



**Submission to Commerce Commission on  
Initial Reset of the Default Price-Quality  
Path for Electricity Distribution  
Businesses: Draft Decisions Paper**

**9 October 2009**

## **CONTENTS**

INTRODUCTION .....	3
EXECUTIVE SUMMARY .....	3
FRAMEWORK AND PROCESS .....	4
PRICE PATH .....	6
STARTING PRICES .....	9
RATE OF CHANGE .....	9
QUALITY STANDARDS.....	10

## **INTRODUCTION**

1. Vector welcomes the opportunity to provide this submission to the Commerce Commission on the *Initial Reset of the Default Price-Quality Path for Electricity Distribution Businesses: Draft Decisions Paper*.
2. Vector's contact for this submission is Nathan Strong, Manager Regulatory Affairs, on 04 803 9039 or [nathan.strong@vector.co.nz](mailto:nathan.strong@vector.co.nz).

## **EXECUTIVE SUMMARY**

3. Vector believes the majority of the Commission's draft decisions are pragmatic and reasonable under the circumstances. We note that many of the more difficult issues have been postponed until after 1 April 2010, consistent with decisions on input methodologies. Vector continues to support a logical sequencing of decisions on the default path arrangements and setting of input methodologies.
4. Vector believes that the key changes the Commission should make to its draft decisions for the 1 April 2010 reset are:
  - a) Use a t-2 approach rather than a t-1 approach to establishing quantities. The Commission's concern about lagged quantities is more theoretical than real. The example used in the Commission's Appendix B is based on an assumed demand growth of 30%. Using a more realistic demand growth rate of 2%, the impact of using quantities from t-2, gives rise to a 0.09% difference in prices. Compared to the administrative burden of estimating quantities and making retrospective comparisons of actual versus estimates, the alleged improved "accuracy" of using t-1 quantities is not worth the effort or the additional compliance uncertainty created.
  - b) Reconsider the lagged CPI approach. It would be straight-forward to true-up the price path over time between actual and forecast CPI numbers, whereas the Commission's proposed approach means that EDBs will face the same inflation number twice in the transition from an *actual* to *lagged* approach in setting prices.
  - c) Provide for a more comprehensive set of pass-through-costs. Vector supports the pass-through of transmission-related costs, levies and local authority rates. However, in Vector's view, it is unreasonable to impose a regulatory regime where additional regulatory impositions (or relief)

caused by the EC or other Government agencies can only be passed through to customers by applying for a CPP. Vector submits that pass-through costs (savings) should include new costs (savings) caused by the imposition (retraction) of rules and regulations by Government authorities.

- d) Substitute extreme event values with average rather than boundary values, in the assessment of quality performance.

5. In the remainder of this submission we set out the detailed basis for these views and comment on issues that have been delayed until after 1 April 2010. Topics are broadly dealt with in the order they appear in the Draft Decisions Paper.

## **FRAMEWORK AND PROCESS**

### *Issues not considered for the Initial Reset DPP*

6. The Commission has decided to defer some of the more complicated issues until later in the process – notably, starting price adjustments, an energy efficiency mechanism, an s-factor mechanism, re-openers and the enforcement guidelines. Vector recognises the time pressures involved and therefore accepts that these issues will need to be addressed following the Initial Reset DPP. We urge the Commission to use the additional time to work closely with stakeholders to develop workable and effective solutions to these issues.

7. Vector wishes to register a strong measure of disappointment that the Commission did not put in place a work programme to achieve compliance with section 54Q – energy efficiency incentives – in time for the reset on 1 April 2010. Vector submits that the proposed price path approach without any mechanisms to counteract the energy efficiency disincentives of price cap regulation is unlawful. The Commission’s claims that distributors can make changes to their price structures that will promote energy efficiency (or avoid disincentives) are not founded in any analysis and are incorrect.<sup>1</sup> We look forward to working with the Commission on developing reasonable incentive mechanisms, including the detailed suggestions set out in our submission on the DPP Discussion Paper.

