



**2010-15 Default Price-Quality Path  
Starting Price Adjustments and Other  
Amendments**

**Update Paper**

**16 May 2011**

## **A: INTRODUCTION**

- 1 Powerco Limited (*Powerco*) welcomes the opportunity to make this submission on the Commerce Commission's update paper *2010- 15 Default Price-Quality Path Starting Price Adjustments and Other Amendments* (April 2011) (*Update Paper*).
- 2 This submission should be read in conjunction with (and is intended to be complementary to) the Electricity Networks Association's (*ENA*) Submission on DPP Starting Price Adjustments and Other DPP Amendments (16 May 2011).
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## **B: EXECUTIVE SUMMARY**

- 4 From the perspective of a supplier, there are two basic but fundamental needs that the starting price adjustment methodology must satisfy – certainty, and an expectation that starting prices will give suppliers an expectation of earning a normal rate of return over time. Both of these needs are strongly implied by the Part 4 Purpose.
- 5 Our overriding concern with the Commission’s proposed starting price adjustment methodology is that these needs will not be met. If they are not, the negative consequences for investment in the industry are real and likely to be immediate, and there will be a gradual but concrete deterioration in infrastructure investment in New Zealand. This is not a perceived outcome; it is an experienced reality, especially in the electricity industry in New Zealand.
- 6 Powerco’s concern is driven by two problems with the Commission’s proposed methodology:
  - 6.1 the industry-wide forecasts are beset with uncertainty and there is no sound basis on which to consider that they are a reasonable proxy to measure the projected profitability of a supplier. It is almost certain that the Commission will overestimate (and underestimate) the projected profitability of some suppliers. As such, there are likely to be a number of suppliers for which the DPP does not give an expectation of earning at least a normal return.
  - 6.2 the CPP cannot be relied on by the Commission as a fall-back mechanism to correct for the inevitable errors generated by the proposed starting price adjustment methodology. This is not the proper role of the CPP, and the expense and risk of moving to a CPP means that many suppliers will be reluctant to make a CPP proposal. The result will be that some EDBs remain on a DPP which does not give them an expectation of a normal return.
- 7 Two solutions are required to address these problems. First, the Commission should retain its earlier proposal for a ‘dead band’ around the starting price adjustment to provide for efficiency enhancing incentives and a margin for error. Secondly, if the Commission is to use forecasts to measure projected profitability, it must commit to a more robust methodology and better data so that the forecasts are more certain and accurate. In Powerco’s view, it may take some time before the appropriate methodology is developed and better data is available. This suggests that the dead band will initially need to be sufficiently wide to account for the substantial uncertainty in the forecasts.

## **C: REGULATORY FRAMEWORK**

- 8 In this part we make submissions on the consultation process, starting price adjustments under the specific context of section 54K(3), the purpose of DPP/CPP regulation, and the role of the CPP.

### **Consultation process**

- 9 The Commission's Update Paper is a significant departure from its previous proposal. Powerco appreciates the heavy workload that the Commission has been under and that the Commission's views may alter during the consultation process. However, the extent of the change between the August 2009 and April 2011 papers exceed any change that has been seen throughout the Input Methodology Process and was wholly un-expected.
- 10 The return that investors expect is a function (at the highest level) of two forces – what could be earned elsewhere and what is the chance of the investment not turning out as expected. The Commission's un-signalled change in approach to the Po process has increased the chance of investments in electricity and gas infrastructure not turning out as expected. The effect of this on the expectations of capital suppliers to the electricity and gas infrastructure sector will depend on the final Po decision.
- 11 We would have appreciated the Commission signalling this to the industry at a much earlier stage. For the last seven months Powerco and its investors have been operating (and making investments of over \$40 million) on the assumption of the Commission's August 2010 proposal and that a band approach would be adopted. While the Commission is entitled to change its mind, a long period of silence, followed by a short consultation period has substantially undermined our confidence in the Commission's process. The late release of reports from Economic Insights further reduces the timeframe available for interested parties to comment on the Commission's Update Paper and erodes industry confidence in this process.
- 12 The Commission's new proposal introduces much more uncertainty to the final Po. For example the Commission still intends to refine the opex assumption, and the CPI forecast will not be known until the June Monetary Policy Statement is published (although Powerco considers the Commission's approach to forecasting CPI to be inappropriate and that the appropriate forecast should be known already – see section D of this submission).
- 13 The relatively short timeframe for responding to the new proposal has also compounded the difficulties in effectively responding to the Commission. In addition, Powerco notes that the Commission has not given express reasons for removing the ROI band concept from the methodology. This was a fundamental element of the Commission's previous proposal and we would expect the Commission to explain its decision such that we can respond properly.
- 14 These process issues have disadvantaged Powerco and the industry.
- ### **Starting price adjustments under section 54K(3)**
- 15 The Commission proposes to make starting price adjustments under section 54K(3) of the Commerce Act. Section 54K(3) provides that:

If an input methodology is published after 1 April 2010 and if, had that methodology applied at the time the default price-quality paths were reset as required by subsection (1), it would have resulted in a materially different path being set, then the Commission may reset the default price-quality paths in accordance with section 53P and may apply claw-back, despite section 53ZB(1).

16 The input methodologies for electricity distribution businesses were published on 20 January 2011. The Commission is of the view that, had the input methodologies applied at the time of the initial reset, a materially different path would have been set.

17 Powerco does not consider that the Commission has established that a materially different path would have been set had the input methodologies applied. In outline, our reasons are:

17.1 the Commission has failed to distinguish between different paths that arise from the application of the input methodologies as opposed to the starting price adjustment methodology. Only the difference caused by the input methodologies can be legitimately counted under section 54K(3);

17.2 the Commission has failed to quantify the difference (if any) between the path that was set and the path that would have been set had the input methodologies applied; and

17.3 in the context of a provision which permits the Commission to apply claw-back, the Commission has underestimated the precision of analysis required to trigger a reset under section 54K(3).

18 In Powerco's view, the Commission has not established that it may reset the DPP under section 54K(3) and to do so would be ultra vires.

***Failure to distinguish the difference arising from starting price adjustment methodology***

19 At paragraph 1.11 of the Update Paper, the Commission states that it "considers that a reset of starting prices for the 2010-15 DPP to promote realignment of prices and costs over the regulatory period based on relevant input methodologies will result in a materially different path being set".

20 For the purpose of determining whether a materially different path would have been set, it appears that the Commission proposes to adopt the starting price adjustment methodology set out in the Update Paper and apply the input methodologies under that methodology. The Commission will then compare the path that results from the new starting price adjustment methodology and input methodologies to the path that was originally set.

21 Any difference between the paths that arise from the Commission's proposed approach may be categorised as:

21.1 that difference to the path that results from the new starting price adjustment methodology; and

21.2 that difference to the path that results from the input methodologies.

