

4 August 2016
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Dear Keston

IM review: Submission on suite of draft decision papers

We appreciate the opportunity to comment on the Commerce Commission's Part 4 Input Methodologies (IM) review draft decision papers, published 16th June 2016, and related material.

On 13 July the Commission notified stakeholders that it would hold a workshop on cost of capital issues. We request that the Commission add *trailing average cost of debt* to the agenda for the cost of capital workshop.

Summary of our views

We consider that the IMs are broadly fit for purpose, and have the following specific views in relation to the Commission's draft decisions:

1. **We acknowledge the Commission's efforts to ensure a robust, consultative process.** We encourage the Commission to continue those efforts including, if necessary, deferring decisions in key areas if further work is needed before a decision can be safely made.
2. **We agree that the IMs are fundamentally fit for purpose.** The Commission's extensive, line by line review has reinforced this and we reiterate the importance of applying a structured framework to guide IM decision making and adopting clear thresholds for change.
3. **We continue to advocate for a trailing average cost of debt (TACD).** Retention of the 'rate on the day' (ROTD) approach is out of step with regulatory developments in other jurisdictions and imposes unnecessary costs and risk on both consumers and suppliers.
4. **We have mixed views on other cost of capital proposals.** We support changes that improve estimation accuracy but caution against non-transparent adjustments or 'tweaks'. We do not support an annual capital charge inflation adjustment through the MAR wash-up.
5. **We agree no further consideration of a two-tier WACC or the BSDR approach is warranted.** The problems with both are well documented. We also agree there is no justification for further review of the WACC percentile for energy.

We provide some introductory comments and expand on these points below.

INTRODUCTION

We appreciate the one week extension to the consultation period. However, a delay in the publication of the Electricity Authority's TPM and DGPP reviews resulted in a substantial overlap between those consultations and the Commission's IMs draft decision.

This overlap has affected our ability to process the large amount of material published by the Commission and has limited the focus and depth of our submission.

In addition to this submission we have a number of drafting comments and suggestions on the proposed draft changes to the IMs documents themselves. These will be submitted by 11 August.

There are four appendices to this submission:

- Appendix A: an expert report by Frontier Economics on cost of capital issues (attached separately)
- Appendix B: analysis of regulated NZ electricity distribution and transmission companies
- Appendix C: a table containing high level comments on a number of the proposals
- Appendix D: transmission pricing data for pricing year 2016/17 relating to ACOT payments.

We also refer the reader to Transpower's previous submissions on the IMs review, in particular our 5 February 2016 submission on the *cost of capital* update paper and appended reports.

1. CONSULTATIVE PROCESS

We recognise and support the Commission's efforts to ensure a robust, consultative process. We have appreciated the Commission's early consultation on various matters such as problem definition and, where possible, release of expert reports and material prior to the release of the Commission's consultation documents. Other engagements such as workshops and one on one engagement have also been useful.

Staging aspects of the review, fast-tracking some matters while leaving others, such as the Transpower Capex IM, to a later date has made it easier for stakeholders to manage the large volumes of information produced and engage with the consultation.¹

We encourage the Commission to continue its consultative approach including, if necessary, deferring decisions in non-time critical areas if further work will enable more robust decisions.²

2. REGULATORY CERTAINTY AND PREDICTABILITY AND DECISION-MAKING FRAMEWORK

A key message in the draft decision is that the IMs are fundamentally fit for purpose. We agree and share the Commission's reluctance for "substantial policy change" (and its potential impact on regulatory certainty and the predictability the IMs are intended to promote).

The proposed changes to the IMs mainly reflect a natural and incremental evolution of the IMs and the development journey of the IMs (including that, since their determination in late 2010, the IMs have been scrutinised by the High Court through the Merit Appeals and revised as part of the 2014 IPP and DPP resets).³

Clear thresholds promote the purpose of Part 4 and the IMs

We agree with the Commission that:

Any framework for the IM review is bound by the statutory criteria in Part 4. When considering whether to make a change to the IMs, we must consider the purpose of Part 4 of the Act (s 52A) and the purpose of IMs (s 52R). We must give effect to these purposes and can only develop a decision-

¹ Although we are disappointed with the apparent deprioritisation of work to resolve issues with Transpower's IRIS.

² We understand the main driver for the Commission's timetable is the 2017 gas reset. This driver is relevant to some of the IMs, such as the cost of capital IM, but appears less relevant for many of the issues considered as part of the review.

³ Including a review to change the WACC percentile.

making framework or commit to key economic principles in so far as they assist us in giving effect to these purposes.⁴

However, we are disappointed that the Commission “do[es] not intend, nor consider it helpful, to adopt a practical threshold ...”⁵

We recognise that mechanical thresholds wouldn’t necessarily be practical, but we think the Commission should be able to clearly and explicitly signal that it will apply higher thresholds or hurdles for more substantive reforms. Similarly, that it would apply lower thresholds for minor changes or those that benefit both consumers and suppliers.

We consider that adoption of explicit thresholds would promote the purpose of the IMs (and Part 4) – and appears to feature prominently in the Commission’s own reasoning; for example:

- its overarching reluctance towards “substantial policy change”;
- the view that “Changing an IM may affect *conditional regulatory predictability* which may, in turn affect incentives to invest”⁶; and
- recognition of “the importance of stability and predictability in regulatory settings, particularly for material components such as WACC”.⁷

Statements like these appear to reflect the existence, and application, of thresholds for changing the IMS. We encourage the Commission to formalise and publish these thresholds. In our view doing so would enhance transparency and the decision-making framework - extending it beyond axiomatic statements that the current IMs will only be changed where this appears likely to promote the Part 4 purpose.

