SUBMISSION TO COMMERCE COMMISSION ON GAS PIPELINE BUSINESS DEFAULT PRICE PATH RESET

CREATING A NEW ENERGY FUTURE

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EXECUTIVE SUMMARY

This is Vector's submission on the Commerce Commission's (the Commission) draft p

Topic	Vector view
Characteristics of the default price path (DPP)	• Vector encourages the Commission not to increase the costs of DPP regulation given the explicit expectation of the DPP to be low cost.
Setting expenditures	• Vector recommends the Commission refrains from adopting an approach for setting expenditures involves significant value judgements and discretion. • Vector recommends expenditures are assessed with materiality thresholds at a total level before any further inquiry can be made. • The Commission must apply uniform reasonable materiality thresholds for assessing expenditures that are reasonably well-defined across suppliers. • Vector recommends the Commission is principled with its treatment of economies of scale issues arising from the Vector gas transmission, non-Auckland gas distribution network and Maui Development Ltd (MDL) transmission pipeline sales. The Commission must recognise the loss of economies of scale to Vector's business from the sale of the Vector transmission and non-Auckland distribution networks. • The Commission must be *bone-fide* with the new expenditure framework as a means of improving the supplier expenditure profile rather than using the approach to justify significant expenditure cutting. • The Commission must be confident the proposed new expenditure assessment framework can work in the context of the First Gas Ltd (FGL) transactions which have redefined boundaries for networks, reduced the validity historic asset management plans (AMPs) and historic financial information only being partially updated for the asset sales.
Inflation Forecasting	• We recommend the Commission undertake steps to improve its approach to inflation forecasting. Given the persistent bias of Reserve Bank of New Zealand (RBNZ) to over-forecast inflation and diverging views with market estimates of forecast inflation, the Commission's inflation forecasts are

Topic	*Vector view*
	compromising supplier expectations of achieving the regulatory return.
Constant price revenue growth (CPRG) forecasting	• Vector encourages the Commission to ensure CPRG does not compromise a supplier's ability to recover its building block revenues and provides an incentive for the supplier to grow its network. • Vector recommends the Commission is conservative with its CPRG forecast. This is prudent given the inherent challenges the Commission's consultant Concept Consulting had with identifying any meaningful drivers for gas demand especially given its status as a 'fuel of choice'.
Service Quality measures	• Vector encourages the Commission not to extend the new major outages quality standard to gas distribution businesses (GDBs) given there has been little evidence of customer concern about such events for GDBs • Vector supports a collaborative approach for any new service quality information disclosure metric to ensure the requirements do not impose onerous requirements to ensure reporting meets auditing compliance standards.

INTRODUCTION

1. This is Vector's submission on the Commission's consultation *Default Price-Quality Paths for Gas Pipelines Services from 1 October 2017 - Policy for Setting Price Paths and Quality Standards* (Policy Paper) published on 30 August 2016. Vector's contact person for this submission is:

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2. No part of this submission is confidential.

3. Vector owns and operates a GPB in the Auckland region which is subject to DPP regulation under Part 4 of the *Commerce Act 1986* (the Act). Vector is interested in ensuring the policy settings for resetting the DPP for GPBs are consistent with the section 52A purpose of Part 4 of the Act.

THE CHARACTERISTICS OF THE DEFAULT PRICE PATH

5. Under Part 4 of the *Commerce Act 1986* (the Act), the DPP/CPP regime was intended:

> *…to provide a relatively low-cost way of setting price-quality paths for suppliers of regulated goods or services, while allowing the opportunity for individual regulated suppliers to have alternative price quality paths that better meet their particular circumstances.*[1]

6. This low-cost characteristic of DPPs for determining price-quality outcomes was also observed by the High Court:

> *But much of a DPP is generic and the Commission's capacity to take account of a supplier's specific circumstances* <u>is limited</u> *by the intention that a DPP be relatively low cost.*[2]

7. The Commission's proposed approach for the forthcoming GPB DPPs of expecting businesses to pass unspecified "scrutiny" and hold documentation to overcome subjective scrutiny will significantly increase the regulatory burden for stakeholders.