8. Vector notes the Commission’s arguments regarding timeframes not allowing energy efficiency mechanisms etc to be developed and the section 53K requirement that DPPs be low-cost counts against the development of energy efficiency mechanism. As section 54Q is a mandatory requirement, the “low cost”

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<sup>1</sup> For example, the Commission has not considered the impact of the Low User Fixed Charge regulations, which constrains EDBs ability to set residential tariffs on a fixed basis.

nature of the DPP is a secondary consideration. Considerations of time and cost have also not prevented the Commission from progressing a large amount of new, complex and highly technical work on assessing productivity, for example.

*Interpretation of the Part 4 Purpose Statement*

9. Vector will provide further submissions on the Purpose Statement in its cross-submission on the Input Methodologies conference.

*Next steps*

10. While we recognise the time pressures facing the Commission, a one-week technical drafting consultation period is not sufficient for EDBs to properly consider the wording, formulae, forms of auditors' reports and other such matters. Past experience has shown that accuracy of drafting is critical to promoting confidence in the compliance process and avoiding un-intended consequences or ambiguities. A two week period should be provided, and it would be preferable to bring forward other aspects of the process to accommodate this.

11. Vector also supports the work programme to develop an:

- (a) S-factor scheme for relating prices to systematic changes in quality performance;
- (b) Energy efficiency scheme to remove the impediments of price cap regulation to EDBs promoting improvements in energy efficiency;
- (c) Efficiency carry-over mechanisms to ensure that there are consistent incentives to improve efficiency over the entire regulatory period; and
- (d) Further development of 're-openers' consistent with the DPP / CPP framework.

12. In respect of points (c) and (d) above, the Commission needs to ensure that the design of these mechanisms is prioritised with the rules known by 1 April 2011, at the latest, to ensure the Purpose of Part 4 can be met.

## **PRICE PATH**

### *Definition of quantity*

13. Vector welcomes the draft decision to use updated annual quantities. The use of updated annual quantities will mitigate the pass-through anomaly and ensure quantities more closely resemble tariff structures (as the tariff structures evolve over time).

14. However, Vector disagrees with the proposed t-1 approach. In our view, the Commission has been overly optimistic in its assessment of the reliability of information available to EDBs to estimate volumes and should adopt a t-2 approach.

15. The Commission has proposed using quantities from the period t-1. It appears that at the time prices are set (using the 1 December period used by the Commission) the Commission has assumed that accurate consumption information will be available up to the end of November (8 months of data) and that forecast consumption for the remaining period out to March the following year will be required (4 months of data). This assumption is not correct.

16. EDBs generally depend on retailers billing end consumers before they can be provided with consumption information. It is standard practice for the retailer to bill the customer up to two months in arrears and therefore Vector does not expect accurate consumption data for a period of up to 3 months in arrears.

17. At 1 December, the period for which we have a reasonable (but still incomplete) view on consumption would be up to August (5 months of data). This would mean that Vector would have to forecast 7-8 months of consumption information (including the end of the winter peak period), rather than the 3-4 months the Commission has noted. The result of this approach is that compliance will largely be driven by forecast information, creating unreliability and uncertainty.

18. Whilst Vector agrees using information more closely aligned to current prices is desirable, the Commission's draft decision does not strike an appropriate balance between the benefits of using t-1 and the reduced risk and greater certainty of using t-2. Vector submits that a t-2 approach is the best approach. A t-2 approach is superior to the current regime, where quantities become progressively out-of-date, and would also provide complete certainty for distributors when setting prices and demonstrating compliance with the price path.

19. Uncertainty is also created for EDBs as the Commission has not described in detail what (if any) action would be taken if actual quantities differed by more than 5% from forecast quantities. The Commission has briefly mentioned that a t-2 approach may be the fall back position. Vector submits that adopting a t-2 approach from the start would be a superior solution and would avoid the uncertainty and confusion of needing to change approaches at a later date.