- 22 It is worth pointing out that any difference arising from the new starting price adjustment methodology may be considerable. This is evident in the significantly different starting price adjustments that were proposed under the Commission's previous proposal in August 2010.<sup>1</sup>
- 23 Powerco submits that section 54K(3) permits only the difference that arises from the input methodologies to count when determining whether the path would be materially different. The Commission has expressly determined that the starting price methodology is not an input methodology – therefore changes in this methodology are not a trigger to allow 54K(3) to apply.
- 24 The purpose of section 54K(3) is to account for the incremental change of the input methodologies relative to the information that was available at the initial reset, and not a change to the starting price adjustment methodology. For example, a different initial RAB value resulting from the application of the asset valuation input methodology may be counted, but not a difference to the path that arises solely from how that initial RAB value would be applied in a new starting price adjustment methodology. The Commission has failed to distinguish between the two categories of differences.
- 25 Section 54K(3) should be read in light of the presumption against retrospectivity.<sup>2</sup> While the section does expressly allow the input methodologies to apply in a retrospective sense, it should be construed narrowly consistent with the presumption. A narrow construction allows only the input methodologies to apply retrospectively, and not a new starting price adjustment methodology.
- 26 The difficulty with allowing the Commission's approach is that it would give the Commission a wide discretion to construct a new starting price adjustment methodology and backdate its application to the initial reset. This is particularly troublesome in the context of a provision which gives the Commission the power to apply claw-back to excessive profits as measured by the price path that would have been set had the input methodologies applied. The uncertainty that this would create for suppliers would heighten regulatory risk and undermine incentives to invest. Permitting the Commission's approach is therefore inconsistent with the purpose of Part 4 of the Commerce Act.
- 27 To the extent that the Commission's view that the paths would be materially different is based on the difference that arises due to the new starting price adjustment methodology, it is wrong in law and has not satisfied the test to trigger a reset in section 54K(3).

***Failure to quantify the difference between the paths***

- 28 The Commission further considers that:<sup>3</sup>

...the Specification of Price input methodology by itself would likely have resulted in a materially different path being set for the 2010-15 DPP... One aspect that is readily

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<sup>1</sup> Commerce Commission "Starting Price Adjustments for Default Price-Quality Paths: Discussion Paper" (5 August 2010), paragraphs 6.25-26.

<sup>2</sup> Section 7, Interpretation Act 1999.

<sup>3</sup> Update Paper, paragraph 1.13.

quantifiable is the difference between the consumer price index (CPI) definitions in the 2010-15 DPP and the input methodology.

29 Although the Commission asserts that the difference between the CPI definitions is “readily quantifiable”, there is no evidence of the quantification, and there is no attempt to show that the difference is material. This is not a sufficiently robust way of satisfying the test in section 54K(3). It also raises a consultation process concern for Powerco in that we are unable to respond in a meaningful way to the Commission’s claim that the difference is quantifiable.

30 Powerco submits that the Commission has underestimated the standard required to trigger a reset of the DPP under section 54K(3). The possibility of claw-back once the section is triggered requires a more exacting analysis than the Commission has engaged in.

***Commission must establish that it is permitted to reset the DPP***

31 The Commission has jumped the gun in considering that the “materially different” test in section 54K(3) has been satisfied. On the basis of what the Commission has put forward, Powerco can only conclude that the Commission is not lawfully permitted to reset the DPP. However, should the Commission be able to establish that the price-quality paths would have been materially different, we address in this submission the merits of the Commission’s starting price adjustment methodology.

**The requirements of section 53P**

32 Even if the Commission is able to satisfy the requirement for the out of cycle starting price adjustment in section 54K(3), the Commission must still meet the requirements of starting price adjustments generally.

33 The Commission proposes to adjust starting prices based on the current and projected profitability of each supplier, consistent with section 53P. However, as we discuss later in this submission, the Commission’s method to measure the projected profitability of each supplier is deficient, suffers from considerable uncertainty, and will only by chance accurately model a supplier’s actual ROI. Powerco is therefore of the view that the Commission will be unable to satisfy the statutory test to base starting prices on current and projected profitability under its proposed starting price adjustment methodology.

**Part 4 Purpose**

34 Powerco’s submissions on the implications of the Part 4 Purpose for the starting price adjustment methodology are limited to the requirement for regulation to give suppliers incentives to invest and innovate.

35 There is one key principle that must guide the Commission in designing the starting price adjustment methodology such that it gives suppliers incentives to invest and innovate: *the methodology must generate starting prices that give suppliers an expectation of earning at least a normal return*. If the methodology fails to achieve this principle the Commission will have failed to determine a starting price adjustment methodology that is consistent with the Part 4 Purpose.

- 36 Powerco notes that the Commission has previously accepted the principle as a bottom line in designing the starting price adjustment methodology:<sup>4</sup>

If the regulated firm does not expect to make **at least a normal return** on its efficient incremental investments going forward, it would be unable to maintain the quality of its services and would have no incentive to invest further in order to meet the growth in consumer demand. **Such an outcome would not promote the long-term benefit of consumers...**

As well as expecting to receive **at least a normal return** on its future efficient investments, a regulated firm should also be able to make a normal return on the efficient investments it has already made. This ensures that the firm will have incentives not just to remain in the market, but to make further efficient investments in replacement, upgraded and new infrastructure as well. (emphasis added)

- 37 However, the Commission's previous emphasis on this principle appears to have been diluted in the Update Paper. The lack of focus on this principle is borne out in Commission's starting price adjustment methodology which, in Powerco's view, fails to give suppliers an expectation of earning at least a normal return. This is due in large part to the forecasts element of the methodology which, as we emphasise in this submission, will only by chance accurately model a supplier's actual ROI. As the expectation of earning a normal return is the critical element in promoting incentives to invest, the Commission's proposed methodology is inconsistent with the Part 4 Purpose.

#### **Purpose of DPP / CPP regulation**

- 38 Section 53K provides:

The purpose of default/customised price-quality regulation is to provide a relatively low-cost way of setting price-quality paths for suppliers of regulated goods or services, while allowing the opportunity for individual regulated suppliers to have alternative price-quality paths that better meet their particular circumstances.

- 39 To be clear, the purpose statement applies to DPP/ CPP regulation as a regulatory package. The Commission is required by section 53K to develop a regulatory package (comprised of the DPP and CPP) which is relatively low cost, and which allows the opportunity for individual suppliers to have alternative price-quality paths that better meet their particular circumstances. There are three key implications of the purpose statement which Powerco wishes to make explicit:

- 39.1 the CPP does not need to be low-cost. Rather, the requirement is for the regulatory package to be relatively low-cost. (As we discuss later in this submission, the CPP is in fact a high-cost alternative);
- 39.2 the DPP must be low-cost. If the DPP is not low-cost then the regulatory package cannot be low-cost;
- 39.3 however, although a low-cost DPP is a necessary condition, it is not sufficient. The DPP must be designed such that it is suitable for most suppliers and

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<sup>4</sup> Commerce Commission "Reset of Default Price-Quality Path for Electricity Distribution Businesses: Discussion Paper" (19 June 2009), paragraphs 54, 56.

relatively few suppliers are forced to move to a CPP in order to have an expectation of at least a normal return. The alternative – where large numbers of suppliers are on the relatively high cost CPP – would mean that the regulatory package is not relatively low-cost and would therefore be inconsistent with the purpose statement.

- 40 In relation to the last of these three implications, the Commission appears to be in agreement:<sup>5</sup>

In the Commission's view a DPP should be a generic tool, as far as practicable, such that under a DPP, price-quality regulation can be cost-effectively applied across multiple suppliers.