8. The approach also undermines the interaction of DPPs with CPPs. The High Court was clear about the purpose of a CPP:

> *In contrast to industry-wide DPP regulation, a CPP provides an alternative price-quality path addressed to the proponent supplier's particular circumstances.*[3]

9. Accordingly, the proposed approach appears to violate the explicit expectation of DPPs to be a low cost form of regulation. We encourage the Commission not to deviate from the low cost requirements of Part 4 of the Act by unwittingly increasing the regulatory burden involved with DPPs.

SETTING EXPENDITURES

General comments

10. A major change in the Commission's Policy Paper is its approach for setting expenditures for the (2018-2023) DPP.

11. For the previous (2012-2017) DPP the Commission applied a more generic (i.e. low cost) and transparent approach for setting expenditures. The Commission estimated operating expenditure (opex) using supplier financial information from their most recent completed reporting period and trended this information forward based on relevant cost inflators. This approach was termed "step-and-trend".

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[1] Section 53K *Commerce Act 1986*

[2] *Wellington International Airport Ltd and others v Commerce Commission* [2013] NZHC 3289 p [33]

[3] Ibid, no. 2 p [35]

12. The Commission's forecast for commissioned assets for the previous (2012-2017) DPP was based on supplier asset management plans (AMP) forecasts. However, these forecasts were capped at 120 percent of historical expenditure for the DPP period.

13. For the upcoming (2018-2023) DPP period, the Commission's Policy Paper has signalled its intention assess expenditures according to a specific expenditure objective:

> *Capital and operating expenditure should reflect the efficient costs that a prudent-non-exempt business would require to meet demand in the regulatory period and over the longer term and comply with applicable regulatory obligations.*[4]

14. The Commission has unnecessarily overcomplicated the task of setting expenditures for the GPB reset by introducing an expenditure objective beyond the requirements of section 52A of the Act for assessing DPPs.

15. Section 52A includes specific requirements for Part 4 regulation to limit the ability of the supplier to extract excessive profits and share efficiency gains in the supply of regulated goods and services with consumers. An explicit expenditure objective may encourage the Commission to make judgements on limited expenditure information without the checks and balances a more sophisticated regulatory regime entitles stakeholders. This includes the requirement for suppliers to submit detailed regulatory proposals (and alternative proposals) and having decisions subject to merits review.

16. In applying this expenditure objective, the Commission has suggested it will consider "tailoring" supplier expenditures by relying more on supplier forecasts developed for their AMPs.

17. The Commission will use more discretion under the new expenditure scrutiny framework if it considers supplier expenditures are not within materiality bounds of historic expenditures described as "business as usual" (BAU) expenditure in the Commission's Policy Paper.

18. We encourage the Commission when assessing expenditures and their materiality to use measures well-defined by the industry and considered by Gas Distribution Information Disclosures.[5]

19. Where the change in expenditures are explained in the AMP (for a category of expenditure) then the Commission (and its expert consultant) may allow the expenditure change. If the Commission is not satisfied with AMP description then it may request more supplier scrutiny[6] by requesting more specific justification for the expenditure change.

20. This new approach provides far more discretion on the part of the Commission and will require value judgements and greater subjectivity on its part when determining required

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[4] Commerce Commission, *Default price-quality paths for gas pipeline services from 1 October 2017: Policy for setting price paths and quality standards*, 30 August 2016, p. 4

[5] Commerce Commission, Gas Distribution Information Disclosure Determination 2012

[6] Supplier scrutiny is defined in the Commission's proposed assessment framework for expenditures as an additional stage for assessing expenditure

expenditures. This complicated approach for assessing expenditures may elevate the risk of error ultimately to the detriment of the quality of the regulated service.

21. Given the Commission's expenditure framework was published after most suppliers have completed the publication of their most recent AMPs, we are concerned about the lack of specific consultation with suppliers specifying the intended use of AMPs for the Commission's *new* DPP expenditure framework.

Consequences of the proposed changes for assessing expenditures

Delivering to the low-cost characteristics of the DPP

22. To adhere to the low cost principles of the DPP, we strongly encourage the Commission to limit the opportunity for discretion with supplier scrutiny by using reasonably defined materiality bounds when assessing expenditures in its proposed expenditure assessment framework.

23. In this respect, the Commission should first assess forecast operating expenditure and forecast commissioned assets at the aggregate level. Where these expenditures are found to be reasonably in line with expectations (such as historical outturn expenditures and in line with growth forecasts) and appropriately defined materiality bounds then such expenditure should be allowed. This approach is consistent with ensuring customer interests are protected from inflated expenditures and the section 52A purpose of Part 4 of the Act.

