Commerce Commission

Initial Default Price-Quality Path
for
Gas Pipeline Businesses

Discussion Paper

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COMMERCE COMMISSION

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CONTENTS

GLOSSARY OF TERMS, ABBREVIATIONS AND DEFINITIONS

Abbreviation	Definition
2008 GPS	GPS on Gas Governance, April 2008
Act, the	Commerce Act 1986
AECT	Auckland Energy Consumer Trust
Commission	Commerce Commission
CPI	Consumer Price Index
CPI Criterion	If a supplier has increased its weighted average prices by more than the movement, or forecast movement, in the all groups index number of the New Zealand Consumer Price Index in the period beginning 1 January 2008 and ending with the date that the determination is made.
CPI-X	CPI minus an X-factor
CPP	Customised Price-Quality Path
DPP	Default Price-Quality Path
ENA	Electricity Networks Association
Gas Authorisations	Refers to the Commerce Act (Powerco Natural Gas Services) Authorisation 2008; and Commerce Act (Vector Natural Gas Services) Authorisation 2008
GasNet	GasNet Limited
GDBs	Gas Distribution Businesses
GIC	Gas Industry Company Limited
GPBs	Gas Pipeline Businesses
GPS	Government Policy Statement
Greymouth Gas	Greymouth Gas New Zealand Limited
GTBs	Gas Transmission Businesses
IM	Input Methodology
IMs	Refers to the Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010; and the Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010
IM Draft Reasons	Refers to the Input Methodologies (Gas Pipeline Services) Draft Reasons Paper, 21 June 2010
IM Reasons	Refers to the Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper, 22 December 2010

Abbreviation	Definition
Initial DPP	The initial default price-quality path for GPBs that the Commission is required to set under s 55E(2) of the Act
Issues Paper	Refers to the Initial Default Price-Quality Path for Gas Pipeline Businesses, Issues Paper, 12 April 2010
MDL	Maui Development Limited
MPOC	Maui Pipeline Operating Code
Order, the	Commerce (Control of Natural Gas Services) Order 2005
Part 4 Purpose	Purpose of Part 4, as set out in s 52A of the Act
Powerco	Powerco Limited
PREs	Public Reported Escapes
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
Section 53K Purpose	Purpose of default/customised price-quality regulation, as set out in s 53K of the Act
Starting price adjustments	Relates to the prices set by the Commission in accordance with s 53P(3)(b) of the Act
TFP	Total factor productivity
UFG	Unaccounted for gas
Vector	Vector Limited
VTC	Vector Transmission Code
X-factor	Under a CPI-X mechanism a regulated business may increase annual prices by no more than CPI, less an annual percentage i.e. the X-factor

EXECUTIVE SUMMARY

X.1 The default price-quality path (DPP) is a regulatory instrument provided for under Part 4 of the Commerce Act 1986 (the Act).[1] This form of regulation applies to some businesses that are suppliers of gas transmission services (GTBs) and gas distribution services (GDBs). These are collectively known as gas pipeline businesses (GPBs).[2]

X.2 Section 55E(2) of the Act provides that the Commerce Commission (Commission) must set the initial default price-quality path for GPBs (Initial DPP) as soon as practicable after 1 July 2010.

X.3 The purpose of this Discussion Paper is to:

a. provide an update on the Commission's current position on key aspects relating to setting the Initial DPP for GPBs, following the release of the input methodology determinations for GDBs and GTBs on 22 December 2010[3] (IMs) and consideration of submissions on the Commission's preliminary views provided in the issues paper on the Initial DPP for GPBs released on 12 April 2010[4] (the Issues Paper); and

b. seek submissions from interested parties on the Commission's views expressed in this paper, with the purpose of informing the Commission's decisions on the Initial DPP for GPBs.

X.4 The IMs were released on 22 December 2010 and the Commission is bound by the requirements set out in those documents when setting the Initial DPP for GPBs. This Discussion Paper explains the Commission's thinking on aspects relating to an Initial DPP for GPBs that are not determined by the IMs, namely the setting of appropriate price paths, rates of change, quality standards, regulatory control periods and compliance assessment periods.

X.5 The views expressed in this Discussion Paper are subject to change following submissions on this paper and further consideration of these matters by the Commission.