20. The example given in Appendix B of the consultation paper demonstrates the impact of using lagged quantities. Even with the extreme assumption of volume growth between  $Q_{10}$  and  $Q_{11}$  of 30%, the impact on pricing would be less than 1%<sup>2</sup> and when more realistic volume growth estimates are used in the example (e.g., 2%) the impact is less than 0.1%. These kinds of percentages are within the margin of error in comparison to the judgements that the Commission will have to make in making starting price adjustments. Vector recommends that the Commission adopt a t-2 approach.

#### *Indexing the price path*

21. The Commission affirms its draft decision to use a lagged CPI approach to establishing the price path. While Vector agrees that it has the advantage of providing certainty, in the current environment, where there is a risk that inflation may become more significant due to overseas monetary policy settings, it would be preferable to adopt a more co-incident CPI approach. In addition, as price adjustments on 1 April 2009 were based on forecasts of inflation for the March 2009 year, transitioning to a lagged approach means that effectively the 2009 CPI is repeated.

22. Vector submits that the Commission should adopt the latest RBNZ CPI forecast as the basis for setting the price path and assessing compliance. In order to 'true-up' differences between forecast and actual inflation, it would be straightforward to correct for this by adding a term ( $CPI_{Actual} - CPI_{Forecast}$ ) to the CPI-X adjustment.

#### *Pass-through costs*

23. Vector agrees that the proposed pass-through costs are appropriate. In particular, we welcome confirmation that Commerce Act levies prior to the Initial Reset should be eligible for pass-through.

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<sup>2</sup>  $11.14/11.06 - 1 = 0.7\%$ .

24. However, Vector continues to maintain that it is unreasonable to prevent EDBs from recovering the costs of complying with new externally mandated regulations. If none of the costs of new regulatory impositions can be passed on, they effectively become an additional tax on EDBs. Vector made this point in more detail in our submission on the DPP Discussion Paper and we note that the Commission does not address these issues in the Draft Decisions Paper.

#### *Pass-through anomaly*

25. Vector does not believe that unbundling of transmission charges is a workable solution to the pass-through anomaly, due to the complexity involved. We agree with the Commission that updating of quantities will mitigate the anomaly sufficiently, even under a t-2 approach as proposed above.

#### *Excluded services*

26. Vector notes that the Draft Decisions Paper is silent on the matter of excluded services. We agree with the proposal in the Discussion Paper that services subject to workable and effective competition should be excluded from quantities in the price path. However, we again recommend that the Commission should issue a guideline on what circumstances should be covered by the workable and effective competition standard, as there appear to be inconsistent practices across the industry relating to definitions of contestable situations. For example, we understand that where EDBs have competed to supply embedded networks based on competition over the right to install the network, some have deemed such situations competitive, whereas end-consumers have not had the opportunity to negotiate the distribution charges and can be subject to unconstrained prices.

#### *Points of detail*

27. In paragraph B16, the Commission notes that transmission costs are fixed each year and known in advance. While this is currently correct, it is dependent on the transmission-pricing methodology (TPM). The TPM is currently being reviewed and the outcomes of that review are not known at this stage. The Commission should consider how the proposals would be affected if the TPM is changed to the extent that transmission costs are not known in advance.

28. One part of the price-path formula in Appendix B may need some clarification. The  $\Delta CPI_t$  terminology in Formula 7 is inconsistent with the terminology in Formula 8, where the 't' term is on a different basis (calendar year in which the assessment date occurs, versus calendar year ending 31 December).

## **STARTING PRICES**

29. Vector welcomes the draft decision that starting prices on 1 April 2010 will be the prices which apply on 31 March 2010. We support the use of actual rather than allowed prices.

30. Vector also supports the draft decision to make starting price adjustments after the input methodologies have been established. This will enhance the certainty and credibility of the new regulatory regime.

## **RATE OF CHANGE**

### *X-factor*

31. Vector submits that an X-factor of 0 is reasonable, given the range of domestic and international evidence.

### *Productivity analysis*

32. Vector notes the detailed debate in the Decisions Paper regarding the appropriate approach for assessing TFP. While in this instance it is encouraging that both Economic Insights and Pacific Economics Group have reached similar conclusions, it is clear that there remains considerable disagreement regarding measurement of EDB productivity.