24. Unnecessarily increasing the level of discretion with supplier scrutiny may unwittingly result in the Commission applying its discretion across a wide range expenditures which may have a significant cumulative impact on final expenditure allowances. Indiscriminate use of the Commission's discretion to cut expenditures may result in final expenditures for suppliers that compromise the delivery of the regulated service to the long-term detriment of end-users.

25. We support the Commission using reasonable materiality bounds that are clearly defined and consistently applied across all suppliers for assessing expenditures. This ensures the opportunity for applying supplier scrutiny is limited to expenditures that are outside of the bounds.

26. Vector **recommends** the Commission consults with stakeholders on the appropriate materiality bounds for the expenditure assessment framework.

Proposed tailoring of expenditures

27. Vector is concerned the Commission has interpreted industry feedback for the use of more sources of forecast information as support for redefining the DPP. As part of the Commission's feedback for its Process and Issues Paper, we noted the history necessary to apply a 'step and trend' approach for Vector's expenditures has been compromised by the First Gas Ltd (FGL) transactions resulting in changes in ownership of the Vector transmission pipeline, Maui Development Ltd (MDL) transmission pipeline and the Vector

North Island GDB occurring within the current DPP period. We discuss further in this submission the specific impacts of the FGL transactions on Vector and FGL.

28. The FGL transactions have resulted in pipelines being consolidated, network boundaries redrawn and suppliers having different sized businesses than during the course of the DPP. Accordingly, Vector considers it appropriate for the Commission to put greater weight on most recent supplier AMPs when setting expenditures.

29. The expenditure assessment framework devised by the Commission (and its expert consultant Strata) relies significantly on comparing the AMP against historical information for assessing the prudency of forecast AMP expenditure. However, the methodology for assessing expenditures appears to lack detail on how it will address the issues relevant from the FGL transactions. Accordingly, we are unsure as to the additional benefit this approach offers.

30. The Commission also indicated that within its new methodology for assessing expenditures it is considering supplier specific "tailoring" of the materiality bounds for assessing expenditure forecasts for different suppliers. Vector sees no reason why this is necessary. Rather, the Commission should apply uniform materiality expenditure boundaries for all suppliers. This is the most transparent and principled way for assessing expenditures consistent with the expectations of the DPP to apply generic assumptions across suppliers.

Increasing the cost of regulation

31. As discussed above, Vector has significant concerns the Commission's approach will elevate the costs of regulation. The Commission's consultant Strata appears to propose an intensive process for assessing supplier expenditures:

> *"If the proposition is proven, the expenditure forecasts are shown to be usable inputs into the DPP calculation. If the proposition is not proven then the expenditure forecasts, or a component of them, will need to be excluded from the DPP calculation. If potentially systematic issues are found, then it may be necessary to reject the entire expenditure forecast. In this case, the Commission would need to establish an alternative for calculating the DPP…"*[7]

32. We cannot see how the above approach is consistent with the High Court interpretation of a DPP. Strata's above framework appears to contemplate a CPP type process for assessing AMP forecasts. We also have reservations about judgements leading to an implication of systematic bias – such a conclusion should be based on irrefutable evidence as opposed to conjecture (such as unreasonably narrow materiality bounds for assessing expenditure). The Commission should not take the decision of substituting a supplier's forecast lightly. However, where the Commission proposes to substitute a supplier's forecast it must clearly define how this alternative expenditure will be derived and why it is materially better. Vector recommends any individual expenditure notwithstanding scrutiny should revert to be within the materiality bound threshold. We encourage the Commission

[7] Strata Energy Consulting, *Low cost review framework for gas pipeline expenditure proposed framework and methodology report for Commerce Commission*, 26 August 2016, p. 14

not apply a punitive approach of allowing only the lower level of the materiality bounds of expenditure, as suggested in the Policy Paper.

33. Strata have recommended the Commission may apply the “lowest” actual historical year to represent “efficient” costs and use such expenditure for future years. We find this approach as disingenuous and unhelpful. The shortcomings of such an approach include the discounting of issues relevant for assessing forecast expenditures including, *inter alia*: additional network length, new customer connections, changes to consumer preferences, changing load profiles and health, safety and environmental considerations.