X.6 This paper does not contain a detailed discussion of the setting of starting price adjustments or future requirements for information disclosure, as these are the

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1 Sections 53K and 53L of the Act.

2 Not all suppliers of pipeline services are subject to DPP regulation. Exempt pipelines are listed under Schedule 6 of the Act.

3 Commerce Commission, *Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010*, 22 December 2010; Commerce Commission, *Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010*, 22 December 2010; Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, 22 December 2010.

4 Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses*, *Issues Paper,* 12 April 2010.

subjects of separate discussion and consultation documents that will be released by the Commission.[5]

X.7 Table X.1 below provides a summary of the Commission's position expressed in this paper, noting where the Commission's position differs from the preliminary views expressed in the Issues Paper.

Table X.1: Summary of Commission's Views on the Initial DPP for GPBs

Topic	Preliminary view	Current position
Section 3: Structure of the default price-quality path		
Nature and scope of determination.	Gas distribution and transmission should be considered as different types of services for the purpose of the Initial DPP.	No change. Approach is consistent with the specification of price in the IM determination.
Differentiation of distribution and transmission services.	The distinction between distribution and transmission services may be made with reference to the definition of "transmission system" as set out in the Gas Governance (Critical Contingency Management) Regulations 2008.	Gas distribution and transmission services are suitably defined in both the Act and the IMs that apply to them, and further definition is not required.
Integrated vs separate price and quality standards.	The Initial DPP should consist of separately specified and assessed price path and quality standards, rather than have price and quality dimensions integrated in some manner.	No change.
Section 4: Form of control		
Form of control for GDBs.	A weighted average price cap is the most appropriate form of control for GDBs.	No change. Approach is consistent with the specification of price in the IM determination.
Form of control for GTBs.	A total revenue cap may be the most appropriate form of control for all GTBs.	A total revenue cap is the most appropriate form of control for MDL. A weighted average price cap is the most appropriate form of control for Vector. Approach is consistent with the specification of price in the IM determination.

5 However, it should be noted that this paper discusses specific aspects of the Initial DPP, such as future information requirements pertaining to quality measures and rates of change, that are intended to be disclosed under an information disclosure regime.

Topic	Preliminary view	Current position
Section 5: Claw-Back and Price under the DPP		
Revenue assessment and application of claw-back.	GPBs should be required to demonstrate compliance using a specified assessment methodology that would ascertain whether or not, and the extent to which, a GPB has increased its weighted average prices (or over-recovered its revenues) by more than the movement in CPI over the period 1 January 2008 to the date when the Determination is made (the CPI Criterion).	Applying claw-back to GPBs is unlikely to be necessary for the Initial DPP.
Vector's previous request for confirmation regarding its methodology for demonstrating compliance with s 55F(2).	The Commission had previously responded to Vector that it could not provide such confirmation at that time but that it intended to consider this issue further as the Initial DPP was developed.	Subject to the same methodology being applied to the setting of prices in 2010 and 2011, Vector will not be subject to claw-back provisions under s 55F(2) of the Act at the start of the Initial DPP.
Services controlled under the Commerce (Control of Natural Gas Services) Order 2005.	The providers of services controlled under the Order should not have to demonstrate whether the CPI Criterion has been met. This would effectively mean that gas pipeline services provided by Powerco and Vector's Auckland distribution network would not be subject to potential claw-back provisions contained in the Act.	No change.
Compliance with the price path for GPBs.	Annual compliance would be monitored by comparing the supplier's performance against the cap.	It is appropriate to set the cap as an allowable notional revenue and monitor performance using a notional revenue figure, where notional revenue is determined using prices for an assessment period multiplied by the relevant quantities.
Catering for future investment needs.		The IMs (and the option of applying for a customised price-quality path, including the contingent project mechanism under a CPP) ensure sufficient flexibility under a default/customised regulatory framework to cater for the future investment needs of GTBs.

