



Mr Greg Ruthven  
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Dear Greg

### **WACC Components of the MRCP**

The Independent Market Operator (IMO) has engaged PricewaterhouseCoopers to provide estimates of the following WACC parameters:

- nominal risk free rate of return;
- expected inflation;
- real risk free rate of return;
- debt risk premium;
- corporate tax rate.

Estimates were to be provided at two dates, the first of which was at the end of September 2011 and the second of which was the end of December 2011.

This letter provides values of the WACC parameters at 30 December 2011. Values have been estimated applying the methods set out in our report to the IMO “Maximum reserve Capacity Price – WACC methodology” dated 28 February 2011. In particular:

- the nominal risk free rate is estimated as the average over the 20 trading days to 30 December 2011 of the interpolated yield on Commonwealth Government Securities with 10 years to maturity;
- the expected inflation rate is estimated as the geometric mean of inflation forecasts published by the Reserve Bank of Australia, or a value of 2.5 per cent per annum where no forecast is published;
- the real risk free rate of return is calculated from the nominal risk free rate of return and inflation rate applying the Fisher equation;

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- the debt risk premium is calculated for a 10 year BBB rated corporate bond by extrapolating from the Bloomberg fair value yield curve for 7 year BBB rated corporate bonds (over the 20 trading days to 30 December 2011) by the margin between 7 year and 10 year AAA rated bonds (over the 20 trading day period to 22 June 2010); and
- the corporate tax rate is taken as the current statutory rate of corporate income tax.

The estimates of WACC parameter thus derived are:

Nominal risk free rate	3.92%
Inflation rate	2.55%
Real risk free rate	1.34%
Debt risk premium	4.13%
Corporate tax rate	30%

A spreadsheet is attached containing the calculation of these estimates.

As raised with you in previous discussions, I draw your attention to the fact that the risk free rates stated above reflect implied yields on Commonwealth Government Securities that are at extremely low levels relative to historical averages. Caution should be exercised in applying these low values of risk free rates in the CAPM to derive an estimate of the cost of equity without considering implications for values of other parameters, particularly the market risk premium.

If you wish to discuss any of the detail of derivation of these estimates, please give me a call.

Yours sincerely

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