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# ***Submission to the Commerce Commission***

on

Input methodologies review: emerging  
views papers

Made on behalf of 16 Electricity Distribution Businesses

*PwC submission on  
behalf of group of 16  
EDBs*

*24 March 2016*

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# *Table of contents*

Introduction	2
Summary	4
Process update	6
DPP and CPP interactions	8
Form of control	11
Cost of capital	14

# Introduction

## Overview

1. This submission responds to the following consultation papers and expert reports published by the Commerce Commission (Commission) on 29 February 2016:
  - ‘Input methodologies review: Process update paper’, 29 February 2016 (PUP)
  - ‘Input methodologies review: Emerging views on opportunities to improve the way default and customised price-quality paths work together’, 29 February 2016 (Price Path paper)
  - ‘Input methodologies review: Emerging views on form of control’, 29 February 2016 (FoC paper)
  - ‘Review of WACC Issues, Dr Martin Lally’, 25 February 2016 (Lally report).
2. This submission has been prepared by PricewaterhouseCoopers (PwC) on behalf of the following 16 Electricity Distribution Businesses (EDBs or distributors):
  - Alpine Energy Limited
  - Aurora Energy Limited
  - EA Networks
  - Eastland Network Limited
  - Electricity Invercargill Limited
  - MainPower New Zealand Limited
  - Marlborough Lines Limited
  - Nelson Electricity Limited
  - Network Tasman Limited
  - Network Waitaki Limited
  - OtagoNet Joint Venture
  - The Lines Company Limited
  - The Power Company Limited
  - Top Energy Limited
  - Waipa Networks Limited
  - Westpower Limited.
3. Together these businesses supply 22% of electricity consumers, maintain 38% of total distribution network length and service 67% of the total network supply area in New Zealand. They include both consumer owned and non-consumer owned businesses, and urban and rural networks located in both the North and South Islands.

4. The EDBs which support this submission also support the submission made by the ENA. The purpose of this submission is to highlight topics of particular interest to the 16 EDBs listed on the previous page.
5. We trust this submission provides useful input to your consultation on the consultation papers. We would be happy to answer any questions you may have regarding this submission.
6. The primary contact for this submission is:

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# Summary

7. The following points summarise our views on matters raised in the consultation papers. They are discussed more fully in the body of this submission.

## Process update

8. We note the proposed process for the next few steps of the Input Methodologies (IM) review, up to the draft decision. Stakeholders will require sufficient time to review the draft decision and respond to it.
9. We can understand why the Commission wants additional time to consider the related party rules. However, we support the related party provisions being considered as part of the current IM review, rather than separately. Having workable related party rules is particularly important for rural and provincial networks, where there is often no other option but to provide services in-house.

## DPP and CPP interactions

10. We welcome efforts both to make the default price-quality path (DPP) appropriate for a wider range of EDBs' circumstances and to make the customised price-quality path (CPP) more cost effective. In relation to the Commission's eight emerging views in this area, we:
  - support a more tailored approach to setting the DPP
  - agree with the proportionate scrutiny principle; which could also usefully account for the size of the EDB being scrutinised
  - consider that if single-issue CPPs are not available a useful DPP reopener mechanism is essential
  - support increased use and range of DPP reopeners, although we do not agree that reopeners should only be permitted where the price/quality impact is "relatively low"
  - agree that the quality-only CPP should be replaced with a DPP reopener
  - agree that a CPP reopener for contingent and unforeseen projects may be useful, although this should also be available under the DPP
  - consider that prudent additional costs between the decision to apply for a CPP and the start of the CPP should be able to be recovered (not just between the CPP application and the start of the CPP)
  - agree that new pass-through costs should be able to be created when a DPP is set.

