Aurora
ENERGY LIMITED

Cross-submission

Input Methodologies Review: Draft Decision and Determination Papers

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DELTA
THINK.INFRASTRUCTURE

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1 EXECUTIVE SUMMARY

Aurora welcomes the opportunity to cross-submit in response to submissions on the draft Input Methodologies (IMs) decisions and determinations.

<u>*High level of agreement amongst stakeholders*</u>

There is a lot of common ground amongst stakeholders. Aurora is pleased submissions generally confirm, and support, our views that:

- *Process and framework:* The Commission's IMs review process has been largely sound;
- The amendments to the IMs the Commission proposes are largely sensible;
- Changes to the IMs should, predominantly, be incremental in nature;
- The decision-making framework is a step in the right direction, but the Commission should commit to clear and transparent thresholds for changes to the IMs (with the evidential burden of proof higher the more substantive the change);
- *CPP:* The cost of applying for a CPP is a barrier to CPP applications, even where the DPP is not adequate to meet reasonable investor expectations;
- The Commission's proposals for amendment of the CPP provisions, including more liberal provisions for DPP re-openers are sensible.
- *WACC:* The Commission is out of step with other regulators in proposing to dismiss a trailing average cost of debt (TACD) approach to calculation of WACC. The draft decision should be revisited – Contact being the lone voice defending the current "rate-of-the-day" (ROTD) approach;
- The WACC percentile issue should not be revisited as part of the IMs review (for energy) – Contact and MEUG being the only parties to challenge this position; and
- Black's Simple Discount Rule (BSDR) and a split WACC do not warrant further consideration – with MEUG the sole party challenging this position.

There wasn't necessarily consensus on all issues. It is clear from the Electricity Authority and gentailer submissions that they are not happy with aspects of the Commission's draft decisions; particularly in relation to how to deal with emerging technology, revenue versus price caps and determination of WACC. Amongst the parties that actually commit investment in network services (regulated suppliers and investors), though, there was clear consensus that:

- *Form of Control:* Adoption of a revenue cap is sensible, but the revenue cap should not be capped to expose EDBs to catastrophic event risk;
- Adoption of accelerated depreciation is also sensible, but this should not be capped at 15%;
- The Commission should review "*the application and usability of the related party transactions rules" whereas the Commission focus "appears to be the potential for suppliers to be earning above normal profits under the current rules*"[1]. Likewise, the thresholds for application of ACAM should not be tightened;

<u>*Emerging technology*</u>

Our August 2016 submission noted that "*At present, no evidence has been provided, by the Commission or any submitter (including ERANZ who dealt with the issue in detail) to indicate the cost allocation and RPT rules need tightening*"[2].

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[1] Alpine Energy, Submission to the Commerce Commission on Input methodologies review: Draft decision papers, 4 August 2016, paragraph 30.

[2] Aurora Energy, Submission Input Methodologies Review: Draft Decision and Determination Papers, 4 August 2016, page 1.

Despite this being the one topic each of the incumbent gentailers, and their new representative body, ERANZ, submitted on, our observation remains unchanged. Each of the incumbents expressed concern about facing competition from EDBs, and the prospect (seemingly treated as a given) of cross-subsidies, but failed to provide any explanation or adequate evidence of problems with the current cost allocation and related party transaction (RTP) rules.

In the absence of such evidence, all we can do is reiterate that:

> *"Tightening the rules (including further limits on application of ACAM) would most likely unduly inhibit incentives to invest in non-regulated activities, and restrict the ability of EDBs to adopt non-traditional technology options which could improve efficiency/reduce costs. While such outcomes would reduce the competitive pressure gentailers could face from emerging technology, it would not be to the long-term benefit of consumers or consistent with outcomes in workably competitive markets"*[3].

<u>Meridian's dissenting views on a move to a revenue cap are unsafe</u>

We explained, in our August 2016 submission, why we agreed with the Commission that a shift to a revenue cap was to the long-term benefit of consumers and, contrary to the Electricity Authority letter on the subject, would better incentivise EDBs to reform their distribution pricing methodologies. It is clear from submissions that the Authority's concerns about a shift to a revenue cap are unfounded.