34. While the Commission has suggested the use of AMP information and information disclosure will not elevate the costs for suppliers for assessing expenditures, we do not believe this is the case. We believe the supplier scrutiny stage to be an intensive process given supplier documentation for justifying expenditure may not be what the Commission was anticipating. The Commission has suggested forecasts should be supported by new and additional documentation, such as Board papers or business cases. However, these types of documents are not produced for all expenditure changes.

35. The publication of the expenditure assessment framework after the lodgement of AMPs is likely to increase the increase the escalation to the next stage of the Commission’s expenditure framework of “supplier scrutiny” for some expenditures. This is because our AMP was not produced with this type of investigation in mind. Rather the only specific guidance for the AMP was the Commission’s Information Disclosure requirements.

36. In the long run, we see this approach as increasing the cost of regulation where DPPs are subject to the same type of scrutiny as supplier CPP proposals. Accordingly, AMPs used for a DPP would now be expected to far exceed the requirements imposed on suppliers as part of their ID requirements.

Changing the relationship between DPPs and CPPs

37. As discussed above, the proposal for “tailoring” for the GPB DPP reset could provide for expenditures that deviate from using a “one-size fits all” approach. Vector is concerned the Commission’s new approach for assessing DPP expenditures is redefining the DPP and making CPP applications more complicated. This is despite the Commission’s efforts in the IM review to reduce the cost and complexity involved with CPP applications.

38. A case for a CPP also fundamentally shifts from supplier forecast expenditures not falling within the “generic” assumptions presumed by the DPP to discharging an evidential burden for specific expenditures anticipated by the business but excluded by a DPP reset. This approach lends itself to a much more costly consultant driven model where third-party consultants are used to verify/scrutinise expenditure needs.

39. The Commission appears to assume excessive cutting of expenditures in a DPP will not have lasting damage to a supplier’s delivery of the regulated service as inadequate expenditure can be addressed via a CPP application.

40. We **recommend** the Commission to reassess its expenditure framework proposal against the purpose of the DPP model and limit the opportunity for subjectivity and value

judgements. This is especially the case given the DPP is a low cost form of regulation without the formal checks and balances of other sophisticated regulatory regimes.

Operating expenditures (opex)

41. As discussed above, we believe the level of inquiry for considering the reasonableness of opex should occur at the total opex level. Where total opex is reasonably aligned with expectations, such as historical trends (accounting for network growth) and within reasonably well defined materiality bounds then such expenditure should not be disallowed. This approach is consistent with the low cost purpose of the DPP and the requirements of section 52A of the Act.

42. However, we do recognise there are circumstances that have changed for suppliers during the course of the current DPP and these should be considered by the Commission when considering material changes to some categories of expenditure. We discuss this further below in the context of the FGL transactions.

Impact of FGL transactions

43. In 2016 FGL acquired Vector's gas transmission and North Island gas distribution businesses. In 2015 Vector's gas transmission business and combined gas distribution network recovered over $165 million in revenue.[8] Accordingly, the sale of the Vector transmission and North Island gas distribution business has had a significant impact on the scale of Vector and its remaining businesses. In addition, FGL also acquired the MDL transmission pipeline in 2016.

44. The Commission has suggested that it is not anticipating FGL to realise any efficiencies as part of the 2018-2023 reset from its consolidation of the two separate transmission pipeline businesses operated by MDL and Vector. The consolidation of these two separate businesses under a single operator provides opportunities for functions previously duplicated by MDL and Vector to be more efficiently delivered. Opportunities for consolidation include non-network support functions and some network support functions. Vector considers it reasonable for FGL to have a period of time to achieve such efficiencies, as proposed by the Commission (i.e. for economies of scale efficiencies to be considered at the 2023 reset).

45. However, the Commission's failure to recognise the loss of economies of scale (described as diseconomies in the Commission's paper) is *inconsistent* with the approach of not imposing any efficiency requirement on FGL. The FGL transactions have resulted in Vector losing economies of scale for delivering some of functions necessary to support its Auckland GDB. Accordingly, we find it unreasonable for the Commission to suggest:

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[8] Vector Gas Transmission Services Default Price-Quality Path Determination 2013 (consolidating all amendments as of 26 March 2014), *Compliance Statement 2015* and Gas Distribution Services Default Price-Quality Path Determination 2013, *Compliance Statement 2015*

"any identifiable diseconomies created as a result of the transactions through reduced economies of scale or scope should be borne by suppliers over the next regulatory period. These dis-efficiencies would then be shared with consumers at the time of the next reset (i.e. 2022)."[9]

46. The Commission's chain of logic is internally inconsistent and inconsistent with the principle of not recognising efficiency opportunities arising from the FGL transactions. Firstly, encumbering suppliers to bear less than the efficient costs of operating their service cannot be rectified ex-post. The Commission's proposal implies Vector will continue to operate for the next five years at the scale it possessed prior to the FGL transactions.