Topic	Preliminary view	Current position
Section 6: Rate(s) of change		
Setting the X-factor.	Total factor productivity (TFP) is the preferred measure of productivity and the Commission proposes to use TFP to inform its decision on the level of an X-factor. New Zealand gas sector productivity analysis is of most direct relevance for the purposes of setting the X-factor and, to the extent practicable, the Commission will consider undertaking a New Zealand-based study. However, recognising that the robustness of such analysis may be limited, other indirect approaches for assessing productivity may be used as an alternative if data issues cannot be resolved. The results of any productivity analysis should not apply mechanistically.	Based on the Economic Insights report, in the absence of any conclusive evidence to the contrary, an X-factor of zero is appropriate for GPBs for the Initial DPP. The report can be accessed via the Commission's website.[6]
Data requirements for calculating future TFPs for GPBs.		Previous work conducted by Economic Insights for the Australian Energy Market Commission in 2009 may serve as a useful reference in this regard.[7]

6 Economic Insights Pty Limited, *Regulation of Suppliers of Gas Pipeline Services – Gas Sector Productivity*, 10 February 2011. http://www.comcom.govt.nz/2012-default-price-quality-path/.

7 Economic Insights, *Assessment of Data Currently Available to Support TFP-based Network Regulation*, 9 June 2009, Appendix A, pp. 52-58. http://www.aemc.gov.au/Media/docs/Economic%20Insights%20-%20Assessment%20of%20data%20currently%20available%20to%20support%20TFP-based%20network%20regulation,%209%20June%202009-d56686ba-b5f5-4f64-a474-3d79c900d614-0.pdf.

Topic	Preliminary view	Current position
Section 7: Quality standards		
Quality standards.	To the extent practicable, the regime will put in place objective quality standards with defined and measurable indicators. Reliability is central to service quality, as a deterioration of reliability is likely to impact on the quality of the service experienced by end-users. It is important that any such standards are meaningful in terms of assessing compliance.	One quality standard should apply to GPBs for the Initial DPP and this should be related to safety. A number of additional quality measures should also be required to be disclosed as part of the Commission's information disclosure regime to facilitate the setting of further quality standards at future DPP resets. The majority of these quality measures would not have an associated threshold in the Initial DPP.
Section 8: Setting the regulatory and assessment periods		
Options for regulatory and assessment periods.	The regulatory period for the Initial DPP would start on 1 July 2012 and the annual assessment period would start on either 1 July or 1 October for each year of the Initial DPP.	The Commission's preferred position is to start the regulatory period on 2 July 2012 and this will be for a period of 4 years and 3 months. The Commission's preferred option is for annual assessment periods of 1 October – 30 September. This will require partial year compliance for the period 2 July 2012 – 30 September 2012.

X.8 Following consideration of submissions on the matters discussed in this paper, and potentially the release of an updated discussion paper for consultation if required, the Commission intends to release for consultation its draft determination in December 2011. Subject to the content of future submissions, a decision on the Initial DPP for GPBs is likely to be published by 29 February 2012.

SECTION 1 INTRODUCTION

Overview

Background

1.1 Under s 55D of the Commerce Act 1986 (the Act), suppliers of gas pipeline services are subject to default/customised price-quality regulation. The following businesses supply gas pipeline services as that term is defined in the Act:

Table 1.1: Gas Pipeline Businesses (GPBs) subject to Part 4

Gas Transmission Businesses (GTBs)	Gas Distribution Businesses (GDBs)
Maui Development Limited (MDL)	Powerco Limited (Powerco)
Vector Limited (Vector)	Vector
	GasNet Limited (GasNet)

1.2 Under s 55E(2) of the Act, the Commerce Commission (Commission) is required to set an initial default price-quality path for GPBs (Initial DPP) as soon as practicable after 1 July 2010.[8] In an issues paper on the Initial DPP for GPBs released on 12 April 2010 (the Issues Paper), the Commission stated that it intended to set the Initial DPP by 1 July 2012.[9]

1.3 Under s 53O of the Act, where default price-quality regulation applies to regulated goods or services, a determination made under s 52P of the Act must contain certain information. This includes starting prices, rate or rates of change in prices and quality standards that apply during the first regulatory period. The dates on which a default price-quality path (DPP) takes effect, the annual dates by which any proposal for a customised price-quality path must be received and demonstration of compliance must also be specified.

1.4 The Commission released its Input Methodologies (IMs) for gas pipeline services in December 2010.

Purpose

1.5 The purpose of this Discussion Paper is to provide an update on the Commission's current position on key aspects relating to the setting of the Initial DPP for GPBs.

1.6 It does not cover detailed aspects relating to starting price adjustments that may apply to GPBs.[10] Similarly, the Commission is in the process of consulting separately on specific information disclosure requirements for GPBs.[11] Therefore,

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8 Not all suppliers of pipeline services are subject to DPP regulation. Exempt pipelines are listed under Schedule 6 of the Act.