Change per se does not undermine regulatory certainty and predictability

We do not agree that “moving from a prevailing approach to a trailing average approach would be a substantial policy change” that would “impact on the conditional regulatory predictability that the IMs are intended to promote”.⁸

Regulatory predictability is not undermined by changes that reflect mainstream regulatory developments in other jurisdictions and that benefit both consumers and suppliers.

Under the criteria we propose the threshold would be relatively low for *win-win* situations, so even if the Commission only identified small benefits it could be sufficient to justify change and satisfy the long-term interests of consumers’ objective.

In contrast, if sensible changes are dismissed then the credibility of the regime itself can be undermined.

3. WE ADVOCATE FOR A TRAILING AVERAGE COST OF DEBT

We continue to support change away from the current ‘rate on the day’ (ROTD) approach in favour of a trailing average cost of debt (TACD) approach. We consider that substantial valid concerns have been raised with ROTD (notably that it imposes unnecessary costs and risks on consumers and suppliers) while compelling reasons for adopting of a TACD have been provided by submitters.

Nothing in the Lally material or the draft decision provides substantive evidence or reason for us to change our position. On the contrary, these documents affirm our view that TACD is superior to ROTD and a change from the latter is justified.

⁴ Commerce Commission, IMs review draft decisions, Framework for the IM review, 16 June 2016, paragraph 47.

⁵ Ibid, paragraph 97.

⁶ Commerce Commission, IMs review draft decisions, Topic paper 4: Cost of capital issues, 16 June 2016, paragraph 346.3.

⁷ Ibid, paragraph 347.

⁸ Commerce Commission, IMs review draft decisions, Topic paper 4: Cost of capital issues, 16 June 2016, paragraph 135.5.

Concerns with Dr Lally's advice

In the past the Commission has sought independent expert advice to peer review other expert advice it relies on in its decision-making. We support this approach and consider that it enhances robust regulation, regulatory certainty and predictability. In our view it would be desirable to do the same in relation to the Lally advice on 'rate of the day' (ROTD) versus TACD. We consider this to be particularly important as Dr Lally has relied on his own arguments, provided to another regulator, to support (and bolster) his view that ROTD should not only be retained, but the justification for ROTD has actually strengthened. We do not think this is credible.

We are uncomfortable with Dr Lally's approach, which we consider casts doubt on the veracity of his advice to the Commission. Our concern with Dr Lally's advice is heightened as ROTD is increasingly out of step with regulatory developments in overseas jurisdictions.

Concern with the rationale for rejecting TACD in favour of ROTD

We understand the rationale given by Dr Lally and the Commission for retaining the ROTD to be the following:

1. It is more likely to satisfy the NPV = 0 principle than the TACD;
2. It is efficient and does not distort investment signals and incentives; and
3. The benefits of adopting a trailing average approach do not outweigh the costs.

We consider that all three conclusions are invalid. We outline our rationale below.

1. TACD less likely to violate NPV=0 principle than ROTD

The NPV=0 principle simply means that the expected present value of revenues generated by regulated assets should equal the expected present value of costs associated with those assets.

As Dr Lally himself acknowledges, under the ROTD approach, the cost of debt allowance can deviate from the efficient cost of debt faced by suppliers. Frontier Economics demonstrates with historical market data that these mismatches can be very large in some periods:⁹

1. In some periods the allowances received by suppliers will be below the efficient cost of debt. The scope for these mismatches could deter efficient investment.
2. In other periods, the regulatory allowance will be above the efficient level, in which case consumers will pay more than is efficient. This does not promote the long-term interests of consumers.

The Commission assumes that these two mismatches will cancel out over time. As Frontier Economics explains, this is a very large assumption — there is no guarantee whatsoever that the mismatches will average out, even over the long-run.

If the mismatches between the allowed and the efficient cost of debt do not even out, the NPV=0 principle will be violated. Even if the assumption that in the long run mismatches even out is valid, in the short run consumers or supplier shareholders, bear the costs of those mismatches.

By contrast, the TACD approach ensures that there will be a closer alignment between the cost of debt allowance and the efficient cost of debt (i.e. the cost of debt faced by suppliers that follow an efficient debt management approach) *in all periods*. This is acknowledged by Dr Lally, who has noted "regulatory use of the trailing average risk-free rate reduces differences between the regulatory WACC and the business's actual rate of return".¹⁰

⁹ Frontier Economics Response to cost of capital issues raised in Draft Input Methodologies August 2016.

¹⁰ Dr Lally, Review of further WACC issues, 22 May 2016, page 4.

As such, we consider the TACD approach, rather than the ROTD approach, is most likely to satisfy the NPV = 0 principle.

2. TACD is more efficient and less likely to distort investment signals and incentives than ROTD

We consider incentives to invest are enhanced, rather than degraded, by the TACD approach.

As outlined above (and explained by Frontier Economics), the ROTD approach can result in large mismatches between the allowed cost of debt and the efficient cost of debt, while the TACD approach significantly reduces the likelihood of such mismatches. These mismatches can persist for several periods under a ROTD approach, and may never be eliminated even over the long-run.

The scope for mismatches between a supplier's efficient and allowed costs under the ROTD approach increases uncertainty about whether the supplier will be able to cover its efficient costs in future. This will discourage efficient investment. In periods in which the allowed cost of debt is below the efficient cost of debt, suppliers will have diminished incentives to invest.