## Form of control

11. We agree that a revenue cap is likely to deliver the benefits the FoC paper has identified and it may be the most suitable form of control for EDBs. However, there are some differing views among EDBs about the preferred option.
12. Some EDBs consider that how a revenue cap will be implemented will significantly affect the outcomes it produces. It would be helpful for the Commission to describe the detail of how a revenue cap would be implemented, so parties can fully understand what is being proposed and reach an informed preference.

13. The FoC paper discussed four of these implementation issues. In response to those, we consider:
- there is no clear need for a smoothing mechanism to address price volatility
  - any under-recoveries should be able to be washed up into the next regulatory period
  - incentives for connecting new customers should be considered
  - there is no need for incentives for EDBs to plan for catastrophic events.

#### Cost of capital

14. We agree with Dr Lally that there is no robust empirical evidence that supports a conclusion that the form of control impacts the asset beta. We note that Dr Lally has identified a number of problems with the empirical evidence available.
15. We also acknowledge the practical difficulties Dr Lally has described with applying Black's Simple Discount Rule (BSDR) in a regulatory setting.
16. We continue to submit that:
- there is no basis for making an adjustment to the asset beta method, in the event that the form of control is changed to a revenue cap
  - the BSDR is not an appropriate tool in a regulatory price-setting context, and its use should not be considered further.

# Process update

## Process up to draft decision

17. The PUP outlines the IM review milestones from now until the draft decision is released in mid-June 2016. This proposed timetable appears reasonable. The EDBs which support this submission will require sufficient time to review the draft decision in detail and prepare a response to it. Therefore any delays in publishing the draft decision should not be offset by corresponding reductions in the time available for consultation. There will also need to be sufficient time after the draft decision for consultation on the technical drafting of the IMs.
18. The PUP indicates the Commission may approach individual suppliers to test the technical implications of some of options relating to emerging technologies. The EDBs which support this submission support testing the practical implications of proposals with industry participants before draft decisions are produced.

## Related party transactions

19. The PUP indicates that the Commission now intends to defer consideration of the related party rules in the IMs to a separate process outside of, and later than, the current IM review.
20. The EDBs which support this submission recognise that the treatment of related party transactions is a complex topic. The interrelationships between related party IMs, related party ID requirements, the cost allocation IMs and EDBs' organisational structures make it challenging to develop rules that can achieve the desired results for each EDB and avoid perverse outcomes or incentives.
21. We can understand why the Commission considers that it needs additional time to consider reforms to the related party rules across the various relevant regulatory determinations. We also agree that the related party IM requirements should be reviewed alongside the related party ID requirements. However, it is not desirable for certain parts of the IMs to be deferred from what is supposed to be a full and comprehensive seven-yearly review. It is the Commission's responsibility to ensure it has sufficient resources to review the IMs in full.
22. As discussed in our previous submission,<sup>1</sup> the current design of the related party rules gives rise to unnecessary confusion and complexity. It is important to improve the consistency between the ID and IM requirements to help suppliers apply the options and rules. Having workable related party rules is particularly important for rural and provincial networks, where there is often no other option but to provide services in-house. It is important that the related party rules allow for sensible commercial arrangements to be in place in those networks.
23. We are concerned that if the related party rules are moved out of the current IM review they risk further delays in future, when the Commission will no longer face a firm deadline in which to conclude the IMs. An important issue here is the accuracy and validity of the ID dataset. The related party rules are most likely being applied inconsistently across the industry, meaning that disclosures are likely to be inconsistent. The longer it takes to update the related party rules the longer the ID data may be inconsistent, which could cause problems for future price setting and summary and analysis.
24. The EDBs which support this submission support the related party provisions being considered as part of the current IM review, rather than separately.

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<sup>1</sup> PwC on behalf of 20 Electricity Distribution Businesses, *Submission to the Commerce Commission on Input Methodologies Review: Invitation to contribute to problem definition*, 21 August 2015, paragraph 36.

25. If the related party provisions are reviewed separately, we support making improvements (simplifications) to the CPP related party requirements as part of this IM review.



