

Submission to the Commerce Commission

on the

**Revised Draft Guidelines – The Commerce
Commission’s Approach to Estimating the
Cost of Capital**

**Made on Behalf of
17 Electricity Distribution Businesses**

14 August 2009

Submission on the Revised Draft Guidelines – The Commerce Commission’s Approach to Estimating the Cost of Capital

A revised regulatory regime for electricity lines businesses (ELBs), gas pipeline businesses (GPBs) and major international airports came into effect on 14 October 2008, with some provisions for ELBs delayed until 1 April 2009, via a new Part 4 of the Commerce Act 1986 (the Act).

Accordingly, the Commerce Commission (the Commission) is consulting with interested parties on the specification of input methodologies, including the cost of capital, which must be determined in accordance with section 52T of the Act.

Previously, in October 2005, the Commission released for comment the following document:

- Draft Guidelines: The Commerce Commission’s Approach to Estimating the Cost of Capital.

This set out the Commission’s methodology for estimating firms’ cost of capital. Submissions on these initial draft guidelines were received in January 2006. Having reviewed the submissions, the Commission subsequently appointed a panel of experts (the Panel) to:

- evaluate the draft guidelines and consider the issues raised in submissions;
- provide a report on the appropriate theory and application of cost of capital for regulatory purposes; and
- in the report, indicate points of consensus and disagreement, and where there is disagreement, explain the reasons why.

Having considered the Panel’s recommendations, and in the context of the new Part 4 of the Act, the Commission has now revised its draft guidelines and issued the following documents:

- The Commerce Commission’s Approach to Estimating the Cost of Capital, 19 June 2009 (the Revised Draft Guidelines); and
- Recommendations to the new Zealand Commerce Commission on an Appropriate Cost of Capital Methodology, Julian Franks, Martin Lally, Stewart Myers, 18 December 2009 (the Panel’s Report).

The Revised Draft Guidelines represent the Commission’s preliminary views and following consultation, the Commission intends to issue Final Guidelines on its approach to estimating the cost of capital, which it will apply across all of its various regulatory instruments in Part 4 of the Act.

This paper forms our submission on the Discussion Paper which has been prepared by PricewaterhouseCoopers on behalf of the following 17 EDBs:

- Alpine Energy Limited
- Buller Electricity Limited
- Eastland Network Limited
- Electricity Ashburton Limited
- Electricity Invercargill Limited
- Horizon Energy Distribution Limited
- MainPower New Zealand Limited
- Marlborough Lines Limited
- Nelson Electricity Limited
- Network Tasman Limited
- Northpower Limited
- OtagoNet Joint Venture
- The Lines Company
- The Power Company Limited
- Top Energy Limited
- Waipa Networks Limited
- Westpower Limited.

This group of EDBs together comprises 406,693 connections (or 21% of the total electricity distribution sector), 56,646 system kilometres (or 39% of the total electricity distribution sector) and \$1.9 billion dollars of regulated network fixed assets (or 26% of the total electricity distribution sector).¹ The ownership structures represented include consumer and community trusts, a listed company, local body and co-operative ownership, as well as those managed by management companies. Group members include networks with predominantly urban systems, others that are sparsely populated and a number with significant urban areas combined with rural and remote rural characteristics.

Our Submission

Our submission comments on the Draft Guidelines, and where appropriate, the Expert Panel's Report in the context of the Draft Report. We have highlighted a number of issues of principle in

¹ Based on 2008 Information Disclosure Data

the first section of our submission, followed by more detailed comments on the specific parameters and mechanisms proposed in the Draft Guidelines for estimating the cost of capital.

Points of Principle

We have summarised below five overriding points of principle which we believe must be considered for estimating the cost of capital for regulated suppliers. These are pervasive throughout our detailed responses set out later in this paper.

(i) Asymmetric risks

1 Regulation imposes asymmetric risks on regulated firms. These risks arise when returns are capped, but without commensurate protection for downside exposures. Regulatory actions and determinations can also destroy valuable real options. These risks can potentially have large impacts on regulated firms and in the long run can thus result in $NPV < 0$ if inadequate rates of return are allowed by the regulator.

