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Chair
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ENA cross submission – agenda items for cost of capital workshops

Dear Mark

In this cross submission the ENA wishes to recommend agenda items that arise for the Commission's proposed cost of capital workshops from the submissions on input methodologies.

LECG[1] (paragraphs 19-24) and Telecom[2] (paragraph 34-48) both argue against the Commission's exclusive reliance on the tax-adjusted CAPM (the so-called Brennan-Lally version) for estimating the cost of equity. LECG suggests that estimates from other models (including non-CAPM-type models) should be given some weight in the process, even if only to shed light on the potential error arising from the use of the tax-adjusted CAPM, and provides some concrete possible approaches. Telecom makes a similar point (paragraph 38), but also suggests a 'back-to-basics' approach under which the appropriate model is determined on a case-by-case basis, rather than simply assumed to be the tax-adjusted CAPM. The ENA considers both these suggestions have merit and should be reflected in the agenda of the proposed cost of capital workshops.

Further evidence for the need to test any model and its conclusions with observed market behaviour and data is provided in the Ireland Wallace & Associates (IWA)[3] report, commissioned by the Major Electricity Users Group (MEUG). IWA observe that the Commission's preferred WACC model results in WACC estimates that increase with leverage, and thus the lowest estimate is achieved by setting leverage to zero. IWA infer from this result that zero leverage is the lowest-cost (most

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[1] *Comments on the Commerce Commission's proposed approach to estimate the cost of capital*, Glenn Boyle, Tim Irwin & Tony van Zijl of LECG, 11 August 2009, and part of the ENA submission

[2] *Submission on Commerce Commission Revised Draft Guidelines for Estimating the Cost of Capital*, August 2009, Public Version, Telecom

[3] *Input Methodologies Discussion Paper Submission: Report to Major Electricity Users' Group*, 31 July 2009, Ireland, Wallace & Associates Limited

to zero. IWA infer from this result that zero leverage is the lowest-cost (most efficient) capital structure for businesses subject to Part 4, and that the Commission should therefore use zero leverage when estimating WACC.

However, this conclusion that leverage is an inefficient form of financing for infrastructure firms is contrary to the capital structures these businesses (and most other firms) employ in practice. If IWA's inference were correct, businesses could increase their value significantly by replacing debt with equity. The fact that they don't is a telling sign that this aspect of the model is mis-specified and that IWA's inference is wrong. We also note that the IWA report is internally inconsistent. On the one hand they site approvingly eminent financial economists (Copeland, Weston & Shastri, paragraph 7.6) as follows:

> *How does a practitioner use the theory to determine optimal capital structure? The answer to this question is the Holy Grail of corporate finance. There is no complete answer, and the author of a sound, empirically validated theory will deserve the Nobel prize in economics.*

but elsewhere in the same report IWA claims the efficient capital structure for businesses subject to Part 4 is known, and is zero leverage.

The ENA recommends the cost of capital workshops consider the following two questions:

(i) If a single model is to be used for estimating the cost of equity, what process should first be followed, and what criteria should be employed, in determining what this model should be?

(ii) If a variety of models are to be used (perhaps with one primary model determined by step (i)), how would these be combined to yield a single estimate?

On unsystematic risk issues, LECG (paragraph 30) notes that allowances for unsystematic risk could be incorporated in the rate base rather than the cost of capital, and Professor Graeme Guthrie[4] provides a detailed justification and implementation of this approach. Although it leaves open a number of questions about how exactly the multiplier *M* might be estimated, Professor Guthrie's approach has the great virtue of reducing the problem of estimating the appropriate real option allowance (and an allowance for other unsystematic risks as well) down to a single parameter. In this sense, this proposed approach is similar to that currently employed by the Commission for estimating the allowance for systematic risk.

We recommend that the cost of capital workshops seek to determine methods by which *M* might be estimated. As this allowance for unsystematic risk could be reflected in either the cost of capital or the rate base, it appropriately is a topic for any cost of capital workshop.

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[4] *Incorporating Real Options in Regulated Prices*, Graeme Guthrie, 13 August 2009, and part of Telecom's submission

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Kind regards

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