- 41 Having acknowledged the importance of designing the DPP such that it can be cost-effectively applied across multiple suppliers, the Commission's proposed starting price adjustment methodology runs contrary to that view. This is because the proposed methodology does not provide for a margin of error in the case of an overestimation of a supplier's profitability. Where the profitability of a supplier is overestimated (which will likely be a frequent occurrence given the generic nature of the DPP and the reliance on industry-wide forecasts) it will be required to apply for a CPP to give an expectation of a normal return.
- 42 Because the Commission's use of industry-wide assumptions is based on the concept of an industry average, it is feasible that around half of the non-exempt EDBs would not expect to earn a normal rate of return under the DPP and will be incentivised to apply for a CPP. As there are 17 non-exempt EDBs, the Commission should expect that at least eight EDBs would be likely to consider CPP applications, or would reduce their investments from those they consider necessary to ensure their profitability aligns with the Commission's forecast.
- 43 It is apparent that the Commission's approach conflicts with the scheme of the provisions relating to CPPs. Section 53Z states that the Commission is not required to consider any more than four proposals for a CPP relating to the same type of goods or services in any one year. The Commerce Act clearly does not envisage an approach where a substantial number of suppliers are incentivised to apply for a CPP.
- 44 The risk inherent in the Commission's starting price adjustment methodology is that a large number of firms will need to apply for a CPP. This will raise the cost of DPP/ CPP regulation such that it is not a relatively low-cost way to set price-quality paths. The Commission's proposed methodology is therefore likely to be inconsistent with the purpose of DPP/ CPP regulation.
- 45 A reasonable solution to this issue is to build in a margin for error into the starting price adjustment methodology that does not rely on the CPP. In Part D of this submission, we discuss an approach similar to the ROI band concept that the Commission proposed in its August 2010 starting price adjustments discussion paper.

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<sup>5</sup> Commerce Commission "*Starting Price Adjustments for Default Price-Quality Paths Discussion Paper*" (5 August 2010), paragraph 2.8.

## **Role of CPPs**

- 46 Powerco observes that two conflicting views of the role of CPPs in the context of designing the starting price adjustment methodology have developed in the course of consultation:
- 46.1 a view that sees the role of the CPP as providing an alternative price-quality path that better meets the particular circumstances of a supplier e.g. in circumstances where the future expenditure requirements of a supplier differ significantly from those implied by the starting price; versus
- 46.2 a view that sees the role of the CPP as performing an additional function, in that the CPP may also be used to correct for error or inaccuracy in the starting price adjustment methodology.
- 47 The latter view has been developed by the Commission in the Update Paper, and did not appear (or was at least not prominent) in the Commission's two other starting price adjustment discussion documents released in June 2009 and August 2010 respectively. The following paragraphs of the Update Paper are indicative of the Commission's revised view of the role of CPPs:
- 47.1 paragraph 2.27 – *"The Commission considers that the proposed approach does not need to provide further bias in favour of suppliers, by providing for uncertainty in profitability forecasts. In the situation that the DPP was not appropriate for a supplier, it may apply for a CPP."*
- 47.2 paragraph 4.59 – *"The Commission considers that the existence of a regulatory package which allows for an alternative to the DPP (i.e. CPP) should be taken into account when valuing the potential impact of adjusting the starting price where there is some uncertainty."*
- 47.3 paragraph 4.62 – *"Suppliers' option to apply for a CPP limits the adverse effect of any potential overestimation of the profitability of suppliers relative to the WACC (including the effects of using industry-wide parameters)."*
- 48 The revised view of the role of the CPP is a central plank of the Commission's logic in proposing a starting price adjustment methodology with no margin for error. Essentially, the Commission is relying on the CPP to cover errors in its forecasts, and justifying its use in this way because it claims that moving to a CPP will involve minimal cost and difficulty for a supplier.
- 49 The Commission's view does not reflect reality, nor is it consistent with the intended role of the CPP.
- 50 The purpose of DPP/ CPP regulation gives useful guidance as to the proper role of the CPP:
- ... while allowing the opportunity for individual regulated suppliers to have alternative price-quality paths that better meet their particular circumstances.
- 51 The key phrase is "better meet their particular circumstances". Powerco submits that this limits the proper role to providing suppliers which have significantly different expenditure requirements from the average an alternative price-quality

path which gives the supplier an expectation of a normal return. Powerco refers to the ENA's submission which confirms that this is the policy intent of the CPP.<sup>6</sup>

- 52 Importantly, the purpose statement makes no reference to the role of the CPP being an alternative price-quality path in the event that the Commission's forecasts are inaccurate or contain errors. The possibility of suppliers moving to a CPP cannot be an excuse for the Commission to develop a starting price adjustment methodology which is error-prone, not robust, and not suitable for a number of EDBs.
- 53 The Commission has also erred in its view that a starting price adjustment methodology without an appropriate margin for error is justifiable because undertaking a CPP would involve minimal cost and is relatively simple.
- 54 Powerco shares the view of the industry that the CPP proposal and approval process will be high cost. We have made a previous submission to the Commission on the estimated costs of preparing a CPP proposal, in which we stated:<sup>7</sup>

Powerco has had a number of discussions with Australian regulated electricity and gas suppliers regarding the costs that they face in completing their regulatory review processes. Based on these discussions, Powerco expects that we would utilise a team of up to three internal staff and a number of external consultants for up to eighteen months to compile a CPP proposal for its electricity business. Our current expectations are that taking into account the cost of "backfilling" internal staff, engaging external consultants, completing any additional field work required and undertaking the audits and independent assessments required will cost between \$1.5 and \$2 million. This does not include any Commission costs or the opportunity cost of experienced staff moving away from business as usual work.

- 55 Since the release of the Input Methodologies Powerco has begun to develop a CPP project plan to ensure we are prepared in case we determine a CPP is appropriate. This work has confirmed that our earlier estimate of costs is conservative.
- 56 In Appendix 1 of this submission, we further discuss the likely costs involved in moving to a CPP. The material in the appendix demonstrates:
- 56.1 that the information requirements for a CPP proposal are over and above the information that Powerco would generate as part of its business as usual processes. In this respect, we strongly disagree with the Commission's assertion that the information required for a CPP "should be readily available to a supplier, whether or not it is applying for a CPP". This is a factual matter – EDBs either have this information or they don't – and in Powerco's case the Commission is mistaken. Further, it would be a simple matter for the Commission to make enquiries of each non-exempt EDB to establish the factual picture;<sup>8</sup> and

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<sup>6</sup> Electricity Networks Association "Submission on DPP Starting Price Adjustments and Related Amendments" (16 May 2011), paragraph 42.

<sup>7</sup> Powerco "Post Workshop Submission Customised Price-Quality Path" (19 April 2010), paragraph 24.

<sup>8</sup> Commerce Commission "2010-15 Default Price-Quality Path Starting Price Adjustments and Other Amendments: Update Paper" (April 2011), paragraph 4.64.

- 56.2 there will be substantial additional costs involved in reviewing the information, validating assumptions, and amending the information so that it is suitable for external review.
- 57 The appendix also discusses the risks for EDBs inherent in moving to a CPP. Powerco has concrete experience of the risks of individual regulatory assessments from the Gas Authorisation process. As an example, in that process, Powerco submitted a growth forecast of -1%. However, the Commission disagreed with this and applied a forecast of 0%. If Powerco's forecast was accepted the starting price adjustment on 1 January 2009 would have been around -6.1%, rather than -11.1%. In applying for an electricity CPP, there is a risk that the Commission will disagree with an EDB's growth forecasts (or other inputs) increasing uncertainty over the possible outcomes.
- 58 Other risks include the risk of the CPP proposal being delayed or rejected or the risk that Powerco's prices under a CPP would be less than permissible under the DPP.
- 59 Taking into account the high cost and risks involved in moving to a CPP, EDBs are likely to be reluctant to make the shift. This is an important factor that the Commission needs to take into account when developing a starting price adjustment methodology. The incentives and risks faced by EDBs cannot be ignored. The Commission is proposing a rigid starting price adjustment methodology and assuming as a matter of practical implication that the CPP process will be a robust response to errors in the starting price adjustment, and preserve in practice the investment incentives required by section 52A. As a matter of practical implication, that approach is incorrect for the reasons given above. In Powerco's view, these considerations emphasise the real need for the starting price adjustment methodology to have an inbuilt margin for error.
- 60 Acknowledging the proper role of the CPP requires the Commission to revisit the design of its proposed starting price adjustment methodology. The methodology is predicated on the assumption that the CPP will compensate for the lack of a margin for error in the DPP. This is not the role of the CPP, and the Commission is mistaken in its belief that a CPP is relatively inexpensive and simple. A key plank in the Commission's argument is factually incorrect.

