Submission to the Commerce Commission on the Setting of Starting Pricings for Gas Pipeline Businesses under the Initial Default Price-Quality Path

28 September 2011

CONTENTS

INTRODUCTION

1. Vector welcomes the opportunity to comment on the Commerce Commission's ("**Commission**") Discussion Paper "Setting of Starting Prices for Gas Pipeline Businesses ("**GPBs**") under the Initial Default Price-Quality Path" dated 22 August 2011 ("**GPB SPA Discussion Paper**").

2. This submission should be read in conjunction with Vector's "Submission to the Commerce Commission on Draft Decision on Starting Price Adjustments for Electricity Distribution Businesses" dated 24 August 2011.

3. As the Commission is aware, the Courts have determined that the Starting Price Adjustment ("**SPA**") methodology must be developed as an input methodology ("**IM**"). This submission is intended to provide assistance to the Commission on the development of SPA IMs for GPBs. Vector notes that many of the issues raised in this submission are equally applicable to EDBs.

4. No part of Vector's submission is confidential and we are happy for it to be publicly released.

5. If the Commission has any queries regarding Vector's submission, or would like further information, please contact:

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EXECUTIVE SUMMARY

6. Vector welcomes the Commission's proposal to: (i) apply a revenue cap for gas transmission; (ii) set X at 0 for gas; and (iii) use regional or individual specific data rather than national data for forecasting.

7. However, in Vector's view, the Commission's proposed SPA methodology does not best promote the Part 4 purpose. Key issues with the Commission's approach are that it:

    a. does not address errors inherent in forecasting information;

    b. seeks to eliminate rather than limit current and projected excessive profits; and

    c. distorts incentives to make efficiency gains as:

        i. regulated suppliers would be incentivised to make efficiency gains only at the start of each regulatory period; and

        ii. incentives to improve efficiency would be limited to 'low-hanging fruit' with a pay-back of less than five years.

8. As a result there is a significant risk that:

    a. some regulated suppliers will be unable to recover their efficiently incurred costs, or earn a commercially sustainable (normal) rate of return, and consequently may not have incentives (or the ability) to invest; and

    b. the Default Price-Quality Path ("**DPP**") will effectively act as rate of return regulation, rather than incentive-based regulation, substantially dampening incentives to innovate, invest and improve efficiency, and consequently limiting the benefits of efficiency gains available to be shared, over time, with consumers.

9. In this submission Vector sets out a framework for a proposed alternative approach which, in its view, would be materially better in meeting the Part 4 purpose, avoiding the likely risks set out above. Vector's preference remains that the Commission carry over prices for the 2012 reset given the current poor quality GPB data.

Addressing uncertainty and errors in forecasting information

10. Vector is concerned the Commission's approach to setting starting prices under the initial DPP will not necessarily "allow GPBs the opportunity to earn normal returns …".[1]

11. For example, the Commission is not proposing to include any mechanism for addressing the risk of error inherent in forecasting information. This is of particular concern in the case of GPBs as gas data is not as accurate or reliable as electricity data (noting that electricity data itself has accuracy issues).

12. The Commission acknowledges the risks of error are asymmetric (so allowance for underestimation is required in order to best promote the long-

[1] GPB SPA Discussion Paper, para 2.6.

term benefit of consumers). The Commission, however, takes a contrary view for DPP regulation. The Commission says this is because regulated suppliers will use the Customised Price-Quality Path ("**CPP**") mechanism as a way of dealing with errors in the setting of DPPs.

13. The Commission is simply wrong in its assumption that if a DPP is set too low for a regulated supplier to recover its costs, the regulated supplier would make a CPP application. Submissions made to the Commission in relation to the EDB DPP consultation clearly demonstrate CPP applications would be complex, time-consuming, costly and risky.

14. The uncertainty inherent in CPPs was recently acknowledged in *Vector v Commerce Commission* where Clifford J stated that "there are certain inflexibilities with the CPP regime – in particular that once proposed a CPP may not be withdrawn and that the Commission may replace a proposed CPP with one of its own determination – that create some uncertainties about the CPP process itself".[2]

15. A substantial under-recovery of costs may need to occur for a regulated supplier to be willing to make a CPP application. Even then, the regulated supplier would need to have confidence the CPP would be likely to be more favourable than the DPP.

16. In order to best meet the Part 4 purpose, the Commission should adopt an error correction mechanism or, alternatively, a point estimate above the 75th percentile weighted average cost of capital ("**WACC**") (where the 75th percentile is the best estimate of normal returns given WACC parameter and model uncertainty).

Limiting profits while ensuring incentives to invest and improve efficiency

17. Vector believes the Commission has placed too much emphasis on subsection 52A(1)(d) of the Commerce Act at the expense of subsections 52A(1)(a) – (c) and the overarching purpose of section 52A to promote the long-term benefit of consumers.

18. The Commission's approach seeks to remove all current and projected supranormal profits in a single SPA and, as a result, will undermine incentives to invest, innovate and improve efficiency, contrary to the Part 4 purpose. A more gradual removal of profits would better meet the Part 4 purpose of benefiting consumers in the long term.

19. Vector agrees with the Commission's previously held view that "it is unlikely to be in consumers' long-term interests to attempt to fully eliminate all excess returns",[3] and "the faster the rate of sharing efficiency gains with consumers, the weaker the incentive for businesses to make efficiency gains".[4] The shorter the time period a regulated supplier has to enjoy the benefits of improved efficiency the closer the operation of the DPP will be to de facto rate of return regulation.

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[2] *Vector Limited v Commerce Commission*, 26 September 2011, Clifford J, HC Wellington, CIV-2011-485-536, para 130.

[3] Commerce Commission, *2010-15 Default Price-Quality Path for Electricity Distribution: Draft Decisions Paper*, July 2011, para 1.48.

[4] Commerce Commission, *Regulation of Electricity Lines Businesses: Discussion Paper*, 21 March 2002, para 8.63.

20. Regulated suppliers need to be meaningfully rewarded for efficiency gains to ensure they have incentives to improve efficiency. Vector believes limiting the period within which regulated suppliers are rewarded for efficiency gains to within any given regulatory period (with a maximum length of five years decreasing to zero) does not provide sufficient incentives for efficiency improvements and, over time, would limit the efficiency gains available to be shared with consumers.

A materially better SPA methodology

21. The Commission has, to date, not agreed that an error correction mechanism is necessary in the SPA methodology. Nor has it reconsidered its position in relation to the application of an incremental rolling incentive scheme ("**IRIS**") for DPPs (despite the fact that the Commission's model now includes a forecast opex against which efficiency gains can be assessed).

22. Importantly, when deciding against the IRIS for DPPs, the Commission expressly stated that:

    a. there would be value in such a scheme if it were feasible; and

    b. efficiency gains, including those from mergers and acquisitions, can be taken into account through SPA at each DPP reset.[5]

23. Vector considers it is critical that the Commission now develop an SPA IM that takes proper account of efficiency gains (as the Commission previously indicated it would).

24. In this context, Vector proposes an alternative approach which could be readily built into the Commission's current proposal and the SPA IM. Under Vector's proposed alternative methodology, the initial SPA would be set to remove part, but not all, of current and projected supranormal profits (if any), with the remaining adjustment that would be needed to eliminate all current and projected supranormal profits staggered over subsequent (two or more) regulatory periods ("**staggered SPA methodology**").

25. More specifically, under a staggered SPA methodology:

    a. The regulated supplier would get the full benefit of any efficiency gain it makes for the remainder of the regulatory period, plus get to keep some, but not all, of the efficiency gain for the next regulatory period.

    b. Using the Commission's approach in the EDB DPP consultation by way of example, if the Commission considers Vector's EDB needs a SPA of -8.5%, as currently proposed, to eliminate current and projected supranormal profits, the Commission could make a -4.25% adjustment initially, and then add the remaining -4.25%, required to get prices down to that required for a normal rate of return for the first regulatory period, to the next regulatory period's SPA.

    c. The regulated supplier would consequently receive a greater reward for efficiency gains, which would commensurately increase its incentives to improve efficiency.

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[5] Commerce Commission, *Input Methodologies (Electricity Distribution) - Emerging Views Paper*, 23 December 2009, p 134; Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, December 2010, para 8.5.22.

d. This approach would entail an initial cost to consumers (prices not as low as they otherwise would have been in the first regulatory period) but over time consumers would benefit from incentives on regulated suppliers to deliver greater efficiency gains, which would be shared.

26. Vector considers that an SPA methodology which best meets the Part 4 purpose would also:

    a. make allowance for gains to be retained for at least five years (similar to an IRIS mechanism) so that regulated suppliers have incentives to make efficiency gains throughout the regulatory period; and

    b. include an error correction mechanism.

27. However, even on its own, the staggered SPA methodology would be significantly better at meeting the Part 4 purpose than an immediate and full removal of current and projected supranormal profits at the beginning of each regulatory period.

28. In the alternative and at the very least, the Commission should amend the IM determinations so that an IRIS applies to DPPs (noting that Vector considers a staggered SPA methodology is the materially better approach). Vector has recommended an appropriate approach in its submissions on the GPB / EDB IM determination consultation.[6] An error correction mechanism should also be included.

Use of 2010/2011 data

29. Vector is of the view that use of 2011 data would best ensure prices are based on current profitability, as well as providing a more sound basis for determining projected profitability. 2011 data would accordingly best meet the requirement of section 52P(3)(b) of the Commerce Act that "starting prices must be … based on the current and projected profitability of each supplier".

Information required to set starting prices

30. Vector believes it would be preferable to use regulated suppliers' information, to the extent it is available and robust enough to be relied on, to determine projected growth in revenue, capex and opex. The Commission should expect regulated suppliers to have reliable business forecasts that should suffice with appropriate governance (eg directors' certification).

31. If past capex is below the level required for future capex, as reflected in regulated suppliers' asset management plans ("**AMPs**"), the Commission's approach could result in a cap on capex; resulting in a suppression on investment.

