ATTACHMENT 3

Response to submission made to the Australian Energy Regulator (AER) by the Victorian Energy Consumer and User Alliance (VECUA) dated 6 January 2016

1 Return on capital

1.1 VECUA's submissions on the AER's WACC determination approach

(a) Insufficient consideration of market data and other evidence

ActewAGL Distribution agrees with VECUA that the AER has had insufficient regard to market evidence in determining the rate of return. However ActewAGL Distribution does not agree with VECUA's submission that a proper consideration of available market data and other evidence would support a lower rate of return than that determined by the AER.

On the contrary, as noted in ActewAGL Distribution's 6 January 2016 response:[1]

- the AER's estimate of the return on equity is below any comparable recent estimate from market practitioners, including estimates from the AER's review of recent broker reports and independent expert reports; and
- the AER's estimate of the return on equity is below that indicated by current market prices for traded equities and the AER's market-wide dividend growth model (**DGM**) analysis.

This outcome is due to the AER mechanistically applying the foundation model approach developed in the Rate of Return Guidelines, without any meaningful consideration of whether such an approach leads to an estimate of the return on equity that is consistent with the allowed rate of return objective and commensurate with prevailing market conditions.

More specifically, this is the result of the AER:

- relying solely on the output of a model that is known to produce biased estimates, without properly correcting for that bias;
- applying this model in a way that does not reflect market practice and which results in the return on equity simply tracking movements in the risk-free rate; and
- making errors in the interpretation of key evidence.

Further evidence provided with this submission reinforces these points. Evidence from investors indicates that the AER's proposed return on equity of 7.3% is not too high, as suggested by the VECUA submission, but rather it is too low.

A submission made by listed infrastructure fund Spark Infrastructure in relation to the AER's April 2015 preliminary determination for SA Power Networks explains that:

- the regulatory returns resulting from the AER's implementation of the SL CAPM using short term base rates and long run average market risk premium are well below the prevailing market rates;[2]

[1] ActewAGL Distribution, – Appendix 5.1 Rate of return, gamma, inflation, Revised 2016-21 access arrangement proposal, Response to the AER's draft decision, 6 January 2016, section 3.2, p 55.

[2] Spark Infrastructure, *Appropriate rate of return for electricity distribution businesses*, 3 July 2015, p 2.

- the AER's approach of combining short term base rates and long run average market risk premium in the SL CAPM is inconsistent with market practice in relation to estimation of hurdle rates for investment;[3] and
- the returns allowed in the AER's latest determinations are not sufficient to attract equity investment when compared to competing investment opportunities.[4]

Spark's view has been informed by feedback from a broad range of pension funds and other ultimate suppliers of investment funds. Their feedback to Spark was universally that the regulatory returns currently expected for the next regulatory periods are inadequate to sustain long run decisions to invest in the sector.[5]

The statements made by Spark Infrastructure in its submission in relation to the AER's April 2015 determinations remain apposite in this case. In the Preliminary Decision in respect of the Victorian Businesses and the Draft Decision in respect of ActewAGL Distribution, the AER has applied the same method for estimating the return on equity as it applied in the April 2015 determinations, and the resulting return on equity estimate is very similar (7.3% compared to 7.1%).

(b) The AER's focus on the Victorian Businesses' proposal

ActewAGL Distribution does not agree that the AER has "inappropriately" focused on the rate of return proposals put forward by the Victorian Businesses.

The Victorian Businesses have provided cogent evidence as to the required return of equity and return on debt for the forthcoming regulatory period. It is entirely appropriate (and required under the National Electricity Rules (**NER**)) for the AER to have proper regard to this evidence.

ActewAGL Distribution considers that in fact the AER has not sufficiently had regard to all of the evidence it and the Victorian Businesses have submitted to date. In particular, the AER does not appear to take into account the estimates of the return on equity provided by Frontier Economics using the Black CAPM, the Fama French Model and DGM. Rather, the AER has solely relied on its implementation of the SL CAPM to determine the return on equity.

1.2 VECUA's submissions on the AER's WACC determinations

(a) Relevance of asset indexation to the AER's return on equity determination

VECUA argues that the AER has failed to consider the impact of asset indexation in its return on equity determinations. It is said that the AER's calculation of its return on equity allowances does not reflect the reality that networks apply annual asset indexation to their regulatory asset bases (**RABs**).

This is not correct. The method adopted by the AER for determining annual revenue requirements does take into account the fact that, under the NER, the RAB must be indexed each year for inflation[6] and a nominal rate of return must be applied to this indexed RAB value to determine the return on capital allowance.[7] This is accounted for by making an adjustment to the annual revenue requirement calculation for each year for indexation of the regulatory asset base, as required by the NER.[8] The adjustment that is made to the annual revenue requirement is a negative adjustment equal to the amount by which the RAB is indexed for inflation in that year.[9]

[3] Spark Infrastructure, *Appropriate rate of return for electricity distribution businesses*, 3 July 2015, p 4.