By contrast, the TACD approach ensures that the allowed cost of debt is sufficient to cover the efficient cost of debt. This makes it considerably easier for suppliers to make efficient investment decisions when they present themselves. As Frontier Economics notes, this has been articulated by a number of regulators and policymakers overseas. For instance, the Australian Energy Markets Commission has noted that:

The impact on the incentives for efficient capex is also an important consideration. The incentives for efficient capex are stronger when the difference between the return on debt and the debt servicing costs of the service provider is minimised.¹¹

When the Commission argues that the ROTD approach provides strong signals for efficient investments, it appears to be assuming that when suppliers are contemplating efficient, long-lived investments, they make those investments on the assumption that prevailing rates are likely to be representative of the cost of capital they are likely to face in future. That is not an appropriate assumption when:

1. The investments are very long-lived (such as investments made by Transpower); and
2. Prevailing rates have a tendency to be very volatile over time.

A far more important consideration for suppliers, when considering investment decisions, is the extent to which the regulatory allowance will be sufficient to cover the efficient costs of making those investments. For the reasons discussed above, the TACD approach (better than the ROTD approach) ensures this.

We are conscious of a potential mismatch in views on this matter between the Commission and Transpower. We would be happy to expand on our thinking for the Commission, including to provide worked examples, if that would assist its consideration of this matter.

3. The benefits of adopting TACD greatly outweigh the costs

In relation to points 2 and 3, we reiterate that “The main objective of the WACC IM review should be to ensure WACC is estimated as accurately as possible, also that it reflects and promotes efficient debt management practice (as observable by comparable firms and in “workably competitive markets”).¹²

¹¹ AEMC, Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Position Paper, 15 November 2012, p.58.

¹² Transpower, Update paper on the cost of capital, 5 February 2016, page 2.

We also remind the Commission of its, similar, position that “The cost of capital IM seeks to ensure expectations are for a normal rate of return are similar to that expected in workably competitive markets for activities of comparable risk, such that the Part 4 Purpose is met”.¹³

While both the Commission and Dr Lally acknowledge a TACD approach benefits consumers and regulated suppliers by reducing price volatility, we do not consider this has been given sufficient weight. For example, the topic paper 4 does not engage with our illustration of how material this volatility could be, or the example provided by the UCLL and UBA FPP determination:

The risk free rate declined by 145 bps between the scheduled decision (December 2014) and the actual decision (December 2015). We have estimated that if the risk-free rate had increased by this amount rather than reduced the final TSLRIC price would have been approximately \$6.70 (or 16%) higher – c.a. \$48 per month rather than c.a. \$41 per month.¹⁴

In the Chorus example the volatility in rates translated to a revenue difference of approximately \$100 million per annum. This demonstrates markedly how the ROTD approach can impose undesirable and unnecessary spot market volatility on consumers and suppliers.

If such volatility were justified by some compelling efficiency or consumer protection rationale, it might be considered more acceptable. However, this is not the case. The rationale for retaining the volatility appears mainly academic, outdated and unsupported by evidence. We do not agree that an approach that exposes consumers to significant financial market volatility promotes the long-term interests of consumers.

This is a real issue, as demonstrated by historical actual ROTD outcomes in Australia. As Frontier Economics describes, Australian consumers bore the brunt of extreme financial market volatility during the peak of the global financial crisis under the ROTD approach. In 2011 a consumer group called the Energy Users Rule Change Committee (the EURCC) proposed to Australian policymakers that the ROTD approach be abandoned¹⁵ because:

1. The cost of debt allowed by the Australian Energy Regulator (AER) under the ROTD approach exceeded the actual cost of debt incurred by networks issuing debt according to an efficient TACD strategy by between 2.5% to 3.4%.
2. This had translated in revenue over-recovery by the industry as a whole of more than \$1.2 billion. In other word, consumers paid more than \$1.2billion more under the ROTD approach than they would have under a TACD approach.

The EURCC proposed the introduction of the TACD approach as a means of limiting their exposure to such price shocks in future and argued that:

The Committee contends that the rules in this area fail to deliver the National Electricity Objective (NEO) as stated in the National Electricity Law (NEL). This is because the [ROTD] Return on Debt determined by the Australian Energy Regulator pursuant to the Rules, has been significantly higher than the actual cost of debt. This has resulted in excessive profits to network service provider (NSP) shareholders, higher prices for electricity users and perverse incentives for inefficient over-investment.¹⁶

The points raised by the EURCC are difficult to contest.

We also do not consider the rationale provided for rejecting the TACD approach is well grounded in terms of the Part 4 objectives and legislative construct. For example, as noted by ENA:

¹³ Commerce Commission, IMs (electricity distribution and gas pipeline services) reasons paper, 22 December 2010, paragraph 6.2.1.

¹⁴ Transpower, Update paper on the cost of capital, 5 February 2016, page 7.

¹⁵ Amcor, Australian Paper, Rio Tinto, Simplot, Wesfarmers, Westfield and Woolworths, Proposal to change the National Electricity Rules in respect of the calculation of the Return on Debt, 17 October 2011, p.21.

¹⁶ Ibid, p.8.

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.¹⁷

As several Australian regulators and regulated entities have adopted the TACD approach with little effort and cost we consider the transition costs and issues of adopting the TACD approach are not significant.

If a transition from the ROTD approach to the TACD approach is necessary in New Zealand, it may be implemented at the commencement of RCP3 by the repricing of interest rate swap portfolios to match the new methodology. The trailing average debt premium can be determined by measuring historical rates over the adopted trailing average period. Alternatively, given more benign markets over the past six to seven years, current spot rates approximate recent (six to seven year average) historical rates, adoption of a 5 or 10 year spot rate may be appropriate and could be reasonably agreed to ensure windfall gains or losses are avoided.