The only support the Authority received in the electricity sector was from Meridian, and we were unable to follow their reasoning. Meridian asserted *"that with a move to a revenue cap EDBs will be insulated from revenue loss – this could encourage them to continue to rely on consumption-based pricing or indeed to move to other, more inefficient, pricing structures"* [footnote removed][4], but go on to say *"as emerging technologies reduce in cost and gain greater traction it may be that EDBs who remained under a WAPC would change this view and start to see the relative revenue risks reversed. This would in turn incentivise them to adopt more efficient pricing structures"*[5].

We aren't quite sure what point Meridian are trying to make. It appears what they are saying is that currently EDBs rely too much on consumption-based (variable) charges, but emerging technology will force a change. On the basis of Meridian's apparent reasoning, a revenue cap would only be a problem if it was, somehow, able to fully insulate EDBs from technology risk.

<u>No support or no rationale given for support of ROTD over TACD</u>

We were disappointed with Contact's stance against a trailing average cost of debt (TACD) approach to calculation of WACC. It was limited to one sentence, and avoided providing their own explanation for preferring ROTD.

Consideration of the reasoning provided by regulators in overseas jurisdictions, such as Australia, and of submissions by consumers and consumer groups, show that TACD is in the long-term interests of consumers.

Under TACD, the level of network charges, in any given 5-year regulatory period, would not to depend on the level of interest rates in a particular one-month (or three-month) period; i.e., TACD removes a regulatory 'gamble' over whether interest rates (and consequently network charges) would be high or low. For this reason alone, we were surprised that Contact supports retention of ROTD.

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[3] Aurora Energy, Submission Input Methodologies Review: Draft Decision and Determination Papers, 4 August 2016, page 1.

[4] Meridian, Submission on Input Methodologies (IM) draft decisions papers (including the Report on the IM review), 4 August 2016, page 1.

[5] Meridian Submission on Input Methodologies (IM) draft decisions papers (including the Report on the IM review), 4 August 2016, page 2.

2 INTRODUCTION

Aurora welcomes the opportunity to cross-submit in relation to the Commerce Commission's Input Methodologies (IMs) draft decisions and determinations.

No part of our cross-submission is confidential and we are happy for it to be publicly released.

If the Commission has any queries regarding this submission, please do not hesitate to contact Alec Findlater:

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3 GENERAL OBSERVATIONS AND DECISION-MAKING FRAMEWORK

It is clear that stakeholders, particularly regulated suppliers, consider that the Commission is generally on the right track with the IMs review, and that the review process has been generally sound. We applaud the Commission for this.

PwC, for example, stated that *"The distributors which support this submission broadly welcome the package of input methodology (IM) improvements put forward in the consultation material. For the most part, the Commission has assessed the issues carefully and developed well-reasoned proposals"*[6].

The support for the Commission's process includes the view that it is generally appropriate for the review to adopt incremental and moderate changes to the IMs, and this supports development of regulatory certainty and predictability.

A recurring theme, though, is that while the decision-making framework is a useful step, it does not go far enough. For example, Orion commented that:

> *"The draft decision in terms of the framework for reviewing the IMs does not seem materially different from the draft guidelines published last year. The Commission continues to reserve discretion on when to change the IMs and appears unwilling to apply any clear materiality threshold. We agree that an IM should only be changed where the benefits outweigh the costs, but this is not a materiality threshold and the benefit/cost analysis is likely to be subjective. We submit that a materiality threshold is needed"*[7].

We similarly share PwC's concern:

> *"… that the Commission has set out a generally reasonable process and approach, but has claimed for itself the ability to change that approach at, effectively, any time it wants to. This is not consistent with the purpose of the IMs – to provide certainty"*[8].

[6] PricewaterhouseCoopers, Submission to the Commerce Commission on Input methodologies review: draft decisions papers, 4 August 2016, paragraph 9.

[7] Orion, Submission on Input methodologies review – draft decisions, 4 August 2016, paragraph 12.

[8] PricewaterhouseCoopers, Submission to the Commerce Commission on Input methodologies review: draft decisions papers, 4 August 2016, paragraph 74.

ENA also detailed that:

> *"Our underlying concern remains that the IMs can and are being changed frequently, which undermines certainty and confidence for investors, suppliers and consumers. For example, since December 2010 the IMs that apply to EDBs have been amended 10 times.*
>
> *…*
>
> *"A statement that they will be amended only when pros outweigh cons (where the assessment of both pros and cons will be necessarily subjective) does little to provide any such assurance. The ENA would support a statement that substantive (i.e. non-error correcting) changes to the IMs are only made, outside of the statutory 7-year review process, where the change meets a clear materiality threshold for changing the IMs."*[9]

We support ENA's recommendation that "… *The Commission confirms that a change to a core economic principle will be subject to a very high evidentiary and economic threshold"*[10].

