Attachment 3

Rate of Return

Revenue Proposal 2023-24 to 2027-28

31 JANUARY 2022

ElectraNet

Company Information

ElectraNet Pty Ltd (ElectraNet) is the principal electricity transmission network service provider (TNSP) in South Australia.

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Note

This attachment forms part of our Revenue Proposal for the 2023-24 to 2027-28 regulatory period. It should be read in conjunction with the other parts of the Revenue Proposal.

Our Revenue Proposal comprises the overview and attachments listed below, and the supporting documents that are listed in Attachment 14:

Revenue Proposal Overview

- Attachment 1 – Maximum allowed revenue
- Attachment 2 – Regulatory asset base
- Attachment 3 – Rate of return (this document)
- Attachment 4 – Regulatory depreciation
- Attachment 5 – Capital expenditure
- Attachment 6 – Operating expenditure
- Attachment 7 – Corporate income tax
- Attachment 8 – Efficiency benefit sharing scheme
- Attachment 9 – Capital expenditure sharing scheme
- Attachment 10 – Service target performance incentive scheme
- Attachment 11 – Pricing methodology
- Attachment 12 – Pass through events
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3. Rate of Return

3.1 Key points

- In December 2018, the AER published its Rate of Return Instrument and an accompanying explanatory statement. The AER is currently reviewing and consulting on its next Rate of Return Instrument, which will be published in December 2022. The 2022 Rate of Return Instrument will be binding on all regulatory determinations in the subsequent four years, which will include the AER's determination in relation to this Revenue Proposal.
- For the purpose of this Revenue Proposal, and because the 2022 instrument is not yet available, we have estimated our cost of equity and debt in accordance with the 2018 instrument. A gamma value of 0.585 has been adopted, which was also specified in the 2018 Instrument.
- The rate of return and gamma estimates in this Revenue Proposal are intended to be 'placeholders'. We propose to update them and to consider any other changes required as a consequence of the AER's 2022 Rate of Return Instrument in our Revised Revenue Proposal.
- Forecast inflation is also an important parameter to address in the building block approach to revenue regulation. To compensate investors appropriately for the impact of inflation, the forecast must be accurate and unbiased.
- The AER conducted a review of methods for forecasting inflation in 2020. In this Revenue Proposal, we have adopted a forecast of inflation of 2.40%, based on the AER's preferred 'glidepath' forecasting method following that review.
- In relation to debt raising and equity raising costs, we have adopted the AER's current approach to estimating benchmark allowances.
- Table 3.1 below summarises the key parameter values contained in this Attachment.

Table 3.1: Proposed rate of return and inflation

Parameters	Value
Risk free rate	1.37%
Equity beta	0.6
Market risk premium	6.1%
Return on equity	5.00%
Return on debt	3.82%
Inflation	2.40%
Gearing ratio	60%
Gamma	0.585
Corporate Tax rate	30%
Nominal vanilla WACC	**4.29%**

3.2 Introduction

This Attachment deals with the allowed rate of return. We have adopted a weighted average of the return on equity and the return on debt on a nominal vanilla basis, together with an estimate of the value of imputation credits.[1]

We also present our forecast of expected inflation, which is an important parameter in ensuring that providers of equity and debt are adequately compensated.

Network service providers require capital to invest in their businesses. These funds are provided by the owners (through equity) or lenders (through debt). Both equity and debt investors require a return on the funds they provide. This return reflects the single largest cost to network businesses.

To promote the National Electricity Objective, it is crucial that the rate of return is set to enable a network business to attract the necessary capital to undertake efficient investment in the network in the long term interests of its customers. To promote efficient investment, a regulated network must be provided with a reasonable opportunity to recover its efficient costs, which includes its financing costs.

The remainder of this attachment is structured as follows:

- Section 3.3 provides a brief overview of the AER's 2018 Rate of Return Instrument;
- Sections 3.4 presents our placeholder estimate of the benchmark cost of equity;
- Section 3.5 presents our placeholder estimate of the benchmark cost of debt;
- Section 3.6 summarises our placeholder weighted average cost of capital (WACC) for the 2023-24 to 2027-28 regulatory period;
- Sections 3.7 and 3.8 present our estimated equity and debt raising costs;
- Section 3.9 explains that we have adopted a placeholder estimate of gamma, consistent with the 2018 Rate of Return Instrument; and
- Section 3.10 explains our approach to forecast inflation.

3.3 Rate of Return Instrument

The National Electricity Law requires the AER to make a binding Rate of Return Instrument.[2] That instrument must set out either the value for the rate of return, or a method for calculating the rate of return that can be applied automatically without exercise of discretion.

1 National Electricity Rules, clause 6A.6.2(d).

2 National Electricity Law, Part 3, Division 1B.

The AER published its first, and so far only, Rate of Return Instrument and an accompanying explanatory statement in December 2018.[3] The 2018 Rate of Return Instrument maintained the AER's previous regulatory approach of determining a nominal vanilla weighted average return on equity and debt, weighted by the gearing ratio. Therefore, the AER's 2018 Rate of Return Instrument defines the allowed rate of return as follows:

$$k_t = (1\text{-}G) \times k^e + k_t^d \times G$$

where:

- k_t is the rate of return in regulatory year t;
- k^e is the allowed return on equity for the regulatory period and is calculated in accordance with clause 4 of the instrument;
- k_t^d is the allowed return on debt for the regulatory year t, and is calculated in accordance with clause 9 of the instrument; and
- G is the gearing ratio and is set at a value of 0.6.