47. This assumption will falsely assume efficiencies within the business that do not exist. The Commission will be setting costs at less than the efficient level for a business of Vector's new smaller scale following the FGL transactions. Suggesting such costs can be "shared" with consumers at the time of the 2023 reset is not consistent with setting efficient expenditures.

48. Should the Commission refrain from requiring FGL to achieve efficiencies following the consolidation of two separate transmission pipelines under a single operator as part of the forthcoming reset, then it should also recognise the relative loss of scale to Vector as a result of the transactions.

49. Vector considers there to be more of a principled case for recognising the loss of scale to Vector's business from the FGL transactions than the reprieve offered to FGL for achieving economies of scale efficiencies in the upcoming DPP period. We cannot see any principled or justifiable reason for entitling one operator the luxury of transitioning to an efficient operation from gaining economies of scale while forcing another to incur less than efficient costs as a result of its smaller business scale.

Commissioned assets expenditure

50. The Commission has suggested it would move away from the approach used for setting the initial GPB DPP (2012-2017) of using the supplier forecasts for commissioned assets and restricting "capping" the supplier's AMP forecast to 120 percent of the historical average.

51. The Commission is proposing to remove the "cap" on AMP forecasts enabling suppliers to potentially achieve a more efficient commissioned asset expenditure profile. The Commission has suggested this approach could entitle suppliers to receive greater allowances as part of "encouraging the right expenditure, at the right time". However, this is contingent on the supplier passing the Commission's scrutiny for the expenditure forecast.

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[9] *Ibid* n4, p. 97

52. Vector recommends where the most recent AMP is in line with historical expenditure accounting for forecasted growth, then a supplier cannot be said to be "inflating" their commissioned assets forecast in the manner described by Castalia as described in the Commission's Policy Paper.[10] There is no specific targeting of inflated revenues. Instead the AMP is more than likely to retain the forward investment needs for the business and starting prices will not be set inappropriately as a result of using AMP forecasts. In this instance there is very little benefit from applying any further "scrutiny" under the Commission's expenditure assessment framework.

The Commission's methodology for assessing commissioned assets

53. The Commission's consultant Strata has developed a methodology of scrutinising supplier AMP commissioned assets forecasts by using three different years of AMP forecasts to test the material bounds of the forecast. We caution the Commission from putting significant weight on this approach.

54. Our concerns with the Stata approach are relevant to the fact that for this upcoming reset previously integrated networks have been separated and network boundaries redefined as a result of the FGL transactions. The redefining of distribution networks and connections in the Whangaparoa and area North of Auckland from Vector's non-Auckland GDB to its Auckland GDB undermines much of the forecast insights historical AMPs (anything before the 2016 AMP) may provide.

55. We find it difficult for the Commission to derive much value from comparing the most recent AMP for Vector's Auckland GDB against any other AMP which has not been adjusted for the new GDB boundaries between the Vector and FGL GDB networks.

Growth asset expenditure

56. Vector has particular concerns about the Commission's new approach for assessing forecast commissioned assets given its conflicting statements on its expectation for assessing the sub-category of commissioned assets expenditure relating to growth. This sub-category of commissioned assets is an especially important driver for total commissioned assets expenditure. Accordingly, Vector anticipated this category would be more favourably treated under the new approach.

57. However, we are concerned with the inconsistent messaging within the Commission's Policy Paper for assessing commissioned assets. On the one hand, the Commission states:

> *"…our assessment framework can accommodate forecast expenditure that is contingent on future events or where the cost or timing is uncertain."*[11]

58. At the same time the Commissioned has suggested:

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[10] *Ibid* n 4, p.22

[11] *Ibid*, n 4, p. 39

"…due to the contingent nature of growth capital expenditure, we expect that this may be an area of a supplier's forecast that is harder to justify, and therefore may experience exclusion of a proportionately higher level of its forecast expenditure."[12]

59. Vector is concerned the Commission considers it appropriate to justify forecast disproportionate exclusions to growth expenditure. This proposed treatment of growth expenditure forecasts appears to undermine the Commission's ability to tailor expenditures to the forward looking needs of suppliers.