# DPP and CPP interactions

## Overview

26. The consultation paper considers potential improvements to DPP/ CPP regulation and puts forward eight emerging views on this topic (listed in the table below).
27. The EDBs which support this submission welcome efforts both to make the DPP appropriate for a wider range of EDBs' circumstances and to make the CPP more cost effective when EDBs do need to apply for it. We acknowledge the Commission is seeking to make improvements in this area and view the emerging views paper as a positive step. However, for many EDBs and their consumers it is likely that CPPs will remain prohibitively expensive – this underlines how important it is to get the DPP settings right.

## Emerging views

**Table 1: Commentary on the emerging views regarding DPPs and CPPs**

Emerging view	Response
<p>Take a more tailored approach to setting the DPP, where costs can be minimised.</p> <p>This will be easier for GPBs as there are fewer of them, but summary and analysis may make it feasible for EDBs over time.</p>	<p>We support a more tailored approach to setting the DPP; this should make it a better fit for more EDBs.</p> <p>We recommend summary and analysis is prioritised so tailoring can be applied for the 2020 reset.</p> <p>It is in the long-term interest of consumers for tailoring to be available for EDBs, because otherwise they and their consumers may incur costs of avoidable CPP applications. Or the EDB may remain on an unsuitable DPP which could damage investment incentives or allow recovery of more revenues than are needed to earn a commercial return.</p>
<p>The proportionate scrutiny principle should be applied:</p> <p><i>“the level of scrutiny applied [to a DPP or CPP] should be commensurate with the price and quality impact on consumers of the tailoring being sought”.</i></p>	<p>We agree with this in principle.</p> <p>This could also usefully take account of the size of the regulated supplier when determining how much scrutiny is proportionate.</p>
<p>Single-issue CPPs are not appropriate.</p>	<p>We acknowledge the Commission’s concerns. However, single-issue CPPs may make CPPs a viable option for more EDBs.</p> <p>If single-issue CPPs are not available it is essential to have a useful set of DPP reopener mechanisms in place.</p>
<p>An expanded set of DPP reopeners would be likely to deliver better outcomes.</p>	<p>We support increased use and range of DPP reopeners. This should make the DPP more suitable for more EDBs, improving the likelihood that the price-quality path will be in the long-term interest of consumers (i.e. prices and quality standards are</p>

Emerging view	Response
<p>Constant price revenue growth forecasts and quality standards may be suitable for DPP reopeners when triggers are met.</p> <p>Commission should have power to initiate reopeners and reopeners could be either positive or negative for EDBs.</p>	<p>less likely to be too high or too low).</p> <p>We agree constant price revenue growth (if a revenue cap is not applied) and quality standards are appropriate candidates for DPP reopeners.</p> <p>The Commission already has powers to initiate reconsideration of a DPP (eg where there are errors). However, we do not think that the Commission should have this power with regard to the additional reopeners, which relate more directly to setting prices and quantity standards under a normal (ie no catastrophic events) DPP.</p> <p>If the Commission had reopener powers EDBs would never be sure when their price path would be reopened, creating regulatory uncertainty and risk damaging investment incentives.</p> <p>Any such power should come with clearly specified triggers and process steps.</p>
<p>The Price path paper's suggested criteria for identifying DPP reopeners are:</p> <ul style="list-style-type: none"> <li>• low-cost scrutiny can be applied</li> <li>• applies to one aspect of DPP that can be isolated from other inputs</li> <li>• has a relatively low impact on price / quality</li> <li>• the Commission was unable to consider relevant information at time of setting DPP (eg due to lack of resources)</li> <li>• would apply to multiple suppliers.</li> </ul>	<p>We do not agree that reopeners should be permitted only where the price/quality impact is “relatively low”. This will restrict reopeners when they are most needed, either locking EDBs into inappropriate DPPs or incurring increased costs for CPP applications. Neither of these outcomes would be in the long-term interest of consumers.</p> <p>In principle the Commission should take account of all relevant information when it sets a DPP. We would be concerned if the reopener was used routinely to make up for resourcing challenges within the Commission. However, we accept there may be exceptional circumstances in which this is appropriate (eg where compelling evidence emerges towards the end of the process and there is genuinely insufficient time to build it into the final decision).</p> <p>We note that not all reopener applications would necessarily apply to multiple suppliers. Reopeners need to be able to apply to individual suppliers as well.</p> <p>These criteria should be seen as factors to consider, not as a strict list of requirements that must all be met before any reopener can be applied. A collective list would prevent reopeners being used in most circumstances.</p>
<p>The quality-only CPP should be replaced with a DPP reopener.</p>	<p>We agree with this proposal. A DPP reopener is likely to be lower cost to apply for than a quality-only CPP. It also avoids the risk that an EDB who is</p>

