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Mr Warwick Anderson
General Manager Network Regulation
Australian Energy Regulator
Level 17, 2 Lonsdale Street
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By email: RateOfReturn@aer.gov.au
Cc: [redacted]

Dear Mr Anderson

Re: Response to AER Rate of Return Final Working Papers

Thank you for the opportunity to respond to the AER's Rate of Return Final Working Papers, which were published in December 2021 as part of the 2022 Rate of Return Instrument (RoRI) review.

We commend the AER's ongoing engagement on this important review, which is occurring at a critical time in the evolution of Australia's energy system.

Our proposed nation-building transmission investment

The current Rate of Return Review is taking place at a time when very significant network investment is required to support the decarbonisation of the Australian economy. We are a key player in the required build-out of Australia's transmission network. Subject to regulatory approvals and securing the necessary land access and environmental and heritage approvals, in the next 2023-28 regulatory period, we will deliver four projects identified as actionable and future actionable projects in Australian Energy Market Operator's (AEMO's) Draft 2022 Integrated System Plan (ISP):

- HumeLink
- Victoria to New South Wales Interconnector (VNI) West
- Sydney Ring (reinforcing Sydney, Newcastle and Wollongong supply), and
- Queensland to New South Wales Interconnector (QNI) connect.

The total indicative cost of these projects in the 2023-28 period is $6.4 billion (Real 2022-23).[1]

[1] This comprises $3,618.9 million for HumeLink, $1,696.7 million for VNI West, $924.5 million for Sydney Ring and $159.2 million for QNI Connect.

This is additional to capex of $2,552.7 million (Real 2022-23) approved by the AER in the current 2018-23 regulatory period for Powering Sydney's Future, Project Energy Connect (PEC), VNI Minor and QNI Minor and attests to the scale of the investment required across the entire NEM over the next few decades.[2]

The feedback we have received through our extensive customer engagement is that these projects are wanted and needed by our customers and are in the long-run interests of consumers.

New investments must be commercially viable

No matter how beneficial our augmentation projects will be to consumers, they cannot proceed unless they are commercially viable. There are two issues here:

1. The allowed return must be reasonable – it must match the market (risk reflective) cost of capital, and
2. The regulatory allowance must be provided in a way that enables network businesses to maintain the benchmark BBB+ investment grade credit rating (that is assumed when setting the regulatory allowance under the AER's Rate of Return Instrument) while funding network augmentation projects.

One of the key issues that the AER has taken forward into this round of the consultation process is the weighted trailing average return on debt allowance. The AER has stated that its key concern with the current uniform trailing average approach is that it may affect the commercial viability of major new projects:

> 'The energy sector is currently undergoing transformation requiring large infrastructure to be built to connect more locationally and regionally dispersed variable renewable energy generation regions or zones. Following the AEMO's ISP, we are now seeing the potential for large projects and a corresponding large impact on the RAB and debt raising for electricity transmission businesses. This raises the prospect of material mismatches between the trailing average and the on the day rate.'[3]

The AER further stated that:

> 'When our trailing average regulatory allowance is below the prevailing cost of debt, we could see pressure from the businesses to increase the regulatory allowance. In these circumstances a network may refuse to undertake the investment, or implicitly threaten to do so unless the regulatory allowance is increased.'[4]

Another way of stating this is that new projects cannot proceed unless they are commercially viable. It is not so much a case of networks 'refusing' or 'threatening,' but just the commercial reality that new projects can only proceed if they are commercially viable.

The AER suggests that a weighted trailing average allowance for the return on debt may help with the commercial viability of major new projects – as it might provide a better match between the regulatory allowance and the actual cost of debt incurred when financing the new project.

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[2] This comprises $254.6 million for PSF, $2,008.0 million for PEC, $240.4 million for QNI and $49.7 million for VNI.
[3] AER, December 2021, *Overall rate of return, equity and debt omnibus: Final Working Paper*, p. 88.
[4] AER, December 2021, *Overall rate of return, equity and debt omnibus: Final Working Paper*, p. 88.

