

Rate of return fact sheet – JGN, June 2015

Our allowed rate of return is commensurate with the efficient financing cost of a benchmark efficient entity providing regulated network services. This is estimated as a weighted average of the return on debt and equity. Our allowed rate of return compensates investors for the risks of providing capital to regulated network service providers.

The allowed rate of return

Significant investment is required to build an electricity or gas network. The allowed rate of return is a forecast of the cost of funds a network business requires to attract investment in the network.

We set the rate of return based on a benchmark, rather than the actual costs of individual businesses. Hence, network businesses have incentives to finance their business as efficiently as possible. We define the benchmark efficient business as one who only provides regulated electricity or gas network services, operating within Australia. This applies to both electricity and gas as the risks across both industries are sufficiently similar such that a single benchmark is appropriate.

We estimate the rate of return by combining the returns of the two sources of funds for investments—equity and debt. The return on equity is the return shareholders of the business will require for them to continue to invest.

The rate of return for the first year (2015–16) of JGN's regulatory period in this final decision is 5.41 per cent.

This rate will be updated annually during the regulatory period.

The return on debt is the interest rate the network business pays when it borrows money to invest. We consider that efficient network businesses would fund their investments by borrowing 60 per cent of the required funds, while raising the remaining 40 per cent from equity.

A good estimate of the rate of return is necessary to promote efficient prices in the long term interests of consumers. If the rate of return is set too low, the network business may not be able to attract sufficient funds to be able to make the required investments in the network and reliability may decline. On the flip side, if the rate of return of return is set too high, the network business may seek to spend too much and consumers will pay inefficiently high prices.

Our aim is to set a rate of return that delivers sufficient but not excessive returns to support investment in safe and reliable energy networks.

Our approach

Our approach includes a process that captures a broad range of material from all stakeholders. We set out this approach in our rate of return guideline (the Guideline) published in December 2013. The Guideline was developed through extensive consultation and included effective and inclusive consumer engagement throughout 2013.

In making this final decision we have reviewed a vast amount of material put before us. This includes reports from experts engaged by network service providers and us, and submissions from users, consumer groups and the Consumer Challenge Panel. Overall, our approach is consistent with what we set out in the Guideline. Further details of our Guideline approach are available at <http://www.aer.gov.au/node/18859>

Our approach allows us to determine a rate of return that is commensurate with efficient costs, reflects market conditions and is in the long term interests of consumers.

Return on equity

Our return on equity estimate is determined by applying an iterative six step process. We refer to this as the foundation model approach. At different stages of this process we capture information relevant to making an estimate based on the merits of each piece of information. We use a range of models, methods, and information to inform our return on equity estimate.

Based on our review of the various equity models, the Sharpe Lintner Capital Asset Pricing model (SLCAPM) stands out as the superior model for our purpose. We, therefore, adopt it as our foundation model. We use some of the other models to inform the input parameter point estimates of the SLCAPM.

Our point estimates for the market risk premium (MRP) and equity beta are derived after considering a range of evidence. We adopted a MRP of 6.5 per cent and equity beta of 0.7 resulting in an equity risk premium (the risk premium over the risk free rate) of 4.55 per cent. We compared this equity risk premium with a range of other information. Our estimate sits within the range of other information available to estimate the return on equity.

The risk free rate we use is based on the 10 year government

bond rate (an average of the observed rate over a 20 day period) close to the next regulatory period. For this final decision we adopted a risk free rate of 2.53 per cent. Our SLCAPM point estimate for this final decision is 7.1 per cent.

Having evaluated our SLCAPM point estimate against a range of other information, we are satisfied that a 7.1 per cent return on equity estimate is a reasonable estimate of efficient equity financing costs.

Our approach for this decision is consistent with the approach taken in the final and preliminary decisions released by the AER in April 2015 for other service providers. In these decisions we also used a return on equity of 7.1% (the product of a risk free rate of 2.55 per cent and an equity risk premium of 4.55 per cent rounded to one decimal place).

Our return on equity estimate for this final decision is 7.1 per cent.

Return on debt

Our return on debt estimate is based on a gradual transition from the 'on-the-day' approach we used in the past to the 'trailing average' approach we proposed in the Guideline. The trailing average approach reflects the return on debt that a network business would face if it raised debt annually in equal parcels. Our return on debt approach incorporates a transition to the new approach.

We commence the trailing average with an initial estimation of the return on debt that is then progressively updated each year over the regulatory period. In practice, this means that for new debt that is issued (10 per cent each year) we apply the trailing average immediately. For existing debt issued before the commencement of the trailing average approach, we will continue to apply the on-the-day approach. Consequently, at the end of 10 years the total debt portfolio will have been updated and incorporated into the trailing average.

Our return on debt estimate is developed on the basis that a benchmark efficient entity issues debt with a 10 year term and has a BBB+ credit rating. To estimate the yield on this debt, we use an independent third party data service provider. We reviewed the data series provided by the Reserve Bank of Australia and Bloomberg and, as neither data series is clearly superior to the other, we decided to adopt an average of the two data series.

Our estimation procedure allows the service provider to propose a period between 10 days and 12 months for each regulatory year, over which the observed rates are averaged to estimate the return on debt. This results in each service provider proposing an averaging period consistent with its debt practices and therefore, our return on debt estimate is different for different service providers.

Our approach and estimation procedures are consistent with the Guideline. Jemena Gas Networks initially agreed with our Guideline approach, but subsequently proposed a hybrid transition approach.

Having evaluated the evidence before us, we are satisfied that a 4.28 per cent return on debt for the first year (2015-16) of

the regulatory control period (to be updated annually) will lead to a rate of return that meets the rate of return objective.

Our approach for this decision is consistent with the approach taken in the final and preliminary decisions released by the AER in April 2015 for other service providers.

The return on debt for the first year (2015-16) of JGN's regulatory period is 4.28 per cent.

This return on debt number will be partially updated annually during the regulatory period to reflect prevailing interest rates in each new year.

Imputation credits

Under the Australian imputation tax system, investors can receive an imputation credit for income tax paid at the company level. For eligible investors, this credit offsets their Australian income tax liabilities.

We subtract from a service provider's corporate tax forecast the value of imputation credits.

In this decision, although we have broadly maintained the approach in the Guideline, we have re-examined the relevant evidence and estimates. This re-examination, and new evidence and advice considered since the Guideline, has led us to depart from the value in the Guideline. Accordingly, we adopt a 0.4 value, rather than the 0.5 value we proposed in the Guideline.

Our approach for this decision is consistent with the approach taken for the final and preliminary decisions released by the AER in April 2015 for other service providers. In these decisions we also used a value for imputation credits of 0.4.

Our value of imputation credits for these decisions is 0.4 (40 per cent).