



From the Electricity Networks Association

Submission on IM review: cost of capital

Submission on Cost of Capital Update Paper – Final

9 February 2016

The Electricity Networks Association makes this submission along with the explicit support of its members listed below.

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Counties Power Ltd
Eastland Network Ltd
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EA Networks Ltd
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Horizon Energy Distribution Ltd
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1. Introduction

1. The Electricity Networks Association (ENA) appreciates the opportunity to comment on the Commerce Commission's (the Commission's) consultation paper "Input methodologies review: Update paper on the cost of capital topic" (the WACC Update Paper).
2. Attached to this submission is an expert report from Competition Economists Group (CEG) entitled *Key reforms to rate of return under the IMs* (CEG report). The ENA endorses the CEG report. The purpose of this submission is to summarise:
 - a) the thresholds that should be reached before any changes to the cost of capital input methodologies (WACC IMs) are made
 - b) the key reforms to the WACC IMs that we believe meet the threshold for changing an IM and should be progressed in the current IM review (for clarity, we support all recommendations in the CEG report but this submission does not discuss them all – instead it highlights what we consider to be the key issues)
 - c) the proposed changes to the WACC IMs that should not be progressed further.
3. The ENA's contact person for this submission is:

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2. Summary of ENA position on potential changes to the WACC IM

2.1 Threshold for changing the WACC IM

4. The ENA agrees with the WACC Update Paper that the starting point for estimating individual parameters is the current approach and considers that the Commission should be cautious when making changes to the cost of capital IMs.¹
5. In this context we refer the Commission to our submission in response to the IM Review Problem Definition consultation, which set out the ENA's view on the framework in which IM reviews are undertaken and the threshold that should be applied before changes to the IMs are made.² That submission was supported by legal advice from Russell McVeagh.³
6. In particular we consider that it is important that material amendments to the WACC IMs are supported by evidence or analysis that demonstrates the amendment is necessary to better meet the Part 4 purpose.
7. We consider that the changes supported by the ENA and discussed below regarding:
 - a) aligning the approach to estimating the risk-free rate and the tax-adjusted market risk premium (TAMRP) with international precedent (this would involve using a 10-year risk-free rate),
 - b) adopting, as a guiding principle, that the cost of debt should reflect an efficient debt management strategy and include trailing average estimates of inputs to the cost of debt,
 - c) adjusting the methodology for estimating the asset beta,
 - d) making DPP and CPP WACCs consistent and
 - e) removing forecast revaluation riskall have supporting evidence and/or analysis justifying the change to the IMs.
8. In particular, these proposals promote investment incentives through (i) better aligning WACC settings to actual business practices, (ii) using more accurate methods for estimating WACC inputs and (iii) removing perverse incentives relating to CPP applications.
9. They also are consistent with promoting certainty as it will be clear to consumers and suppliers that the IMs are being amended to resolve clearly defined problems in ways that are supported by evidence and are consistent with international regulatory practice.

¹ WACC Update Paper, paragraphs 2.3-2.4

² <http://www.comcom.govt.nz/dmsdocument/13624>, section 2.2.

³ <http://www.comcom.govt.nz/dmsdocument/13625>

2.2 Cost of equity

2.2.1 Risk-free rate and TAMRP

10. As explained in detail in the CEG report, the Capital Asset Pricing Model requires that the risk free rate and the TAMRP estimates are internally consistent with each other. When determining the cost of equity, the Commission has preferred to use a TAMRP that is estimated relative to the five year risk free rate rather than the standard international regulatory and commercial precedent of using a longer term estimate of the risk free rate.
11. The ENA agrees with CEG that the IMs should include a methodology that reduces the volatility in the simplified Brennan-Lally CAPM cost of equity estimates. This may require determining the value of the risk free rate and TAMRP closer to the time of determination, rather than fixing them in the IM determination or, alternatively, fixing the real cost of equity in the IMs.
12. The ENA also supports CEG's conclusion that the only reliable estimate of the historical average returns is relative to long term (10 year) rates and that, therefore, the risk free rate should also be a 10 year rate.

2.2.2 Asset beta and form of control

13. The WACC Update Paper discussed the extent to which the form of control should affect the assessment of the asset beta. The ENA does not agree that there is any basis to consider this topic further. The available literature does not provide clear evidence that the form of control affects the asset beta. Nor is there any evidence as to what adjustment to beta would be justified by variations in the form of control. The CEG report sets out the results of empirical analysis that demonstrates that there is no discernible difference in asset betas for:
 - a) US firms who are subject to incentive regulation and those who are not
 - b) US firms who are subject to price cap regulation compared to businesses on a revenue cap. If anything, CEG finds that businesses subject to a revenue cap tend to have higher asset betas than those on a price cap.