## **D: STARTING PRICE ADJUSTMENT METHODOLOGY**

### **Starting price adjustment methodology**

- 61 A key component of the Commission's proposed method for calculating the starting price adjustment is that the new price cap will be tied mechanically to the revenue and costs that was received or incurred during the last available year of the previous control period. This is a significant departure from the Commission's previous position, whereby it proposed that there be a 'dead band' so that prices would remain at their previous levels unless the calculated starting price adjustment passed a materiality threshold.
- 62 In addition to Powerco's concern that the Commission's new method for deriving the starting price adjustment no longer includes allowance for a 'margin for error', Powerco is concerned that the new method will imply that any benefits the businesses may have been receiving as a result of efficiency improving initiatives would be passed through to customers immediately when a new starting price adjustment is made. Powerco noted in its previous submissions that a desirable feature of the previously proposed 'dead band' was that the potential would exist for EDBs to retain some of the benefit of such initiatives into the next control period, thus enhancing the incentives to pursue such efficiencies. Compared to the Commission's previous proposal, the incentive power of the regime is lower.
- 63 Moreover, Powerco notes that by linking the starting price adjustment mechanically to outturn expenditure (and without an 'incremental rolling incentive scheme' adapted to a DPP regime) the Commission will create obvious, perverse incentives for the EDBs to align their expenditure where possible to the test year (for example, by deferring and bringing forward expenditure from other years). This is expected to have the inevitable effect of increasing the extent of regulation the Commission will consider required to implement the low cost scheme, in turn raising the administrative costs incurred by the Commission and businesses and potentially limiting what the businesses can do in practice with consequent productive efficiency losses.
- 64 Powerco's preferred option for providing robust incentives for EDBs to pursue efficiency initiatives is for the DPP regime to include within it a mechanism to ensure that the EDBs receive a fair sharing of the benefits that are created from their initiatives, with the reward indifferent to the timing of an initiative during a control period. Powerco remains of the view that the development of such a mechanism should remain a priority for the Commission. As a second best outcome for addressing efficiency concerns, Powerco considers that the Commission should retain its earlier proposal for a 'dead band' around the starting price adjustment, such that an adjustment would only be made where it passed a prescribed materiality threshold. The simplest means of prescribing the dead band would be to refer to the magnitude of the price change directly, with 5 per cent proposed as a reasonable figure.
- 65 To be clear, Powerco's proposal is that the starting price adjustment would include within it an allowance for error (as this is required to ensure that the regime remains low cost, as set out in Section C of this submission), but that this adjustment would only be applied if the adjustment exceeded a prescribed threshold in either direction (with this dead-band intended to enhance incentives for efficiency).

66 In the context of the DPP, it is difficult to conclude that providing for a reasonable 'dead band' around a starting price adjustment that incorporates an allowance for error would lead to firms either earning excessive returns or be likely to deter investment. The use of industry-wide trends to forecast revenue and cost growth means that there necessarily would be substantial noise in the adjustments that are calculated, so that a component of the adjustment would, in reality, be a reaction to a false positive or negative. Against that, by avoiding a mechanical relationship between outturn expenditure and the starting price adjustment, superior incentives (including reducing the potential incentive for perverse behaviour) would be avoided.

### **Industry wide forecasts**

67 In this section we address each of the forecasts that the Commission proposes to use in its methodology. In the section on CPI, we recommend a particular methodology to derive the CPI forecast and specify a forecast value. For the other forecasts, we demonstrate to the Commission the potential range of inputs into the forecasts and the variability in individual businesses' revenue and expenditure compared to the industry wide average. We intend making further submissions on the forecasts in the round of submissions due 23 May 2011.

68 The following discussion of the industry-wide forecasts supports the inclusion in the starting price adjustment methodology of a margin for error (in the form of a dead band). The starting prices determined under the Commission's proposal will be highly sensitive to the forecasts used. In particular, small variations to the real revenue growth and CPI forecasts will cause substantial variations to starting prices.

69 The forecasts that the Commission proposes to use have a very high degree of uncertainty. Our discussion below on the forecasts demonstrates the potential range of inputs into the forecasts and the potential variability in individual businesses' revenue and expenditure compared to the industry wide average. In these circumstances, we can have little confidence that the forecasts are accurate to within a reasonable range and sufficiently reflect the underlying ROI of each EDB. Powerco has no issue in principle with the use of forecasts to measure projected profitability, but strongly doubts whether the forecasts proposed by the Commission at this point in time are based on a robust method and with a sufficient data series.

70 Because of the high sensitivity of starting prices to variations in the forecasts, and the very high degree of uncertainty in the forecasts, it is almost certain that the Commission will overestimate (and underestimate) the projected profitability of some suppliers. As such, there are likely to be a number of suppliers for which the DPP does not give an expectation of earning at least a normal return. As we have discussed, the CPP cannot be expected to correct for this problem.

71 Therefore, there is a need for a dead band around the starting price adjustment, such that an adjustment would only be made where it passed a prescribed materiality threshold. The size of the 'dead band' will be correlated with the degree of uncertainty in the forecasts, and may reduce over time as the Commission's method and data for forecasting improves. The Commission must also commit to a more robust forecast methodology and better data so that the forecasts are more certain and accurate.