We do not consider it efficient to adopt a hybrid approach. The administration would be simplified by an aligned debt premium and risk free rate methodology, and swap costs currently borne by consumers could be avoided altogether under a full TACD approach. However, should the Commission consider it significantly compelling, a hybrid approach of trailing average for debt premium and ROTD approach for the risk free rate would be preferable to Transpower than the current ROTD approach.

General comments on ROTD vs TACD

The draft decision, while consistent with the Queensland Competition Authority, is out of step with other Australian regulators (including the electricity sector regulators), and regulatory developments elsewhere since the IMs were first established. It would be useful to consider why other regulators have adopted a TACD over a ROTD.

The reasons considered by Australian regulators who have adopted the TACD approach recognise the efficient debt management approach of regulated and non-regulated suppliers. These regulators identify the use of the TACD approach as reducing the mismatch between efficient capital management practises and improving incentives to invest.

As the TACD approach would align the cost of debt allowance with the cost of debt faced by a supplier following an efficient debt strategy, it does not represent a cost pass-through. Also as it will always produce an efficient cost of debt allowance, its adoption would not result in a redistribution of economic welfare from consumers to suppliers, or vice versa.

Some of the objections the Commission has raised, in relation to TACD, are objections to certain design options for a trailing average approach, rather than against the principle of the trailing average per se i.e. “If a 10-year trailing average is used it is likely to overcompensate suppliers compared to our prevailing approach”¹⁸ and “annually updating the price path to take into account a revised cost of debt would be an additional administrative burden”¹⁹ (though the Commission is happy to do this with respect to MAR adjustments for inflation).

We provided evidence,²⁰ that the cost asymmetry of the current ROTD approach can be burdensome on regulated suppliers and the potential costs significant. Further, the administration effort requires no more (assuming a simple agreed approach leveraging current processes) than a reliance on current processes undertaken by the Commission, such as an annual TACD update based upon the

¹⁷ ENA, Submission on IM review: Cost of capital, 9 February 2016, paragraph 19.

¹⁸ Commerce Commission, IMs review draft decisions, Topic paper 4: Cost of capital issues, 16 June 2016, at paragraph 320.

¹⁹ Ibid paragraph 135.7.

²⁰ Trailing Average Cost of Debt and Efficient Debt Management, February 2016

current annual Information Disclosure process. The implementation of a process based upon these existing processes would incur no greater cost than already incurred.

Therefore, we do not consider there is merit to the administrative cost burden argument made by the Commission in support of retaining the ROTD approach.

ROTD considerations

If the Commission retains the ROTD approach we agree that replacing the existing one month window with a three month window would help mitigate some of the downside of the approach. However, it would not deal with the liquidity problem.

The liquidity of the New Zealand swap market would not easily accommodate the volume of interest rate swap transactions that the Commission's ROTD approach assumes. The same problems that we raised with a one-month window still apply, albeit slightly alleviated by the wider window. We have surveyed domestic bank and market brokers and remain concerned, based upon responses that the regulated supplier hedging volume will shift the demand and supply equilibrium in the short term.

In addition, we recommend the Commission move the determination window date closer to the RCP commencement date to mitigate the costs of interest rate swaps with forward start dates ca. 7 to 8 months earlier than the start of the RCP.

4. WE HAVE MIXED VIEWS ON OTHER COST OF CAPITAL PROPOSALS

4.1 RAB indexation

We support changes that improve estimation accuracy but caution against non-transparent adjustments or 'tweaks'. We do not support creating an annual capital charge adjustment through the MAR wash-up.

We support the Commission's draft decision not to index Transpower's RAB. We consider this to be consistent with the Commission's position on emerging technology, and the draft decision to allow EDBs accelerated depreciation. We support the Commission's reasons against RAB indexation for Transpower.

RAB indexation for Transpower would be a major change to the IMs and one Transpower does not support. If a change were to be considered then, consistent with our views on thresholds for decision-making, substantial evidence would be required to inform any decision (which was not evident in the six paragraphs devoted to the topic in the draft decision).

4.2 Inflation adjustments

Although we appreciate what the Commission is seeking to achieve, we do not support the proposal "to create an annual capital charge adjustment through the MAR wash-up"²¹ in order to address inflation risk.

We have not considered this issue in great detail and have discussed the matter only briefly with the Commission team. However, we agree with the Commission's suggestion that "the net benefits of the proposed change may be relatively small, since inflation forecast errors are likely to be uncorrelated and inflation has low variability in New Zealand"²², particularly given the regulatory complexity that this would add.

²¹ Commerce Commission, Input methodologies review draft decisions, Topic paper 1: Form of control and RAB indexation for EDBs, GPBs and Transpower, 16 June 2016, paragraph 234.

²² Commerce Commission, Input methodologies review draft decisions, Topic paper 1: Form of control and RAB indexation for EDBs, GPBs and Transpower, 16 June 2016, paragraph 236.

Our brief consideration raised the following practical and substantive concerns.

1. **Transpower cannot adjust its cost of debt after the fact.** When Transpower raises debt at the nominal rate allowed by the Commission, we contract to pay our swap counterparties the market rate that provide compensation for (amongst other things) the expected, rather than the actual, rate of inflation.

We cannot adjust these positions each year, ex-post, to match the outcome of the ex-post wash-up (i.e. to the extent that inflation outturns failed to match expectations) insofar as it relates to its cost of debt finance.²³

2. **The expected rate of inflation cannot be observed directly.** As a result, this methodology would require a reliable *estimate* of market inflation expectations for each year of the Control Period, measured as at the time of the WACC determination window.