[4] Spark Infrastructure, *Appropriate rate of return for electricity distribution businesses*, 3 July 2015, p 5.

[5] Spark Infrastructure, *Appropriate rate of return for electricity distribution businesses*, 3 July 2015, p 2.

[6] NER cl 6.5.1; S6.2.3(c)(4).

[7] NER, cl 6.5.2(d)(2).

[8] NER, cl 6.4.3(a)(1).

[9] NER, cl 6.4.3(b)(1).

Therefore, no further adjustment to the method for dealing with inflation is required, nor would any further adjustment be permitted under the NER. As explained above, the NER clearly prescribe how inflation is to be accounted for in determining the rate of return (i.e. the rate of return is to be determined on a nominal basis), rolling forward the RAB (the RAB is to be adjusted for inflation in each year) and determining revenue requirements (the annual revenue requirement is to include a negative adjustment for indexation of the regulatory asset base).

As discussed in ActewAGL Distribution's 6 January 2016 response, this gives rise to important interrelationships between the method for forecasting inflation and other aspects of the AER's determination, particularly its determination of the allowed rate of return. Given these interrelationships, it is important that the forecast of inflation be as accurate as possible, and consistent with the implied forecast of inflation in the nominal rate of return. This issue is discussed further in ActewAGL Distribution's 6 January 2016 response.[10]

(b) Estimation of the return on equity

VECUA argues that the AER has over-estimated the return on equity, by applying a market risk premium (**MRP**) and equity beta in the SL CAPM that are too high. VECUA argues that both the MRP and equity beta should be set to the bottom of the AER's ranges for those parameters (i.e. 5% and 0.4 respectively).

VECUA's submissions on the return on equity rest on the following contentions:

- that it is appropriate to use the SL CAPM alone to estimate the return on equity, with no adjustment for any of the known weaknesses in this model;
- best estimates of the MRP and equity beta are 5% and 0.4 respectively; and
- using an MRP of 5% and equity beta of 0.4 in the SL CAPM will lead to a reasonable estimate of the return on equity, and one that contributes to the achievement of the allowed rate of return objective.

For reasons set out in the ActewAGL Distribution's 6 January 2016 response, the evidence before the AER does not support the first contention. The empirical evidence points to shortcomings in the design of the SL CAPM which mean that it will underestimate the required return on equity for businesses with a beta below one and businesses with high book-to-market ratios.[11]

VECUA's submission as to the best estimates of the equity beta and MRP are also not supported by the evidence before the AER. No expert (including the AER's expert) concludes that the best empirical estimate of the equity beta is 0.4[12]; rather, the expert evidence supports an SL CAPM equity beta of 0.82 (before any adjustment to account for biases in this model).[13] Similarly, the expert evidence before the AER does not support an MRP of 5%, but rather supports a much higher estimate of the prevailing MRP (Frontier Economics recommend an estimate of 7.9%[14]).

[10] ActewAGL Distribution, – Appendix 5.1 Rate of return, gamma, inflation, Revised 2016-21 access arrangement proposal, Response to the AER's draft decision, 6 January 2016, section 5.1, p 130

[11] ActewAGL Distribution, – Appendix 5.1 Rate of return, gamma, inflation, Revised 2016-21 access arrangement proposal, Response to the AER's draft decision, 6 January 2016, section 3.3.2.1, p 62.

[12] VECUA refers to "Professor Henry's estimate of 0.4". Professor Henry did not recommend an estimate of 0.4. Rather, Professor Henry recommended a range of 0.3 – 0.8, based in the limited sample of domestic businesses that he was instructed to use (Olan T Henry, *Estimating β: An update*, April 2014, p 63).

[13] Frontier Economics, *Estimating the equity beta for the benchmark efficient entity,* January 2016. See also: ActewAGL Distribution, – Appendix 5.1 Rate of return, gamma, inflation, Revised 2016-21 access arrangement proposal, Response to the AER's draft decision, 6 January 2016, section 3.4.3.3, p 92.

[14] Frontier Economics, *The required return on equity under a foundation model approach*, January 2016, Table 5. See also: ActewAGL Distribution, – Appendix 5.1 Rate of return, gamma, inflation, Revised 2016-21 access arrangement proposal, Response to the AER's draft decision, 6 January 2016, section 3.4.2, p 86.