We reiterate our view that the decision-making framework would better enhance regulatory certainty, and promotion of long-term benefit for consumers, if the Commission established explicit thresholds for when the IMs will, and won't, be changed. We aren't asking the Commission to do anything that would conflict with, or override, its statutory objective. A stronger commitment to regulatory certainty would support incentives to invest, innovate and improve efficiency and is to the long-term benefit of consumers.

4 EMERGING TECHNOLOGY, COST ALLOCATION AND RELATED PARTY TRANSACTIONS

The debate over treatment of EDB investment in emerging technology should be considered in the context of Orion's commentary that:

> *"… the technologies that are emerging in the electricity sector are creating opportunities to deliver real and material benefits to consumers in terms of improved resilience, reliability and efficiency. The use of emerging technologies is also likely to provide opportunities for EDBs to deliver network services more cheaply, e.g. by deferring capital expenditure.*
>
> *…*
>
> *We are currently investigating opportunities to support customers' use of batteries to smooth peaks on our network and thus avoid larger network augmentation costs. Any regulatory intervention that made these kinds of initiatives harder is likely to increase costs for consumers …"*[11]

MEUG also provided useful contextual commentary:

> *"… faced with long-term disruptions the evolution of IM and Part 4 in the long term needs to be considered to ensure near term changes to IM can accommodate and not obstruct long-term change in the structure of the market. MEUG suggest it is necessary to consider the evolution of the IM in broader terms in anticipation of the certainty of disruption in the electricity sector in terms of how that disruption may change industry structures and supplier and consumer behaviours"*[12].

The conclusions we reach as a consequence of this commentary may, however, differ from MEUG.

[9] ENA, Input Methodologies review, Framework for the IM review, 4 August 2016, paragraphs 15 and 16

[10] ENA, Input Methodologies review, Framework for the IM review, 4 August 2016, paragraph 3.

[11] Orion, Submission on Input methodologies review – draft decisions, 4 August 2016, paragraphs 15 - 17.

[12] MEUG, Submission on Input methodologies draft review decisions, 4 August 2016, paragraph 10.

We consider that MEUG's observations are precisely why the Commission should be considering reforms such as accelerated depreciation and adoption of a revenue cap. They also reinforce our concern about the risk of tightening the cost allocation and RPT rules, if they act as a barrier to EDBs adopting emerging technology, and encourage a continued focus on traditional technologies. If such a deterrent resulted in higher costs to EDBs than would otherwise occur, then it is likely that EDBs would be exposed to elevated levels technology risk. As Vector notes *"To place artificial barriers at this early stage will risk preventing or deterring EDBs from exploring projects and ultimately delivering service innovation …"*[13].

This is part of the reason why Aurora is of the view that:

- the Commission should not tighten the cost allocation and RPT rules. We agree with ENA that the ACAM threshold should not be reduced from 20% to 10%[14], and with First Gas that the Commission should not *"amend decision CA04 to require justification, without any regard to materiality, for every use of a proxy cost allocation"* and that if justification is required it *"should be subject to a materiality threshold"*[15,16];
- instead, the Commission should review whether the practicability and usability of the RPT rules could be improved. To this end, we agree with ENA that the RPT rules should be changed to: (i) remove the link between cost allocation and RPT rules created by the reference to "directly attributable costs, (ii) the directors' certification option should not be restricted to circumstances where no other option is available; and (iii) the IM and Information Disclosure Determination RPT rules should be aligned[17]; and
- the Commission should consider allowing more aggressive accelerated depreciation/including Unison's proposal that depreciation on new assets be capped at 25 years.

<u>*Gentailer concerns in relation to emerging technology*</u>

Contact has suggested, in response to the reforms the Commission is considering to address emerging technology, that *"The Commission's proposal to act at this stage is unjustified given the lack of available evidence …"*[18] but that *"Waiting for market failure before acting risks creating a self-fulfilling prophecy"*[19].

We question whether Contact's observation suggests that the Commission's proposal lacks sufficient evidential basis at this time. The level of evidence required to justify the change should reflect that the proposal is NPV price neutral.