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[6] Vector, *Submission in response to the Commerce Commission's Input Methodologies Draft Reasons and Determinations for Electricity Distribution Businesses and Gas Pipeline Businesses: Cost Allocation, Regulatory Tax, Pricing Methodology, Rules and Processes*, 9 August 2010, Appendix A. Also see Vector, *Submission to Commerce Commission on Electricity Default Price-Quality Path Discussion Paper,* 17 July 2009, pages 27-30.

DEVELOPMENT OF A ROBUST SPA IM

32. Vector **notes** it supports the Commission's proposal to: (i) apply a revenue cap for gas transmission; (ii) set X at 0 for gas; and (iii) use regional or individual specific data rather than national data for forecasting if there is going to be an SPA, subject to Vector's position that data for GPBs is currently unsuitable for price setting purposes.

33. Vector reiterates its position that the Commission should carry over existing prices for the first regulatory period under section 53P(3)(a).

34. Should the Commission decide to adjust starting prices under section 53P(3)(b), Vector considers that the Commission should:

    a. include an error correction mechanism in order to better ensure regulated suppliers are able to earn a normal rate of return - this is particularly critical for the GPB DPP given the poor quality of GPB historic data; and

    b. not remove all current and projected supranormal profits to avoid excessive dampening of incentives to improve efficiency – there is a risk that the operation of the SPA/DPP could amount to de facto rate of return regulation.

The Commission should carry over prices for the first regulatory period

35. In its 27 May 2011 submission on the GPB DPP, Vector submitted that the Commission should not seek to reset prices at this stage given the lack of robust data available for GPBs.[7] Vector also explained that the Commission's statement that it must set prices under section 53P(3)(b) because there is no preceding regulatory period on which to base prices is incorrect given section 55F(1).

36. The Commission now appears to accept it has a choice whether to adopt section 53P(3)(a) or (b). In particular, the Commission has stated that it is still forming a view as to whether the available data is sufficient to enable it to set prices under section 53P(3)(b).

37. Vector's position remains that the data available is not suitable for price setting purposes. As set out in Vector's 27 May submission, this is because, amongst other things, gas has not been subject to as rigorous information disclosure requirements, including AMP disclosure, as electricity has been. The compressed timeframe the Commission is operating to will inevitably heighten the risk of errors in the SPA methodology and calculation of current and projected excessive profits. A better approach would be for the Commission to gather the necessary data over the first regulatory period and then make SPAs in 2016.

38. If the Commission does decide to set starting prices for GPBs under section 53P(3)(b), an error correction mechanism would, in Vector's view, be critical in order to address the high degree of uncertainty.[8]

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[7] Vector, *Submission on the Commerce Commission's Initial Default Price-Quality Path for Gas Pipeline Businesses*, 27 May 2011, paras 113 - 118.

[8] Vector notes that the lack of robust data is not the only reason for applying section 53P(a). The Commission should more generally be satisfied that resetting prices under section 53P(3)(b) will better meet the Part 4 purpose compared to carrying over existing prices under section 53P(a) and with a proper assessment of the Part 4 purpose. It does not appear that the Commission has

Enabling recovery of a normal return

Commission's position on regulatory error

39. In the EDB DPP reset consultation, the Commission is proposing to remove all of what it calculates to be supranormal profits, immediately and in full, in its SPA. No allowance is given for potential errors in information used to determine current and future profitability.

40. The Commission has not explicitly stated in the GBP SPA Discussion Paper that it will adopt the same approach for gas, but this is implied by the limited list of differences in the approach it proposes to take to setting prices between electricity and gas,[9] and the statement that the Commission "… will calculate the present value of projected total costs that will allow the businesses to earn a normal return over the regulatory period".[10]

41. The Commission has taken the view that it need not take any account of the asymmetric risks of regulatory error for DPP regulation because regulated suppliers can and will apply for a CPP.

42. Vector refers to and relies on the detailed submissions it has previously made on the need for the error correction mechanism in the EDB SPA consultation. These submissions set out why the Commission is simply wrong in its assumption that CPPs will be used by regulated suppliers as an error correction mechanism. Vector also refers to the numerous submissions provided to the Commission by other regulated suppliers and their experts explaining why CPPs will not be relied on as an error correction mechanism.

43. The uncertainty inherent in CPPs was recently acknowledged in *Vector v Commerce Commission* where Clifford J stated that "there are certain inflexibilities with the CPP regime – in particular that once proposed a CPP may not be withdrawn and that the Commission may replace a proposed CPP with one of its own determination – that create some uncertainties about the CPP process itself".[11]

44. Given the strength and weight of the evidence and submissions provided to the Commission, Vector urges the Commission to review its position on the CPP as an error correction mechanism. In particular, Vector reiterates its view that:[12]

> The Commission's dismissal of the risk of asymmetric error in relation to DPP / CPP regulation represents a major departure from accepted regulatory principles. It would be expected that such a departure would be supported by expert economic analysis and careful consideration of submissions received. The Commission's position, in Vector's view, is not supported by evidence or economic analysis and is inconsistent with the majority of submissions received on this point. Contrary to the Commission's position, asymmetric error should be a key consideration when considering approaches to DPP regulation.

45. Under the Commission's approach (where all current and projected supranormal profits are removed at the start of each regulatory period)

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undertaken any substantive analysis in this regard (other than very high level comments at para 2.11 of the GPB SPA Discussion Paper).

[9] GBP SPA Discussion Paper, para 3.17.

[10] GBP SPA Discussion Paper, para X.8.

[11] *Vector Limited v Commerce Commission*, 26 September 2011, Clifford J, HC Wellington, CIV-2011-485-536, para 130.

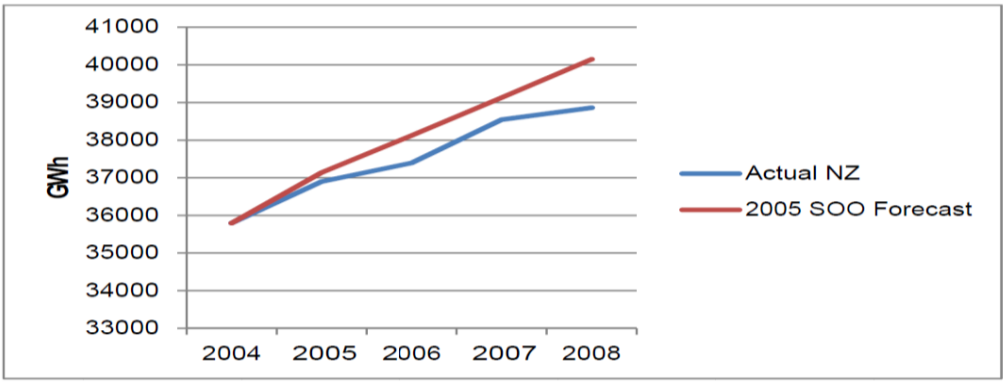
[12] Vector, *Submission to the Commerce Commission on Draft Decision on Starting Price Adjustments for Electricity Distribution Businesses*, 24 August 2011, para 31.

there is a significant the risk regulated suppliers will not be able to recover a commercially sustainable (normal) rate of return.

46. There are clearly substantial grounds for uncertainty in relation to each of the inputs into the Commission's calculation of each regulated supplier's costs. This is illustrated quite vividly by the submissions in response to the Commission on its "Draft Decision on Starting Price Adjustments for Electricity Distribution Businesses", 24 August 2011.[13]

47. The submissions made by EDBs highlight: (i) numerous errors in the Commission's modelling; (ii) how inaccurate forecasts can be in practice; and (iii) the legitimate scope for substantially different judgements in forecasting. This is illustrated well in Figure 1 from Powerco's submission to the Commission in the electricity DPP:[14]

Figure 1: Forecasting errors



48. A forecasting error of this magnitude, combined with an SPA that removes all (calculated) supranormal profits and provides no safety margin, could readily mean a regulated supplier is unable to recover a commercially sustainable (normal) rate of return.

Greater risk of error for GPBs

49. The risks associated with regulatory error are particularly stark in the case of GPBs.

50. While the information the Commission relies on for the SPA for EDBs is far from perfect, and has a number of significant flaws, it will be far more robust than much of the information available for gas. Gas information is less accurate and less reliable. This should have implications for the degree of confidence the Commission has in whether the SPA prices it sets for gas, if it attempts to extract all of what it calculates to be supranormal profits, would allow GPBs to earn normal rates of return.

51. Vector emphasises here that the 75th percentile WACC was not intended to address error in the information used in the starting price adjustment process. Rather, the Commission settled on the 75th percentile WACC to address WACC estimation error.[15]

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[13] http://www.comcom.govt.nz/2010-2015-default-price-quality-path/

[14] See Powerco, *Submission on 2010-15 Default Price-Quality Path Starting Price Adjustments and Other Amendments Update Paper*, 16 May 2011, Figure 3.

[15] In the EDB consultation, the Commission suggested that the 75th percentile addresses regulatory error in the SPA methodology: see Commerce Commission, *2010-2015 Default Price-Quality Path*

52. The compressed timeframe for implementing the GPB DPP will inevitably heighten the risk of errors. The Commission has not even obtained, let alone consulted on, some key forecasting data required for the SPA, even though it plans to make a draft determination on 4 November 2011.

53. As noted in Vector's submissions in the EDB SPA consultation, if regulated suppliers are not able to recover at least a commercially sustainable (normal) rate of return *ex post*, or do not have an *ex ante* expectation that they will be able to at least recover a sustainable (normal) rate of return, then the Commission will fail to achieve subpart (a) of the purpose in section 52A(1).

54. It would not necessarily be a regulatory failure if the forecasts the Commission rely on turn out to be incorrect.[16] It would be a regulatory failure if the Commission did not recognise the inevitability of this, and the implications it has for ensuring regulated suppliers are able to earn a commercially sustainable (normal) rate of return.

55. Vector **notes** regulated suppliers that do not expect to be able to earn a normal rate of return under a DPP:

    a. will not necessarily apply for a CPP because of the cost and risk of CPP applications; and

    b. may cut capex and/or opex, in ways that are not necessarily in the long-term interests of consumers, as a way of mitigating or eliminating expected losses.