2.2.3 Methodology for estimating the asset beta

14. The ENA recommends that the asset beta is estimated using an average of the daily, weekly and monthly data. We are not aware of any clear evidence supporting one measurement period over another and consider that taking an average across the three is most likely to avoid bias. The ENA also supports CEG's conclusion that the Commission should have regard to the downward bias in SBL CAPM when determining its parameters.
15. We note Dr Lally, advising the Commission, has recently provided advice in support of the approach in the current IMs. The CEG report responds in some detail to Dr Lally's analysis and we recommend the CEG analysis is considered carefully by the Commission.

2.3 Cost of debt

16. The ENA supports the recommendation in the CEG report that the IMs reflect a guiding principle that the compensation for the cost of debt should reflect an efficient debt management strategy. This would involve defining an efficient benchmark debt management strategy and then estimating the cost of debt that a business following that debt management strategy would have. Compensation would then be provided to ENBs based on that estimate.

17. As discussed in the CEG report, a key advantage of adopting this guiding principle is that it would enable ENBs, if they wanted, to adopt a debt management strategy that aligns actual costs with the allowance provided through the IMs.
18. The ENA strongly supports the use of a trailing average to estimate the risk free rate and debt premium components of the cost of debt. We consider this is consistent with the benchmark debt management strategy that an efficient ENB would adopt.
19. The use of a trailing average would promote outcomes that are consistent with those in workably competitive markets. ENBs will have an expectation that they will be compensated for the costs of an efficient debt management strategy and thus can recover the costs of investments. This will promote incentives to invest while still limiting the ability to extract excessive profits.
20. The use of a trailing average would also materially reduce the volatility that has been seen in the WACC estimates determined at various times since 2010. This volatility is driven by the practice of determining a WACC value based on market conditions within one specified month. Using a trailing average would provide more stable prices over time for non-exempt ENBs and reduce volatility in the information disclosure WACC, to which ENB profits are compared through disclosures.
21. The tenor of the cost of debt should reflect actual business practice among ENBs that have the scale to fund the majority of their debt from public bond markets. International evidence, as discussed in the CEG report, suggests the tenor should be at least 10 years.

2.4 Consistent DPP and CPP WACCs

22. There can be material differences between the WACC that applies for a DPP and the WACC that applies for a CPP. We consider that the divergence between DPP and CPP WACCs is a problem with the current IMs because it creates incentives to apply, or not apply, for a CPP based on movements in the risk-free rate and debt premium rather than the particular investment needs of the ENB. We note this problem may be less significant than the issues discussed above regarding the use of prevailing rates to set the inputs to the cost of debt and the cost of equity.
23. The trailing average proposals above will reduce the variance between DPP and CPP WACCs but will not remove it altogether. The ENA therefore also supports making the CPP WACC equal to the DPP WACC.
24. We do not support the proposal by Dr Lally that the DPP WACC is applied to existing assets and capex approved under a DPP while the CPP WACC is applied to all additional capex under a CPP. It seems that the complexity of implementing this proposal may not have been fully recognised by the Commission or Dr Lally.⁴ We also consider that a split cost of capital would create concerns among investors that split costs of capital may be applied more generally.
25. The ENA supports the position in the WACC Update Paper that the proposal by the Major Electricity Users' Group for applying a different cost of capital for existing assets relative to new assets will not be taken further. The weight of evidence presented through the IM review process so far clearly indicates that this proposal would be complex and costly to implement and have material negative consequences on investment incentives across the regulated sectors.

⁴ For example, it would not be straightforward to identify the DPP and CPP capex components in each year of a CPP, and it may be impossible to identify which WACC should be applied in the return on capital component of the IRIS capex wash-up. Removing the split WACCs when the ENB transitions back to a DPP from the CPP may also be challenging.

2.5 Inflation and revaluation

26. The treatment of inflation in the current IMs means that the level of nominal compensation received by ENBs is affected by errors in the inflation forecasts used by the Commission when setting price paths. In the previous and current DPP periods, inflation forecast errors have meant that ENBs have not been compensated for their estimated nominal cost of capital. This has led to material losses for the non-exempt ENBs.
27. The CEG report sets out potential options to address this issue, each of which has different implications. The ENA supports consideration of the available options and we note that ENA members may provide their own submissions on this topic.
28. The ENA also considers that the Commission should review its approach to forecasting inflation rates as previous forecasts have not been very accurate. The ENA suggests using market-based estimates of expected inflation, such as break even inflation rates from government bond markets, rather than assuming inflation rates will return to the mid-point of the RBNZ target range over time.

2.6 Black's Simple Discount Rule

29. The ENA considers that no attempt should be made to apply Black's Simple Discount Rule. As discussed in more detail in the CEG report, it would be difficult to implement Black's Rule in the context of regulatory decisions. This is because the implementation of the Rule is predicated on assumptions that do not necessarily hold, particularly in the context of regulated natural monopolies, such as the existence of a closely correlated benchmark series and normally distributed future cashflows.
30. In addition, unlike the CAPM model, where relative risk is typically estimated using long historical series of publicly available market data, Black's Rule will need to be implemented using individual-specific forecasts that may be subjective in nature. This approach is unlikely to be appropriate or useful for regulatory purposes where greater emphasis is placed on certainty and transparency.