Emerging view	Response
<p>There should be a CPP reopener for contingent events.</p>	<p>subject to a quality-only CPP is prevented from making another CPP application to address cost and revenue issues (eg in response to a catastrophic event) during the same regulatory period.</p> <p>We agree that a CPP reopener for contingent and unforeseen projects may be useful. This should also be available under the DPP.</p> <p>Smaller EDBs in particular would benefit from a contingent event reopener; funding large, one-off projects that do not reflect expenditure trends is more likely to be problematic for smaller EDBs.</p> <p>Providing contingent event reopeners in the DPP is in the long-term interest of consumers because it would enable EDBs to fund large, out-of-trend projects and thus enable essential investment to go ahead (a CPP application is not affordable for many EDBs, even with the additional allowance available under the DPP).</p>
<p>Net additional costs related to CPPs should be recovered through CPP applications.</p>	<p>Agree that the costs of urgent investments incurred between the CPP application and the CPP starting are able to be recovered through the CPP.</p> <p>However, some urgent costs may need to be incurred even earlier. Prudent additional costs between the decision to apply for a CPP and the start of the CPP should be able to be recovered.</p> <p>An EDB's costs of applying for a CPP should also be able to be recovered through the CPP. This would remove a major barrier to smaller EDBs being able to apply for CPPs (the additional allowance available under the DPP does not affect this barrier).</p>
<p>New pass-through costs should be able to be created when a DPP is set.</p>	<p>Agree. It makes sense to allow new pass-through costs to be added at the time a DPP is set, as well as during a DPP by amendment.</p>

# Form of control

## Pure revenue cap or weighted average price cap?

28. The Commission’s emerging view is that a “pure” revenue cap, ie a revenue cap which guarantees allowable revenues are recovered, usually through a wash-up mechanism within the price path, is the appropriate form of control for EDBs, rather than the weighted average price cap (WAPC) that currently applies.
29. There are advantages and disadvantages with both options (and with the range of other “hybrid” options that contain some features of a pure revenue cap and a WAPC). A revenue cap may be the most suitable form of control for EDBs. However, there are differing views among EDBs about the preferred option.
30. Some EDBs consider that how a revenue cap will be implemented will significantly affect the outcomes it produces. It would be helpful for the Commission to describe the detail of how it intends a revenue cap would be implemented, so parties can fully understand what is being proposed and reach an informed preference. This could be done at the time of the draft decision.
31. The table below considers the benefits of a pure revenue cap that the FoC paper identifies, relative to the WAPC.