### **Consumer Price Index**

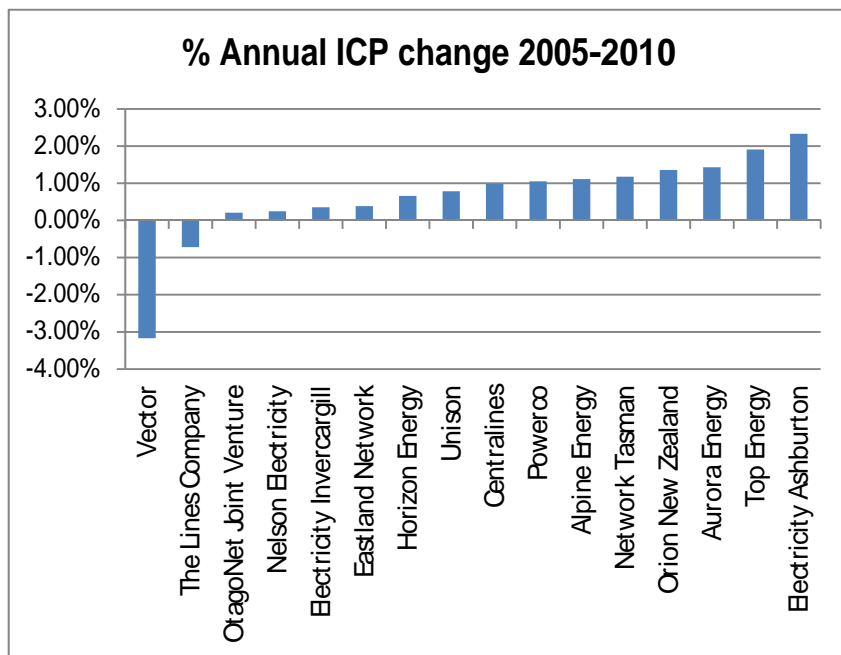
- 72 We refer the Commission to Jeff Balchin's advice to Powerco, *2010- 15 Default Price-Quality Path Starting Price Adjustments Update Paper: Importance of the Forecast of Inflation* (16 May 2011). The key points from that advice are:
- 72.1 An important objective of inflation indexation in a CPI-X regime is to protect investors in long-lived regulated assets from the risk of inflation being higher or lower than forecast. This implies that the same real return must be expected, irrespective of the level of inflation that is observed.
- 72.2 The Commission's method for forecasting inflation in its starting price adjustment calculations is not consistent with this objective.
- (a) Its calculations will deliver a real return that varies depending on how the actual level of inflation observed prior to the Commission making its determination and the more recent forecast of inflation is different to the inflation expectation included in the nominal risk free rate of return (which is measured over the month to 1 September 2009).
  - (b) Equally, its suggestion that it will benchmark the nominal return that EDBs receive against a fixed nominal WACC risks classifying a higher than forecast revenue indexation / revaluation gain as an excessive return when it is fact required to compensate for an unexpectedly high rate of inflation.
- 72.3 The forecast of inflation is an important input – a variation in this input has the same effect on the level of the price cap as the same variation in the (nominal) risk free rate of return. Hence, it is imperative for the forecast to be consistent with the objectives of a CPI-X regime and to be forecast in a robust manner.
- 72.4 The simplest method for ensuring that the target real return is achieved is to:
- (a) use a forecast of inflation in the starting price adjustment calculations that is the best estimate of inflation that is included in the risk free rate of return; and
  - (b) when testing annual returns, either adjust the nominal WACC to be consistent with the actual level of inflation observed, or benchmark returns against a real WACC (in which case the revaluation gain is omitted from the calculation of income).
- 72.5 The Commission's proposal to use the Reserve Bank of New Zealand's forecast of inflation for the period they are available is supported. However, the Commission's proposal to use the last year of these forecasts to extrapolate a forecast for the period beyond the Bank's explicit forecasts has no justification. A better medium to long term forecast would be the midpoint of the Bank's target range for inflation, which is the standard method for deriving a forecast of inflation for regulatory purposes in Australia.
- 72.6 Applying this method to estimate the rate of inflation that is embedded in the risk free rate of return (that is, for the five years from 1 September 2009)

delivers an inflation forecast of 1.94 per cent, which should be used in the starting price adjustment calculations.

**Real revenue growth variation**

73 The Commission’s assumption is a real revenue growth rate of 1.5% p.a. between 2010 and 2015. Real revenue growth comprises of only ICP growth and electricity volume growth for the vast majority of EDBs.<sup>9</sup> The last five years shows a large variance in ICP and volume growth between non-exempt EDBs. There is no reason to believe that these trends will change in the near future.

**Percentage of annual ICP change between 2005 and 2010<sup>10</sup>**



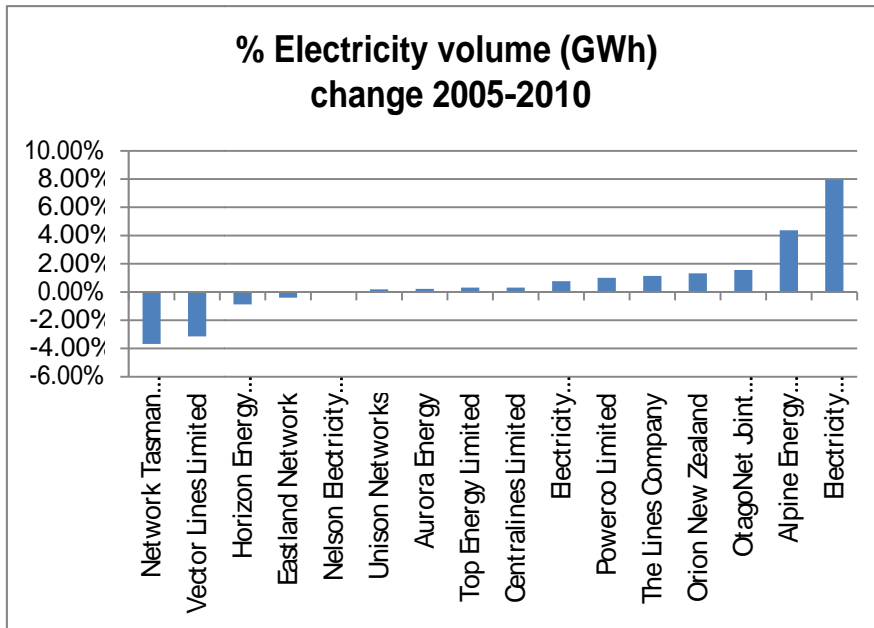
74 The growth in ICP numbers varied by over 5% between 2005 and 2010. The lowest growth rate was -3.17% and the highest growth rate was 2.33%. Only two non-exempt EDBs had ICP growth rates above the Commission’s assumption of 1.5%.

75 The growth in electricity volume varies more than the growth in ICP numbers. The variation is over 11% for non-exempt EDBs, with a lowest growth rate of -3.68% and a highest growth rate of 7.96%.

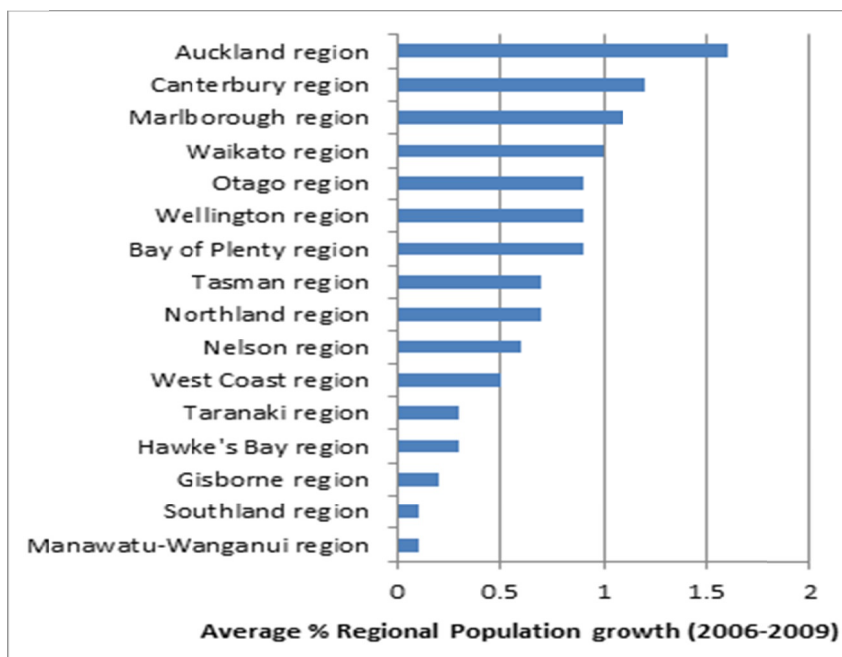
<sup>9</sup> A small number of EDBs also have a charge based on demand, but these are the minority so have not been considered.

<sup>10</sup> Data from PwC Electricity Information Disclosure Compendium, 2005 and 2010.