2 Wherever it is practicable the Commission should make explicit allowance for asymmetric risks / real options, without placing unreasonably restrictive evidential requirements solely on the regulated firm. Where it is not practicable to derive reasonable estimates for these factors, we consider that the Commission needs to be cognisant of their existence, both when considering each of the individual cost of capital parameters and, more particularly, when selecting a weighted average cost of capital (WACC) within the assessed range.

(ii) Measurement

3 The cost of capital reflects an expected rate of return, taking into account returns prevailing in capital markets on alternative investments of equivalent risk. It is not and cannot be a precise measure. The determination of the cost of capital relies on a range of estimates and assumptions and as a result determining a point estimate of the cost of capital has uncertainty associated with it. The assessment of the cost of capital must take into account the potential for error both in its specification (i.e. model risk) and in the parameters that inform the assessment.

(iii) Business characteristics

4 Not all businesses within an industry have the same characteristics. As a result they will not necessarily all have similar exposures to market risks. In some sectors (for example electricity distribution), while exposure to macroeconomic factors and regulation may be similar amongst

firms, factors such as scale, customer type and mix, customer density, cost structures and the ability to raise capital vary considerably. The Commission needs to ensure that the model for determining the cost of capital provides flexibility in regard to individual businesses' characteristics, so as to not unfairly disadvantage businesses with unique risk profiles. While an industry-wide WACC may be a useful starting (or default) position, the Commission should remain open to the use of company specific WACCs if, on a case-by-case basis, there is evidence of material differences in risk between companies within the industry.

(iv) *Financeability*

5 The Commission needs to ensure that in the process of developing its assessment of cost of capital, it is cognisant of the potential for price control to hinder the ability of firms to raise finance. Firms must be able to finance their operating costs, investment programs and meet financing costs. Financeability may be affected by not only the allowed rate of return, but also by a number of regulatory decisions that determine the inter-temporal profile of the allowed revenue stream.

(v) *Process for setting allowed rates of returns*

6 The Draft Guidelines include in Figure 1 a proposed process for setting allowed rates of return. The discussion in the accompanying section 4 of the Draft Guidelines suggest that some of the steps would be undertaken for all regulated businesses (reflecting generic market wide parameters), others would be industry specific (such as industry equity beta) and others would be business specific (for example business financeability). However, it is not clear how this process would be applied in each of the regulatory instruments applying to EDBs, including information disclosure, Default Price-Quality Paths (DPPs) and Customised Price-Quality Paths (CPPs). For example it is difficult to comprehend how financeability tests could be employed in the context of information disclosure regulation. For this reason we suggest that the final Guidelines should provide context around the process as set out in Figure 1.

Specific Comments on the Input Parameters and Estimating the Cost of Capital for Regulated Suppliers

(i) *NPV=0*

7 We support the general principle of the NPV=0 rule, such that firms ought to have an expectation of earning at least a reasonable rate of return and recovering their efficient investment. We would note that the Panel also highlighted the desirability of a scheme that would allow firms to keep profits generated over the regulatory period as a result of efficiencies. This would incentivise

firms to implement efficient practices earlier without fear of potential claw-back of excessive profits. This significant principle should be embodied in the Commission's Final Guidelines and means that on an *ex post* basis there should be some probability that on average $NPV \geq 0$.

(ii) The Form of the Capital Asset Pricing Model ("CAPM") CAPM

8 The lack of empirical evidence in support of CAPM has been widely discussed and analysed by academics in recent decades. Fama and French (2004), analysed the entire universe of listed US stocks (for which data was available) over a 75 year period, which demonstrated that the CAPM is insufficient to explain realised returns, in particular for low or high beta stocks. They found that the actual returns for low beta stocks were in excess of those suggested by CAPM, while the actual returns for high beta stocks were lower.

