2017/18 – 2021/22 Revenue Proposal

Rate of Return
An Overview | July 2015

What is the Rate of Return?

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

To estimate the WACC, we consider the cost of two sources of investment funds – equity and debt. The return (or effectively an interest rate) investors expect on their investment is known as the Return on Equity. The return lenders expect, and the business must pay to borrow money to invest, is known as the Return on Debt.

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

How will we estimate the WACC?

Powerlink will adopt the methodology outlined in the Australian Energy Regulator's (AER's) Rate of Return Guideline. The Guideline sets out an approach the AER considers will best achieve the Rate of Return objective in the National Electricity Rules:

> *"The Rate of Return for a Transmission Network Service Provider (TNSP) is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the TNSP in respect of the provision of prescribed services" (V.72).*

Based on the benchmark efficient entity approach and the Guideline benchmark mix of debt and equity, Powerlink will estimate WACC as follows:

A more detailed explanation of the Rate of Return can be found in the AER's Rate of Return Guideline www.aer.gov.au/Better-regulation

Return on Equity

The AER's approach has been to estimate the Return on Equity using a 'foundation model' (the Sharpe-Lintner Capital Asset Pricing Model or SL-CAPM[1]).

A number of other models, methods and information are expected to be used to come up with a range or point estimate for each of the foundation model inputs. Put simply, the model attempts to estimate a return to investors for a particular business (in Powerlink's 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).

Powerlink will apply this approach to the latest available data in its Revenue Proposal.

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.

As this approach is different to what the AER has used in the past, the AER will gradually transition each regulated business to this approach over time. This means that the Return on Debt (and the WACC) will be recalculated each year.

Powerlink will seek independent expert advice to estimate the Return on Debt over a term of 10-years and using a credit rating of BBB+, consistent with this approach.

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.

[1] The SL-CAPM calculates the return on equity as follows: RoE = Rf + Be(MRP)