These estimates would have to be derived in a way that gave results consistent with the ex-post outturn inflation numbers i.e. with no relative systematic over- or under-estimation between the two methodologies. The Commission asserts that a forecast of inflation would be a proxy for the expected rate of inflation but there is no reason to suppose that any forecast of inflation will match the expected rate of inflation priced into nominal rates by the market.²⁴

Moreover, because the expected rate of inflation cannot be observed, there is no way to verify if any of the forecasts available in New Zealand have a track record of accuracy, and no way to discern if any of the forecasts that the Commission might consider are biased. Since there is no reliable way to estimate the expected rate of inflation embedded within the nominal WACC, there is no reliable way to implement the capital charge adjustment that the Commission proposes.

3. **Inflation expectations implicit in the nominal WACC reflect the average rate of expected inflation over the tenor of the WACC.** Because the inflation expectation implicit within a 5-year nominal yield (say) is the average rate of inflation expected by the market over the 5-year life of a bond, observing that actual outturn inflation was high or low in any given year provides no information on whether the inflation expectation implicit within nominal yield for the 5-year life was wrong.

The corollary of this is that if the Commission's objective is to provide an ex-ante expectation of consistent real returns, then it would set a different nominal WACC for each year of the control period. That is because market inflation expectations at the start of a Control Period are different for each year of the period. However, the Commission *does not* set a different nominal WACC for each year and so the implicit real return is different for each year. We suggest that at best this seems to complicate the wash-up mechanism and at worst it invalidates the result.

4. **We would expect that the practical implementation of this wash-up would be asymmetric.** Our expectation, in line with the Commission's, is that "the net benefits of the proposed change may be relatively small, since inflation forecast errors are likely to be uncorrelated and inflation has low variability in New Zealand".²⁵

However, we have considered the cases where inflation forecast errors are more material:

- If outturn inflation is lower than forecast then our revenues would be adjusted down.

²³ Transpower's actual leverage is approximately 70%.

²⁴ In New Zealand, it is not possible to estimate reliably expected (implied) inflation embedded within the nominal WACC by, for instance, comparing the yields on nominal and inflation-protected government bonds. This is because inflation-protected bonds are very thinly-traded in New Zealand so the yields on those bonds will reflect, in part, an illiquidity premium and will not provide a 'pure' measure of the real risk-free rate.

²⁵ Commerce Commission, Input methodologies review draft decisions, Topic paper 1: Form of control and RAB indexation for EDBs, GPBs and Transpower, 16 June 2016, paragraph 236.

- However, if outturn inflation is significantly higher than forecast then we would be required to increase revenues – possibly by a significant amount.

Under the latter scenario our customers would be subject to revenue wash-ups for higher-than-forecast capital costs and a higher-than-forecast opex allowance. These would at least be justified as the recovery of actual costs. If, however, there were a further component to the price increase – one that is justified by pointing to our shareholder’s need to maintain its real return – then Transpower may find it difficult to implement the full increase.

4.3 Topic paper 4: Cost of capital issues: Cost of debt

We recognise the Commission has an issue when applying a single methodology over a diverse range of regulated suppliers. The one-size-fits-all approach in the cost of capital IM may work well for the majority of regulated suppliers operating under a DPP, but does not fit well the larger suppliers, or work well under an IPP which should be tailored to Transpower’s (or any other supplier that may operate under an IPP in the future) **individual** circumstances.²⁶ Appendix B illustrates by chart the relative size of Regulated Asset Base (RAB), debt and gearing of Commerce Commission regulated electricity entities in New Zealand.

We agree smaller entities with small debt portfolios may potentially be over-compensated and larger entities with larger portfolios under-compensated for risks incurred. In order to deal with range of regulated entities, we consider it would be reasonable to differentiate the cost of debt methodology and consider the efficient approach for electricity transmission (with a single large supplier, operating under an IPP) and distribution (multiple small suppliers) separately.²⁷

There are also associated issues relating to the additional costs required to maintain a large debt portfolio, particularly in a small capital market such as New Zealand. For instance, Transpower’s domestic debt in New Zealand (ca. \$1.4 billion) is over 10% of the domestic corporate bond market (ca. \$12 billion). This requires funding diversity including more costly foreign issuance, maintaining credit ratings with ratings agencies and foreign debt programmes, such as Euro Medium Term Note (EMTN), etc.

4.4 Topic paper 4: Cost of capital issues: Asset beta

We support the Commission position that “We have not adjusted our asset beta for differences in systematic risk due to regulatory differences”²⁸ and Dr Lally conclusion “there is no empirical study that provides a clear conclusion on the effect of regulation on beta”.²⁹

We reiterate that “In principle, theoretically at least, there is a difference in risk between a price cap and a revenue cap. Regulated suppliers operating under a price cap are subject to volume or demand risk”³⁰ but that “It may ... be understandable that while there is could be a theoretical difference in risk profile between a price cap and a revenue cap that the Commission has not provided electricity distribution networks a higher asset beta to reflect this risk”.³¹

4.5 Topic paper 4: Cost of capital issues: Equity beta

We welcome the Commission’s draft decision to make changes to help mitigate or address the estimation errors based on the choice of reference day.

²⁶ Despite those firms holding close to 85% of sector debt (Transpower alone holds 33% of sector debt).

²⁷ Though the issues affect the few largest distribution business in a similar way to Transpower.