9 Given that the Commission typically assesses and applies a low beta in its cost of capital determinations for firms subject to regulation, and that it adheres rigidly to use of CAPM, this solid body of research indicates that the Commission's low beta-based cost of capital estimates will be too low. This problem will be exacerbated by using a tax adjusted specification of CAPM, which has the effect of reducing the intercept and increasing the slope of the securities market line, whereas the Fama and French (2004) research shows that the opposite form of adjustment would be required to align the CAPM with the empirical evidence.

10 It is incumbent on the Commission to recognise the bias resulting from use of the CAPM (particularly the Brennan-Lally CAPM) with below average beta values and to make some form of correction for this, such as one or more of the following:

- Use of the classical CAPM, as either a cross-check or the primary basis for assessing the WACC;
- Allowing an increment to the WACC;
- Choosing a WACC from a higher point from its assessed WACC range; and
- Allowing a mean reversion-type adjustment to the beta.

11 To date the Commission has exclusively used the simplified Brennan-Lally CAPM to estimate the cost of equity for the regulated activities of firms. However, we consider that there is merit in considering other forms of the CAPM (both classical and international), as well as using the Fama-French three factor and DCF models as cross-checks on the simplified Brennan-Lally CAPM cost of equity estimates.

12 We note the diversity of views amongst the panel members in relation to the appropriate form of CAPM to be used. Dr Lally recommends the continued use of the simplified Brennan-Lally

version of the CAPM; Professor Myers recommends the classical CAPM model; and Professor Franks recommends the use of both of these models in addition to the International Capital Asset Pricing Model (using all the available evidence on the degree of home bias to select the appropriate form of the CAPM).

13 The Commission's current and proposed position is that allowing for investor taxes, improves the efficacy of the CAPM. However, as highlighted by Professor Myers, the assumptions underlying the simplified Brennan-Lally CAPM are likely to be too extreme and as a result he recommends the use of the classical CAPM rather than the simplified form of the Brennan-Lally CAPM. Professor Myers acknowledges the poor performance of the CAPM (as identified by Fama and French); in particular that the under-estimation of the cost of equity for low-beta firms is amplified by using the simplified Brennan-Lally model. Furthermore, both Professor Myers and previous submitters on the cost of capital highlight that New Zealand is open to foreign investment by those who do not benefit from dividend imputation, and that not all investors enjoy the benefits of imputation credits. These factors all support use of the classical CAPM, either as the primary basis for estimating the regulatory cost of equity, or at least as a cross-check that is given due weight.

14 We consider that the Commission should therefore have regard to the position of all of the panel members on the appropriate form of CAPM, not just those of its advisor, Dr Lally, and its own historical practice when it finalises its guidelines.

(iii) Risk Free Rates

Suitable Proxies

15 The Commission has proposed retaining its current practice of benchmarking the risk free rate against government bond yields, but has indicated that it will keep this position under review.

16 We broadly support the continued use of using government bond yields. However, we note that other proxies, such as swap rates are currently being considered in other jurisdictions and that there is ongoing research being undertaken in this area. As a result, we believe that this is an area that requires ongoing monitoring by the Commission, particularly if the liquidity of government bonds declines relative to that of swaps.

The Appropriate Term

17 The Commission's current approach results in two different risk free rates being used in determining the return on equity. The Commission matches the maturity of the risk free rate in the intercept term to the length of the regulatory period whereas the risk free rate used in estimating the MRP is generally for a ten year term².

18 We note that this outcome is at odds with two of the panel members, who consider that the Commission should be using the one year risk free rate in applying the CAPM and also for estimating the MRP. To determine the regulatory cost of capital Professor Myers then recommends standardising on using a 5-year forecast of the one year risk free rate, while Professor Franks favours a 3-year forecast. We concur that the Commission should standardise on a medium to long term risk free rate for input to regulatory cost of capital estimates assessed using the CAPM. In our view that term should be consistent with the investment analysis practices of firms and their shareholders when investing in the long-life assets that are typically being subject to regulation.

19 The use of the yield on long maturity bonds also has a side benefit of reducing the potential volatility in the regulatory cost of capital that can arise as a result of short term events (and government's responses to those events) for example the current short term cost of funding following the financial crisis. A more stable risk free rate input should thus enhance financeability and reduce re-financing risk.