There are plenty of examples of natural monopoly markets which have suffered as a consequence of new technology – postal being the latest example.

Further, while the evidence the Commission provided may not be conclusive, we agree with Unison that "there is greater uncertainty about future demand for network services than in 2010"[20]. If the Commission waits it could be too late – the market failure could be a self-fulfilling prophecy. As PwC note "… *it is helpful to take precautionary steps now to minimise the risk of harm to consumers in future"*[21].

[13] Vector, Submission to Commerce Commission on the IM review draft decision and IM report, 4 August 2016, paragraph 83.

[14] ENA, Input Methodologies review – Topic paper 3, impact of emerging technologies, 4 August 2016, section 5.1.

[15] First Gas, Submission on Input Methodologies review draft decisions (excluding cost of capital), 4 August 2016, page 2.

[16] We similarly agree with GasNet's views on these matters: GasNet, Submission on Input Methodologies Review Draft Decisions Papers, 1 August 2016, paragraphs 12 – 15.

[17] ENA, Input Methodologies review, Input Methodologies review – Topic paper 7, related party transactions, 4 August 2016, paragraph 24.

[18] Contact Energy, Input Methodology Review, 4 August 2016, page 7.

[19] Contact Energy, Input Methodology Review, 4 August 2016, page 11.

[20] Unison, Submission on the Input Methodology Review, 4 August 2016, paragraph 12.

[21] PricewaterhouseCoopers, Submission to the Commerce Commission on Input methodologies review: draft decisions papers, 4 August 2016, paragraph 44.

Our August 2016 submission made the observation that ERANZ's earlier submissions on this subject were strong on assertion and rhetoric, but lacked evidential support. Unfortunately, the same comment can be made about the latest ERANZ and gentailer submissions on emerging technology.

Some of the gentailer concerns seem to be based on incorrect assumptions, or misunderstanding of how the cost allocation IMs work. For example, application of ACAM does not mean 100% of shared operating costs are allocated to the regulated business. ENA detail the misunderstandings in their submission.[22]

Similarly, just as we did in our submission, Orion pointed out that while the Electricity Authority appeared to be concerned "*… that EDBs will leverage their regulated business to make investments in unregulated business activities, which other parties such as retailers will be unable to compete with*" it "*… has not provided Any evidence of anti-competitive behaviour …*"[23].

Accordingly, we refer to the High Court statement in the IMs Merit Appeal decision that "*Where a proposition is simply asserted ... we give it little or no weight*"[24]. More colloquially, but amounting to the same point, Powerco stated that they "*appreciate the fact that the Commission has not made any "knee-jerk" reactions to the prospect of new technologies without a proper evidential basis for doing so*"[25].

While ERANZ claim that their proposed changes to the cost allocation IMs "*does not restrict networks from utilising the [emerging] technology*"[26], this statement is difficult to reconcile with their continued suggestion that the Commission should "*revise the IMs to ensure assets that can be provided competitively do not enter into an EDB's Regulatory Asset Base (RAB) unless the value for inclusion is zero*"[27]. More generally, the ERANZ proposals would add substantial costs to EDBs trying to improve efficiency by adopting alternative or emerging technology. We reiterate our view that the ERANZ position is inconsistent with reasonable investor expectations. Its implications are potentially broader than just emerging technology, such as battery storage, and could also extend to other EDB assets such as land and office buildings (where they are not rented) – the market for property is competitive.

The gentailer submissions also fail to recognise Part 4 regulation is principally limited to information disclosure requirements, and price and service quality setting, and the IMs "*must not unduly deter investment by a supplier of regulated goods or services in the provision of other goods or services*" (section 52T(3)); including, specifically, in relation to the IM for valuation of assets (noting that ERANZ and its advisor suggested non-traditional technology be valued at zero), and "*allocation of common costs, including between activities, businesses, consumer classes, and geographic areas*" (section 52T(1)(a)(iii)) (noting the various gentailer submissions on cost allocation, and ACAM).

The reality is that regulated suppliers are already engaged in any number of activities that are outside traditional network supply. Emerging technology such as solar PV and battery storage is simply the latest iteration. Vector's Advanced Metering Service (AMS) being a case in point. Similarly, Orion point out that "*We, like other EDBs, has [sic] been operating load control systems for many years, providing similar services to those that could be provided by batteries*"[28]. Despite this, there is no evidence of problems with cross-subsidies, or adverse impacts on competition. We see no reason why engagement in emerging technology would be any different.