In December 2022, the AER will publish its next Rate of Return Instrument, which will be the relevant binding instrument in relation to this Revenue Proposal. Although the AER's review is currently underway, it is too early to anticipate its findings.

As a practical measure, therefore, we have applied the 2018 Rate of Return Instrument for the purposes of estimating the relevant parameter values for this Revenue Proposal. Our Revised Revenue Proposal will update any relevant parameters as required and consider any other changes required as a consequence of the AER's 2022 Rate of Return Instrument.

3.4 Return on equity

The 2018 Rate of Return Instrument adopts the Sharpe-Lintner CAPM (SLCAPM) to calculate the return on equity, specifying the parameter values as follows:

$$k^e = k^f + \beta \times MRP$$

where:

- kf is the allowed risk free rate of return expressed as an effective annual rate percentage;
- β is the allowed equity beta and is set to a value of 0.6; and
- MRP is the allowed market risk premium and is set to a value of 6.1% per annum.

The 2018 Rate of Return Instrument requires the risk free rate to be estimated using a formula based on yields on 10-year Commonwealth Government Securities (CGS). The formula requires the risk free averaging period to:

- be over a period of between 20 and 60 business days;
- start no earlier than 7 months prior to the commencement of the regulatory period;

[3] Available at: https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-instrument-2018.

- finish no later than 3 months prior to the commencement of the regulatory period; and
- be nominated both:
  - prior to the start of the risk-free rate averaging period, and
  - no later than the date of lodgement of the Revenue Proposal for the regulatory control period.[4]

We have nominated a proposed confidential averaging period in accordance with the above requirements. For the purpose of this Revenue Proposal, we have adopted a risk free rate that reflects the latest available quarterly market data from September 2021 as a placeholder estimate. The nominated averaging period will be reconsidered as required in our Revised Revenue Proposal in light of the requirements of the 2022 Rate of Return Instrument.

Our placeholder estimates for the cost of equity are presented in Table 3.2.

Table 3.2: Proposed cost of equity parameters

Parameters	Proposed Value	Comments
Risk free rate (Nominal)	1.37%	This is a placeholder value reflecting the yield on ten year Commonwealth bonds measured over the period ending 30 September 2021. The risk free rate will be updated in line with the confidential averaging period and reconsidered if required in light of the requirements of the 2022 Rate of Return Instrument.
Equity beta	0.6	This value is consistent with clause 4(b) of the 2018 Rate of Return Instrument. It will be updated and reconsidered if required in light of the requirements of the 2022 Rate of Return Instrument.
MRP	6.1%	This value is consistent with clause 4(c) of the 2018 Rate of Return Instrument. It will be updated and reconsidered if required in light of the requirements of the 2022 Rate of Return Instrument.
Return on Equity	4.29%	The cost of equity is estimated in accordance with the SLCAPM, as specified in clause 4 of the 2018 Rate of Return Instrument, based on the values above. It will be updated and reconsidered if required in light of the requirements of the 2022 Rate of Return Instrument.

3.5 Return on debt

The 2018 Rate of Return Instrument details the approach to estimating the cost of debt as comprising:

- a benchmarking approach, based on debt yield data from third party data providers and benchmarks for term of debt and credit rating;
- a 10-year trailing average approach with an annual update; and
- a 10-year transition to the 10-year trailing average approach.

[4] AER, *2018 Rate of Return Instrument*, clause 8.

In its final decision for the current regulatory period, the AER adopted the following approach in relation to ElectraNet's benchmark allowance for debt:

- estimate the return on debt using the on-the-day approach (that is, based on prevailing market conditions) in the first regulatory year of the 2018-19 to 2022-23 regulatory period, and
- transitioning into a trailing average approach (that is, a moving historical average) over 10 years.

For the purpose of this Revenue Proposal, we have continued the transition to the 10-year trailing average approach as specified in the 2018 instrument.

The AER's 2018 Rate of Return Instrument requires the risk free averaging periods for the purpose of the cost of debt to:

- be over a period of 10 or more consecutive business days, up to a maximum of 12 months;
- start no earlier than 16 months prior to the commencement of a regulatory year;
- finish no later than 4 months prior to the commencement of a regulatory year;
- be specified for each regulatory year within the regulatory control period;
- not overlap for each different regulatory year, although the averaging period is not required to be identical for each regulatory year; and
- be nominated both:
  - prior to the start of the return on debt averaging period, and
  - no later than the lodgement date of the Revenue Proposal for the regulatory control period.[5]

We have nominated proposed confidential averaging periods in accordance with the above requirements. For the purpose of this Revenue Proposal, we have adopted a risk free rate that reflects the latest available quarterly market data from September 2021 as a placeholder estimate. The nominated averaging periods will be reconsidered as required in our Revised Revenue Proposal in light of the requirements of the 2022 Rate of Return Instrument.