20 Using spot rates on government bonds as the risk-free rate in the CAPM is the theoretically preferred approach. However, we agree that in many circumstances, for pragmatic reasons, including obtaining data and the preference for the use of a single rate, using yields to maturity will be an appropriate approach.

Market Risk Premium (MRP)

21 The MRP represents the additional expected return over and above the risk free rate to compensate investors for holding a market portfolio. It is a forward looking concept and therefore can not be directly measured. Additionally, the market portfolio can not be observed, but is approximated by the use of an index, generally for listed equities.

22 As a result, MRP estimation techniques are primarily backward looking, or *ex-post*. The Commission has indicated that *ex-post* techniques will form the starting point of its estimation of MRP, but that historical premiums may be poor predictors of future premiums. The Commission states that it will therefore use *ex-ante* estimates as cross-checks of the *ex-post* estimates, but that the overall MRP estimate will be a matter of judgement for the Commission. However, the Commission states in the Revised Draft Guidelines that it will continue to use its current MRP estimate of 7 percent, which is based on advice and analysis from Dr Lally that pools *ex post* and *ex ante* MRP estimates with (apparently) equal weights applied to each estimate.

23 In the first instance we do not consider that the WACC Guidelines should prescribe a particular MRP estimate, as this is a parameter that should be open to revision at any time, based on then current evidence (although in practice it is an input that may not be adjusted all that frequently).

24 Furthermore, if the Commission is now to give greater weight to *ex post* MRP estimates, it is inappropriate for it to simply rely on the results of previous MRP analysis that used a different weighting scheme.

25 Historically, the Commission's advisor, Dr Lally, has had a policy of rounding his MRP estimate, derived from his sample median, to the nearest whole percent. We have previously expressed concern how this could lead to a large step change in the MRP estimate if under this approach, further analysis concluded, for example, that the MRP had changed from, say 7.3 percent to 7.6 percent (the Commission's MRP estimate would then change from 7.0 percent to 8.0 percent). Such a step change would be inconsistent with Professor Franks' recommendations on regulatory consistency.

26 In the most recent work undertaken for the Commission, Dr Lally arrives at a sample median of 7.3 percent, but settles on an estimate of 7.0 percent without reference to a rounding policy. In our view this is unsatisfactory. It is not clear whether the rounding policy still exists or whether the Commission's MRP estimate is intended to be based on a statistical analysis (i.e. a sample median).

27 It is noted that the recent global financial crisis has likely increased expected risk premia (as is observable in credit markets) and that a higher MRP is now justified. However, the nature of *ex post* MRP estimates means that these will have reduced over this period (due to declining share

2 Lally, M., The Weighted Average Cost of Capital for Gas Pipeline Businesses, report for the Commerce Commission, 28 October 2008, page 24.

markets). Hence, at the current time, up to date *ex ante* MRP estimates (or at least the movement in these) may require somewhat more weight than usual in forming a view on the expected MRP.

28 The Commission also proposes using international MRP estimates in forming its estimate on the cost of capital. We concur that this approach may be useful but highlight that it is questionable as to what weight should be given to the international estimates. Historical New Zealand MRP estimates implicitly assume that historical factors remain constant. They also assume that the MRP is not materially affected by changes in the structure of the economy. These concerns must also apply to foreign historical MRP estimates. Furthermore, foreign economies may have had (and still have) different industry composition (as reflected in their share market index), different structures within industries, different levels and types of risk etc, which will tend to make them less relevant to New Zealand. Overall, the New Zealand MRP is generally acknowledged as being higher (after standardising the treatment of investor taxes) than for larger overseas markets, such as Australia and the US. Accordingly, some upward adjustment should be made to MRP estimates from these markets before they are pooled or analysed with New Zealand estimates.