60. The Commission attempts to justify its approach to growth expenditure on the basis that it believes the proposed approach will not have significant effect on GDBs. This is because GDBs are more likely to "re-prioritise allowable expenditure towards growth." We believe this is an unsatisfactory approach for assessing expenditures. Requiring suppliers to "shift" expenditures undermines the Commission's task of providing a reasonable allowances for the management of the regulated business. Where the supplier is shifting expenditures to meet growth requirements then actual expenditures for other categories of commissioned assets will be lower. This will give the impression of such assets being capable of being managed within a lower budget i.e. this will result in lower level of expenditure for other categories of commissioned assets expenditure at future resets. However, the cause for such change to asset management was more to do with the Commission's overzealous approach to forecasting efficient growth expenditure.

61. We note a similar issue was considered recently in Australia with the Australian Energy Regulator's (AER) assessment of market expansion capex for Jemena's New South Wales gas pipeline business. In this regard the Australian competition tribunal found the AER's final decision for Jemena's gas distribution network:

> *… will result in a level of revenue which in the immediate to longer term may impair the provision of safe, secure and efficient gas to consumers below an acceptable standard to consumers, and in this instance also because the longer term cost implications to consumers of the present AER Final Decision may well also result in significant increments in prices to consumers in the immediate to longer term future, particularly in relation to the allowance for ME [market expansion] capex.*[13]

Commissioned assets versus capital expenditure

62. The Commission and Strata appear to have performed their analysis on capital expenditure (capex) forecasts instead of commissioned assets. Building block revenues under the IMs have been calculated using forecasts for commissioned assets over the period. Capex and commissioned assets are different concepts. Capex refers to expenditure (generally project based) as it occurs while commissioned assets only arise once an asset has been completely finished. The difference between the two measures produce different outcomes for large projects spanning multiple years.

[12] *Ibid*, n 4, p.27

[13] *Application by Jemena Gas Networks (NSW) Ltd* [2016] ACompT 5 p [196]

Productivity (The X-factor)

63. The Commission is required to have regard to the expected productivity improvements it expects suppliers with their delivery of the regulated service over time. In this regard, the X-factor provides an expectation of the total factor productivity (for both capex and opex) the supplier should achieve over time.

64. The Commission has indicated that it will use overseas benchmarks for GPB performance to determine the appropriate X-factor to apply for the regulatory period. The Commission has also suggested that given it will rely more on supplier forecasts for determining expenditures, then it will not need to consider an opex partial productivity factor.

65. Vector supports the Commission's approach for measuring productivity so long as reasonable regard when setting expenditures to the loss of scale for its business as a result of the FGL transactions. Should the Commission fail to recognise the loss of scale for Vector's Auckland GDB then it will be less likely to achieve efficiencies presumed by any X-factor or partial productivity factor. In this regard, the Commission's current suggestion that diseconomies can be shared with consumers at the next reset in 2023 also implies that the Commission anticipates Vector's Auckland GDB to be less efficient over the course of the upcoming DPP and not comply with the productivity improvements envisaged by an X-factor or partial productivity factor.

FORECASTING

Inflation forecasting

66. As part of the IM review a number of parties, including Vector, have highlighted the shortcomings of the Commission's approach for forecasting inflation for the DPP. Inflation forecasts are used by the Commission's DPP model to forecast estimated price changes and estimate revaluation "income" for suppliers.

67. The Commission's draft IM decision describes the interaction of an ex-ante nominal weighted average cost of capital (WACC) and forecast revaluation income as intending to provide a supplier with an expectation of a real return (as opposed to a nominal return) over the regulatory period.

68. Since the global financial crisis, the Reserve Bank of New Zealand's (RBNZ) inflation forecast used by the Commission has shown a persistent bias to over-forecasting inflation. Vector is concerned the RBNZ's forecast of inflation, which is used to derive revaluation income for the supplier over the regulatory period, is over-estimating inflation prevailing in the Commission's nominal WACC (which has a market expectation of inflation embedded within it).