However, even if the proposed approach did better match the allowed and required return on debt (which is not clear to us, given the way networks actually raise debt for such projects)[5] it is very much a second order consideration. The main issue in relation to commercial viability is the impact on credit ratings over the early years of a major new project. Our experience from putting in place financing for PEC is that it is very difficult for a network to maintain a BBB+ rating when financing a major new project under the current regulatory arrangements. This is not an issue that can be easily solved by altering the weighting scheme on the return on debt allowance.

Rather, we consider that (in the absence of government support, either by way of subsidy or concessional financing, or accelerated depreciation allowances) major new projects would have to be financed with more than the benchmark 40 per cent of equity financing if a BBB+ rating is to be maintained.[6]

One straightforward way of improving the commercial viability of new projects would be for the AER to simply adjust the weights applied to its standard RoRI allowances for the return on debt and equity in line with the commercial reality that relatively more equity would be temporarily required to support a BBB+ credit rating while building these major new projects.

However, a complete solution to the commercial viability issue will require a full consideration of the extent to which major new projects involve economic risks and have characteristics that are unlike business-as-usual transmission operations upon which the current and proposed RoRI are based. Major new projects (such as the examples set out above) are construction projects for a number of years before becoming part of the operations of the transmission network and construction activities. Given their scale, these projects involve considerably more risk than the normal operation and maintenance of an existing electricity transmission network. Consequently, businesses involved in these activities which are necessary to deliver the energy transition require different returns in the early phases of these projects to ensure they are delivered efficiently.

A number of regulators have recognised that major construction projects differ from the operation of regulated infrastructure assets and have put in place regulatory arrangements that reflect those differences. For example, Heathrow Airport was allowed a special 'construction margin' on capital invested during the construction phase of its new Terminal 5 (or T5) and the European Commission recommended that national regulators should also allow higher rates of return during the roll-out phase of fibre networks. These precedents reflect the widely-accepted view that construction activities support relatively less debt finance and have a higher level of systematic risk than energy network operations.

In relation to Heathrow's T5, for example, the UK economic regulator, Civil Aviation Authority (CAA) observed that:

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[5] The AER has not explained how the weighted trailing average approach would work or what assumptions would be made about the way the benchmark firm would raise debt capital for each major new project. For example, the Concurrent Evidence sessions considered an approach whereby the benchmark firm might be assumed to issue ten different tranches of debt for each project. This would not reflect the commercial reality of how debt would be efficiently raised, so may not serve to help match the regulatory allowance to the efficient cost of debt.

[6] This has been demonstrated to the AER in the course of the rule change process relating to PEC. For example, the CEPA report commissioned by the AEMC concluded that "Our modelling confirms that with respect to financeability, some key credit metrics for a TNSP financed at the notional gearing of the benchmark efficient entity would be stretched" and that "our analysis indicates that the network companies would need to make a relatively small change from the notional capital structure (i.e. gearing within a range of 55-58%, rather than 60%) in order to achieve ratios consistent with the rule change scenario." (CEPA, January 2021, Financeability of ISP projects, pp. 6, 7.)

> 'the scale of a project like Terminal 5 clearly involves accessing the capital markets as it is unlikely to be possible to fully finance such a project from internally generated cash flow. Large investment projects tend to be risky in a number of ways. The scale of Terminal 5 will increase BAA's risks, not only with respect to construction risk but also risks of uncertain demand and risks associated with the Terminal 5 triggers as pointed out by the Competition Commission.'[7]

This led to the CAA allowing a higher return on equity than would have been the case in the absence of the major T5 construction project. In relation to the higher regulatory allowance, the CAA observed that:

> 'This figure reflects the uncertainty surrounding the cost of equity, and especially the cost of new equity, and the importance of enabling BAA to finance Terminal 5 on a commercial basis given the risks involved. The other side of the coin is clearly that all risk, i.e. demand risk as well as cost risk, lies with BAA. This implies that whatever capital structure BAA and its financiers adopt, the risk associated with this structure lies entirely with BAA and its financiers.' [8]

Similarly, the European Commission (Commission) recommended that national regulators should provide a higher rate of return allowance in relation to the additional risks involved in the capital-intensive roll-out of fibre networks. The Commission stated that:

> 'Investment risk should be rewarded by means of a risk premium incorporated in the cost of capital. The return on capital allowed ex ante for investment into NGA [next generation access] networks should strike a balance between on the one hand providing adequate incentives for undertakings to invest (implying a sufficiently high rate of return) and promoting allocative efficiency, sustainable competition and maximum consumer benefits on the other (implying a rate of return that is not excessive). To do so, NRAs [National Regulatory Authorities] should, where justified, include over the pay-back period of the investment a supplement reflecting the risk of the investment in the WACC calculation currently performed for setting the price of access to the unbundled copper loop.' [9]

The Commission further identified the sorts of risks that would justify an additional premium during the network construction / roll-out phase as follows:

> 'NRAs should estimate investment risk, inter alia, by taking into account the following factors of uncertainty: (i) uncertainty relating to retail and wholesale demand; (ii) uncertainty relating to the costs of deployment, civil engineering works and managerial execution; (iii) uncertainty relating to technological progress; (iv) uncertainty relating to market dynamics and the evolving competitive situation, such as the degree of infrastructure-based and/or cable competition; and (v) macroeconomic uncertainty.' [10]

We note that very large ISP-type projects involve significant construction-type risks including environmental, bio-diversity, geotechnical, land access and indigenous heritage risks, tight delivery timeframes, and shortages in available labour and construction resources. For major company-changing projects, like the

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7 CAA, February 2002, Economic Regulation of BAA London Airports (Heathrow, Gatwick and Stansted) 2003-2008 - CAA Decision (CAA 2003-2008 Decision BAA London Airports), pp. 44-45.

8 CAA, 2003-2008 Decision BAA London Airports, February 2002, p. 45.

9 European Commission, September 2010, Commission Recommendation on regulated access to Next Generation Access Networks (NGA), annex 1, item 6.

10 European Commission, September 2010, Commission Recommendation on regulated access to Next Generation Access Networks (NGA), annex 1, item 6.

examples above, the scale of these construction-related risks is well beyond that which pertains to replacement or more incremental augmentation capex.

We recognise that the regulatory framework includes various mechanisms to deal with risk such as cost pass-throughs, consideration of contingent projects, and staging of contingent projects. However, these mechanisms are not designed to address the fundamentally different characteristics of businesses, like us, essentially having a major construction division for a number of years.

The designers of the current regulatory framework did not anticipate the kind of transformation in the electricity system (in terms of scale and speed) that is required to support Australia's decarbonisation objectives. During the period where some transmission networks will effectively have major construction divisions, that activity should be appropriately compensated to ensure that the investment is economically viable. This will not be achieved within the context of a business-as-usual benchmark RoRI allowance – it requires a full consideration of the extent to which construction activities differ from network operation activities.

Our view is that the AER should consider the issue of commercial viability of major new projects and greenfield construction risk as part of the RoRI process. Ongoing network operations and major new construction activities should each be compensated in accordance with the risks involved – rather than assuming that new construction activities have the same risk, and therefore return, profile as ongoing network operations. Once construction is complete and the new project becomes a functioning part of network operations, it would receive an allowed return commensurate with the risk of network operations. This is similar to the regulatory precedent in relation to the Heathrow and European fibre rollout examples above.

It would be straightforward to accommodate a 'construction' allowance during the construction phase of major new projects. The AER would first identify which new construction projects are major new investments – excluding business-as-usual replacement capex and ordinary/incremental augmentation capex. Major new projects would be placed into a separate regulatory asset base (RAB) during the construction phase, and would be allowed a return commensurate with the increased risk associated with construction. This would involve a beta estimate commensurate with construction risk, gearing commensurate with such construction activities, and the prevailing return on debt. When the new project is commissioned and becomes a working part of the network it would be rolled into the standard RAB and would receive the standard regulatory allowance from that time forward.

Our view is that the AER should consider this issue as part of its current RoRI process. If the AER is unable to accommodate this consideration as part of the RoRI process it should initiate a separate regulatory process to fully consider this issue. Either way, the AER's consideration should integrate with the Australian Energy Market Commission's (AEMC) Transmission Planning and Investment Review that is also considering the commercial viability of new projects.[11] We are actively engaging with the AEMC on approaches for ensuring that vital transmission projects can proceed in a way that enables the credit benchmarks of the benchmark efficient entity to be maintained whilst delivering projects set out in AEMO's ISP that are central to Australia's energy transition.