²⁸ Commerce Commission, IMs review draft decisions, Topic paper 4: Cost of capital issues, 16 June 2016, paragraph 135.4.

²⁹ Dr Lally, report to the Commerce Commission, “Review of WACC issues”, 25 February 2016, paragraph 20.

³⁰ Transpower, Update paper on the cost of capital, 5 February 2016, page 12.

³¹ Ibid, page 13.

The Commission's proposal to estimate weekly and four-weekly betas using every possible reference day and then average the results should reduce estimation errors.

We do not think, however, that the Commission has demonstrated that daily betas are 'noisy', and that daily beta estimates should therefore be precluded (Frontier's analysis supports our view).

4.6 Topic paper 4: Cost of capital issues: TCSD

We consider that neither the topic paper 4 on WACC issues, nor Dr Lally, have engaged with our comments about the distinction between a DPP and an IPP, or our view that Transpower's situation is more akin to Chorus, and the UBA and UCLL determinations, than regulated suppliers operating under DPPs.³²

A 'one size fits all' approach may work under a DPP but is not appropriate under an IPP which should be tailored to Transpower's individual circumstances (or any other operated the IPP regime is extended to, including potentially Chorus under the Government's Telecommunications Act reforms).

For example, the reasons a TCSD approach was adopted under the IMs, rather than the approach taken for Chorus of simply reflecting its average debt age exceeds 5-years, reflects that DPPs have to accommodate a range of regulated suppliers; some with average debt ages in excess of 5-years, and some below.

As we have noted already "In relation to Transpower, and the IPP we operate under, the Commission only needs to estimate a single WACC"³³ and, as the Commission itself has observed, "For a single firm we can estimate a debt premium with a term reflecting the assumed term of its debt, and therefore there is no need for a TCSD in the current decision".³⁴

There is no legislative or industry specific difference that justifies the current differential treatment between Chorus and Transpower on this matter. In contrast, legislative differences do justify differential treatment of Transpower under an IPP to regulated suppliers under DPPs.

Given that the IPP Transpower operates under is bespoke, and specific to Transpower, a TCSD is unnecessary. The Commission should adopt the approach it has taken for Chorus.

4.7 Topic paper 4: Cost of capital issues: NSS fitted curve

We consider that the NSS fitted curve is a better (potentially more systematic) approach to determining the debt premium than the method currently used by the Commission.

However, we have reservations around the transparency associated with the inclusion of higher and lower rated bonds and of the dummy variables used to weight the fitted curve when bonds other than those rated BBB+ are included. As the Commission notes in the draft decision, the inclusion of dummy variables controls for differences in the level of the debt premium for bonds of different ratings, but does not allow for differences in the shapes of yield curves for bonds of different ratings. If the sample of *non*-BBB+ bonds is disproportionately large, and differences in the shapes of the yield curves between ratings is not accounted for properly, the debt premium estimate may be skewed by the relationship between the term to maturity and debt premium of bonds of different rating levels.

Without a transparent methodology and approach, confidence in the accuracy and reasonableness of the results would be undermined.

³² Transpower, Update paper on the cost of capital, 5 February 2016, page 7.

³³ Ibid page 7.

³⁴ Commerce Commission, Cost of capital for the UCLL and UBA pricing reviews, 15 December 2015, paragraph 82.

The Commission has proposed to introduce a very complex approach, and stakeholders have not been allowed sufficient time to consider properly the potential merits and shortcomings of NSS approach. The empirical evidence on the implementability and robustness of the approach in New Zealand is also very limited at present.

Before the Commission adopts the NSS fitted curve methodology in regulatory determinations, we consider that significantly more consultation, and opportunity for assessment of the theoretical and empirical evidence by stakeholders, is necessary. We also ask that the Commission publish a ‘proof of concept’ of the model, including data and detailed calculations, so that stakeholders can make informed comment on whether the NSS approach should be adopted within the IMs. This suggests that the adoption of complex curve-fitting techniques within the IM should be deferred to the next IM review, with more work done over the coming years by the Commission and stakeholders to assess the merits of the approach.

5. TWO-TIER WACC AND BSDR DO NOT WARRANT FURTHER CONSIDERATION

We agree no further consideration of a two-tier WACC or the BSDR approach is warranted. The problems with both are well documented. We also agree there is no justification for further detailed review of the WACC percentile for energy.

5.1 Topic paper 4: Cost of capital issues: BSDR and WACC percentiles

For the reasons set out in our previous submissions on this topic (including the reports from Frontier Economics) we support the Commission’s draft decisions:

1. Not to adopt the so-called Black Simple Discount Rule (BSDR);
2. Not to adopt a split WACC; and
3. Not to revisit the optimal WACC percentile.

We are, however, uneasy about the qualification that the Commission “do[es] not propose to use BSDR as a cross-check on the WACC until some of the identified issues have been resolved” (emphasis added).³⁵

The Commission has been unclear about which particular issues it is referring to, whether it plans to attempt to resolve these issues itself or, more appropriately, it is putting the onus on proponents of the BSDR to attempt to address the issues. For avoidance of doubt, we do not support or consider further work on this matter to be desirable.

OTHER MATTERS

Topic paper 7: Related Party Transactions: ACOT

While the related party transaction consultation does not materially impact Transpower, we note the Commission is interested in the trends in ACOT payments, which have risen substantially over the last few years. We thought it helpful to clarify that this change has at least in part been due to changes in transmission prices and increases in the Regional Coincidental Peak Demand (RCPD) interconnection charges occurred over the same time period.

