Rate of Return

An Overview | January 2021
2023-27 Revenue Proposal

What is the Rate of Return?

The rate of return, also commonly known as the Weighted Average Cost of Capital (WACC), is an estimate of the cost of funds required to attract and retain investment in a business.

To estimate the rate of return, the cost of two sources of investment funds are considered:

- Return on equity - the return (or effectively an interest rate) investors expect on their investment
- Return on debt - the return lenders expect and the business must pay to borrow money to invest.

The cost of each source of funds is then weighted by the proportion of each source of funding relative to total value.

How we estimate the WACC?

Powerlink has applied the Australian Energy Regulator's (AER's) 2018 Rate of Return Instrument (RoR Instrument)[1] to determine an indicative rate of return for the 2023-27 regulatory period of 4.44% per annum[2].

The AER's 2018 RoR Instrument sets out the way to calculate the rate of return and the value of imputation credits.

Based on the AER's benchmark efficient entity approach and the benchmark mix of debt and equity, our rate of return is estimated as follows:

RoR = Return on Equity x 40% + Return on Debt x 60%

The rate of return will be adjusted annually for an update to the return on debt.

Return on Equity

The AER's approach to estimate the return on equity (RoE) uses the Sharpe-Lintner Capital Asset Pricing Model (SL-CAPM)[3].

This model estimates a return to investors for a particular business (in our case, electricity transmission) that takes into account:

- returns to a risk-free asset (via the risk-free rate, Rf);
- returns to the broader market (via the market risk premium, MRP); and
- the variability of returns and therefore the riskiness of the investment relative to general market conditions (via the equity beta, Be).

The AER's 2018 RoR Instrument establishes a formula for calculating the risk free rate and sets fixed values for:

- the market risk premium at 6.1% per annum; and
- the equity beta at 0.6.

We have adopted these parameters to calculate our indicative return on equity.

Return on Debt

The AER's approach seeks to estimate a return on debt that is an average of interest rates over a 10-year period. It does this by assuming that each year, one-tenth of a business' debt is refinanced. This is known as the trailing average portfolio approach.

Under this approach, the return on debt (and the rate of return) will be recalculated each year, based on a benchmark credit rating of BBB+.

To estimate the return on debt for the 2023-27 regulatory period, we have assumed the prevailing debt market conditions from our previous annual update (in January 2020) will continue.

Gamma

Gamma is the term given to an estimate for the value of imputation credits. While gamma is not part of the WACC formula, its value affects the after-tax revenues of the business. In general, the higher the value of gamma, the lower the after-tax revenues.

We have adopted the value for gamma of 0.585 set in the AER's 2018 RoR Instrument.

For more information, please refer to the *AER's 2018 Rate of Return Instrument*.

1 The AER's Rate of Return Instrument applies to Powerlink's Revenue Proposal and is binding on all of the AER's regulatory determinations for four years after it was published.

2 The AER will update relevant rate of return parameters consistent with our nominated (approved) averaging periods in its Final Decision on our 2023-27 Revenue Proposal in April 2022.

3 The SL-CAPM calculates the return on equity as follows: RoE = Rf + Be(MRP) where MRP = (expected market return – Rf).