Finally, VECUA's submissions do not include any consideration of whether the return on equity and overall rate of return that would result from its proposed approach is reasonable and consistent with the allowed rate of return objective. If VECUA's proposal were to be implemented, this would deliver an equity risk premium (**ERP**) of just 2% and a return on equity of approximately 4.8%. This is significantly below the ERP and return on equity ranges indicated by the reasonableness checks (or "cross-checks") referred to by the AER in the Preliminary Decision in respect of the Victorian Businesses and the Draft Decision in respect of ActewAGL Distribution.[15] VECUA's submission would also imply a return on equity that is significantly below the prevailing return on debt.

The relevant evidence in relation to each of these issues is addressed in detail in ActewAGL Distribution's 6 January 2016 response.

(c) Return on debt

VECUA raises two issues in relation to estimation of the return on debt:

1. VECUA claims that, by using broad BBB data series for estimation of the return on debt, the AER has provided significantly higher cost of debt allowances than appropriate; and
2. VECUA argues that the AER should benchmark businesses' actual debt costs to inform its return on debt allowances.

The first of these issues was addressed in ActewAGL Distribution's 6 January 2016 response. For reasons explained in that response, continuing to use a broad BBB band data series to estimate the return on debt will not lead to an allowance that is 'too high'. Rather, given that the evidence supports a credit rating of BBB to BBB+, using a broad BBB band data series is entirely appropriate.[16]

In relation to the second issue, ActewAGL Distribution submits that it would not be appropriate, and not consistent with the NER and National Gas Rules, for the return on debt allowance to be based on businesses' actual debt costs. Such an approach would be inconsistent with:

- the allowed rate of return objective, which requires the rate of return to be commensurate with the efficient financing costs of a benchmark efficient entity (not the actual financing costs of the regulated business);[17]
- the revenue and pricing principles, which provide for recovery of at least the efficient costs incurred in the provision of direct control network services (not actual costs) and the provision of effective incentives to promote economic efficiency;[18]
- the national electricity objective, which is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers;[19] and
- the principles of incentive-based regulation, including that service providers should be compensated for the efficient costs of service delivery (not actual costs), so that at least some of the rewards or penalties associated with over- or under-performance against the efficient cost benchmark flow to the service provider.

As has been recognised by policy-makers and the AER on numerous occasions, in order to promote efficient investment in, and efficient operation and use of, regulated services, businesses should be

[15] For an analysis of these cross-checks, refer to: ActewAGL Distribution, – Appendix 5.1 Rate of return, gamma, inflation, Revised 2016-21 access arrangement proposal, Response to the AER's draft decision, 6 January 2016, section 3.5.1, p 94.

[16] ActewAGL Distribution, – Appendix 5.1 Rate of return, gamma, inflation, Revised 2016-21 access arrangement proposal, Response to the AER's draft decision, 6 January 2016, section 2.4.1, p 36.

[17] NER, cl 6.5.2(c).

[18] NEL, s 7A.

[19] NEL, s 7.

compensated for the efficient cost that would be incurred by the relevant benchmark efficient entity. Setting regulated allowances based on actual costs potentially provides businesses with a perverse incentive to inflate their actual costs.

This was explained by the AEMC in its final rule determination accompanying the November 2012 changes to the rate of return rules. The AEMC stated (referring to statements in its draft rule determination which were affirmed in the final determination):[20]

> *"The draft rule determination stated that the primary objective of the allowed rate of return is to provide service providers with a return on capital that reflects efficient financing costs. A rate of return that reflects efficient financing costs will allow a service provider to attract the necessary investment capital to maintain a reliable energy supply while minimising the cost to consumers. The Commission also stated that it is important for recovery of financing costs to be based on benchmark efficient finance costs. This is to provide incentives for firms to adopt efficient financing arrangements and to protect consumers from the effects of inefficient ones."*

Specifically in relation to the return on debt, the AEMC stated:[21]

> *The return on debt allowance must still be estimated in a manner consistent with the overall rate of return objective. That is, it must be a benchmark cost of debt for an efficient firm. It should not be misinterpreted as suggesting that it must reflect a service provider's actual cost of debt.*

ActewAGL Distribution understands that the AER does not intend to depart from long-standing regulatory practice in this respect, including for the reasons set out above. However if the AER was to change its practice and seeks to rely on any information on actual debt costs in determining the return on debt allowance in the final decision, ActewAGL Distribution would need to be informed of that, and provided with a reasonable opportunity to respond.

[20] AEMC, *Rule Determination: National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012; National Gas Amendment (Price and Revenue Regulation of Gas Services) Rule 2012*, 29 November 2012, p 43. The AEMC affirms that this statement remains apposite in respect of the final rule at pages 65 and 67.

[21] AEMC, *Rule Determination: National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012; National Gas Amendment (Price and Revenue Regulation of Gas Services) Rule 2012*, 29 November 2012, p 86.