This issue is discussed in Transpower’s 2014/15 TPM Operational Review, and the Electricity Authority’s recent DGPP and TPM review consultations. It is observable from transmission pricing data included at Appendix D; in particular, the Interconnection Rate (S/kW) which increased from

³⁵ Commerce Commission, Input methodologies review draft decisions, Topic paper 4: Cost of capital issues, 16 June 2016, paragraph 656.

\$63.74 to \$110.35 between 2008/9 and 2015/16.³⁶ We would be happy to provide any further information the Commission may find useful.

Please do not hesitate to contact me if you have any queries or would like to discuss the content of this submission.

Yours sincerely

A handwritten signature in black ink, appearing to be 'JC' followed by a long horizontal stroke.

Jeremy Cain
Regulatory Affairs & Pricing Manager

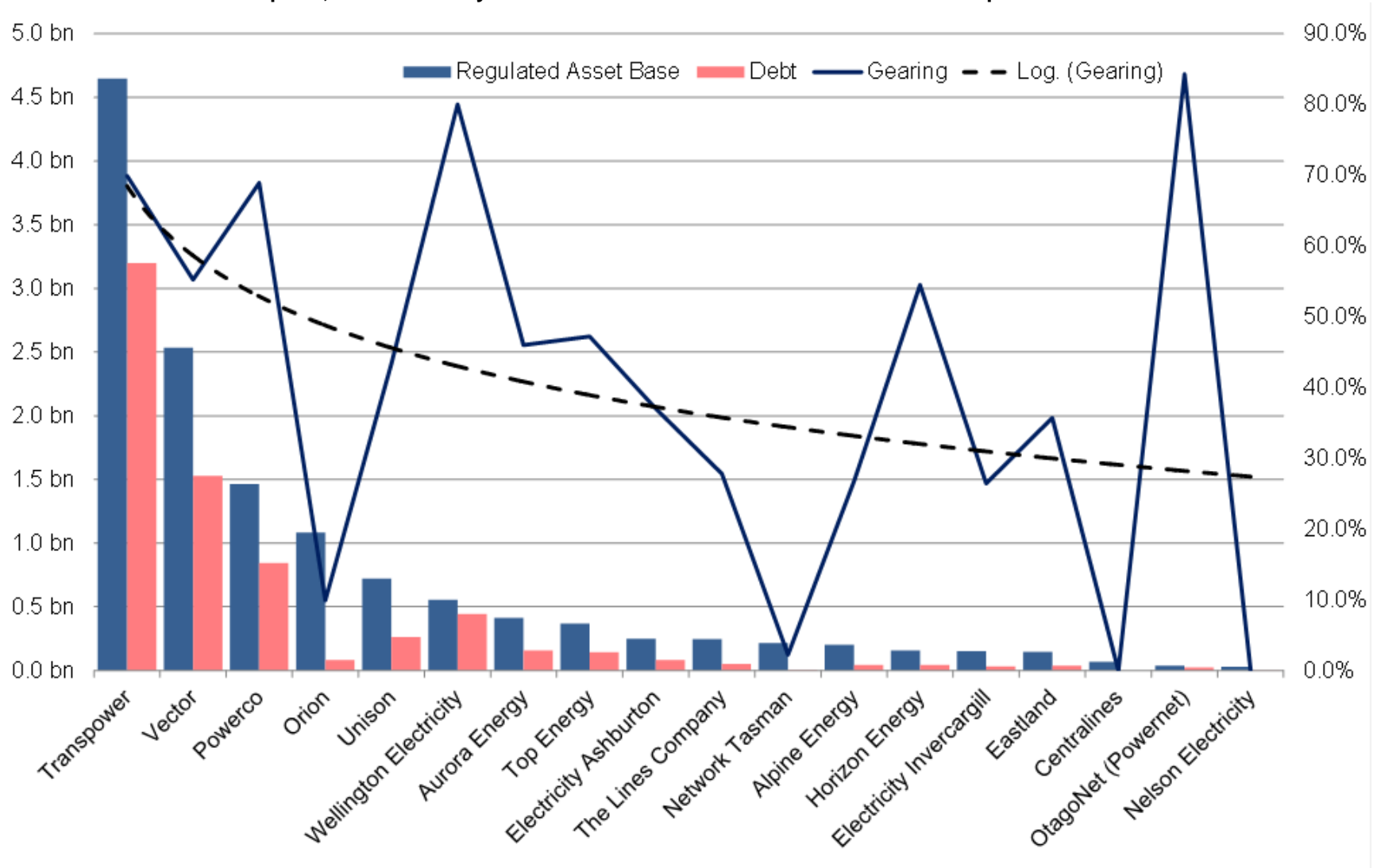
³⁶ It is also analysed in some detail in a report by Scientia Consulting submitted to the Electricity Authority by Transpower on 26 July. This is expected to be made public on 9 August.