**Table 2: Benefits of a pure revenue cap**

Benefit of a pure revenue cap	Comment
Removes quantity forecasting risk	<p>Agree.</p> <p>Under a pure revenue cap there is no risk of revenues being higher or lower than needed to meet the revenue requirement simply due to demand forecasting errors. However, a revenue cap is less suitable where there is significant, and difficult to forecast, growth on a network.</p>
Removes disincentives to restructure prices	<p>Agree.</p> <p>The need for reform of EDB price structures is becoming more pressing with the emergence of new technologies and the spread of smart meters.</p> <p>Moving to a revenue cap reduces compliance and revenue risks created by price changes. These have been a barrier to price structure reform in recent years.</p>
Removes potential disincentive for EDBs to pursue energy efficiency initiatives	<p>Agree.</p> <p>A pure revenue cap means EDBs will have better incentives to invest in energy efficiency and demand-side management. However, the current disincentive may not be large.</p>

## Implementation of a pure revenue cap

32. Changing to a pure revenue cap would be a straightforward drafting change to make to the IMs (only a few words would need to be amended). However, there would be significant detail to work through as part of the 2020 DPP determination process to sort out how the revenue cap would be implemented and how the transition from the current WAPC would be managed.
33. It is helpful to debate these issues now because, as discussed above, the detail of how a pure revenue cap will be implemented can materially affect the extent to which EDBs support a change in the form of control. We support stakeholders having a clear understanding of how a pure revenue cap would be implemented before they need to reach a position on the draft IM review decision. That way they can reach a fully informed view on which form of control is preferable.
34. The FoC paper raised four implementation-related issues, seeking to resolve perceived downsides of a pure revenue cap. These and our initial responses to them are in the table below.

**Table 3: Implementation issues for a pure revenue cap**

Issue	Initial comments
Should there be a smoothing mechanism to minimise intra-period average price volatility?	<p>It is not clear that price volatility would be a significant problem. Price volatility at the start of each regulatory period can also occur under WAPCs.</p> <p>EDBs have an interest in reducing price shocks for consumers and would most likely smooth out any price shocks themselves within the revenue cap. This is current practice within the industry and there is precedent within the current DPP for the Commission to smooth out price changes across regulatory periods.</p>
Should there be a smoothing mechanism to limit the ability to take under-recovery into future pricing periods?	<p>Preventing carry-over into future pricing periods would not be consistent with implementing a “pure” revenue cap and would also appear to be inconsistent with the Part 4 Purpose Statement.</p> <p>This proposal would prevent some EDBs from recovering their full building blocks revenue requirement, which would not assist with investment incentives.</p> <p>There is also a precedent under the current form of control for certain wash-ups to be carried forward over a regulatory period.</p>
Should there be incentives for EDBs to undertake new connections?	<p>Probably yes.</p> <p>EDBs already have reputational and relationship incentives to connect new customers. Trust-owned EDBs also have ownership obligations related to their communities.</p> <p>However, problems could occur when the following circumstance arises:</p>

Issue	Initial comments
	<ul style="list-style-type: none"> <li>• A new, large and unforeseen customer (or a large number of small customers) seeks to connect to the network during a regulatory period.</li> <li>• The costs of connecting the customer are significant and were not included in the price path forecasts.</li> <li>• Thus the EDB's net revenues would not be able to increase to cover the increased costs and this may make it more challenging for new connections to proceed.</li> </ul> <p>While EDBs could recover these costs through capital contributions, 100% up-front payments may not be affordable for all connecting parties. We consider EDBs should be able to recoup the costs of such connections, possibly by way of a recoverable cost.</p>
<p>Should there be incentives for EDBs to plan for catastrophic events?</p>	<p>No.</p> <p>The form of control will not affect EDBs' willingness to plan for catastrophic events.</p> <p>EDBs are providers of essential services and are well aware of the need to plan for catastrophic events, which is part of being a responsible electricity industry participant. Under the ID Determination EDBs are already required to plan for high impact low probability risks through their Asset Management Plans – it is not clear additional incentives are needed.</p> <p>Creating this incentive might give the impression that EDBs are not serious about planning for catastrophic events and we would be concerned about the reputational impacts of that.</p>

35. Other questions that will need to be addressed at some stage if the form of control changes include:

- What are the implications for the pass-through balance? Would this be retained as a separate mechanism or deemed no longer necessary?
- Over what timeframe would EDBs be expected to return any over- or under-recovery from a previous year or a previous regulatory period?
- What would the compliance reporting requirements be?