56. Without prejudice to Vector's position that the Commission should not reset starting prices given the current issues with GPB information, Vector **recommends** the Commission:

    a. allow a safety margin for regulatory errors in the SPA IM; and

    b. not rely on CPPs as the sole safe-guard against deficiencies in DPPs.

Avoiding operating SPA/DPP as rate of return regulation

57. The Commission proposes an SPA methodology similar to that applied for EDBs where any supranormal profits above the industry-wide WACC are removed at the beginning of the regulatory period. Under its approach, the Commission:

    a. in effect, treats "limited in their the ability to earn excessive profits" to mean that the Commission must remove 100% of any supranormal profits at the beginning of a regulatory period;

    b. defines excessive profits as supranormal profits;

    c. provides between zero (end) and five (beginning of the regulatory period) years only for regulated suppliers to retain the benefits of efficiency improvements;[17] and

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Starting Price Adjustments Update Paper, 11 April 2011, para 2.27. This was strongly contested by Vector in its submission on that update paper dated 16 May 2011 (see paras 111 - 118).

[16] Noting that Vector considers the information must be of a reasonable quality in order to proceed with a price reset in the first place.

[17] Or a maximum three years for electricity, in the first regulatory period, with the proposed DPP reset mid-regulatory period.

d. more generally, fails to consider the impact of the removal of all supranormal profits on incentives to invest and improve efficiency and/or on the long term benefit of consumers.

58. Under the Commission's proposal, regulated suppliers would have a maximum of five years to gain rewards for efficiency gains before they are passed on in full to consumers. This would have the following impacts on regulated suppliers' incentives:

a. incentives to improve efficiency would be limited to 'low-hanging fruit' with a pay-back of less than five years; and

b. regulated suppliers would be incentivised to make efficiency gains at the start of each regulatory period rather than continuously throughout the regulatory period.

59. In Vector's submission the Commission's approach does not best promote the purpose of Part 4. Specifically, the Commission has placed an over-emphasis on, and/or misapplied, subsection 52A(1)(d) at the expense of subsections 52A(1)(a) – (c) and the overarching purpose of section 52A (to promote the long-term benefit of consumers). Absent strong incentives to innovate, invest and improve efficiency, over time there would be negative impacts for consumers in terms of the scope for future sharing of efficiency gains through lower prices and improved service quality (52A(1)(c)).

60. Vector's concern is heightened by the observation, based on the Commission's 2007 analysis of Multilateral Total Factor Productivity (MTFP), that the Commission's proposed SPAs in electricity penalise those EDBs the Commission has deemed to be most efficient compared to those EDBs the Commission believes to be inefficient.[18] As Powerco observe, "the key point is the most recent assessment of efficiency conducted by the Commission bears out the concerns made by submitters that the decision rewards inefficiency and poor performance, while penalising good performance in the middle of the regulatory period. This is precisely what incentive-based regulation is supposed not to do".[19]

61. The Commission has previously indicated that the sharing of efficiency gains would be taken account of in a DPP SPA methodology (when addressing concerns that an IRIS would not be included for DPPs). Specifically:[20]

> [U]nder a DPP, the Commission proposes that the sharing of efficiency gains (including those from mergers and acquisitions) can be taken into account through starting price adjustments. As such, the Commission considers that the development of an explicit form of efficiency carryover mechanism for a DPP is unnecessary.

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[18] Powerco, *2010 Default Price Cross-Submission on Price-Quality Path for Electricity Distribution Draft Decision Paper*, 5 September 2011.

[19] Ibid, para 46.

[20] Commerce Commission, *Input Methodologies (Electricity Distribution) - Emerging Views Pa*per, 23 December 2009, p. 134. This was repeated in Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper, December 2010,* para 8.5.22. where the Commission stated: "DPPs are not set from a baseline of assessed forecast efficient expenditure. Therefore, the ability to apply an explicit IRIS by which actual costs are reconciled to forecast information is limited (i.e. the ability of the Commission to identify true efficiency gains is limited due to the practical constraints of how a DPP is intended to operate). However, as previously noted in the Emerging Views Paper, the sharing of the benefits of efficiency gains (including those from mergers and acquisitions) can be taken into account through starting price adjustments at each DPP reset. In light of this—while there would be value in such a scheme if it were feasible—it is not possible to determine a suitable rolling incentive scheme that will apply to the DPP".

62. The Commission appears to have moved away from this position and without any justification or analysis.

63. In order to promote the Part 4 purpose, the extent to which profits are limited (between 0% and 100%) should be determined with reference to the impact of removal on the other objectives in the Part 4 purpose. To simply remove 100% of supranormal profits will in Vector's view, without question, dampen incentives to invest and to improve efficiency contrary to the long-term benefit of consumers.

"Limited" does not mean "prevented"

64. The Commission appears to have effectively interpreted:

    a. section 52A(1)(d) as requiring the removal or prevention of any current and projected excessive profits rather than the limit of the ability to earn excessive profits; and

    b. the choice between sections 53P(3)(a) and (b) as being between removing no supranormal profits ((a)) or removing all supranormal profits ((b)).

65. Vector assumes this because the Commission has not provided any discussion on any option other than no removal or complete removal of current and projected excessive profits. Sections 53P(3)(a) and (b) actually provide the Commission with the discretion to remove anywhere between and including 0% and 100% of supranormal profits.

66. Vector reminds the Commission that its earlier ROI Band proposal would not have entailed 100% removal of current and projected supranormal profits, at least as defined by the Commission's WACC point estimate.

67. While section 52A(1)(d) specifies that regulated suppliers should be "limited" in their ability to extract excessive profits, this does not mean "prevented" or "precluded". The Oxford Dictionary definition of "limited" is "restricted in size, amount or extent". Vector agrees with Powerco that:[21]

> … the central problem with the Commission's reasoning is that it has misinterpreted what is meant by limited in their ability to extract excessive profits. The Commission treats this phrase as synonymous with ensuring that all EDBs earn returns at or close to the industry-wide WACC.

68. Section 52A(1)(d) should be interpreted as allowing regulated suppliers to earn supranormal profits, so long as those profits are limited in a way that mimics the outcomes of a competitive market. A DPP of CPI-0 with no SPA would "limit" excessive returns, while a DPP of CPI-0 with a SPA would provide a greater "limit". Castalia make the observation that: "An alternative interpretation [of 'limited in their ability to extract excessive profits'] that would better reflect conditions in workably competitive markets would be that 'limiting suppliers' ability' means that companies should not be unlimited in their ability to earn excessive profits".[22] Vector

[21] Powerco, *Submission on the 2010-2015 Default Price-Quality path for Electricity Distribution Draft Decision Paper*, 24 August 2011, para 50.

[22] Castalia, *Report to Powerco: Review of Draft Decision Paper for the 2010-15 Default Price-Quality Path for Electricity Distribution*, August 2011, page 10.

again agrees with Castalia that "the phrase 'limited in their ability' should not be interpreted to mean 'have no ability'."[23]

69. In addition, there is nothing in the wording of section 53P(3)(b) that suggests that the SPA should be set to ensure regulated suppliers are projected to earn no more than a normal rate of return over the regulatory period. The term "based on" (the current and projected profitability of each supplier) has been interpreted by the Courts as meaning a starting point or foundation.[24] Accordingly, "based on" is a broad term and should not be read to narrow the meaning of section 52A(1)(d) to mean removal of 100% of supranormal profits.[25] Section 53P(3)(b) could include any SPA which removes more than 0% and up to 100% of supranormal profits.

70. The limit on excessive profits should be balanced against the other subparts of section 52A(1) in order to best satisfy the overall purpose of promoting the long-term benefit of consumers. If the Commission is too aggressive in limiting or restricting the likelihood of regulated suppliers earning supranormal profits it risks operating Part 4 as if it is rate of return regulation.

Excessive profits are distinct from supranormal profits

71. The other aspect of section 52A(1)(d) is the reference to "excessive profits". Before the Commission considers applying section 53P(3)(b) to reduce profits it needs to be able to show there are excessive profits, as distinct from supranormal profits, and that a DPP absent an SPA would fail to adequately limit regulated suppliers' ability to earn excessive profits. [26]

72. It appears that the Commission has interpreted "excessive profits" as meaning "supranormal profits":[27]

> Any excess returns are measured as the difference between what the gas pipeline business is currently earning and what the Commission considers is a normal return for such a business.

73. The term "excessive" has entirely negative connotations suggesting "too much" or "more than needed". The Oxford Dictionary definition is "more than is necessary, normal or desirable". The Courts have interpreted excessive as meaning "not merely … above suggested levels, but…excessive when all the circumstances were taken into account".[28] Consistent with the Courts' interpretation, Castalia argues that: "The phrase 'excessive profits' should not be read to mean 'any profits higher than WACC'."[29] That is, excessive profits are not the same as supranormal profits (profits above WACC).

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[23] Ibid.
[24] *Prendergast v Associated Stevedores Ltd* [1992] 1 ERNZ 737 at p 12 - 13.
[25] The Oxford Dictionary definition of "based" is "a foundation, support of starting point".
[26] Castalia (in *Report to Powerco: Review of Draft Decision Paper for the 2010-15 Default Price-Quality Path for Electricity Distribution*, August 2011, at page 2) made a similar observation in relation to the Commission's proposed electricity SPA, arguing that: "While some EDBs will have their projected profits reduced, the Commission does not advance any evidence or reasoning that current profits are 'excessive', or that the current DPP does not already 'limit EDBs' ability to earn excessive profits'."
[27] Commerce Commission, *Gas Control Inquiry Final Report*, 29 November 2004, para 48.
[28] *Sykes v Rotorua District Council* (1992) 2 NZRMA 326.
[29] Castalia, *Report to Powerco: Review of Draft Decision Paper for the 2010-15 Default Price-Quality Path for Electricity Distribution*, August 2011, page 10.

74. Supranormal profits can be functional. They can encourage efficiency gains and help ensure regulated suppliers earn at least a normal rate of return, given profit measurement uncertainty and errors. This is not "more than is necessary, normal or desirable" and not excessive.