29 PricewaterhouseCoopers' current estimate of the (tax adjusted) MRP for the New Zealand market is 7.5 percent. We recognise that in current market circumstances this may have increased somewhat, although at a practical level in much of our valuation related work moderate fluctuations in the MRP can be accommodated by way of cross-check valuation approaches and / or conservatism in other assumptions. However, these avenues will not typically be available to a regulator, so the Commission may need to be more responsive to altering its MRP estimate for current market conditions.

Beta

Equity Beta

30 The Commission intends to estimate industry-wide equity betas as a starting point for estimating equity betas of individual firms. In order to estimate an industry beta, the Commission proposes to take a weighted average across the individual beta estimates of the comparator companies. An alternative approach is to construct a portfolio comprising the sample firms and estimate the beta of that portfolio.

31 We consider that the portfolio approach is potentially useful, provided that the firms selected are from within the same industry and country. However, where firms are from different industries and/or different countries we recognise that it will often be necessary to average individual firm beta estimates.

32 In the Panel's discussion on firm and industry betas it is implicit that the sample firms will be drawn from the same industry as the regulated firm. However, in the Revised Draft Guidelines the Commission states that it will consider 'comparator firms' may include firms from "*..other sectors with comparable risk profiles.*"³ The Commission then discusses features of similarity. In our opinion the selection of comparator firms from other industries should be supported by rigorous empirical analysis that verifies that these other firms do have comparable risk profiles, rather than being based on subjective views.

33 We note that the Commission is open to accepting evidence to support any proposal for a firm specific cost of capital. We support this approach, as in some industry sectors the risks faced by firms can vary considerably due to differences in scale, customer type and mix, customer density, cost structures and the ability to raise capital.

Debt Beta

34 The Commission has indicated that it intends to estimate debt betas, where feasible, using CAPM, and where appropriate include them in the estimation of the cost of capital. While this approach should be considered by the Commission, in reality it will introduce significant additional work and complexity to the estimate of the regulatory cost of capital, with the most likely outcome being little or no impact on the final cost of capital estimate.

35 If debt betas are to be estimated we concur with the Commission that it is conceptually incorrect to use a debt index to estimate debt betas. From a conceptual perspective the Commission should instead be redefining the market index to include debt and equity and measure betas from this index. However, we recognise that this approach would be difficult to apply in practice as it would need to be applied to each market from which data was drawn and would require re-estimation of the MRP.

36 The most practical approach would likely be to disaggregate the observed debt margins into an expected default loss and an expected risk premium component. The latter could then be divided by the MRP to infer a debt beta. However, this approach would still be problematic as it would require estimation of the expected default loss and assumes that no other factors (e.g. taxes or liquidity) affect observed debt margins.

³ Refer paragraph 170.

37 If the Commission were to implement debt betas we note that it would need to re-visit any earlier asset beta analysis it wished to rely on, with analysis which excluded the effects of debt betas.

Leverage

38 The Commission is inclined to apply a notional leverage to all firms in an industry, based on an average of the gearing ratios in that industry, after testing that this average is consistent with that of an investment grade corporate. Furthermore, the Commission intends to use book values of debt and equity where the entities are not listed, rather than market values.

39 Given the Commission's preferred approach of determining the cost of equity using the simplified Brennan-Lally CAPM model, we would note that the cost of capital is not particularly sensitive to the leverage assumption and as a result, the use of notional leverage will generally be a pragmatic approach. However, if consideration is applied to utilising the classical CAPM model, then the basis of the leverage assumption will become more important for firms.

40 The treatment of leverage is an important issue in the context of the regulatory tax assumption and the manner in which the cost of capital is to be compared to the Return on Investment (ROI) indicator for regulated suppliers.

Cost of debt

41 The debt premium implemented in the cost of capital formula is the margin between the corporate rate of borrowing and the riskless rate of return.

42 The Commission is proposing to have regard to two factors when assessing the cost of debt, or the debt premium, being benchmarking allowed debt premiums paid by firms who have recently issued plain vanilla debt that is:

- of similar maturity, and
- of a reasonable investment grade (e.g. using Standard & Poor's/Moody's ratings A-/A3 or BBB+/Baa1).