# Cost of capital

## *Effect of the form of control on the asset beta*

36. As we stated in our submission on the WACC update paper,<sup>2</sup> there would need to be compelling empirical evidence to justify a change in the asset beta on the grounds that the regulatory form of control is changed to a revenue cap. The evidence would need to demonstrate that a change to the form of control has a significant effect on a regulated supplier's beta. Dr Lally has not found any such evidence; his conclusion was that *"there is no empirical study that provides a clear conclusion on the effect of regulation on beta."*<sup>3</sup>
37. The Lally report sets out a number of problems with the empirical evidence that is available:
- It is difficult to separate a sample of firms into 'WAPC' and 'revenue cap' categories, which is a key requirement for this analysis. The sample firms use a range of regulatory frameworks that effectively sit on a continuum, some firms are subject to multiple regulatory systems and, for others, the regulatory methods can change during the sample period. In addition, the specific type of revenue cap that might apply to EDBs has yet to be fully developed.
  - The comparative returns found in some empirical studies, including one cited in the IM Reasons Paper, are significantly impacted by one-off events.
  - The standard test for comparing average betas between two samples requires an assumption that the data are statistically independent. However this will not be the case – in fact, the returns of the two samples will be positively correlated since they're both affected by the same macroeconomic shocks. Relaxing this assumption makes it more difficult to establish statistically that the average betas of the two samples are different.
  - Some empirical studies have a sample size which is too small to demonstrate any difference with statistical confidence.
  - The paper which Lally considers has the "best empirical evidence" is 20 years old and Lally states that there is doubt regarding the applicability of the conclusion to the present.
38. Given the evidence presented in the Lally report, and Dr Lally's opinion of it, we see no reason to change our previous view<sup>4</sup> that the empirical literature on the relationship between the form of control and the asset beta methodology is, at best, mixed.
39. We also previously submitted that any new method for estimating the asset beta must be demonstrably more accurate than the current method.<sup>5</sup> The Lally report does not provide (and did not seek to provide) any evidence in this regard.
40. We therefore retain our previous conclusion that there is no basis for making an adjustment to the asset beta method, in the event that the form of control is changed to a revenue cap.

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<sup>2</sup> PwC on behalf of 19 Electricity Distribution Businesses, *Submission to the Commerce Commission on Input methodologies review: Update paper on the cost of capital topic*, 5 February 2016, page 8.

<sup>3</sup> Lally report, page 3.

<sup>4</sup> Op cit 2.

<sup>5</sup> Op cit 2.

## *Black's simple discount rule*

41. In our submission on the WACC update paper,<sup>6</sup> we noted that the use of the BSDR introduces additional complexity because the probability distribution of the regulatory cash flows must be estimated. We noted that it had not been demonstrated how it could work in a regulatory setting, with the key difficulty being how forecast regulatory cash flows could be adjusted so that they could be discounted at the risk-free rate.
42. The Lally report sets some specific reasons for why the BSDR would be difficult to implement in practice in a WAPC or revenue cap situation. It describes the difficulties in estimating the probability distribution of regulatory cash flows, and in particular the vested interest that the EDBs would have if they were to provide information to the Commission to help it do that. It notes that no method has yet been demonstrated which can estimate the expected cash flows conditional on the market return equalling the risk-free rate. Lastly, the Lally report stated that it is unclear whether the regulatory cash flows are linearly related with the market, which is required for the BSDR to be applied.
43. The BSDR is not designed to estimate the cost of equity, nor is it designed to operate in a regulatory context. In our view, the additional practical complexities that would be introduced make it inappropriate for use as a means of determining regulatory price paths. We support the view of Dr Lally, who states that he “[does] not favour this approach”.<sup>7</sup> As we stated in our submission on the WACC update paper, we do not support further consideration of this option.

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<sup>6</sup> Op cit 2.

<sup>7</sup> Lally report, page 4.