[11] AEMC, Transmission Planning and Investment Review.

Allowed returns must match the market cost of capital

In relation to the allowed return on capital, we are not seeking any additional allowances or 'aiming up' in the 2022 RoRI process – just allowed returns that are capable of attracting the financial capital required to facilitate those investments. The key is simply that the regulatory allowance should reflect the market cost of capital.

The Energy Networks Australia (ENA) submission provides the following context for the current review:

- The AER's allowed return on equity is currently lower than at the time of any previous review
- The Brattle report commissioned by the AER demonstrated that the AER's allowed return on equity was, by every metric, lower than that of all comparable regulators that were examined. Brattle concluded that the AER's approach was "not as effective" as that of other regulators, and
- The independent expert valuation reports prepared as part of the recent Spark Infrastructure and AusNet Services transactions concluded that the current market cost of equity capital (with gearing at 60 per cent) is 7.5 – 8 per cent while the AER's current allowance is 5.5 per cent.

Within this context, we are particularly concerned that the AER has maintained its consideration of some potential changes to its approach that would *reduce* allowed returns – further below the levels provided by comparable regulators and used by independent experts.

Specific elements of the allowed return

We endorse the ENA's submission, which sets out detailed responses on the issues that the AER is taking forward to the next stage of the 2022 RoRI process.[12]

We would like to highlight four key issues that are raised in the ENA submissions and which are of great importance to transmission network businesses at the current stage of the once-in-a-generation transition to new energy sources:

1. <u>The term of the risk-free rate</u>

We understand that the AER is considering two different approaches:

- The first approach is to set allowed return on equity to match the market cost of equity capital. Since the observed market practice is to use a 10-year risk-free rate, the regulatory allowance should also be based on a 10-year rate. Matching the regulatory allowance with the market cost of capital achieves NPV=0, or
- The alternative approach, due to Dr Lally, is that investors should use a 5-year risk-free rate because they should value regulated assets as the present value of (a) the regulatory allowances over the 5-year regulatory period, plus (b) the end-of-period RAB. Since no cash flows beyond year 5 are required for this exercise, a 5-year discount rate would be appropriate.

This raises the question of whether the regulator should:

- Consider the approach that investors <u>do</u> adopt, based on evidence of market practice, or

[12] ENA, March 2022, *ENA submission on final working papers.*

- Consider the approach that Dr Lally says investors should adopt, based on his assumptions and derivations.

We are surprised that this issue is still under consideration, given that:

- The AER has considered this issue several times before (2009, 2013 and 2018 rate of return reviews) and has adopted a 10-year risk-free rate in every one of its decisions to date.
- This approach is generally not used by Australian regulators and indeed in a number of recent decisions has been explicitly been abandoned.[13]
- In its 2018 review, the AER noted that a 10-year term:
  - Reflects the actual practices of investors, including investors in regulated assets
  - Is more consistent with the theory of the Sharpe-Lintner capital asset pricing model (SL CAPM)
  - Best reflects well accepted academic literature, and
  - Best supports the National Electricity Objective (NEO) and National Gas Objective (NGO).
- A 10-year risk-free rate (or longer) is standard regulatory and commercial practice and is recommended by leading textbooks, including Australian and regulatory textbooks.
- The network shareholder group has submitted that a 10-year term is standard practice among investors.
- No stakeholder has advocated for a change in the term.

The independent expert valuation reports prepared in relation to the Spark Infrastructure and AusNet transactions both adopted the standard market practice of a 10-year term.

The ENA's submission explains that Dr Lally's assumptions and derivations are in fact inconsistent with accepted finance theory.

Whilst not commenting on the arcane theoretical debate that might interest some academic experts, we do note that the evidence of regulatory and commercial market practice on this issue is overwhelming, and consistent with the approach that the AER has adopted in every one of its decisions to date. The case for a change in the term of equity falls well short of any reasonable threshold at this time.