69. Vector's own analysis of more recent RBNZ forecasts has highlighted the dramatic differences between the RBNZ's forecasts of inflation and the market expectations of inflation in the near term. The RBNZ has also acknowledged the limitations to its forecasting of inflation. In this respect, Vector considers use of the RBNZ's forecasts for

the GPB DPP reset for estimating revaluation income over the DPP period may introduce risk that compromises the achievement of one of the Commission's economic principles for resetting the DPP: real financial capital management.

Demand forecasting – constant price revenue growth

70. Under a weighted average price cap (WAPC), the Commission is required to estimate changes in revenue as a result of changing user demand for the regulated service (where prices do not change). This is referred to by the Commission as constant price revenue growth (CPRG). CPRG is a parameter used by the Commission to "smooth" building block revenues for suppliers to estimate "starting prices" for suppliers. A low CPRG assumes a flatter gradient of demand changes over the DPP while a high CPRG suggests demand will be consistently strong and results in lower starting prices.

Previous experiences with forecasting regional demand

71. The case for retention of the WAPC for GDBs was driven by FGL and Powerco. Vector, by contrast, has not expressed a view on retaining the WAPC. A key reason for withholding our support has been the Commission's accuracy of demand forecasting for the Auckland region.

72. In Vector's experience with regional demand forecasting for its electricity distribution business (EDB) for the 2012-2015 DPP, the Commission significantly overestimated volume growth for the DPP period. Where the Commission has over-estimated CPRG for a supplier, it has a material impact on its ability to earn the building block revenues presumed in the starting price.

73. We are acutely conscious about the consequences optimistic demand forecasts have had on our Auckland electricity distribution business to achieve revenues presumed in the Commission's estimates of efficient building blocks.

Reducing the risk of not achieving allowable revenues

74. A key feature of the Commission's decision to transition to a revenue cap form of control for other Part 4 regulated services was to eliminate the impact of CPRG forecasting error on setting starting prices.

75. Powerco and FGL supported continuing with a WAPC in the IM review for GDBs as it provides suppliers with a powerful incentive to seek out more opportunities to grow network connections. This especially relevant given the status of reticulated gas as a fuel of choice for North Island consumers with a much lower penetration than EDB networks. In this respect an achievable CPRG provides a powerful incentive for seeking out network growth. However, where the Commission significantly overestimates demand then there is a point where a supplier must transition from seeking out network growth opportunities to other strategies to ensure the business can derive a normal return to compensate for unrealised demand resulting in lower starting prices and compromising the recovery of building block revenues.

76. Accordingly, Vector encourages the Commission to ensure its estimate of CPRG provides an inducement for suppliers to seek out incremental growth opportunities.

77. We **recommend** the Commission within its IM review continue to consider the merits of a supplier initiated DPP reopener for CPRG estimates that have material differences with realised demand.

Concept Consulting Report – Approach to developing distribution network demand projections

78. Concept Consulting (Concept) has highlighted the challenges it had with forecasting demand such as lack of time-series data and unreliable relationships from which to estimate gas demand. Given the short time-series and lack of explanatory relationships, Concept was unable to confidently derive a regression model from which to derive CPRG forecasts. Instead Concept has developed an alternative model – a *structural demand projections model*. To apply this model Concept has been required to make a number of value judgements.

79. We agree with Concept's concerns about the time-series history. A four year time-series is too short a period of time within which to develop reliable trend analysis. Unseasonable weather (such as a colder than average winter) will disturb any credible insight from using only four years of data.

80. In addition, Vector also agrees with Concept's other concerns for developing a credible regression relationship using population growth or economic growth for estimating customer segment demand.

81. Nonetheless, Concept has chosen these types of variables to extrapolate CPRG projections for the different regions in its *structural demand projections model*. Having failed to establish any historical causal relationship for a particular variable with reticulated gas demand, Concept is suggesting it "believes" there to be explanatory value with these variables to predicting demand.

82. Given reticulated gas is a discretionary fuel there is not likely to be a strong relationship with drivers such as population growth. The increasing choice for customer energy needs with affordable emerging technologies also further complicate reliably estimating gas demand. In the Vector region there are a number of significant new residential developments such as Hobsonville Point which have chosen not to offer reticulated gas for dwellings.