43 Due to the thin nature of the New Zealand corporate bond market we note that the above approach may not always be easy to apply in practice.

44 It is important for the Commission to recognise the unique features of some firms, even those within the same sector. As a result, while benchmarking debt premiums provides an

indication of debt costs, the Commerce will need to be cognisant that in some industry sectors, the large diversity in the scale of the firms and their cost structures could make benchmarking difficult and the resulting assumptions may not be relevant for all firms in the sector.

45 In addition, for consistency the Commission intends that the following conditions should be satisfied when estimating debt premiums.

- the risk free rate and the corporate bond yield used to measure the debt premium should be of the same maturity; and
- the risk free rate used to measure the debt premium should be the same risk free rate used to estimate the cost of equity in the CAPM formula.

46 We disagree with the Commission's proposal to measure the debt premium for the same term as the regulatory period. We consider that the debt premium should be measured for the term of the most reasonable, cost efficient, lowest re-financing risk debt structure. Using the regulatory period (which is typically shorter than asset life or debt maturity) may impose additional hedging costs on firms and expose them to significant re-financing risks (which risks have become apparent in the last two years). Where appropriate, allowance should be made for the costs of hedging or swapping the underlying risk free rate on the debt to a term matching that used in the regulatory WACC. We note that generally it will not be realistic for firms to swap or hedge out of the debt margin that is priced into their optimal / actual debt structure.

47 The Commission considers that debt issuance costs should be viewed as expenses and amortised over the regulatory period as part of the firm's cash flows, as opposed to be incorporated into the cost of debt. In our view debt issuance costs should be included in the cost of debt, rather than through regulatory cash flows, as this will be simpler and more transparent to model.

Taxation

48 The Commission has historically adopted a tax-adjusted WACC model. In this model, taxation is accounted for through the cost of capital rather than in regulated cash flows. The Commission's recent focus on the tax payable approach to assessing the tax allowance, has lead it to consider adopting the vanilla WACC. The tax payable approach typically results in a higher degree of volatility in regulated cash flows, resulting in effective tax rates that vary across firms within an industry, and possibly annually at a firm level.

49 When using a vanilla WACC, tax liabilities are accounted for explicitly within the cash flows rather than the WACC itself. We concur that firms' should be compensated for the tax costs that they incur. We have addressed a number of the implementation issues associated with

determining the approach to regulatory tax in our accompanying Input Methodologies Submission. We also agree with the Commission's observation that a post-tax return is more comparable to ROI calculations provided under information disclosures and as a result, the Commission will need to assess returns with both a vanilla WACC and a post-tax WACC.

50 The Commission has highlighted the difficulty in assessing the average personal tax rate across all investors in the economy, or t_i in the Brennan-Lally version of the CAPM. For simplicity, the Commission has assumed that t_i is equivalent to the corporate tax rate, currently 30%. While this is a pragmatic approach, the Commission needs to ensure that the uncertainty associated with this assumption is captured when the Commission undertakes an assessment of its cost of capital range.

Estimating the WACC range

51 The Commission highlights that it faces significant error uncertainty both in regard to the model and input parameters, when it estimates the key variables in the WACC formula. Furthermore, as acknowledged by the Commission, the social costs of setting returns too low likely outweigh the social costs of setting them too high.

52 The Commission has set out its statistical analytical approach to determining a plausible WACC range in the Revised Draft Guidelines. We note that the Commission's approach specifically targets estimation error while little attention is paid to errors that arise as a result of model uncertainty. It is not clear the extent to which model error would impact on the plausible WACC range, but in our opinion some attempt should be made to also recognise the potential impact of this on the Commission's WACC range.

Use of Monte Carlo simulation

53 While the Commission considers that it is feasible to obtain direct estimates and reasonable ranges for the WACC without Monte Carlo analysis, we consider that if different distribution types and/or partial correlations are assumed for different parameters, then Monte Carlo will (in many cases) be simpler to apply than trying to analytically derive the distribution function for the resulting WACC (i.e. this is not a matter of dealing with 'complex feedback loops', but of selecting the easiest tool to use). The use of Monte Carlo analysis would also reduce the incentive for the Commission to otherwise make over-simplified parameter distribution and correlation assumptions.