[22] ENA, Input Methodologies review – Topic paper 3, impact of emerging technologies, 4 August 2016, paragraph 29.

[23] Orion, Submission on Input methodologies review – draft decisions, 4 August 2016, paragraph 30.

[24] WELLINGTON INTERNATIONAL AIRPORT LTD & ORS v COMMERCE COMMISSION [2013] NZHC [11 December 2013], paragraph [1745].

[25] Powerco, Submission on Input Methodologies Review Draft Decisions, 4 August 2016, paragraph 251.

[26] ERANZ, ERANZ submission to the Commerce Commission on Input Methodologies for emerging technology, 4 August 2016, page 4.

[27] ERANZ, ERANZ submission to the Commerce Commission on Input Methodologies for emerging technology, 4 August 2016, paragraph 10.

[28] Orion, Submission on Input methodologies review – draft decisions, 4 August 2016, paragraph 20.

5 PRICE VERSUS REVENUE CAP

In our August 2016 submission we were reluctantly critical of the Electricity Authority for its position on a revenue cap versus a price cap. It is clear from submissions that we were not alone in our views with only Meridian expressing support for the Authority's position.

Alpine Energy, for example, expressed concern that the Authority's letter could influence the Commission's decision and expressed *"the view that the Authority has misunderstood the economic literature that is widely available on applying a revenue cap as a form of control …"*[29].

ENA expressed the view that the Authority's view reflects a *"narrow, theoretical view of the world" which is "focused on the short-term incentive for EDBs. However, in the long term if EDB prices become unsuited to consumer demands … the effect will be that prices become unsustainable … EDBs are businesses that invest in long-life assets and are concerned to ensure that they can recover their investments"*[30].

Orion commented that *"… the concerns raised by the Electricity Authority … regarding pricing efficiency under a revenue cap are not well founded"*[31].

PwC, also by example, stated: *"We recognise the Authority has raised concerns regarding the application of a revenue cap. However, we do not believe any weight should be given to these concerns as they are heavily theoretical and do not reflect actual business practices by distributors"*[32].

The challenges to the Authority's position weren't just limited to EDBs.

Contact, for example, *"… agree[d] with the Commission that a revenue cap removes potential disincentives on EDBs to implement more allocatively efficient distribution pricing, given the potential increase in quantity forecasting risk (for example in a demand tariff scenario, a few very cold winter days would be expected to be have a greater impact on peak demand than on annual energy usage)"*[33].

Also by example, Molly Melhuish noted the difference in approach to regulation, between the Electricity Authority and the Commission, and challenged the Authority's views by pointing out revenue caps were devised *"to remove the incentive of network companies to suppress energy-efficiency investments and/or behaviour. By encouraging reduction of demand at peak times, network companies could defer new network investment"*[34].

If you take a one dimensional analysis of either a price or revenue cap it is easy to reach a conclusion that either produces perverse incentives: under a price cap profits can be Increased by encouraging consumption as much as possible so regulated suppliers would have incentives to set fixed charges very high, and volumetric charges as low as possible, while under a revenue cap profits can be increased by minimising costs, and setting volumetric charges as high as possible.

More sensible public policy analysis would reject either extremes as unrealistic and, instead, recognise price and revenue caps both have pluses and minuses. This, in part, explains why EDBs views on the matter have changed over time. Experience with the operation of DPPs under Part 4, demand forecast errors in the last two DPP resets, the emerging impact of new technology, and

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[29] Alpine Energy, Submission to the Commerce Commission on Input methodologies review: Draft decision papers, 4 August 2016, paragraph 35.

[30] ENA, Input Methodologies review – Topic paper 1, form of control and RAB indexation, 4 August 2016, paragraph 41.

[31] Orion, Submission on Input methodologies review – draft decisions, 4 August 2016, paragraph 7.3.

[32] PricewaterhouseCoopers, Submission to the Commerce Commission on Input methodologies review: draft decisions papers, 4 August 2016, paragraph 16.

[33] Contact Energy, Input Methodology Review, 4 August 2016, page 6.