75. The term "excessive" should also be interpreted in the context of "promoting outcomes that are consistent with outcomes produced in competitive markets". Firms operating in workably competitive markets are able to earn supranormal profits, for periods of time, by improving efficiency (reduction in costs and/or improvement in service quality) to give themselves a competitive advantage over their competitors. As Castalia has noted:[30]

> Workably competitive markets do not produce returns for suppliers that are equal to an estimate of the industry-wide WACC – either over the short or the long run. Instead, workably competitive markets reward efficient firms by enabling them to generate returns above their cost of capital for sustained periods.

76. Powerco also usefully draws attention to the case of *Telecom Corporation Ltd v Commerce Commission* (1991) 4 TCLR 473, where the High Court made a distinction between supranormal profits that reflect superior performance, are welfare enhancing or simply reflect the normal fluctuations in a workably competitive market, and profits that are functionless; that is, solely attributable to the exercise of market power. Powerco argues that:[31]

> Only the latter may be characterised as excessive profits. When the meaning of excessive profits is seen in this light, Powerco submits that the Commission has erred in using profits in excess of WACC as a proxy for excessive profits, and is wrong to assert that aligning returns with WACC will limit the ability of EDBs to extract excessive profits.

77. Vector also agrees with Castalia that "… the Commission's approach demonstrates an implicit presumption that any deviation above the industry-wide WACC must be excessive. This presumption is not supported by either economic theory or by market evidence".[32]

78. It is clear the Commission recognises there is a distinction between functional and functionless rents. The Commission, for example, has noted that: "It can be difficult to separate out higher profits due to superior performance from higher profits due to functionless monopoly rents."[33] The Commission has not, however, made this distinction in its treatment of excessive profits under the SPA.

79. Under low-cost DPP regulation it is reasonable to assume supranormal profits represent efficiency gains. This is in the context where exact analysis of efficiency gains versus unproductive gains is not realistic and where GPBs subject to the gas authorisation are already operating under price control. Further, non-regulated GPBs have been subject to an effective price freeze since 2008. Any risk that a subset of any profits above WACC might include legacy excessive profits is, in Vector's view, far outweighed by the corresponding promotion of incentives to invest and improve efficiency and the fact these profits are shared with consumers (albeit over a longer period of time).

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[30] Ibid, page 3.

[31] Powerco, *Submission on the 2010-2015 Default Price-Quality path for Electricity Distribution Draft Decision Paper*, 24 August 2011, para 51.

[32] Castalia, *Report to Powerco: Review of Draft Decision Paper for the 2010-15 Default Price-Quality Path for Electricity Distribution*, August 2011, page 2.

[33] Commerce Commission, *Regulatory Provisions of the Commerce Act 1986: Discussion Paper*, 19 December 2008, para 166.

80. Finally, even if the Commission continues to treat supranormal profits as excessive profits, the position remains that the Commission is required to limit these excessive profits, and not necessarily required to remove them in full at the start of each regulatory period.

How quickly should the benefits of efficiency gains be shared with consumers?

81. A key requirement for the Commission to successfully apply Part 4 of the Commerce Act is balancing the different subparts ((a) – (d)) of section 52A(1), to the extent there are trade-offs amongst the subparts, to maximise the long-term benefit of consumers. A key question to consider is: how long do regulated suppliers need to be able to sustain supranormal profits to promote the long-term interests of consumers?

82. The Commission's focus in the GPB SPA Discussion Paper, however, is primarily on rate of return concerns. Vector considers that the Commission should ensure it takes full account of the role supranormal profits can have in incentivising regulated suppliers to improve efficiency, and what this means for the size of future efficiency gains available to be shared with consumers. The Commission's only analysis of the Part 4 purpose is to briefly state that setting prices under section 533P(b) would "reduce the likelihood that any individual GPB would be able to extract excessive profits (s 52A(1)(d))",[34] and establish prices "not below the level required to earn a normal return (in promotion of section 52A(1)(a))".[35]

83. The difficulty with a rate of return focus is that the greater the extent to which regulated suppliers would be limited in their ability to extract excessive profits (subpart (d)), the weaker the incentives regulated suppliers would have to improve efficiency (subpart (b)). Such an aggressive approach would result in short-term benefits to consumers, through lower prices (to the extent they are passed onto consumers), but in the longer-term there would be less efficiency gains to share, and consumers would face higher prices than otherwise.

84. These issues were expressly recognised by the Commission at the commencement of the input methodology process where the Commission stated:[36]

> At the end of the regulatory period the form of control will be reviewed taking into account the cost reductions that the business has made in the previous period, thereby passing any efficiency savings on to consumers. **However, the resetting of the terms of control can lead to a partial weakening of the efficiency incentives, as it limits the length of time the business retains the benefit and therefore the value to the business of making that saving.** In addition, a potential problem with incentive-based regulation is that firms might prioritise short-term cost-minimisation over investment and innovation, or allow service quality to deteriorate to increase profits. **Any incentive scheme put in place should be aware of any such issues and try to take their effects into account.**
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> [Emphasis added]

85. The Commission has also previously noted "profits provide the incentive for firms to actively discover opportunities for efficiency gains and innovation"[37] and "the faster the rate of sharing efficiency gains with consumers, the

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[34] GPB SPA Discussion Paper, para 2.10.
[35] Ibid, para 2.11.
[36] Commerce Commission, *Regulatory Provisions of the Commerce Act 1986: Discussion Paper*, 19 December 2008, para 64.
[37] Ibid, para 129.

weaker the incentive for businesses to make efficiency gains".[38] It has also correctly observed the advantages of sharing benefits over time:[39]

> Although a price path might not deliver significant short-term results to consumers, consumers benefit in the long term from lower prices. Consumers are also likely to reap benefits from the efforts of large electricity lines businesses to minimise costs and provide innovative services, as under a price path such incentives are retained.

86. In terms of how long efficiency gains should be retained, the Commission has more recently stated that:[40]

> At least in the short-run, suppliers should expect to earn greater than normal returns when they discover new information and create new opportunities. In the medium- to long-term, however, any 'excessive profits' should be limited, just as they would be in a competitive market, where vigorous and effective competition would ensure that efficiency gains are ultimately shared with consumers.

87. Vector agrees with this view, but notes five years cannot credibly be considered the "medium term" in an industry with typical asset lives in the region of 50 years.[41] Furthermore, while some gains could be competed away in less than five years in a competitive market, other gains will take longer to be competed away. In any event, the Commission correctly refers to excessive profits being "limited" rather than removed in the medium to long-term.

88. In short, in order to meet the Part 4 purpose, Vector submits supranormal profits should be allowed to be retained, in part, beyond the five year regulatory period.

Commission supported gradual removal of supranormal profits under the previous regime

89. Under the previous Part 4A of the Commerce Act, the Commission formed the view that SPAs were not needed to limit the ability of regulated suppliers to extract excessive profits. Rather, it used X (the rate of change under the CPI -X) to gradually remove supranormal profits such that regulated suppliers were rewarded for efficiency gains. The Commission's approach was confirmed in the High Court, Court of Appeal and Supreme Court.[42]

90. In *Unison v Commerce Commission*, Wild J observed (in the context of Part 4A) that: "There is a significant amount of evidence that a P_0 adjustment, while it may… limit… the ability to extract excessive profits, will be counterproductive in terms of the… aim of providing strong incentives to approve [sic] efficiency and the quality of services."[43]

91. Similarly Dr Henry Ergas of NECG, in its cross-submission to the Commission for Unison on 21 March 2003, made the following comments:[44]

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[38] Commerce Commission, *Regulation of Electricity Lines Businesses: Discussion Paper*, 21 March 2002, para 8.63.
[39] Ibid, para 8.90.
[40] Commerce Commission, *Input Methodologies (Electricity Distribution Services) Draft Reasons Paper*, June 2010, para 2.7.22.
[41] While 5 years is widely accepted as an appropriate regulatory period, it is usual regulatory practice to ensure efficiency gains are retained for a longer period.
[42] *Unison Networks v Commerce Commission*, [2005] 3 NZCCLR 495 [2007] NZCA 49, [2007] NZSC 74.
[43] *Unison Networks v Commerce Commission*, [2005] 3 NZCCLR 495, paras [140].
[44] Para 4.

> We consider that a glide path is more appropriate for a threshold regime than a P_0 adjustment. This is because a P_0 adjustment immediately takes away excess profits earned by efficient companies, thereby reducing incentives to make such efficiency improvements in the first instance. While moving to a glide path is more likely to result in companies that have excessive returns due to monopoly pricing (rather than superior efficiency) keeping such returns for a longer period, it would have the significantly more favourable aspect of providing better incentives for efficiency improvements by companies over the five-year period.

92. Meyrick in its report to the Commission also advised that:[45]

> Profitability issues are often addressed … by the setting of a 'P_0' factor ... in the first year of the regulatory period to bring the business's profitability back to 'normal' levels … They [P_0 adjustments] also assume that the regulator has full information which is rarely the case.
>
> **A more reasonable approach to addressing the profitability problem is setting a 'glide path' where prices are adjusted over a period of several years to bring the business to a position of earning a normal return.** The overall X factor that a business is set will then consist of two components: the usual productivity-based component plus an additional component aimed at gradually eliminating excess profits or restoring normal returns, as the case may be.
>
> [Emphasis added]

93. The views referred to above remain entirely valid, despite the replacement of Part 4A of the Commerce Act with a revised Part 4. The purpose in section 57E of Part 4A was similar to the Part 4 purpose including that it required that suppliers "are limited in their ability to extract excessive profits". Further, and importantly, there is now greater and express emphasis on promoting incentives to invest (where promotion of incentives to invest and improving efficiency are closely aligned).[46]

94. While Part 4 (section 53P) does not permit X to be used as a glide path,[47] the Commission remains able to develop an SPA methodology under Part 4 that removes supranormal profits gradually over time. Indeed, the Commission has previously stated that it is able to take account of efficiency gains in the SPA methodology.[48]

Commission's current approach effectively rate of return regulation

95. Under the Commission's current approach, not only are supranormal profits removed, efficiency gains are then only retained for the maximum five years if achieved in the first year of the regulatory period. Thereafter, the period of retention progressively decreases. This appears to be inconsistent with the Commission's reasoning in the past and contrary to international regulatory best practice.

