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Dear Warwick,

Ausgrid welcomes the opportunity to make a submission on the Australian Energy Regulator's (**AER**) Draft 2022 Rate of Return Instrument (**Draft RORI**). The RORI is one of the most significant decisions made by the AER in terms of its effect on both outcomes for customers and the financial stability of network businesses. The consequences of setting rate of return too high or too low can have significant effects on both.

The final 2022 Rate of Return Instrument (**RORI**) provides an opportunity for the AER to promote the transition to a low carbon economy. The way energy is generated and being consumed is changing and the AER has a key role in ensuring that networks have appropriate investment incentives to facilitate the transition. For example, over the coming years there is a need to invest in the capabilities required to efficiently integrate distributed energy resources (**DER**). Investing in reliability, resilience and the capability to flexibly respond to extreme weather risks is also important for networks, as global mean temperatures continue to rise.

As part of our 2024-29 regulatory reset we have been engaging deeply with customers and customer advocates about key customer priorities, including affordability. We are acutely aware that recent cost of living pressures, and cost increases in other parts of the energy sector, are putting pressure on household and business budgets. We understand that the AER is making its RORI decision in this context. However, our customers are also telling us they expect us to mitigate the impact of climate change and integrate an increasing number of DER onto the grid. It remains vital that the RORI is determined within this longer-term context, so that customers are ultimately provided the services they value, at the lowest sustainable cost.

The ENA submission, supported by Ausgrid, provides in-depth technical detail on all the issues, however we make some brief comments below on the key items in the Draft RORI.

Term of the risk-free rate should remain at 10 years

The Draft RORI requires that the term of the risk free rate match the term of the regulatory period, typically 5 years.[1] We understand the two main reasons to move away from a 10 year term are to:

- Satisfy the NPV=0 condition; and

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[1] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 93.

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- Align with the inflation term, which has changed from 10 years to 5 years since the 2018 RORI.

We are concerned with the change of the term to 5 years and the reasoning behind it.

Change in interpretation of NPV=0

The Draft RORI states that the NPV=0 condition is not met if the term of the risk free rate does not match the term of regulatory period. In previous decisions it was considered that setting the allowed return equal to the required return of investors achieved the NPV=0 principle and better contributed to the National Electricity Objective and National Gas Objective.[2] Mathematical equations that purported to show the NPV=0 condition was violated unless the terms matched were not considered to outweigh the evidence that the prevailing market cost of capital was the best estimate for return on equity.

The Draft RORI provides additional mathematical equations to demonstrate how the NPV=0 condition can only be met if the term of the risk free rate is equal to the term of the regulatory period. We have had some difficulty understanding the logic behind the conclusion drawn from the equations and assumptions, as set out below.

The Draft RORI presents the following formula to show that NPV=0 over 2 periods for a market value of equity of $40:[3]

$$40 = \frac{40 \times k_1 + 20}{1.05} + \frac{20 \times E[k_2] + 20}{(1.05)^2}$$

Where:
40 = market value of equity
20 = depreciation over 2 periods
k_1 = expected return in period 1
$E[k_2]$ = expected return in period 2

One of the simplifying assumptions is that investors discount all cashflows using the same long-term discount rate, which is the required return on equity over 2 periods.[4]

It goes on to say this formula does not hold if the allowed return is reset at the beginning of the second period – for example if $E[k_2]$ is reset to 6%.[5] On this basis, it is concluded that "if the long-term required return on equity is expected to change over time, resetting the allowed return on equity equal to the prevailing long-term required return would not result in NPV=0".[6]

We do not dispute that in the above formula, if $E[k_2]$ = 6% the formula does not hold. Our concern is with the assumption that investors would keep the discount rate constant in the second period, and discount second period cash flows with the first period rate, when the allowed return has

[2] AER, Rate of return instrument explanatory statement, December 2018, p 126.
[3] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 110.
[4] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 109.
[5] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 110.
[6] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 110.

been reset at the start of the second period. If we change the notation in the denominators to match the assumption, the formula above becomes:

$$40 = \frac{40 \times k_1 + 20}{(1 + k_1)} + \frac{20 \times E[k_2] + 20}{(1 + k_1)(1 + E[k_1])}$$

We would expect the above formula to be as follows:

$$40 = \frac{40 \times k_1 + 20}{(1 + k_1)} + \frac{20 \times E[k_2] + 20}{(1 + k_1)(1 + E[k_2])}$$

The Draft RORI suggests that the assumptions are consistent with valuation practices described in stakeholder submissions.[7] The footnote refers to several pages in an ENA submission, however this submission does not reference the discount rate that would be used in the second period if the regulator changed the allowed return. To the contrary, that submission provides evidence that investors use a 10 year risk free rate, not that the 10 year risk free rate stays constant over 2 periods, even if the allowed return changes. If the allowed return for the second period was known at the start of the first period, the second period cash flows would be discounted at the allowed return for period 2.