9 Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses*, *Issues Paper,* 12 April 2010.

10 A paper discussing the Commission's views on setting starting prices under s 53P(3)(b) of the Act will be separately released by the Commission. Although focussing on EDBs, it may be of relevance to resetting starting prices (where relevant) for GPBs.

11 Commerce Commission, *Information Disclosure Regulation Electricity Lines Services and Gas Pipeline Services, Process and Issues Paper*, 23 February 2011.

while both starting price adjustments and information disclosure requirements for GPBs will be referred to in this paper, the focus of this Discussion Paper is on the development of other components of an Initial DPP for GPBs.

1.7 The Commission set out some preliminary views on its approach to setting a DPP for GPBs in its Issues Paper. In forming the current positions set out in this Discussion Paper, the Commission has further developed the views previously consulted on and taken account of submissions from interested parties.

1.8 The Commission seeks feedback from all interested parties on the issues discussed in this Discussion Paper. Submissions on this Discussion Paper will assist in informing the Commission's decisions on the Initial DPP for GPBs.

Scope of Issues

1.9 While the views of the Commission have evolved since the release of the Issues Paper and receipt of submissions in response to that paper, the Commission's current views are subject to change and do not represent formal decisions at this stage. The remainder of this Discussion Paper is structured as follows:

- *Section 2 – Regulatory Framework:* sets out the regulatory framework under which the Commission is to set the Initial DPP for GPBs;
- *Section 3 – Structure of the Default Price-Quality Path:* sets out the Commission's proposed framework for establishing a price-quality path for GPBs;
- *Section 4 – Form of Control:* sets out the Commission's proposed approach to setting forms of control for GPBs;
- *Section 5 – Claw-Back and Price Under the Default Price-Quality Path:* sets out the Commission's current position on how the price path should be determined for GPBs under the various components of the proposed default price-quality framework;
- *Section 6 – Rate(s) of Change:* sets out the Commission's proposals for the setting of an X-factor for GPBs that reflects an appropriate rate of change;
- *Section 7 – Quality Standards:* sets out the Commission's current position on the applicability of quality standards to GPBs under an Initial DPP, how these should be applied to both the Initial DPP and future DPPs and the reasons for this approach; and
- *Section 8 – Setting the Regulatory and Assessment Periods:* sets out the views on the start of the Initial DPP and the options for assessing compliance.

1.10 The Commission has focused the scope of this Discussion Paper on the development of a DPP framework and ensuring that the DPP process is consistent with other parts of the regulatory regime.

Previous Consultation

1.11 The Commission has previously released a number of papers that are of relevance to this Discussion Paper and the setting of DPPs for GPBs.

1.12 As noted in paragraph 1.2 above, on 12 April 2010, the Commission released an Issues Paper on the Initial DPP for GPBs.[12] Submissions received in response to this paper are available via the Commission's website.[13]

1.13 A Draft Reasons Paper relating to input methodologies for GPBs was also released on 21 June 2010.[14] Submissions received in response to this paper can be accessed via the Commission's website.[15]

1.14 The Commission then released its final input methodologies determinations that apply to GTBs and GDBs on 23 December 2010.[16]

Next Steps

1.15 The Commission's proposed process for setting the Initial DPP is set out below. This proposed timeline is indicative only, and may change over time.

Table 1.2: Proposed process for setting the Initial DPP

Key Step	Indicative Date
Submissions due on Discussion Paper Cross-submissions due	27 May 2011 10 June 2011
Updated Discussion Paper (if required) Submissions due Cross-submissions due	26 August 2011 7 October 2011 21 October 2011
Draft Decisions Paper and Draft Determination Submissions due Cross-submissions due	2 December 2011 13 January 2012 27 January 2012
Final Reasons Paper and Final Determination (dependent upon start of DPP Determination on 2 July 2012)	29 February 2012

Submissions

1.16 Submissions are invited on this Discussion Paper and should be submitted to the Commission no later than 5pm Friday, 27 May 2011. The Commission also invites cross-submissions on matters raised in submissions to the Discussion Paper. The

12 Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses*, 12 April 2010.

13 http://comcom.govt.nz/2012-default-price-quality-path/#_msocom_2.