Appendix A: Frontier Report on Cost of Capital Issues

ATTACHED SEPARATELY

Appendix B: Regulated electricity transmission and distribution companies in New Zealand

Sources: 2015 annual reports, PwC Electricity Line Business: 2015 Information Disclosure Compendium



Appendix C: Table of comments on draft decisions

Summary of IM decisions that affect Transpower

Topic	Original decision reference	Transpower Comment
Finance leases	Decision AV25	We agree.
No indexation of RAB - Transpower	Decision AV26	Refer to main submission and Frontier Economics report.
Asset disposals - Transpower	Decision AV29	We agree.
Financing costs on works under construction	Decision AV33	We support this change for the reasons set out in Transpower's 2013 IM amendment request to the Commission.
Standard physical asset lives	Decision AV35	We support this change.
No cost allocation for common costs - Transpower	Decision CA07	We agree there is no reason to consider change.
Operating costs must be adjusted for system operating costs – Transpower	Decision CA08	We agree there is no reason to consider change.
Costs associated with new investment contracts - Transpower	Decision CA09	We agree there is no reason to consider change.
WACC percentile	Decision CC12	Refer to main submission and Frontier Economics report.
Commission to publish annual WACC estimates - Transpower	Decision CC13	Refer to main submission and Frontier Economics report.
Cost of debt in WACC estimates	Decision CC15	Refer to main submission and Frontier Economics report.
Term credit spread differential allowance	Decision CC16	Refer to main submission and Frontier Economics report.
Cost of equity in WACC estimates	Decision CC17	Refer to main submission and Frontier Economics report.
Corporate tax rate in WACC estimates	Decision CC18	We agree there is no reason to consider change.
Next closest alternative (NCA)	Decision GE01 (new)	<p>We support this change which has the potential to help avoid perverse outcomes or unnecessary administrative work.</p> <p>However, we consider this change has the potential to undermine the predictability and certainty provided by the IMs. It will, consequently, need to be specified carefully to limit the Commission's discretion to make changes that are not supported by the affected suppliers.</p>

Topic	Original decision reference	Transpower Comment
IRIS to apply under an IPP	Decision IR04	Refer to main submission.
Treatment of IRIS balances	Decision IR05	We support this change.
IRIS – 5 year retention of efficiency gains	Decision IR06	No comment.
RCP1 IRIS transition - Transpower	Decision IR07	We agree there is no reason to consider change.
Reconsideration of IPP	Decision RP05	We support this change.
Meaning of 'material' for purposes of reconsideration	Decision RP06	We support this change.
Annual reconsideration for effect of major capex and listed projects	Decision RP07	We do not support this change for the reasons set out in the main submission and Frontier Economics report.
Revenue cap	Decision SP08	We agree there is no reason to consider change.
Inflation risk	Decision SP08	Refer to main submission and Frontier Economics report.
MAR update process	Decision SP08	No comment.
Pass-through costs - Transpower	Decision SP09	No comment.
Recoverable costs - Transpower	Decision SP10	We consider the reasons set out in our 2013 IM amendment request to be valid.
Tax	Decision TX10, 11, 12, 13, 14, 15	We agree there is no reason to consider change.

Appendix D: Transmission pricing data (with interconnection rate change highlighted)

Transmission Pricing Data for 2016/17 Pricing Year



Pricing Year 1 April 2016 to 31 March 2017

Capacity measurement period 1 September 2014 to 31 August 2015

Capacity Data	2008/09	2009 / 10	2010 / 11	2011 / 12	2012 / 13	2013 / 14	2014/15	2015/16	2016/17
Historical Anytime Maximum Injection (MW)	3,286	3,200	3,206	3,202	3,161	3,197	3,251	3,225	3,223
Total Regional Coincident Peak Demand (MW)	6,052	5,825	5,980	5,872	6,032	5,780	5,775	5,729	5,775
RCPD – Upper North Island (UNI)	1,932	1,857	1,989	1,928	2,024	1,882	1,914	1,904	1,904
RCPD – Lower North Island (LNI)	2,018	1,889	1,964	1,908	1,922	1,879	1,892	1,890	1,897
RCPD – Upper South Island (USI)	1,050	1,055	1,031	1,025	1,051	997	1,009	966	980
RCPD – Lower South Island (LSI)	1,052	1,025	995	1,011	1,035	1,005	961	968	994

Revenue and Rates	2008/09	2009 / 10	2010 / 11	2011 / 12	2012 / 13	2013 / 14	2014/15	2015/16	2016/17	
Total Connection Charge Revenue (\$m)	122.81	127.03	126.22	118.99	128.69	135.67	138.09	127.68	128.57	
WACC	Pre-tax (%)	11.14	11.14	11.14	9.81	9.99	9.99	9.99	8.94	8.94
	Post-tax (%)	7.80	7.80	7.80	7.06	7.19	7.19	7.19	6.44	6.44
Asset Return Rate (%)	6.93	7.10	7.00	6.21	6.68	7.55	7.71	7.80	7.97	
Maintenance Recovery Rates	Substations (%)	1.93	2.02	2.17	2.21	2.21	2.21	2.04	2.00	1.87
	220kV tower lines (\$/km)	2,734	3,145	3,355	3,804	4,613	4,877	5,015	5,381	5,242
	All other tower lines (\$/km)	2,851	3,059	3,427	4,225	4,759	5,378	5,959	7,269	5,326
	Pole lines (\$/km)	2,758	2,989	3,199	3,594	4,128	5,593	6,200	8,387	4,301
Injection Overhead Rate (%)	5.90	3.26	2.53	3.13	3.98	3.53	3.48	4.42	5.03	
Operating Recovery Rate (\$/switch)	1,064	1,109	1,132	1,086	1,134	992	908	1,016	1,107	
Total Interconnection Revenue (\$m)	385.75	411.50	413.61	447.06	546.98	574.15	661.11	632.19	662.09	
Interconnection Rate (\$/kW)	63.74	70.94	69.12	76.14	90.66	99.44	114.47	110.35	114.64	
Total HVDC Revenue (\$m)	82.96	78.34	84.84	117.11	128.77	162.47	145.00	149.93	152.27	
HVDC Rate (\$/kW)	25.25	24.48	26.46	36.58	40.73	50.82	44.60	46.49	47.24	