If the formula was expressed as expected, it would hold regardless of how the long-term required return on equity changed.

Alignment with term of inflation

The AER notes that its decision to change the risk free rate term from 10 years to 5 years provides consistency with the conceptual framework on which it based its decision to change the expected inflation term from 10 to 5 years.[8] The AER has appears to have changed its mind on this point, noting they have indicated on several occasions that the term of inflation, term of rate of return, term of equity and term of debt can be assessed independently and do not need to align.[9]

While it is open to the AER to change its mind, we encourage the AER to carefully reconsider the evidence before it ahead of the final RORI. For example, Box 6.1 in the Draft RORI suggests that, based on expectations theory and geometric averages, businesses will be overcompensated if a 10 year risk free rate is reset every 5 years. However, we encourage reconsideration of investor expectations, similar to the assumption outlined in the previous section. The analysis assumes investors require the same return over 2 regulatory periods. However, when industry says investors use a 10 year risk free rate, it does not mean that investors have a required return based on the 10 year risk free rate that does not change over 2 regulatory periods. Equity investors make valuations in perpetuity, using the prevailing 10 year risk free rate at the time of the valuation. If prevailing long-term risk free rate changes, the discount rate changes.

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[7] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 110.
[8] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 113.
[9] For example, AER, Term of the Rate of Return: Draft Working Paper, May 2021, p 32; AER, Term of the rate of return & Rate of return and cashflows in a low interest rate environment: Final Working Paper, September 2021, p 21; AER, Draft rate of return instrument: Explanatory statement, June 2022, p 40.

Other regulators

If the AER maintains its position for the final 2022 RORI, it will be the only Australian regulator, and one of two comparable regulators internationally, that uses a 5 year term for risk free rate. The WA Economic Regulation Authority (**ERA**), which had previously used a 5 year term, recently made a draft decision to change to a 10 year term based on the same evidence and same regulatory task as the AER.

We understand that different regulators may make different decisions on various aspects of rate of return. However, in all cases for the Australian regulators, the regulatory task is essentially the same, the evidence is the same and after multiple decisions affirming a 10 year rate as better achieving the NEO, we have some difficulty understanding how the AER has found reason to make a decision contrary to their regulator colleagues and long-standing precedent.

We consider that this inconsistency alone should give AER pause to carefully reconsider the evidence before it. We are available to engage further with the AER on this issue ahead of the final RORI.

The calibrated dividend growth model (DGM) is more robust for estimating market risk premium (MRP)

The Draft RORI proposes to maintain the same approach to MRP as the 2018 RORI. This approach bases the estimate on historic excess returns (HER) and updates the estimate to be consistent with the risk free rate term of 5 years.[10] The Draft RORI also outlines how another approach might work if additional consultation persuaded it that another method was superior.[11]

The AER's preferred other method, known as option 3b, is to set MRP mechanically at the time of each regulatory determination using both HER and a dividend growth model (DGM). The AER's preferred DGM is the 3-stage model that was given no weight in the 2018 RORI. The calibrated DGM, put forward by ENA in response to the perceived shortcomings of the 3-stage DGM, was not considered appropriate because:

- The model produces extremely volatile MRP estimates; and
- Long-term dividend growth of 6% (used to calibrate the model) is above other estimates of long-term dividend growth, including long-term GDP growth of 5%.[12]

As explained in section 4.3 of the ENA submission, the volatility produced by the ENA calibrated DGM is the same as the volatility in the AER's preferred DGM.[13] It is unclear why the same level of volatility is considered an issue for one, but not the other. Further, the DGMs deliver a more stable return on equity than the HER method. This is because they smooth out some of the volatility of risk free rates.

The long-term dividend growth assumption of 6% is used because that drives the long-term HER estimate that is being calibrated. It is not an input selected by ENA, but a back-solved input to

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[10] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 124.
[11] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 125.
[12] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 145.
[13] ENA, Rate of Return Instrument Review – Response to AER's Draft Decision, 2 September 2022.

ensure the long-term HER is maintained on average. Maintaining the long-term HER is the key principle that makes it superior to other DGMs because it produces an unbiased MRP.

We also have concerns about the methodology used to calculate a 5 year MRP. The DGM estimates a total market return (**TMR**) at a point in time, and we would expect that the prevailing 5 year risk free rate would be deducted from the TMR to compute the 5 year MRP. However, the AER suggests that it will estimate the 5 year MRP by subtracting the 10 year risk free rate from TMR to calculate a 10 year MRP, then adjust the 10 year MRP for the difference between historical 5 and 10 year risk free rates.[14] It would be helpful if the AER could explain why it proposes this method rather than the conventional method.

International data should be included in the equity beta estimate

The Draft RORI proposes to maintain its approach in the 2018 RORI when estimating equity beta.[15] This means the current comparator set of firms will continue to be used, even though only one of those firms will be active when the 2022 instrument is made. As explained in previous submissions, we believe this is insufficient to provide a robust data set for the purpose of calculating equity beta.[16] The relevance of the obsolete firms to rates of return that will be set in regulatory determinations up to 2031 is negligible.