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[45] Meyrick and Associates report to the Commerce Commission, *Regulation of Electricity Lines Businesses, Analysis of Lines Business Performance – 1996–2003*, 19 December 2003, page 59.

[46] For a discussion of the policy underlying under the Act and the focus on incentives to invest see Vector*, Submission in response to the Commerce Commission's Draft Reasons Paper for Electricity Distribution Businesses and Gas Pipeline Businesses Asset Valuation*, 23 August 2010 paras 9 - 27. In relation to the trade off between opex and capex, see the affidavit of Allan Carvell dated 9 June 2011 filed in *Vector v Commerce Commission* (CIV 2011-485-536).

[47] Section 53P requires that X be based (6) on a generic measure of long-run productivity improvement with (7) adjustments for the effects of inflation on the inputs of suppliers. The Commission can now only set different X factors for regulated suppliers, in relation to a DPP, under section 53P(8) to (a) avoid undue financial hardship to a supplier, minimise price shocks to consumers or (b) as an incentive for the supplier to improve quality of supply.

[48] Commerce Commission, *Input Methodologies (Electricity Distribution) - Emerging Views Paper*, 23 December 2009, page 134.

96. Some of the Commission's statements could be interpreted as implying regulated suppliers would be able to hold onto efficiency gains for more than five years. For example, the Commission has stated that: "Under the proposed adjustment framework a supplier would keep the efficiency gains from a transaction at least until the end of the regulatory period" and that "many of the gains may also be retained until the end of the next regulatory period".[49]

97. However, what the Commission is referring to is efficiency gains that are not realised until the next regulatory period. The regulated supplier will still only retain any such efficiency gains for a maximum of five years. Stating that a regulated supplier will be able to retain efficiency gains "at least until the end of the regulatory period" is simply not accurate when the Commission intends to remove all realised efficiency gains at the end of each regulatory period. "At least" would be more accurate if stated as "at most".

98. The approach proposed by the Commission for mergers and acquisitions of allowing transaction costs related to the mergers and acquisitions to be recovered through an uplift in prices is helpful, but does not go far enough in terms of incentivising efficiency improvements. It should be borne in mind that there are risks and costs associated with mergers and acquisitions that are not covered by transaction costs. If the benefits from efficiency gains are capped at a maximum of five years – even with compensation for transaction costs – the incentives may be muted.

99. In addition, there invariably will be other investments and initiatives that may result in efficiency improvements, but have upfront costs, where the Commission is not providing for recovery of transaction costs or equivalent. If "The Commission considers it is appropriate for suppliers to share with consumers both efficiencies from mergers and acquisitions and the costs incurred in achieving these efficiencies",[50] the same should apply for other initiatives.[51]

100. The Commission has pointed out that: "There is… a greater incentive to attain efficiency enhancements in the first year of the regulatory period than there is at any other time…".[52] This is because the regulated supplier would get a full five years' benefit from the efficiency gain. But by the same logic, if the regulated supplier is able to retain (at least part of) the efficiency gains for a longer period than five years, the incentives to attain efficiency enhancements will be greater still.

101. The shorter the time period a regulated supplier has to enjoy the benefits of improved efficiency the closer the operation of the DPP will be to de facto rate of return regulation. Vector agrees with Mighty River Power that: "Rate of return regulation does not mimic the outcomes of competitive markets as it precludes above normal profits (for well performing firms) and offers little

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[49] Commerce Commission, *Starting Price Adjustments for Default Price-Quality Paths Discussion Paper*, August 2010, para X.6.

[50] Commerce Commission, *Starting Price Adjustments for Default Price-Quality Paths Discussion Paper*, August 2010, para 5.9.

[51] Particularly in electricity to the extent section 54Q of the Commerce Act may be applicable.

[52] Commerce Commission, *Input Methodologies (Electricity Distribution Services) Draft Reasons Paper*, June 2010, para 8.8.2.

or no incentive to improve efficiency".[53] Powerco and Castalia have expressed similar concerns:

> By contrast, the proposed DPP effectively introduces a naïve style of rate of return regulation. The shortcomings of an approach that emphasizes resetting prices to bring returns into line with an estimated cost of capital over short periods of time were recognised by Stephen Littlechild and others when designing the price cap approach adopted in the United Kingdom from the mid-1980s, and later adapted and applied in Australia in its building blocks approach to price control ... The Commission has failed to recognise that this objective is quite different from limiting returns to an estimate of the cost of capital over a short period of time. By effectively converting the DPP into a form of rate of return regulation, the Commission is embarking on a form of regulation largely abandoned by other jurisdictions.[54]

> The guiding principle … seems to be to bring all companies' expected returns … into line with an estimate of the industry WACC. Such an approach has similarities with "cost plus" regulation that has been subject to extensive international critique, and is no longer the norm in comparable regulatory systems overseas.[55]

102. A five year cap on regulated suppliers retaining efficiency improvements is likely to limit the extent to which regulated suppliers have incentives to improve efficiency, particularly where the efficiency gains require innovation and investment, as the regulated supplier will incur the full cost of such initiatives but only retain the benefits for a relatively short period of time. The efficiency gains regulated suppliers have incentives to pursue may be limited to 'low-hanging fruit'.

Final comments

103. Vector agrees with Castalia about "The relative lack of rigor in consultation over the DPP reset methodology...".[56] Vector recognises the breadth of work the Commission has to undertake to implement the new Part 4 of the Commerce Act, and the compressed timeframes the Commission is statutorily required to adhere to. However, these are substantial matters that will have a very large impact on the success of the Commission's application of Part 4 of the Act. In particular, the way the Commission sets its SPAs will have a direct impact on regulated suppliers' ability and willingness to invest.

104. The Commission has appropriately stated that: "The role of the starting price adjustment… is to estimate whether the cap at the end of the previous regulatory period is the appropriate starting point for the next regulatory period",[57] but has not provided any framework around determining this beyond an assumption that the SPA should be set such that current and projected profits are expected (by the Commission) to be a normal rate of return.

105. The Commission should, accordingly, include further analysis in its next consultation paper as to how section 53P(3) should be applied to best meet section 52A of the Commerce Act, including a full analysis of the extent of current and projected supranormal profits that should be extracted in any

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[53] Mighty River Power, *Submission to the Commerce Commission Regulatory Provisions of the Commerce Act*, 16 February 2009, para 26.

[54] Powerco, *Submission on the 2010-2015 Default Price-Quality path for Electricity Distribution Draft Decision Paper*, 24 August 2011, para 12.2.

[55] Castalia report to Powerco, *Review of Draft Decision Paper for the 2010-15 Default Price-Quality Path for Electricity Distribution*, August 2011, page 3.

[56] Ibid, page 19.

[57] Commerce Commission, *Starting Price Adjustments for Default Price-Quality Paths Discussion Paper*, August 2010, para 4.11.

SPAs. The staggered SPA methodology set out in the next section provides an appropriate framework for undertaking this analysis.

ALTERNATIVE STAGGERED SPA

106. In this section, Vector sets out the framework for a staggered SPA methodology which it considers appropriately balances the various Part 4 objectives so that the overall Part 4 purpose is promoted. While further work should be undertaken to determine the optimal extent of efficiency sharing, Vector considers that this proposal provides a sound starting point.

Outline of proposal

107. Instead of making an SPA at the beginning of each regulatory period that removes all current and projected supranormal profits, the Commission should adopt a staggered SPA methodology under which it:

    a. makes an SPA that would remove part of the current and projected supranormal profits at the start of the regulatory period; and then

    b. includes the remainder of the SPA that would have been required to get prices down to a level that removed all current and projected supranormal profits in the subsequent regulatory period(s).[58]

108. In the context of the Part 4A regime, the Commission previously suggested that "a lower P_0 adjustment could be imposed in exchange for a higher X".[59] What Vector is proposing is that a lower SPA be offset by an uplift in subsequent SPAs.

109. For example, if the Commission considers Vector's EDB needs an SPA of -8.5%, as currently proposed, to eliminate current and projected supranormal profits, the Commission could make a -4.25% adjustment initially, and then add the remaining -4.25%, required to get prices down to that required for a normal rate of return, to the next regulatory period's SPA.

110. After the first regulatory period, each SPA would be a composite of removal of any remaining supranormal profits from the beginning of the previous regulatory period plus removal of part of the supranormal profits arising from efficiency gains in the intervening periods.[60]

111. This would limit, but not immediately remove, all supranormal profits that the Commission forecasts for the regulatory period, enabling above normal returns to be removed over two (or more) SPAs, rather than in a single SPA.

112. The regulated supplier would get the full benefit of any efficiency gain it makes for the remainder of the regulatory period, plus get to keep some, but not all, of the efficiency gain for the next regulatory period. The regulated supplier would consequently receive a greater reward for

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[58] For the avoidance of doubt, Vector is only proposing that the stagger apply where a downward SPA is required. Where a regulated supplier's current and projected profitability is below a normal rate of return there are no supranormal profits to retain as a reward for efficiency gains so the stagger concept becomes redundant. The Commission can accordingly treat these regulated suppliers in the way it is presently proposing, ie use the SPA to get profitability to a normal rate of return, but phase the price increase in over time if needed to avoid a rate shock to consumers.

[59] Commerce Commission, *Regulation of Electricity Lines Businesses: Discussion Paper*, 21 March 2002, footnote 37.

[60] The proposed approach is consistent with section 53P(4). Each SPA would relate to current and projected supernormal profits only (including any supranormal profits remaining from the previous SPA).

efficiency gains, which would commensurately increase its incentives to improve efficiency.

113. Vector is of the view that while there would be an initial cost to consumers (prices not as low as they otherwise would have been in the first regulatory period), over time consumers should benefit from greater efficiency gains available to be shared.