83. Vector has observed an undeniable long-term trend on its Auckland network of declining consumption per residential connection over a 10 year period. We have seen average residential gas consumption decline by over 5,000 mega-joules in that time. This trend is also apparent in figure 9 in Concept's report. We also find similar longer-term trends for other segment demand such as industrial users.

84. Given the inherent challenges with forecasting gas demand accurately, we strongly encourage the Commission to use conservative estimates for CPRG.

SERVICE QUALITY REGIME

85. In setting the DPP the Commission is required to specify both the price and quality standards it expects suppliers to deliver the regulated service to.

New quality measure for major interruptions

86. The Commission has proposed amending the quality requirements for the next gas pipeline DPP to include a measure for gas supply quality concerning major interruptions. We have some concern about such a measure being applied to GDBs as well as GTBs. We are surprised by the proposal to change the quality requirements for GDBs given there was no foreshadowing of such changes and no indication that they were necessary or sought by consumers.

87. Adding a new metric to the quality requirement for suppliers is a non-trivial change for businesses – even if the measure will only be measured in certain circumstances. We recommend such a change should only occur where there is clear customer demand for the measure. Breaching the quality threshold is a significant event with possible financial penalties arising under the Act.

88. The Commission has not specified the detail of the major interruption quality standard for GDBs but suggest it may encompass "day-long outages across a significant percentage of customers." We do not believe such a standard is necessary given the obvious reputational and commercial risks from having customers disconnected for such a period of time.

89. The proposed quality standard will also include a reporting obligation about the major interruption incident. The Commission has suggested "the principal purpose of the interruption report is to provide suppliers with an incentive to avoid major interruptions." Yet suppliers already have real incentives to avoid major interruptions for their customers. In this respect, the proposed new measure is not adding any more assurance for quality but will add cost and resources for suppliers. However, the report will also be used by the Commission to inform its enforcement response.

90. While Vector considers it has reasonable safeguards to manage for high-impact low probability (HILP) events on its pipeline. The introduction of a new major interruptions quality measure elevates the consequences from such low probability events occurring. In this respect, Vector considers any new quality measure to address HILP events will require businesses to spend more on HILP related risks. Given the infrastructure demands for the Auckland region to deliver services for its growing population (such as the Waterview tunnel and Auckland city-loop) the opportunity for contact with GDB assets is also factored into our HILP planning. Having a specific quality metric for major outages will elevate the costs of planning against such risk.

91. Given the timing of the Commission's consultation occurring after Vector's most recent AMP being lodged – we are not confident the Commission will provide sufficient additional expenditure to address the elevated consequences for HILP. Our AMP will not have forecasted the risk associated with the new proposed quality metric. If the new quality

metric is progressed then Vector expects supplier expenditures will need to be adjusted for the risk the new measure will impose on suppliers.

92. While there has been discussion about customer concerns regarding major outages along transmission pipelines, there has been limited discussion about whether this is a concern for GDB customers. Vector recommends the Commission does not proceed with the new quality metric for GDBs until it has clear evidence customers are concerned with current levels of risk management for HILP.

New service quality information disclosure requirements

93. The Commission is also proposing two new quality metrics for information disclosure (ID): connections time for new customers and response times to customer service inquiries. Vector encourages the Commission to work with suppliers when defining any new metrics given the burden of any new measure will significantly depend on the detail. Any new ID requirement for auditor certification should work with existing supplier processes and reporting to ensure the additional costs from providing new quality measures are proportionate and reasonable.

PRICE PATH COMPLIANCE

Restructuring of prices

94. The Commission indicated it will generally follow the price restructuring provisions developed for the most recent electricity distribution business price path (2015-2020). Vector considers this approach to be reasonable.

95. The Commission has stated it will consider further the approach for determining the t-2 quantities for price structuring where the existing lagged quantities are no longer appropriate. We encourage the Commission to work with suppliers for a reasonable approach for defining the lagged quantities where restructured prices have characteristics that are incompatible and unlikely to easily trace to the lagged quantities.

Treatment of transactions

96. The current transaction provisions have been found to be inadequate for dealing with transactions such those engaged by FGL – in particular the splitting of the previous Vector GDB.

97. Vector and FGL are submitting a joint compliance statement for the GDB DPP to unwittingly avoid either party committing a breach of the price-path. The proposed changes to the IMs to provide a DPP/CPP re-opener following a major transaction will assist with avoiding any perverse consequences with price-quality compliance following the execution of a major transaction.