While the AER recognises that it's approach will need to be revised in future, it also observes that it has not received evidence on how it might be able to use other comparators to overcome the drawbacks.[17] We note that network businesses have provided examples of how the issues could be overcome. Other regulators provide also useful precedent.[18]

We believe the AER could implement a methodology using robust data for the final RORI, based on the existing body of evidence available on this matter.

Support maintaining the current debt methodology

We support the Draft RORI's proposals to maintain the gearing, credit rating, term and trailing average approach for debt. The energy infrastructure credit spread index (**EICSI**) is a useful cross check tool but has not demonstrated any material or sustained deviation from the benchmark term. We also maintain the view that EICSI and weighted average term to maturity at issuance (**WATMI**) calculated from network debt data should not be used to deterministically set benchmark debt parameters unless the drivers for differences are fully understood, and there appears to be a material and sustained deviation from the benchmark term.

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[14] We note that on page 151 of the Explanatory Statement it is described that the MRP would be reduced by the difference between historical 5 and 10 year risk free rates; however, based on outputs in Table 7.5 on page 152 it is clear the difference will be added to the MRP.
[15] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 163.
[16] For example, Ausgrid, Submission – Equity, 3 September 2021, p 6.
[17] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 164.
[18] ERA, 2022 gas rate of return instrument review: Discussion Paper, December 2021. p. 76.

RAB multiples a useful cross-check only if the regulated element can be disaggregated

The AER maintains that RAB multiples are a useful sense check and trigger for further investigation into the regulatory framework.[19] It notes that RAB multiples are a direct indicator of the value placed by investors on the regulated businesses.[20] We maintain our view expressed in previous submissions that it is a useful cross check only if the RAB multiple can be reliably disaggregated into the regulated and unregulated components.

The RAB multiple is not a direct indicator of the value of the regulated business, it is a direct indicator of the value of a business that includes a regulated element, plus any assumptions made by the investor about, for example, future growth (particularly in the unregulated business), efficiencies and tax benefits. That the resulting value is expressed relative to the RAB does not mean it reflects the investors' view of the value of the RAB alone.

We note that the AER commissioned CEPA to disaggregate the RAB multiples for recent transactions. We have significant concerns with the analysis provided by CEPA. For example, for the purpose of removing the value of AusNet's unregulated business, CEPA estimated its value significantly lower than the independent valuation.[21] No explanation is provided to explain the discrepancy. Frontier Economics has provided separate analysis noting other deficiencies in the CEPA analysis which indicates that it should not be relied upon by the AER.[22]

Financeability

The AER's draft decision is that it is open to using financeability tests in a contextual role.[23] The AER notes some issues with using FFO/debt as a proxy for financeability tests:

- It does not include the subjective component undertaken by rating agencies;
- The 7% benchmark is itself subjective; and
- Financeability is actively managed by the firm to optimise debt costs.[24]

We agree that FFO/debt does not represent the whole judgement made by rating agencies when rating a business. However, FFO/debt is the metric referred to by rating agencies as the key indicator that would move a rating up or down. Further, other metrics can be used and assessed and a reasonable assessment made by the AER, as evidenced by financeability tests used by other regulators.

We also agree that the 7% benchmark is subjective. It would seem reasonable to use a range of levels of FFO/debt that have been observed in rating agency reports, or an average. Our observation is that 7% seems at the very low end of the scale for a BBB+ rating.

Finally, we do not view the final issue as relevant to the purpose of the financeability test. We agree that actual financeability or credit rating outcomes for businesses are a function of

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[19] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 262.
[20] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 263.
[21] CEPA, EV/RAB multiples final report, 10 May 2022, p 14.
[22] Frontier Economics, Analysis of RAB multiples, 27 May 2022.
[23] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 262.
[24] AER, Draft Rate of Return Instrument – Explanatory Statement, June 2022, p 266.

management decisions, and some businesses may actively choose a lower credit rating than the benchmark. That is not what is being assessed – the assessment is whether the regulatory allowances based on the benchmark assumptions for a benchmark firm are internally consistent. That is, if we assume a BBB+ rating and provide an allowance on that basis, do the resulting cash flows result in credit metrics required to support that credit rating.

Used in this way, financeability tests would have more than a contextual role as a cross-check. If it is evident that the RORI would produce metrics inconsistent with the benchmark credit rating, the AER would revisit elements of the rate of return where it has used judgement and amend such that the metrics are consistent with the benchmark credit rating.

We are also concerned that the AER is comfortable with its assessment that 8 of 32 firms failed a 7% FFO/debt. We would welcome further detail on the AER's assessment approach in the final RORI.

If you have any questions regarding this submission, please contact Fiona McAnally ███████████████████████████████

Regards,

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Rob Amphlett Lewis
Chief Customer Officer