Applying the above methodology, our trailing average placeholder estimate of the benchmark cost of debt based on current market rates described above is 3.82%. The estimated benchmark cost of debt based on this placeholder estimate is set out in Table 3.3.

Table 3.3: Estimated benchmark cost of debt

	2023-24	2024-25	2025-26	2026-27	2027-28
Nominal pre-tax return on debt	3.82%	3.67%	3.52%	3.37%	3.21%

[5] AER, *2018 Rate of Return Instrument*, clause 24.

3.6 WACC

Table 3.4 summarises the nominal vanilla WACC or the 'allowed rate of return', calculated in accordance with clause 3 of the 2018 Rate of Return Instrument. It should be noted that we have not attempted to forecast WACC parameters for the purposes of this table other than the return on debt, which changes in the table to reflect our ongoing transition from the 'on the day' approach to the 10- year trailing average approach as set out in section 3.5 above.

The indicative WACC values shown in the table are therefore derived from 'placeholder' estimates which will be updated in line with the nominated averaging periods and reconsidered as required in light of the AER's 2022 Rate of Return Instrument.

In the interim, for transparency and simplicity the revenue calculations presented in our Revenue Proposal are based on the static WACC value for 2023-24 of 4.29%.

Table 3.4: Nominal vanilla WACC

	2023-24	2024-25	2025-26	2026-27	2027-28
Return on equity	5.00%	5.00%	5.00%	5.00%	5.00%
Nominal pre-tax return on debt	3.82%	3.67%	3.52%	3.37%	3.21%
Gearing	60%	60%	60%	60%	60%
Nominal vanilla WACC	4.29%	4.20%	4.11%	4.02%	3.93%

3.7 Equity raising costs

Equity raising costs are the transaction costs incurred when businesses raise new equity to fund capital investment. Accordingly, the AER provides a benchmark allowance to reflect the efficient costs of raising equity, if equity raising is required to maintain the benchmark gearing of 60%.

Our equity raising costs are derived from the PTRM and the AER's benchmarking approach. This includes a distribution rate of 0.9, consistent with the 2018 Rate of Return Instrument. Our modelling indicates that no equity injection is required to maintain the benchmark capital structure over the forthcoming regulatory period.

3.8 Debt raising costs

Debt raising costs are transaction costs incurred each time debt is raised or refinanced. These costs may include arrangement fees, legal fees, company credit rating fees and other transaction costs.

The AER provides a benchmark allowance for debt raising costs as a component of our operating expenditure allowance. The AER's historical approach to debt raising costs has been informed by a report from the Allen Consulting Group, commissioned by the ACCC in 2004. The AER subsequently updated the Allen Consulting Group's analysis to reflect more recent market data provided by PricewaterhouseCoopers during the 2013 rate of return guideline process.

In this Revenue Proposal, we have calculated a debt raising cost allowance based on the default parameters specified in the PTRM. This results in an annual rate of 8.1 bppa, which we have included in our operating expenditure forecasts.

3.9 Gamma

Under the Australian imputation tax system, investors receive imputation credits for tax paid at the company level. For eligible shareholders, imputation credits offset their Australian income tax liabilities. The AER takes account of the value of imputation credits (known as gamma or 'γ') to recognise that imputation credits benefit equity holders, in addition to any dividends or capital gains they receive.

As the regulatory framework applies a post-tax WACC, the value of imputation credits is not a WACC parameter. Instead, the value of imputation credits is a direct input into the calculation of a network service provider's benchmark tax allowance. In accordance with the 2018 Rate of Return Instrument, we have adopted a value for imputation credits of 0.585. This value will be updated and reconsidered as required in light of the AER's 2022 Rate of Return Instrument.

The calculation of our benchmark tax allowance for the 2023-24 to 2027-28 regulatory period is provided in Attachment 7.

3.10 Forecast inflation

In the context of the revenue setting process, forecast inflation is an estimate of inflation expectations in the nominal WACC. It is used in the AER's transmission PTRM to convert the nominal WACC to a real WACC and (through a negative adjustment to depreciation) to avoid the double counting that would otherwise arise from applying a nominal rate of return to an inflation-adjusted capital base. Accordingly, the estimate of expected inflation used in the building block determination to make negative adjustments to revenue must be consistent with and reflect investor's inflation expectations.

Our inflation forecast reflects the outcome of the AER's recent inflation review[6], which concluded that:

- the target inflation horizon should be shortened from ten years to a term that matches the regulatory period (typically five years); and
- a linear glide-path should apply from the RBA's forecasts of inflation for year 2 to the mid-point of the inflation target band (2.5 per cent) in year 5.

In applying this methodology, we have calculated an inflation forecast of 2.40%, which is based on the RBA's short-term inflation forecast in its November 2021 Statement of Monetary Policy, consistent with the AER's preferred inflation forecasting methodology. We expect this estimate will be updated as required based on prevailing market rates at the time of our final revenue determination.

6 AER, Final position, Regulatory treatment of inflation, December 2020

ElectraNet