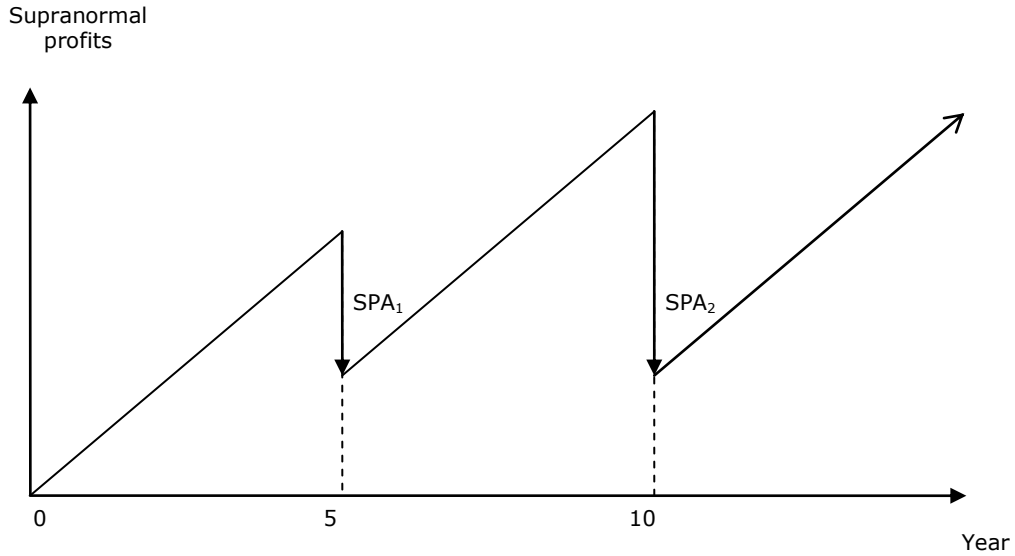
114. This should be a win-win for consumers and regulated suppliers. Regulated suppliers that operate efficiently would be rewarded with greater returns, and consumers would have lower prices than otherwise over the medium to long-term.

115. As Wild J has observed: "Allowing a business to retain some of the benefits for a period preserves its incentive to make ongoing efficiency gains, for the long-term benefit of consumers. The Commission has previously pointed to abundant evidence and submissions to it that P_0 type control (e.g. limiting profits to an 8% return on WACC) would dull incentives to make efficiency gains, because little or none of the resulting benefit accrued to the LELB."[61]

Stylised model

116. The stylised diagrams below illustrate Vector's proposed staggered SPA methodology.[62] **Figure 2** assumes a constant rate of continuous efficiency gains by the regulated supplier, with half of the efficiency gains shared at the beginning of the next regulatory period, and the remainder shared at the beginning of the subsequent regulatory period. The SPA at the start of the second period is greater than from the first because it includes sharing of efficiency gains from two regulatory periods.

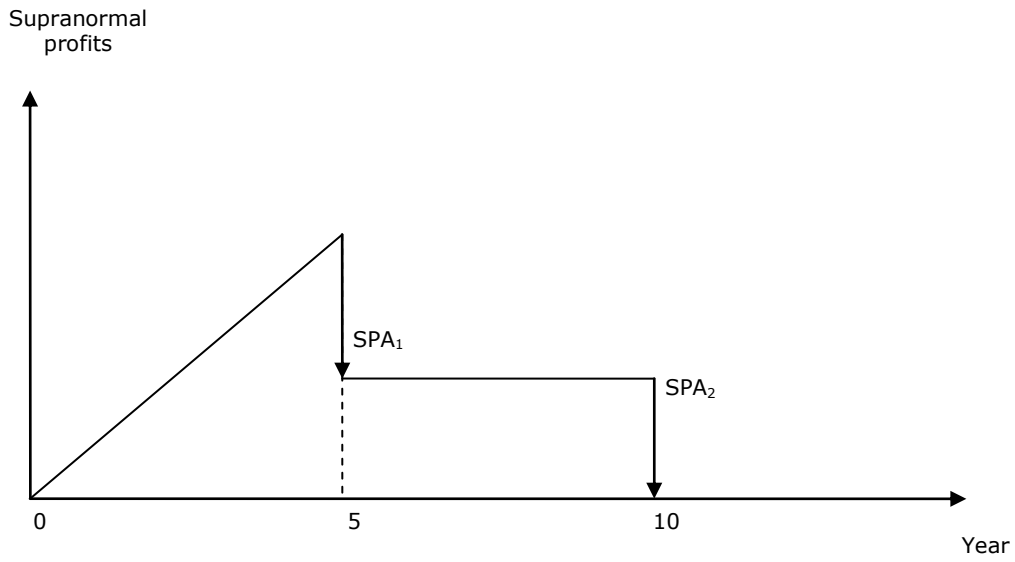
Figure 2: Staggered SPA methodology



117. **Figure 3** shows what would happen if the regulated supplier made no further efficiency gains after the first regulatory period. All supranormal profits would be removed by the beginning of the second regulatory period.

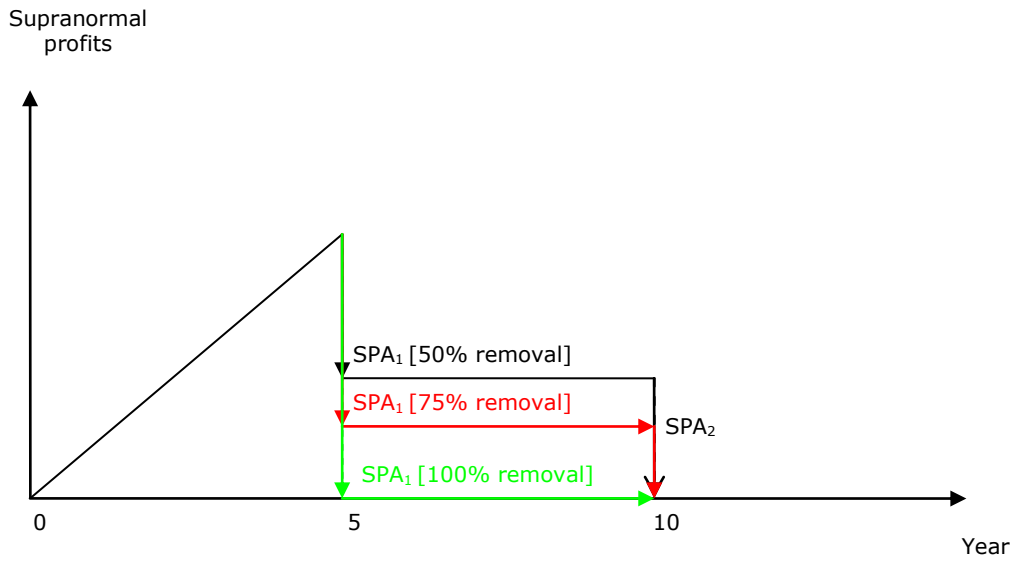
[61] *Unison Networks v Commerce Commission*, 28 November 2005, Wild J, HC Wellington, CIV-2004-485-960, para 119.
[62] For simplicity the diagrams assume there is no cost to making efficiency gains.

Figure 3: Efficiency reward under a staggered SPA methodology



118. The area between SPA_1 and SPA_2 represents the additional reward (additional supranormal profits) for efficiency gains that would occur under a staggered SPA methodology. It would be a simple matter for the Commission to alter the balance between limiting supranormal profits and rewarding efficiency gains, by adjusting the percentage of current and projected supranormal profits that are removed in any given SPA, as shown by **Figure 4**.

Figure 4: Different degrees of "staggering"



119. The trade-off the Commission needs to make is the short-term benefit to consumers of earlier sharing of efficiency (lower supranormal profits) versus lower potential efficiency gains available to be shared in the future, as shown in the **Figures 5 and 6**. A lower immediate sharing of efficiency gains would enable regulated suppliers to earn greater supranormal profits, but this in turn would result in greater future efficiency gains available to be shared with consumers.

Figure 5: Profit and efficiency trade-off with different "staggering"

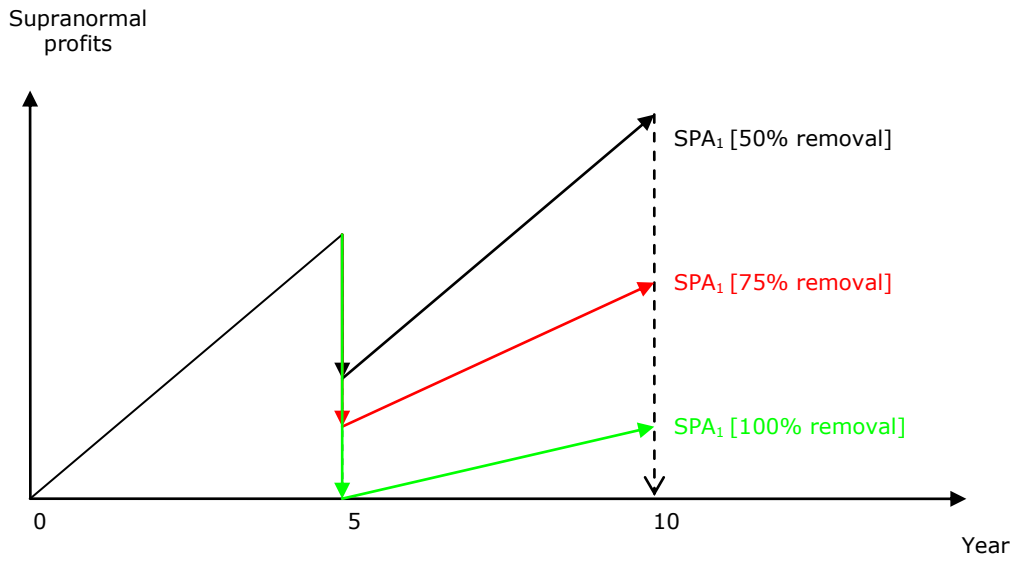
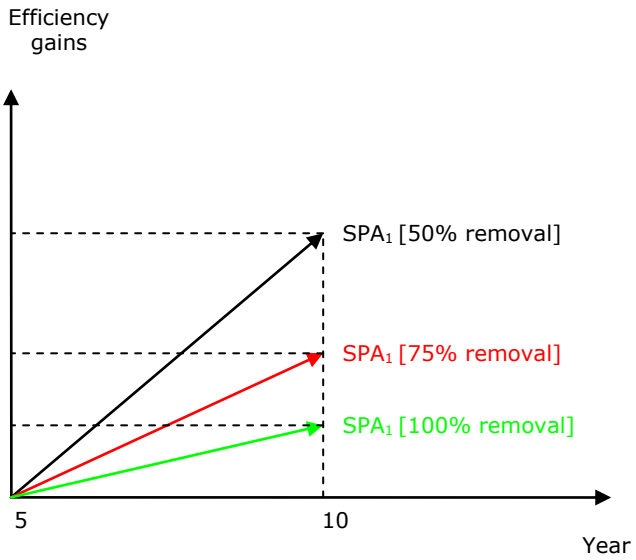