[34] Molly Melhuish, Commentary on letters from Electricity Authority to Commerce Commission dated 30 May 2016 (form of control) https://www.ea.govt.nz/dmsdocument/20784 and 1 June 2016 (on treatment of cash flows, emerging technology) https://www.comcom.govt.nz/dmsdocument/14337, 4 August 2016, page 2.

changes in demand have meant that it is now desirable to shift from a price cap to a revenue cap (even if a price cap was the right decision, originally).

We consider that, overall, submissions provide compelling reasons why the Authority's views on revenue versus price caps were wrong, and why adoption of a revenue cap would help facilitate the types of reforms to electricity distribution pricing the Authority actually wants to encourage. We hope that the submissions help to bring the Authority and Commission to a point where they have a common view on price versus revenue caps, although the decision is ultimately the Commission's to make.

6 ROTD V TACD

The clear message from submitters, with the sole exception of Contact[35], is that a TACD approach to determination of WACC should be preferred over the existing ROTD, or prevailing-rate, approach.

The other clear message, summed up well by Powerco, is that "… *the use of a three month averaging period is preferable to one month. However we remain of the view that an averaging period of around five years would be preferable. In general, we consider that the trailing average approach is superior to the prevailing rate approach*"[36].

Contact's submission on the matter is very limited, and does not include any new or additional reasons for supporting ROTD. Contact simply states that it supports ROTD *"for reasons broadly similar to the Commission's rationale"*[37]. This contrasts with the extensive detailed support for TACD provided in both the latest round of submissions, and in earlier submissions.

Wellington Electricity and Frontier Economics (for Transpower) cited consumer and consumer representative support for a move from ROTD to TACD in Australia. Wellington Electricity made the general observation "… *that all Australian businesses and consumer groups supported the adoption of the trailing average approach*"[38].

Frontier Economics referenced, specifically, the support from the South Australian Council of Social Service (SACOSS) which submitted:

> *"The appeal of the lower rate [that would have been delivered at the time by the ROTD approach] is obvious but SACOSS is also conscious that Global Financial Crisis (GFC) conditions could reappear at some future date and would prefer a solution that reduces volatility for both the owners and customers of SA Water. This is an opportunity to establish a long term approach to how water users are exposed to changes in the cost of capital over time."*[39]

Frontier Economics also noted the support of the Energy Users Rule Change Committee:

> *"The notion of the TACD was first introduced in Australia through an Australian Energy Markets Commission (AEMC) Rule Change process, which concluded in November 2012. The proponents of this change to the National Electricity Rules (NER) and the National Gas Rules (NGR) were the AER and the Energy Users Rule Change Committee (EURCC), which represented a number of large energy consumers in Australia.*
>
> *"The EURCC expressed concern during the rule change process that the ROTD approach was not producing an appropriate estimate of the return on debt for a*

[35] Meridian commented that: "Meridian has reviewed a draft of the submissions made by Contact Energy on the cost of capital paper. Meridian agrees with the submissions made by Contact Energy for the reasons they give." [page 7] Meridian made no explicit comment on ROTD versus TACD.

[36] PricewaterhouseCoopers, Submission to the Commerce Commission on Input methodologies review: draft decisions papers, 4 August 2016, paragraph 252.

[37] Contact Energy, Input Methodology Review, 4 August 2016, page 28.

[38] Wellington Electricity, Input Methodologies Review: Response to Draft Decisions, 4 August 2016, page 4.

[39] ESCOSA, SA Water Regulatory Rate of Return 2016 – 2020: Final Report to the Treasurer, March 2015, page 31.

> *benchmark efficient entity. Specifically, the proponents noted that at the time the AER was resetting prices for many energy networks in 2008 and 2009, the ROTD cost of debt had risen steeply as a consequence of the GFC. However, the bulk of the debt held by those networks was raised at significantly cheaper, pre-GFC rates. Hence, there was a significant divergence between the actual debt service costs faced by regulated networks at the time and the allowed return on debt (determined using the ROTD approach, whereby the contemporaneous (high) rate was applied to the firm's entire debt portfolio).*"[40]

We agree with ENA "*… that a trailing average methodology should be used for the estimation of the cost of debt because it is a more accurate representation of real world best practice debt strategy and it provides consumers and network businesses with better long term outcomes*"[41].