33. Vector continues to have reservations regarding the highly theoretical and complex nature of the Economic Insights approach. To some degree Vector is comforted by the responses to Vector's submissions on the previous DPP discussion paper, although we are not quite sure what to make of responses such as "This means the issue raised by Vector is not relevant in principle."<sup>3</sup> Does this mean *in practice* Vector's concerns are relevant?

34. The Commission is proposing to revisit a number of issues (e.g., energy efficiency incentives) after 1 April 2010 to work with industry to develop reasonable approaches. Vector recommends that the Commission add productivity analysis to its list of topics to revisit. A series of workshops with industry, stakeholder and independent experts should be held to try to foster greater understanding of the EI approach – and thereby promote greater confidence that

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<sup>3</sup> Economic Insights (2009) *Electricity Distribution Industry Productivity Analysis: 1996–2008*, page vi

the regulatory regime is not unduly relying on methodologies that are very difficult to scrutinise, and are (possibly) experimental.

#### *Input price inflation*

35. The Commission has indicated a preference for deriving an input price differential using the TFP approach, and proposes to set this term equal to 0%. In the absence of alternative evidence, Vector agrees that this is a pragmatic approach. However, we do observe that on a forward-looking basis there are factors that will arguably drive input price inflation in the utility sector faster than in the broader economy. In particular:

- As a result of the economical and financial crises, Governments are using fiscal stimulus packages to bring forward infrastructure investments, putting pressure on the construction sectors; and
- The investment cycle globally for electricity network investment is putting pressure on equipment costs and wages for skilled electrical workers. In developed economies, asset renewals and replacement follow the post-war cycle of investment, whereas in developing economies such as China and India, rapid growth (even following the economic and financial market crises) is driving high levels of demand for network infrastructure.

36. We reiterate our earlier submission that the industry and Commission need to work together to establish a reliable basis for tracking inflation facing New Zealand EDBs for use in future resets.

## **QUALITY STANDARDS**

#### *General comments*

37. The draft decisions on the quality standard constitute an improvement on the thresholds regime by recognising the need to take into account statistical variation in quality performance. Nevertheless, Vector remains concerned that some proposals constitute relatively *ad hoc* mechanisms to resolve issues experienced with the thresholds regime regarding technical breaches and do not constitute a statistically robust framework for the quality standards regime. In Vector's view, the Commission's approach is likely to treat different companies inconsistently and lead to false positives and false negatives.

38. As noted in our submission on the Discussion Paper, Vector agrees that:

- “No material deterioration” is an appropriate basis for the quality standard for EDBs until research has been conducted into consumer willingness to pay for improved service and an s-factor scheme is introduced;
- SAIDI and SAIFI are appropriate measures to assess EDBs reliability performance;
- 1 April 2004 to 31 March 2009 is an appropriate period to use to set the historical performance levels; and
- Customer communication is best addressed under the information disclosure regime. Customer engagement should, however, only be required one year prior to the default path reset, as under a default path it is not possible to raise prices in order to fund a higher level of quality.

*Assessing performance and reducing technical breaches – further information required*

39. In Vector’s submission on the DPP Discussion Paper, we observed two key areas where the Commission’s proposed approach would potentially lead to uncertain statistical outcomes:

- Substitution of the SAIDI impact of an extreme day with the boundary value; and
- The use of the ‘two-out-of-three’ rule for assessing performance.

*Extreme events*

40. At paragraphs 7.41 to 7.44 the Commission sets out its analysis of the different options for treatment of extreme events. The Commission notes the IEEE’s statement that:

“no data is excluded: instead it is classified, analysed, and reported on using separate processes.”

41. The Commission then goes on to explain, however, that:

“the Commission considers that the scrutiny of extreme events is likely to be a relatively complex and costly exercise, thus a mechanism for undertaking a detailed analysis of such events is unlikely to be appropriate under a Reset DPP. The

Commission recognises that these events should be taken into account in some manner and considers that this can be achieved through boundary substitution.”