**Graph of the percentage of annual electricity volume change**



- 76 Only three non-exempt EDBs had an average annual growth above the Commission's 1.5% over the period 2005-2010.
- 77 In addition, in Powerco's experience the relationship between GDP and residential growth is weaker than the relationship between GDP and commercial and industrial growth. Factors such as population growth, household growth and average consumption per household are much more significant, along with annual variations in temperature and weather.
- 78 The graph below shows the difference in regional population growth rates between 2006 and 2009. The highest population growth rate is 16 times faster than the lowest growth rate – the lowest being 0.1% for Southland and Manawatu/Wanganui and the highest being 1.6% for Auckland. Only one region – Auckland, is above the Commission's assumption of 1.5% growth.



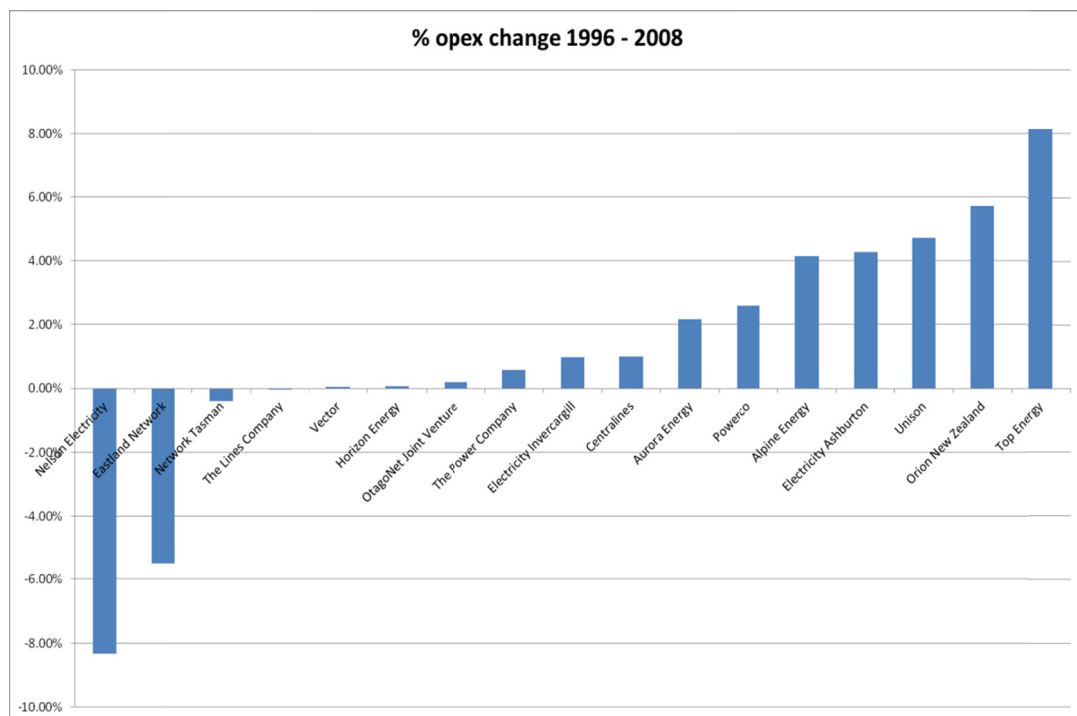
79 Regional GDP also varies between regions, although no much data is publically available. For the period 2000-2003 the highest regional growth rate was nearly double the lowest regional growth rate.<sup>11</sup>

80 In conclusion, there has been significant variance between real revenue growth rates in the recent past, and there is no reason to assume a convergence in the future.

**Nominal opex growth variation**

81 To calculate the nominal opex growth assumption the Commission analysed how opex productivity changed between 1996-2010. The Commission’s analysis concludes that after a period of fast growth in partial productivity up to 2003, opex productivity remained broadly flat in the following period. The Commission’s assumption assumes that industry-wide partial productivity will not change over the regulatory period.

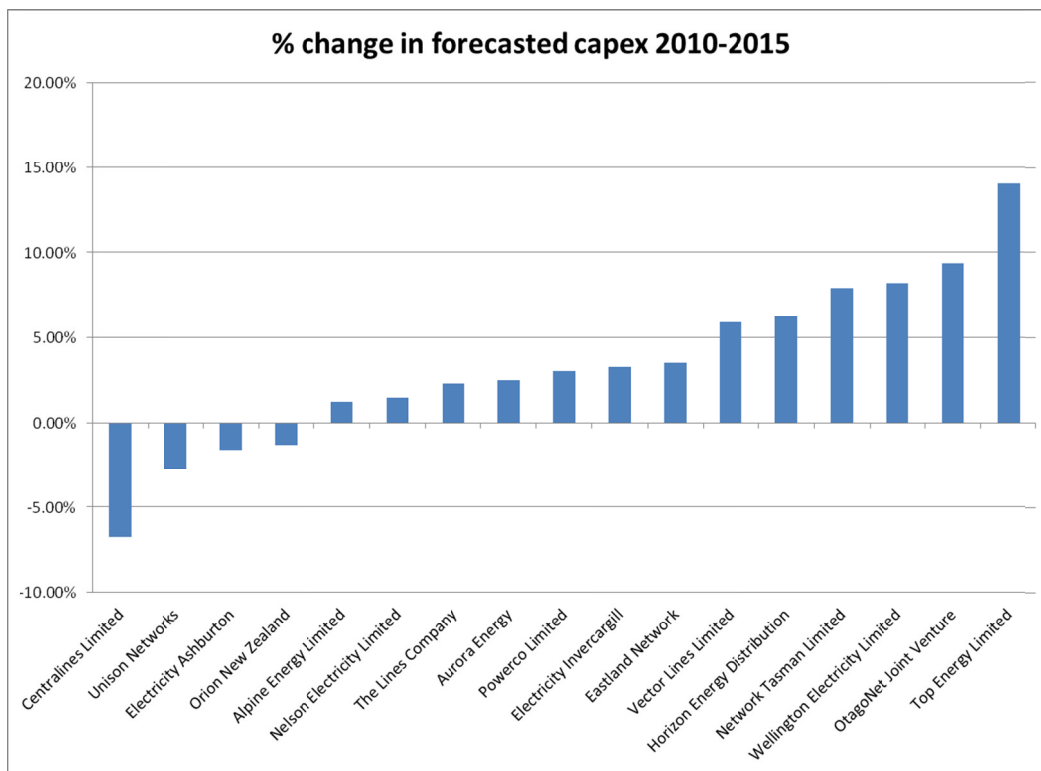
82 The graph below shows the CAGR of opex of non-exempt EDBs over the period 1996 to 2008. This period has been used as it aligns with the time period used in the opex assumption methodology. It shows a substantial variation in growth by EDBs, and a variation of more than 16% between the highest and lowest growth.



**Nominal capex growth variation**

83 The Commission’s nominal capex growth assumption is calculated from the average growth in 2010 AMPs.

<sup>11</sup> Powerco has not been able to find more recent data than 2003, so it is unclear if the difference in regional growth rates has declined or increased in the recent lower growth period.



84 The graph above shows the percentage change in capex in 2010 AMPs. There is a variation of over 20% in forecasted growth between the fastest and slowest growing non-exempt EDBs from 2010 to 2015. The highest growth is 14.03% and the lowest growth is -6.76%.

85 The data presented above demonstrates the potential large degree of variability in the expenditure and growth forecasts of the non-exempt EDBs. In Powerco's view, it is wrong to think that the industry forecast averages represent in a robust and accurate way the projected profitability of each supplier. To that extent, the Commission has not applied the statutory test in section 53P of basing starting prices on the current and projected profitability of each supplier.