In our August 2016 submission we commented: *"All it would take, by way of example, is for interest rates to be abnormally low (high) in three one-month periods, and prices would be too low (high), based on regulated suppliers' efficiently incurred cost of debt for a 15 year period. There is a 1 in 4 (25%) chance of this happening. This would be inconsistent with reasonable investor expectations, setting prices on the basis of current and forecast profitability and incentives to invest (limiting excessive returns)"*[42].

In a similar vein, Wellington Electricity commented *"The trailing average approach also benefits consumers by significantly reducing the risk that prices may be higher or lower than the average interest rate over time, simply because the 'on the day' rate occurred at a high or low point in interest rate cycles ... The current extended lower-than-average interest rate cycle is unlikely to be sustained, and by 2019 (i.e. the next DPP WACC pricing period) interest rates could be considerably higher"*[43].

We also consider that ex-Commissioner Pat Duigan's comments on WACC are relevant to the ROTD versus TACD issue, and our submission on the matter.

Pat Duigan advocated that the Commission seek independent expert advice on asset beta. There is plenty of precedent for this, including the Commission obtaining independent expert review on the advice of its experts. As Pat Duigan noted *"The Commission used international consultants in regard to the beta for the telecommunications pricing decisions and for the cost of capital uplift review. It would be consistent with those precedents for the Commission to engage such consultants now on this beta issue"*[44]. We agree with Pat Duigan but consider that the independent expert should also be tasked with reviewing ROTD versus TACD (as per our previous submission), and potentially also review the WACC IMs more broadly to provide a fresh perspective.

7 REASONABLE INVESTOR EXPECTATIONS AND WACC

The submissions on WACC reinforce our view about the merit of seeking a fresh, independent expert, perspective on WACC and on the importance of the *"reasonable investor expectations"* principle.

Unison, for example, submitted that "*… the proposed changes to WACC, as well as legacy issues from the 2010 WACC decisions are likely to lead to a WACC that does not satisfactorily compensate investors for the cost of capital and the risks they face*"[45]. There was a consistent theme, through submissions from ENA (and their expert advisor, CEG), Orion, PricewaterhouseCoopers, Transpower (and their expert adviser, Frontier Economics), Vector and Wellington Electricity, of examples how

[40] Frontier Economics, Response to cost of capital issues raised in Draft Input Methodologies, August 2016, page 17.

[41] ENA, Input Methodologies review – Topic paper 4 cost of capital issues, 4 August 2016, paragraph 4.

[42] Aurora Energy, Submission Input Methodologies Review: Draft Decision and Determination Papers, 4 August 2016, page 2.

[43] Wellington Electricity, Input Methodologies Review: Response to Draft Decisions, 4 August 2016, page 4.

[44] Pat Duigan, Gas Pipeline and Electricity Lines Businesses Beta Analysis, 30 June 2016, page 2.

[45] Unison, Submission on the Input Methodology Review, 4 August 2016, paragraph 19.

the current WACC IMs fail to ensure full recovery of the cost of capital/reasonable investor expectations.

We recognise there are alternative views, such as from Contact, MEUG and MGUG. The merit of these views should also be assessed in the context of the above submissions.

Contact, for example, argued that the term credit spread differential (TCSD) provision should be removed (and not replaced with a longer debt tenor). The Commission has explained that removal of the TCSD would either preclude efficient debt management, or full recovery of regulated suppliers' cost of capital:

> "*A prudent supplier may issue debt for longer than five years to reduce the refinancing risk associated with assets that have long economic and engineering lives. We consider that a supplier financing assets to reduce refinancing risk in this way is likely to be providing long-term benefits to consumers, and this is why we continue to consider that including a TCSD helps provide the best estimate of a cost of capital incurred by prudent suppliers*"[footnote removed][46].

Contact, also by example, made the comment in relation to debt premiums: "*Given that the Commission <u>assumes</u> the regulated borrowers fund purely via domestic, publically traded retail bonds, then either wholesale bonds should be removed from the debt premium sample set, or the premiums for these bonds should be adjusted for illiquidity*" [emphasis added][47]. As a starting point, to test Contact's proposition it would be worthwhile to test whether it is efficient, or consistent with competitive market outcomes, for all regulated suppliers (or all electricity industry participants), particularly larger firms, to fund their debt 100% domestically.

[46] Commerce Commission, Input methodologies review draft decisions, Topic paper 4: Cost of capital issues, 16 June 2016, paragraph 198.

[47] Contact Energy, Input Methodology Review, 4 August 2016, page 24.