Figure 6: Impact on efficiency from removal of supranormal profits



Further matters for development

120. There are numerous variations on the staggered approach the Commission could take, depending on the analysis of what is required to both promote incentives to improve efficiency and limit excessive profits. Matters for consideration include:

    a. the number of regulatory periods the Commission would allow regulated suppliers to keep some of the efficiency gains over; and

    b. how graduated the removal should be. For example, the Commission could remove two-thirds, half, one-third or any proportion between

0% and 100% of current and projected supranormal profits in the initial SPA, with the remainder removed in subsequent adjustments.[63]

121. In proposing a staggered SPA methodology, Vector recognises that further work would be desirable regarding the extent that future efficiency gains are likely to be possible. The Commission needs to satisfy itself that the expected efficiency benefits from providing greater rewards to improve efficiency would outweigh the cost to consumers of higher prices in the short-term.[64] The greater the scope for efficiency gains, and the greater surety consumers would get this future reward, the less aggressive the Commission should be in removing short-term supranormal profits versus providing rewards to improve efficiency, and vice versa.

122. Vector **recommends** that the Commission:

    a. undertake further analysis, as part of the SPA IM consultation, as to what extent of removal of current and projected supranormal profits in any SPA would provide the optimal incentives for regulated suppliers to improve efficiency, including by innovating and investment; and

    b. adopt a staggered SPA methodology in the SPA IMs whereby the initial SPA is set to remove part, but not all, of current and projected supranormal profits (if any), with the remaining adjustment that would be needed to eliminate all current and projected supranormal profits staggered over subsequent (two or more) regulatory periods.

Incremental Rolling Incentive Scheme

123. Vector's proposal for a staggered SPA methodology that does not immediately remove all current and projected supranormal profits at the start of each regulatory period is consistent with the philosophy behind the Commission's previous Incremental Rolling Incentive Scheme ("**IRIS**") proposal.

124. The IRIS proposal recognised that if all efficiency gains are passed on in full to consumers at the beginning of each new regulatory period, regulated suppliers would have diminishing incentives to improve efficiency over the regulatory period. At the beginning of the regulatory period the regulated supplier could gain five years of benefit, a year later four years of benefit and so on. The IRIS addresses this but still caps the reward for efficiency gains at five years.

125. The staggered SPA methodology recognises that extending the period over which regulated suppliers are rewarded for efficiency gains beyond five years will result in greater incentives to improve efficiency. In other words, if a regulated supplier could hold on to efficiency gains for six years, rather than a maximum of five, their incentives to improve efficiency would be

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[63] The SPAs would not necessarily need to be equally weighted for each regulatory period. For example, the split could be 50% initially, 30% in the next regulatory period and the remaining 20% in the regulatory period after that (or the opposite with 20%, then 30% then 50%).

[64] Many submitters to the Electricity Authority in relation to HVDC pricing, including Vector, made similar comments in relation to the proposal to switch to postage stamp pricing, which would result in higher transmission costs to consumers. The difference there was that the evidence the Electricity Authority provided indicated that the purported efficiency gains (many submitters thought there would be disbenefits) were not sufficient to compensate consumers for this extra cost. As a consequence, all consumers and consumer groups that submitted on the matter objected to the proposal.

greater still, ditto seven, eight and nine years, or two or more regulatory periods.

126. It is still critical, however, that cost reduction incentives in the staggered SPA methodology are not skewed to the early part of any regulatory period. That is, an IRIS type mechanism should be built into the staggered SPA methodology.

127. Vector notes that, in his review of the EDB/GPB IM Draft Reasons Papers, Dr Michael Pollitt concluded it would be desirable to apply an IRIS mechanism to a DPP, stating that:[65]

> [T]he introduction of a rolling incentive mechanism (or Incremental Rolling Incentive Scheme - IRIS) to avoid distortions in the strength of the incentive across a price control period is important. The absence of such a mechanism skews cost reduction initiatives to the early years of the price control (and raises certain input costs if all regulated companies are incentivised to make investments in the same year) and results in declining incentive power as the end of the price control period approaches.
>
> …
>
> I think the introduction of a rolling incentive mechanism is very much to be encouraged. However I wondered why it would not apply under a DPP. It would seem to be universally desirable to have such an incentive.

128. Submitters on the EDB/GPB IM Draft Reasons Papers also considered that an IRIS should apply to a DPP. The Commission agreed there was value in an efficiency carry over mechanism, but that it was not practically possible because of the absence of an opex baseline.

129. Vector **recommends** that a mechanism, similar to an IRIS, be incorporated into the staggered SPA methodology.

130. In the alternative and at the very least, Vector **recommends** that the Commission amend the input methodology determinations so that an IRIS applies to DPPs (noting that Vector considers a staggered SPA methodology is the materially better approach). Vector has recommended an appropriate approach in its submissions on the EDB DPP.[66]

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[65] Dr Michael Pollitt, *Input Methodologies: Expert Review of the New Zealand Commerce Commission's Draft Decisions and Reasons for Electricity Distribution Services and Gas Pipeline Services*, July 2010, pages 3 and 8.

[66] Vector, *Submission to Commerce Commission on Electricity Default Price-Quality Path Discussion Paper*, 17 July 2009, pages 27-30. Also see Vector, *Submission in response to the Commerce Commission's Input Methodologies Draft Reasons and Determinations for Electricity Distribution Businesses and Gas Pipeline Businesses: Cost Allocation, Regulatory Tax, Pricing Methodology, Rules and Processes*, 9 August 2010, paras 248-252 and Appendix A.

INFORMATION REQUIRED TO SET STARTING PRICES

131. There are obvious overlaps in terms of the information required for gas and electricity SPAs. To that end, Vector refers to submissions dated 24 August 2011 on the Commission's "Draft Decision on Starting Price Adjustments for Electricity Distribution Businesses". In particular, Vector draws the Commission's attention to:

    a. Vector's concerns about the impact on the Global Financial Crisis on economic growth;

    b. the evidence Vector provided that ICP growth will not necessarily be the same as population growth;

    c. Vector's support for exclusion of productivity adjustments in opex; and

    d. Vector's view that the labour cost index derived by NZIER is overly optimistic, and provides significantly lower forecast of labour cost growth than is suggested by the information Vector relies on.

Overall approach to sourcing data for setting prices

132. There are a number of areas where the Commission has parked an issue stating that it is "planning to obtain independent expert advice on these matters":[67]

> Projections of some inputs required for this assessment are not currently available, specifically throughput and capital expenditure.[68]
>
> We proposed to develop an uptake factor to estimate the projected growth in revenue …[69]
>
> Throughput is the primary driver of variable revenue for GDBs. As we are not aware of any existing independent projections of throughput of GDBs we are planning to obtain independent expert advice on a preferred option for forecasting variable charges for GDBs.[70]

133. These are substantive matters that will impact directly on whether regulated suppliers can expect to be able to recover a commercially sustainable (normal) rate of return through the regulatory period. The setting of capex projections, in particular, may directly impact on the level of investment and act as a cap on capex.[71]

134. Vector is cognisant the Commission is working under compressed timeframes, but is concerned such substantive matters are yet to be addressed. This reinforces the questions Vector has raised about whether there is robust enough data available to rely on to undertake a price reset for the 2012-17 regulatory period. Regardless, this should be addressed as part of the SPA IM.

135. Vector believes the best way forward for addressing these data gaps would be for the Commission to hold an industry workshop on how to obtain the information the Commission is seeking, including working with interested parties on developing terms of reference and commissioning independent expert advice. Given the tight timeframes, it would be undesirable if the first input interested parties have is after the work had been completed and

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[67] GPB SPA Discussion Paper, para 4.4.
[68] Ibid.
[69] Ibid, para 4.17.
[70] Ibid, para 4.22.
[71] Refer to the sub-section below on "Projecting capital expenditure".

feed into the Commission's SPA modelling. Regardless, Vector also suggests the Commission make publicly available the independent expert advice at the earliest opportunity, rather than waiting for the release of the Draft Determination to provide this information. Ideally, the consultation on the independent expert advice would occur prior to the release of the Draft Determination, but we acknowledge this would be unlikely to be practicable, unless the date for the release of the Draft Determination was delayed.

136. Vector **recommends** the Commission liaise with industry in obtaining independent expert advice in relation to throughput and capex, and release the advice prior to the consultation on the Draft Determination.

Use of 2010/2011 data

137. The Commission has requested submissions "as to whether 2010/2011 data should also be required and used for our final determination for GPBs".[72]

138. Vector believes that use of the most recent information predating the regulatory period best represents current profitability and is the best basis for projecting future profitability. Vector is of the view that use of 2010/2011 data would best ensure prices are based on current profitability, as well as providing a more sound basis for determining projected profitability. 2011 data would accordingly best meet the requirement of section 52P(3)(b) of the Commerce Act that "starting prices must be … based on the current and projected profitability of each supplier".

139. The Commission's Consultation Paper "Default Price-Quality Path for Gas Pipeline Businesses: Draft Information Requests and Process Update", dated 3 June 2011, proposed that data be required for the year ended 30 June 2011. As discussed at a teleconference between Commission and Vector staff on 24 June 2011, 2010/2011 data for GPBs could be provided to inform the SPA decision.

