**Attachment 9-13: Proposed Rate of Return**

**9.1 Introduction**

The submission sets out the Rate of Return Envestra is proposing for the Final Decision. Envestra has used the Sharpe CAPM in determining the proposed 10.98% Rate of Return, with the CAPM output verified for reasonableness using other commonly used asset pricing models and independent market based yield estimates. The point estimates of each of the WACC inputs are summarised below:

|  |  |
| --- | --- |
| **WACC Parameters** | **Point Estimate** |
| Risk Free Rate | 5.6% |
| Equity Risk Premium ( x MRP) | 6.4% |
| Cost of Equity | 12.0% |
| Cost of Debt | 10.3% |
| Value of Imputation Credits | 0.2 |
| Gearing | 60% |
| Benchmark Credit Rating | BBB+ |

The basis on which the point estimates have been selected is as follows:

1. the cost of equity of 12.0% has been derived using a value for equity beta towards the top of the 0.8-1.0 range, an MRP of 6.5% and the risk free rate of 5.6%. The 12.0% cost of equity was selected on the basis it best reflects the prevailing market conditions, is consistent with market expectations and estimates derived from other asset pricing models;
2. the cost of debt of 10.27% is consistent with the BBB+ credit rating and has been selected based on ‘fair value’ yield estimates to ensure sufficient debt can be attracted to fund the capital base and capital expenditure program;
3. The value for imputation credits of 0.2 has been used as this is consistent with the empirical evidence and close to the value generally used by corporate valuation professionals. This point estimate is consistent with a payout ratio of 0.7 and a theta of 0.3.

**9.2 Derivation of the WACC**

The nominal post-tax WACC of 10.98% has been derived from the formula below. In this formulation of the WACC corporate taxes are dealt with in the forecast cash flows.

WACC (nominal, post-tax) 

Where:

|  |  |
| --- | --- |
| Re | 12.0%, which is the risk adjusted post-tax cost of equity required by investors derived from the CAPM |
| E | 40%, which is the benchmark level of equity expressed as a percentage |
| D | 60%, which is the benchmark level of debt expressed as a percentage |
| V | Sum of assumed debt level plus assumed equity level (V = D + E) |
| Rf | 5.60% nominal risk-free rate of return |
| Drp | 4.67% Debt Risk Premium |
| Rd | 10.27% cost of debt (Rf + Drp) |

For the reasons set out in this proposal, Envestra submits that a WACC of 10.98% is the value that best gives effect to the requirements of the National Gas Objective, the National Gas Law and the National Gas Rules.