2. Having due regard to all relevant evidence

We strongly support the approach of the AER having regard to all relevant evidence, rather than placing primary reliance on a small preferred subset of the evidence. This approach received general support among experts in the Concurrent Evidence sessions.

In relation to equity beta, for example, we question whether having regard to a domestic comparator set that contains only a solitary live firm – to the exclusion of all other evidence – is a reasonable approach. Other Australian and NZ regulators have recognised the problem of a very small set of domestic comparators and

[13] For example, in its recent Rate of Return Review, the QCA confirmed its change from a 5-year risk-free rate to a 10-year term, stating that "We consider it is reasonable to use long-term Australian Government bonds based on a 10-year term to maturity. We consider this approach reflects the requirements of investors and lenders who, in relation to long-lived infrastructure assets, will deploy equity over the entire life of the asset, rather than over any given regulatory period. While we prefer a long-term bond based on the life of the assets, 10 years is the longest-term bond available that is sufficiently liquid." (QCA, November 2021, *Rate of return review: Final report*, p. 83).

have regard to international comparators.[14] The ENA explains that the Economic Regulation Authority (ERA) of Western Australia adopts a (like-with-like) equity beta of 0.79 and all other comparable regulators adopt betas above 0.8 – estimates that are 30% or more higher than the AER's current allowance.

In relation to the market risk premium, we support weight being given to sensible specifications of the dividend growth model (DGM). Exclusive reliance on long-term historical average figures produces a constant market risk premium (MRP) that cannot possibly reflect the prevailing market conditions.

3. Proper interpretation of transaction evidence and RAB multiples

The AER has drawn conclusions about the adequacy of its current allowed returns from the regulatory asset base (RAB) multiples observed in recent transactions.[15,16] Our view is that there is no basis for drawing any such conclusion from these RAB multiples. In fact, the recent transaction evidence provides very strong evidence of the inadequacy of the AER's current regulatory allowances.

The aggregated RAB multiples that the AER has cited reflect not just the present value of expected regulatory allowances, but also the present value of incentive payments, revenue from unregulated assets and future projects (regulated and unregulated) that are not reflected in the current RAB, expected increases in future AER allowances, and other things.

It is entirely possible that the present value of expected regulatory allowances is less than the RAB, even though the aggregated RAB multiple is above 1 – due to these other sources of value. Consequently, RAB multiples have zero informative value unless the present value of expected regulatory allowances can be fully and transparently separated from other sources of value.

But such a disaggregation of the RAB multiple is unnecessary because we already have direct estimates of the market cost of equity capital. Independent expert estimates of the market cost of equity capital have recently been prepared for two electricity network businesses that are regulated by the AER. Both report that the current market cost of equity capital is materially higher than the AER's current regulatory allowance. The ENA submission shows that (on a like-with-like basis) the independent experts are more than 200 basis points higher than the AER's regulatory allowance.

4. Continued use of independent third-party data sources for the return on debt

We support the continued use of third-party data sources for the return on debt, and the continued use of a benchmark 10-year term and a benchmark BBB+ credit rating.

There is no evidence to suggest that the benchmark approach of issuing 10-year debt on a staggered maturity basis has become inefficient since 2018, such that a change in approach is warranted. Maintaining a 10-year benchmark term would avoid the need to implement a new set of bespoke transition mechanisms. It would also avoid the regulatory disruption of transitioning to a new term even before networks have completed their transition to the current term.

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[14] We note that this approach recently received judicial endorsement in *Perth Airport Pty Ltd vs Qantas Airways Ltd [No 3]* [2022] WASC 51 [192]-[280].
[15] AER, December 2021, *Overall rate of return, equity and debt omnibus: Final working paper*, p. 131.
[16] AER, December 2021, *Overall rate of return, equity and debt omnibus: Final working paper*, p. 139.

We do not support the industry debt index being used to supplement the independent third-party data sources on which the AER currently relies. This matter was clarified at the Concurrent Evidence sessions.

Next steps

Thank you again for the opportunity to provide this submission. We remain committed to actively contributing to the RoRI consultation process throughout 2022 and note the particular importance of the outcome of it in the delivery of the substantial network investment needed to ensure Australia's energy transition.

Yours sincerely

Brett Redman

Chief Executive Officer