140. If this is problematic for some GPBs Vector would be comfortable with the Commission taking the type of compromise approach proposed by PricewaterhouseCoopers that: "This could be an optional adjustment, where EDBs who are able to demonstrate that the 2010/11 revenue, opex and capex data are unacceptably inaccurate are able to provide the Commission with 2010/11 revenue, opex and capex data … for inclusion in the model. In our view it is unreasonable to prohibit 2010/11 outcomes from the model where they are available in a format which is consistent with the model's requirements."[73]

141. Vector **recommends** the Commission:

    a. use 2010/2011 data in its price reset for GPBs; and

    b. provide GPBs with no less than six weeks' notice of the requirement to provide this data.

Use of individual regulated supplier data

142. Vector believes the Commission's move to use more regionalised or individual specific forecasting data is an improvement on using national

[72] GPB SPA Discussion Paper, para 4.7.

[73] PricewaterhouseCoopers, *Submission on the Commerce Commission Draft Decisions Paper 2010-15 Default Price-Quality Path for Electricity Distribution*, 16 May 2011, para 18.

statistics and averages. This should help reduce the scale of regulatory errors. Gas uptake varies substantially from region to region.

143. Vector believes where individual specific data is available, and this can be shown to be reasonably robust, the Commission should rely on that data. Vector also agrees with GasNet that the Commission should seek "information directly from each business, rather than approximating it through industry-wide assumptions and estimates".[74]

144. Vector also agrees with GasNet that the Commission should obtain estimates of volume growth, capex forecasts and opex forecasts from each regulated supplier. Vector believes it would be preferable to use regulated supplier's information to determine projected growth in revenue, capex and opex.

145. The Commission should expect regulated suppliers to have reliable business forecasts that should suffice with appropriate governance (for example, directors' certification).

146. Vector **recommends** the Commission:

    a. review Vector's and other parties' submissions on the Commission's "Draft Decision on Starting Price Adjustments for Electricity Distribution Businesses", dated 24 August 2011, in determining how to calculate the information required for gas SPAs; and

    b. uses independent forecasts as a fall-back option, but uses a regulated supplier's information on opex, capex and revenue growth where the regulated supplier can satisfy the Commission the information is more robust than independent forecasts.

Projecting revenue growth

147. The approach the Commission proposes to take for projecting revenue growth for gas has strong overlaps with the approach for electricity, with the Commission proposing "to use the same method to project real revenue growth for GDBs as have applied to EDBs".[75] To that end, Vector refers the Commission to our "Submission to the Commerce Commission on Draft Decision on Starting Price Adjustments for Electricity Distribution Businesses", 24 August 2011.

148. In addition, Vector has the following observations about fixed revenue growth:

    a. population growth and ICP growth are not perfectly correlated. Vector's electricity distribution disclosure AMP shows that population growth is greater than ICP growth;[76]

    b. the link in population growth and ICPs for gas will be even less precise as gas is a discretionary service for households;

    c. uptake factors based on the existing customer base and population can be a poor predictor of uptake from additional population growth; and

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[74] GasNet, *Submission on DPP Draft Information Requests and Process Update Consultation Paper*, 17 June 2011, para 18.

[75] GPB SPA Discussion Paper, para 4.9.

[76] Vector, *Submission to the Commerce Commission on Draft Decision on Starting Price Adjustments for Electricity Distribution Businesses*, 24 August 2011, figure 1.

d. Vector's experience is that the ratio between population growth and ICP growth is not constant over time.

149. Vector **recommends** that population growth forecasts be adjusted to reflect that ICP growth is variable with respect to population growth in determining revenue growth from fixed charges. A further adjustment would be required for gas (that would not be necessary for electricity) to reflect that uptake of gas will be lower than the growth in ICPs. Vector also **notes** that its draft gas AMPs contain revenue projections, broken down by region which the Commission could use.

Projecting capital expenditure

150. A problem with the proposal to use historic capex to forecast future capex is that the Commission could effectively lock in capex at historical levels, which may result in capex that is less than required going forward.

151. Regulated suppliers may be incentivised to set their capex at levels no higher than projected by the Commission, rather than at the levels presently set in our gas distribution and transmission AMPs, making the Commission's forecasts a self-fulfilling prophecy.

152. Vector **notes** use of backward looking projections of capex: (i) may understate the capex the GPB intended to make in its AMP; and (ii) this could result in the Commission effectively locking in capex at historic levels.

CONCLUDING REMARKS AND RECOMMENDATIONS

Development of a robust SPA IM

153. Part 4 of the Commerce Act should be applied in a way that mimics, or is consistent with, competitive market dynamics by rewarding regulated suppliers with supranormal profits as a reward for, and incentive to, improving efficiency. Such supranormal profits ultimately are to the long-term benefit of consumers, as they increase the size of efficiency gains available to be shared with consumers. They are functional, useful and benefit consumers so are not necessarily excessive. If the Commission is successful in providing incentives to improve efficiency it should expect to see regulated suppliers earning supranormal profits for sustained periods of time.

154. The Commission could better meet the purpose in section 52A of the Commerce Act, in promoting the long-term interests of consumers, by:

    a. allowing regulated suppliers a margin over WACC as a safety mechanism for regulatory errors;

    b. implementing the Commission's previous IRIS proposal; and

    c. instead of making an SPA at the beginning of each regulatory period that removes all current and projected supranormal profits, adopt a staggered SPA methodology whereby the initial SPA is set to remove part, but not all, of current and projected supranormal profits (if any), with the remaining adjustment that would be needed to eliminate all current and projected supranormal profits staggered over subsequent (two or more) regulatory periods.

Use of 2010/2011 data

155. Vector is of the view that use of 2011 data would best ensure prices are based on current profitability, as well as providing a more sound basis for determining projected profitability. 2011 data would accordingly best meet the requirement of section 52P(3)(b) of the Commerce Act that "starting prices must be … based on the current and projected profitability of each supplier".

Information required to set starting prices

156. Vector believes it would be preferable to use information, to the extent it is available and robust enough to be relied on, from AMPs to determine projected growth in revenue, capex and opex. Vector acknowledges that the gas AMPs have not yet been required to be publicly disclosed, and therefore have not necessarily been subject to the regulatory requirements for disclosure. The quality and reliability of gas AMPs, as they presently stand, may well vary.

157. The risk if the Commission does not do this is highlighted by Vector's capex in its AMP. The forecast capex is substantially higher than past capex. If the Commission relies on forecasts based on past capex it could prevent Vector and other GPBs from making the investment in capex that they intended.

Recommendations

158. For convenience, Vector's recommendations are repeated below in full:

159. Vector **notes** it supports the Commission's proposal to: (i) apply a revenue cap for gas transmission; (ii) set X at 0 for gas; and (iii) use regional or individual specific data rather than national data for forecasting if there is going to be an SPA, subject to Vector's position that data for GPBs is currently unsuitable for price setting purposes.

Enabling recovery of a normal return

160. Vector **notes** regulated suppliers that do not expect to be able to earn a normal rate of return under a DPP:

    a. will not necessarily apply for a CPP because of the cost and risk of CPP applications; and

    b. may cut capex and/or opex, in ways that are not necessarily in the long-term interests of consumers, as a way of mitigating or eliminating expected losses.

161. Without prejudice to Vector's position that the Commission should not reset starting prices given the current issues with GPB information, Vector **recommends** the Commission:

    a. allow a safety margin for regulatory errors in the SPA IM; and

    b. not rely on CPPs as the sole safe-guard against deficiencies in DPPs.

Avoiding operating SPA/DPP as rate of return regulation

162. Vector **recommends** that the Commission include further analysis in its next consultation paper as to how section 53P(3) should be applied to meet section 52A of the Commerce Act, including a full analysis of the extent of current and projected supranormal profits that should be extracted in any SPAs.

Alternative staggered SPA methodology

163. Vector **recommends** the Commission:

    a. undertake further analysis, as part of the SPA IM development, to determine what extent of removal of current and projected supranormal profits in any SPA would provide the optimal incentives for regulated suppliers to improve efficiency, including by innovating and investment; and

    b. adopt as a starting point for this analysis, a staggered SPA methodology in the SPA IMs whereby the initial SPA is set to remove part, but not all, of current and projected supranormal profits (if any), with the remaining adjustment that would be needed to eliminate all current and projected supranormal profits staggered over subsequent (two or more) regulatory periods.

Incremental Rolling Incentive Scheme

164. Vector **recommends** that a mechanism, similar to an IRIS, be incorporated into the staggered SPA methodology.

Overall approach to sourcing data for setting prices

165. Vector **recommends** the Commission liaise with industry in obtaining independent expert advice in relation to throughput and capex, and release the advice prior to consultation on the Draft Determination.

Use of 2010/2011 data

166. Vector **recommends** the Commission:

    a. use 2010/2011 data in its price reset for GPBs; and

    b. provide GPBs with no less than six weeks' notice of the requirement to provide this data.

Use of individual regulated supplier data

167. Vector **recommends** the Commission:

    a. review Vector's and other parties' submissions dated 24 August 2011 on the Commission's "Draft Decision on Starting Price Adjustments for Electricity Distribution Businesses" in determining how to calculate the information required for gas SPAs; and

    b. uses independent forecasts as a fall-back option, but uses AMP information where the regulated supplier can satisfy the Commission the information is more reliable than the independent forecasts.

Projecting revenue growth

168. Vector **recommends** that population growth forecasts be adjusted to reflect that ICP growth is variable with respect to population growth in determining revenue growth from fixed charges. A further adjustment would be required for gas (that would not be necessary for electricity) to reflect that uptake of gas will be lower than the growth in ICPs. Vector also **notes** that its draft gas AMPs contain revenue projections, broken down by region which the Commission could use.

Projected capital expenditure

169. Vector **notes** use of backward looking projections of capex: (i) may understate the capex the GPB intended to make in its AMP; and (ii) this could result in the Commission effectively locking in capex at historic levels.