Choosing an overall WACC

54 We note that the Commission states that it often selects a WACC estimate equal to or above the midpoint of the estimated range, with the extent to which it departs from the midpoint a matter of judgement assessed on a case-by-case basis (depending on the degree of uncertainty reflected in the range and whether the final value selected seems reasonable given the characteristics of the industry and prevailing economic conditions). In our view, the Commission should be specifying that the cost of capital is not simply equal to the midpoint of the range, but greater than the midpoint. This is required in recognition of the social costs of setting the regulatory WACC too low versus too high, to preserve incentives to innovate and invest and to make some allowance for asymmetric risks (if a meaningful allowance is not made elsewhere for these).

55 We recommend that the Commission establish a policy to implement this procedure, for example to add a specific margin to the mid-point cost of capital or to target a particular percentile point from the assessed cost of capital range. Either of these could be expressed as a target band rather than a precise point estimate.

Asymmetric risks

56 The Commission recognises that regulation (and competition) imposes asymmetric risks on regulated firms by capping profits without providing commensurate insulation from downside risks. As a result, it is reasonable to provide regulatory allowances for these risks. These risks are defined as:

- Type I risks which arise through infrequent events that could produce large losses.
- Type II events, derived from such things as stranding and the threat of competitive entry or expansion.

57 These risks should not be ignored by the Commission. The Commission is open to firms establishing a reserve fund to compensate firms for Type I risks and we concur with this.

58 In regard to Type II risks, the Commission highlights that there is little precedent for these types of risks being taken into account through adjustments to the allowed rate of return. The Commission then places the full burden of proof for identifying and quantifying these risks on regulated suppliers. In our view this is unduly onerous on suppliers and, given the body of academic research that acknowledges the presence of these risks, the Commission should be more open to the use of reasonable estimates for these risks.

59 The Commission does not support an allowance for asymmetric risks through the adoption of a point estimate at the upper end of the estimated WACC range. This position is premised upon the difficulty in quantifying the level of adjustment required and the potential for the adjustment to become confused with issues arising from estimation uncertainty. However, to the extent that alternative mechanisms are not introduced to cover Type I risks, we would promote the adoption of an upwards adjustment to the WACC to capture these risks, perhaps as industry standard increments to the WACC.

60 Accommodation for asymmetric risk may be able to be made through cash flows in some regulatory instruments (such as pass through costs in DPP and CPP regulation). These must also be provided for in information disclosure regulation.

Financeability test

61 Financeability tests are starting to be utilised by regulators globally to ascertain whether a firm is able to operate efficiently and finance its capital expenditure within the constraints imposed by the regulatory framework, particularly in the context of increasing levels of investment.

62 In such circumstances the Commission proposes a number of courses of action:

- I. Revisiting its various regulatory inputs to check if they have been appropriately set;
- II. Considering the desirability of reducing the notional gearing assumption adopted in its estimate of the cost of capital;
- III. Considering whether the profile of the firm's allowed revenues should be accelerated to allow earlier cost recovery than would otherwise occur (ensuring that NPV neutrality is maintained);
- IV. Considering adjustments to the cost of capital to ensure financeability.

63 Having revisited assumptions for error, the Commission's preferred approach, action II, (which follows Dr Lally's recommendation, but not that of the other Panel members) is to reduce notional leverage to such a level so as to resolve the financeability concerns. We disagree with this approach as the ultimate response to financeability problems is to assume an all equity financed firm. This avoids addressing the underlying issue of why the regulated firm might have problems servicing its debt, if it is financed on an otherwise reasonable basis. If financeability problems exist it is likely that a higher WACC will still be expected by investors, even for an all equity finance firm.

64 In our opinion, considering whether to accelerate the profile of allowed revenues (action III) is a more reasonable approach which delivers an appropriate response to the financeability test.

As such, it should be applied ahead of proposed course of action II in the order of the actions proposed to be considered by the Commission.

General

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