An alternative substitution for MED values using average values would lead to major events being ‘considered’ to a lesser degree than some non-major events. While the exclusion of the SAIDI and SAIFI values for MEDs would conflict with the IEEE Standard by excluding extreme events from regulatory oversight. The Commission retains its view that a boundary substitution method should be incorporated into the quality standard. The Commission considers that boundary value replacement will have a relatively neutral effect on compliance given the same boundary value is to be substituted into the data used to set standards and the data used to assess them.<sup>340</sup>

The intention of normalising for MEDs under the Reset DPP is to reduce the excessive impact that a major event can have on underlying reliability data. However, it is not the Commission’s intention to exclude MEDs from consideration. The Commission considers that these (potentially conflicting) purposes are best served by substituting the value of MEDs with that of the boundary value.

42. Vector is confused by this analysis and requests that the Commission provide further information on the following points:

- (a) The Commission notes that examining extreme events would likely be a costly exercise. However, by including extreme events in the assessment calculations at the boundary value, the Commission will necessarily have to examine extreme events in assessing breaches of the quality path. Accordingly it is not clear that the Commission’s proposal will decrease costs, indeed it seems likely to increase the burden of the post-breach analysis as the Commission will have to assess whether extreme events have generated a false positive (e.g., because the relative frequency of extreme events has increased during the assessment period). We would appreciate further information on why the Commission considers that confusing extreme event performance and underlying performance would result in lower costs.
- (b) Given the clear statement by the IEEE that it is imperative to analyse the data using separate processes, why does the Commission consider that the need to consider extreme events is “best served by substituting the value of MEDs with that of the boundary value.”? No analysis is presented to support the Commission’s views.

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<sup>340</sup> The extent to which it has a neutral effect will depend on the relative frequency of extreme events during the assessment and reference periods.

(c) The Commission notes that “boundary value replacement will have a relatively neutral effect on compliance given the same boundary value is to be substituted into the data used to set standards and the data used to assess them,” but notes in the footnote that neutrality will be determined “by relative frequency of extreme events during the assessment and reference periods”. Has the Commission conducted analysis of the relative neutrality? If so, can this analysis please be provided?

43. Overall, Vector is unable to respond meaningfully to the Commission’s proposed treatments of extreme events as key information is missing on the factors that have informed the Commission’s draft decisions. Vector remains of the view that the confusion of extreme events and non-extreme events is likely to lead to poor targeting of performance relative to the “no material deterioration” standard. If the Commission is concerned about the need to examine the causes of extreme events, then it would be preferable to develop an information disclosure reporting requirement, which would be consistent with the IEEE framework.

*“Two out of three” rule for assessing compliance*

44. At paragraph 7.75 the Commission sets out its rationale for the “two out of three” standard:

7.75 In relation to the “two out of three” assessment, SRA questioned the need for its “added complication” when compared to a simpler “two in a row” approach.<sup>371</sup> The Commission considers that the use of the “two out of three” assessment is preferable to the “two in a row” approach as it sets a higher performance standard. As an example, an EDB that fails to meet its Reliability Target every alternate year over a five-year regulatory period would satisfy the quality standards under a “two in a row” scheme, while it would fail to satisfy the quality standards twice under a “two out of three” assessment. The Commission considers that allowing EDBs to breach in 60% of the assessment periods in a regulatory period would not promote nor be consistent with a no material deterioration outcome.

45. The Commission’s draft decision appears to be driven by a desire to have more breaches and a “higher performance standard.” However, this is not the purpose of such tools as a “two in a row” or “two out of three” standard, which is to limit the potential for false positives. The determining criteria for any particular methodology is not how many breaches it will generate, but the statistical likelihood that a breach will turn out not to be a breach at all. In the absence of a clear statistical framework (including taking account of the statistical confusion that may be introduced by the Commission’s proposed boundary value substitution), it is not possible for the industry to respond to the Commission’s proposals, or their compatibility with any future S-factor scheme.

*S-factor incentive scheme*

46. Vector welcomes the Commission's commitment to progress work on an S-factor mechanism in 2010 and we are keen to be involved in that process. Vector recommends that the Commission aims to develop an S-factor scheme that can be implemented on 1 April 2011.