## **E: CLAW-BACK**

- 86 The Commission has asked for the views of EDBs on the advantages and disadvantages of applying claw-back. In this Part E Powerco gives its views on claw-back.
- 87 Powerco acknowledges that the application of claw-back in these circumstances is unique and is a "one-off" use of claw-back during a regulatory period. We also acknowledge that suppliers were put on notice as to the possibility of claw-back.
- 88 Powerco is however of the view that applying claw-back in these circumstances will not promote the Part 4 Purpose. First, Powerco agrees with the Commission that "unless clear regulatory rules are specified upfront as to how any future over-recovery or shortfall might be dealt with, adjustments to prices to compensate for any past over-recovery or shortfall might detrimentally affect incentives going forward".<sup>12</sup>
- 89 Secondly, Powerco believes that this uncertainty is exacerbated by the Commission's approach to the starting price adjustment methodology i.e. constructing a new starting price adjustment methodology and backdating it to derive claw-back amounts. In Part C of this submission, we explained the flaws in the Commission's approach and our view that that backdating a new starting price adjustment methodology is not permitted by section 54K(3). It is inherently unfair that specific claw-back amounts could be derived according to which version of the starting price adjustment methodology that the Commission prefers at the time (of which there have been three versions to date, all implying different starting prices).

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<sup>12</sup> Commerce Commission "2010-15 Default Price-Quality Path Starting Price Adjustments and Other Amendments: Update Paper" (April 2011), paragraph 7.10.

## **F: OTHER AMENDMENTS**

### **Process for approval of Recoverable Costs**

- 90 The Commission has proposed that any approval of recoverable costs should be incorporated into the ex post compliance process. The Commission states that because the approval process does not require an efficiency test to justify the amount of the cost, the evidence should be relatively straight-forward to provide.<sup>13</sup> For example, evidence that the EDB has purchased transmission assets and transmission costs have been avoided as a result.
- 91 Powerco supports an ex post compliance process as long as there is a high degree of certainty up front in what must be provided for the Commission to approve the cost. Powerco proposes the following conditions of agreement for the two cases where the Commission's approval is required for recoverable costs:
- 91.1 Where there is a charge payable by an EDB to Transpower in respect of a new investment contract between those parties, or an equivalent type of contract:
- (a) The Commission's approval will be given if a copy of the new investment contract or equivalent type of contract is provided. The charges are approved if they follow the charging methodology in the contract. The contract would not be not released publically by the Commission without approval by the EDB and the other contracting party.
- 91.2 Where there is an amount the Commission is satisfied that an EDB has avoided liability to pay as a result of the EDB having purchased transmission assets from Transpower:
- (a) Approval is given if evidence is provided that the EDB owns the assets (i.e. the purchase agreement). Transpower's agreement would be required to disclose the contract to the Commission. The contract would not be released publically by the Commission without approval by the EDB and Transpower.
  - (b) The EDB would provide the previous year charges as an avoided cost, but could also forecast a change in the charge using a basic building blocks methodology or the Transmission Pricing Methodology. This point is discussed below in more detail.
- 92 The Commission has proposed that the amount of the avoided Transpower cost should be the same in nominal terms in each of the five years. Powerco disagrees as the Transpower asset may need substantial capex invested, and this should be allowed to be passed through.
- 93 Powerco supports the ENA proposal that the EDB is allowed to propose changes in its compliance statement each year due to increased maintenance costs or capital expenditure. Powerco proposes a simple building blocks formula or be used to determine these charges.

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<sup>13</sup> Starting price adjustment paper, paragraph 8.9.

## APPENDIX 1: ESTIMATION OF THE COSTS AND RISKS OF A CPP

- 94 The Commission states that there will not be significant additional costs to non-exempt EDBs in applying for a CPP, or that CPP applications pose a significant risk to EDBs. This runs counter to Powerco's view. In taking the decision to embark on a CPP application, an EDB takes a significant risk and accepts a number of additional costs, a description of these is outlined below.

### Costs

- 95 Completing the CPP application will place an increased burden on most areas of Powerco's electricity distribution business, not least because it will be the first time such an application has been made and hence every section will be bespoke. Below is a summary of the key reasons additional resource will be required when compared with 'Business as Usual' (BAU) processes.

### Compiling the CPP Application

- 96 The vast majority of the report will be a compiled specifically for the CPP application due to the additional requirements and specific wording of what the Input Methodology requires. As an example, for demand forecasts the CPP application requires the following:<sup>14</sup>

#### Demand Forecast:

(1) For each **key assumption** relating to maximum demand, electricity **supplied**, **consumer** numbers, embedded generation and distributed generation-

- (a) explain how it was relied upon in the **CPP proposal**;
- (b) provide, describe and explain the methodology used to prepare the relevant forecasts (to at least zone substation level) relating to demand forecasts for each **disclosure year** in the **next period**, including details of-
  - (i) any sensitivity analysis undertaken;
  - (ii) any weather normalisation methodology used and how weather data has been used; and
  - (iii) the models used (including each model's key inputs and assumptions); and
- (c) provide-
  - (i) an outline of the treatment of very large loads, uncertain loads and significant loads transferred, or expected to be transferred, between different parts of the **network** (e.g. between zone substations and/or between feeders);
  - (ii) assumptions of **consumer** numbers in total and by the **consumer** categories used by the **EDB**;
  - (iii) assumptions of energy volumes **supplied** to **consumers** by each category referred to in sub-paragraph (ii);
  - (iv) assumptions relating to average **consumer** energy usage by each category referred to in sub-paragraph (ii);
  - (v) details of the location, type and size of any embedded generators

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<sup>14</sup> Section 5.4.8 also requires information on demand forecasts.

and assumptions relating to the impact they may have on **network** forecasts;

- (vi) details of the location, types and aggregate levels of any distributed generation and assumptions relating to the impact they may have on **network** forecasts; and
- (vii) details of the effect that any demand management systems or initiatives may have on **network** forecasts.

Explain-

- (a) the extent to which the forecasting methodology used is consistent with and has taken into account historical observations;
- (b) whether forecast data is internally consistent at and between each level of aggregation down to at least the zone substation level; and
- (c) the extent to which the forecasting methodology used is consistent with the methodology used to derive the forecast quantities.

97 While the AMP only requires:

Details of demand forecasts, the basis on which they are derived, and the specific network locations where constraints are expected due to forecast load increases.

*Explanation: The load forecasting methodology used should be explained, indicating all the factors used in preparing the estimates. Load forecasts should be broken down to at least the zone substation level, covering the whole AMP period. The impact of uncertain, but substantial individual projects/developments should be discussed and the AMP should make clear the extent to which these uncertain load requirements are reflected in the load forecast. Load forecasting should take into account the impact of any embedded generation or anticipated levels of distributed generation in a network, and the projected impact of any demand management initiatives. Network or equipment constraints anticipated due to the anticipated load growth during the AMP should be identified.*

98 Powerco's AMP is over 250 pages, and we anticipate the CPP application being a larger document.

99 Another example of the marginal cost is the CPP requirement to:

Provide-

(a) all **policies** relied upon in whole or in part in preparing the response to-

(i) this schedule; and

(ii) any other requirement of Subpart 4 Section 8 of Part 5; and

(b) where the rationale is not already included in the **policies** themselves, the rationale for the **policies** provided in accordance with paragraph (a), including any consultants' reports relied upon in preparing the **policies**.

- 100 Powerco has over 1,000 standards and policies – most of which will link to the CPP application in some way. Substantial resources will be needed to compile the policies and check if the rationale is included in the policy.

***Collation, Cross-checking, Verification and Validation of Data***

- 101 While the data required for a CPP application will be part of Powerco’s BAU, the Commission states it will judge:

*"whether data analysis and assumptions underpinning the proposal are fit for the purpose of the Commission determining a CPP, including consideration as to accuracy, reliability of data and reasonableness of assumptions other matters of judgement"*

and the application will need to

*"include all data, information, calculations and assumptions used in the form of spreadsheets and if data has been calculated make the calculation readily accessible"*

- 102 Therefore all assumptions, methods and working will need to be re-visited to ensure that they:

- apply under the CPP;
- are supported by evidence which is in both an auditable and accessible format; and
- meet the requirements of the Commission.

- 103 This will be an enormous undertaking.

***Significant (estimates 40%) Increase In Electricity Planning Work***

- 104 The electricity planning team will need to revisit the planning work which is undertaken as part of the Asset Management Plan as a CPP will shift the emphasis from BAU to developing the network to be fit for the next 20 years e.g. increased automation, increased capacity, improved resilience, incorporation of technological developments and move to a seven year planning window. This work will be in addition to producing the annual AMP during the period the CPP application is being produced and assessed by the Commission.

***Need for 'Dual Running' During Application***

- 105 We estimate that it will take three years from starting work on an application to it taking effect, including the allocated time for Commission consideration. During this period all BAU activities will need to continue in case the application is unsuccessful or delayed. While this dual running will not require twice the number of people, it will increase the resource required across the pricing, planning and regulatory areas of the business in particular. In addition, consultation channels will need to be expanded with retailers and consumer groups.

***Examples of Projects Required to Generate the Data for a CPP***

- 106 Completing a CPP application will impact a number of Powerco areas. Two examples are below.

106.1 Powerco has an automated system for scheduling maintenance inspections and activity (GEM). GEM is currently only able to schedule work for one year and does not have a 'stand alone' capability. This means it is not possible to run through scenarios for planning maintenance work seven years in advance. The system would automatically generate work orders (which would then be sent to Powerco's service providers to complete the work). Powerco would either need to re-design GEM or manually schedule 14 million work orders (2 million assets per year for 7 years).

106.2 Powerco is the result of the merger and acquisition of a number of district power boards over several years. As a result we have invested heavily to align historic data in to a single coherent system. This process has not been completed and would need to be accelerated to be available for a CPP application in response to the Po decision.

#### ***Additional Costs of the Application***

107 The IMs outline a number of requirements for a CPP including audit, an engineer report and consumer consultation. We anticipate that in addition there will be a requirement for consultants and expert opinions to be engaged to support the work. Whilst the costs of audit and engineer reports can be recovered if the CPP is successful, they cannot if it is rejected and the costs of consultants and other experts cannot be recovered in either event.

108 There are also the significant indirect costs of audit and independent verification – answering queries can be very resource intensive. Forecast information is not currently audited and we envisage auditors requiring significant information to provide the audit opinion on the forecasts.

#### ***Information on Building Block Applications in Australia***

109 Reports from the AEMC TFP review give information of the regulatory costs for each supplier of participating in the Australian regulatory process.<sup>15</sup> The Australian EDBs stated direct costs ranged from AUS\$ 2m-5m, with one EDB saying total costs (including indirect) were as much as AUS\$15.7m. In its draft report, the AEMC used a figure of AUS\$15m per supplier.

110 Table 3.3 below was provided in the report "*Perspectives on the building block approach: Review into the use of total factor productivity for the determination of prices and revenues*".<sup>16</sup>

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<sup>15</sup> *Draft Report: Review into the use of total factor productivity for the determination of prices and revenues*, 12 November 2010, AEMC

<http://www.aemc.gov.au/Media/docs/Draft%20Report-9f958bb4-2410-4498-b213-bbc0fc083cbf-0.pdf>

<sup>16</sup> *Perspectives on the building block approach: Review into the use of total factor productivity for the determination of prices and revenues*. AEMC, 30 July 2009

<http://www.aemc.gov.au/Media/docs/Perspectives%20on%20the%20building%20block%20approach-fe8094b6-5357-4a45-ad94-09a988e7ae38-0.pdf> . The service providers who responded were: ActewAGL, Dampier Bunbury Natural Gas Pipeline, EnergyAustralia, Envestra, Integral Energy, Jemena, Powercor-CitiPower and SP AusNet.

**Table 3.3 Estimated cost of building block approach decisions**

	Service provider total cost	Number of service providers	\$ million Total	AER total cost	Total
Electricity distribution	15	13	195	8	203
Electricity transmission	10	5	50	5	55
Gas distribution	3	11	33	8	41
Gas transmission	3	7	21	7	28

Source: Perspectives Report, AEMC analysis.

- 111 In general, service providers stated that the direct costs incurred ranged from \$2 million to \$5 million for an individual regulatory assessment. One service provider suggested that the entire process, inclusive of internal or indirect costs and hiring external experts (such as legal advisers), could amount to as much as \$15.7 million in absolute dollar amounts (however, this only amounted to 0.01% of total regulated revenue).

**Risks**

- 112 The issues of risk and cost are inherently linked. For example, one way to reduce the risk of a CPP application will be to complete more extensive work on the application and use experts and peers to review the application, all of which have a cost. The key risks outlined below will also contribute to the levels of uncertainty over the application period and the cost of making the application, which is likely to be three years. The key risks in applying for a CPP are:

***Variation in Growth Forecasts***

- 113 In the Gas Authorisation the forecast of growth proposed by Powerco was -1%. The Commission disagreed with this and applied a forecast of 0%. If Powerco’s forecast was accepted the Po on 1 January 2009 would have been around -6.1%, rather than -11.1%. In applying for an electricity CPP, there is a risk that the Commission will disagree with an EDB’s growth forecasts increasing uncertainty over the possible outcomes.

- 114 Accurately forecasting growth is inherently complex as demand depends heavily on a wide variety of factors. For example, the difference in peak usage can be as great as 10% when comparing harsh and mild winters and predicting the future economic situation is an area of debate, with little agreement amongst experts.

***Changes in Quality Targets***

- 115 There is a risk that the Commission will not accept the predicted quality impact outlined in a CPP application and set more stringent thresholds. This will increase the future costs of network management and the likelihood of penalties for breaches in the future.

***CPP Outcome Reduces Prices Below DPP***

- 116 If the Commission disagrees with the arguments in a CPP application they may establish a price path which reduces revenue below that allowed under the DPP. If this occurs, Powerco will have to follow this methodology, reducing revenue, and any 'excess' revenue earned will be subject to claw back. This will have a serious impact on Powerco's revenue and hence presents a significant risk.

***Risk of Delay***

- 117 The Commerce Act allows the Commission to limit consideration to four CPP proposals from the same type of regulated service in a given year. If Powerco takes the decision to apply for a CPP, there is a risk it will be postponed. Not being selected for consideration in the year of application will increase the duration of uncertainty over an application. Hence, the incentive is to ensure the application selected for review which drives up the costs of producing the proposal.

***CPP is Rejected***

- 118 There are five possible outcomes of a CPP application resulting from two separate decision points. At the start of an application an EDB has no insight in to whether the application will pass the initial assessment and if it does, whether it will be deemed to be one of the four to be considered that year. If the application is acceptable for consideration then it may still be rejected at the proposal assessment phase. Lack of certainty is a significant issue for both Powerco and our investors, once the decision to apply for a CPP has been taken certainty over future pricing and revenue will be low for the three years it takes to reach a decision.