14 Commerce Commission, *Input Methodologies Gas Pipeline Services Draft Reasons Paper*, 21 June 2010.

15 http://comcom.govt.nz/consultation-prior-to-december-2010/.

16 Commerce Commission, *Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010,* 22 December 2010; Commerce Commission, *Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010*, 22 December 2010; and Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, 22 December 2010.

purpose of cross-submissions is to ensure that the Commission is aware of points of agreement or disagreement on matters raised by other submitters. The Commission therefore requests that parties providing cross-submissions focus these in that way. Cross submissions should be received by the Commission no later than 5 pm Friday, 10 June 2011. All submissions and cross-submissions should be supported by documentation and evidence, where appropriate.

1.17 To foster an informed and transparent process, the Commission intends to publish all submissions and cross-submissions on its website. Accordingly, the Commission requests an electronic copy of each submission and requests that hard copies of submissions not be provided (unless an electronic copy is not available). The Commission also requires that these electronic copies be provided in an accessible form (i.e. they are ‘unlocked’ and text can be easily transferred). If the submission contains confidential information or if the submitter wishes that the published version be ‘locked’, an additional document labelled “public version” should be provided. Submissions should be sent to:

regulation.branch@comcom.govt.nz;

or

Paul Mitchell
Chief Advisor
Regulation Branch
Commerce Commission
P.O. Box 2351
Wellington

Confidentiality

1.18 The Commission discourages requests for non-disclosure of submissions, in whole or in part, as it is desirable to test all information in a fully public way. The Commission is unlikely to agree to any requests that submissions in their entirety remain confidential. However, the Commission recognises that there will be cases where interested parties making submissions may wish to provide confidential information to the Commission.

1.19 If it is necessary to include such material in a submission the information should be clearly marked and preferably included in an appendix to the submission. Interested parties should provide the Commission with both confidential and public versions of their submissions. The responsibility for ensuring that confidential information is not included in a public version of a submission rests entirely with the party making the submission.

1.20 Parties can request that the Commission makes orders under s 100 of the Act in respect of information that should not be made public. Any request for a s 100 order must be made when the relevant information is supplied to the Commission and must identify the reasons why the relevant information should not be made public. The Commission will provide further information on s 100 orders if requested by parties, including the principles that are applied when considering requests for such orders. A key benefit of such orders is to enable confidential information to be shared with specified parties on a restricted basis for the purpose of making submissions. Any s 100 order will apply for a limited time only as specified in the order. Once an order expires, the Commission will follow its usual process in response to any request for information under the Official Information Act 1982.

SECTION 2 REGULATORY FRAMEWORK

Overview

2.1 The Commission has determined IMs for GPBs and these were set on 22 December 2010. A detailed discussion of the regulatory context and purpose of Part 4 (Part 4 Purpose) was included within the IMs Reasons and is not replicated in full here.[17] While this paper predominantly discusses the effect of the IMs on the Initial DPP, this section provides a brief summary of the relevant regulatory framework pertaining to GPBs as background.

Purpose of Part 4

2.2 Section 52 of the Act provides an overview of Part 4:

> *"This Part provides for the regulation of the price and quality of goods or services in markets where there is little or no competition and little or no likelihood of a substantial increase in competition."*

2.3 Section 52A of the Act states that the purpose of Part 4 is:

> *"…to promote the long-term benefit of consumers in markets referred to in section 52 by promoting outcomes that are consistent with outcomes produced in competitive markets such that suppliers of regulated goods or services—*
>
> *(a) have incentives to innovate and to invest, including in replacement, upgraded, and new assets; and*
>
> *(b) have incentives to improve efficiency and provide services at a quality that reflects consumer demands; and*
>
> *(c) share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices; and*
>
> *(d) are limited in their ability to extract excessive profits."*

Commission's Interpretation of the Part 4 Purpose

2.4 As set out in the IM Reasons, the Commission's interpretation of the Part 4 Purpose is as follows:

- The central purpose is to promote the long-term benefit of consumers in markets where there is little or no competition and little or no likelihood of a substantial increase in competition.

- This central purpose is to be achieved by promoting outcomes consistent with outcomes produced in workably competitive markets, such that the regulatory objectives set out in s 52A(1)(a)-(d) of the Act occur.[18]

2.5 The regulatory instruments under Part 4, including the DPP, provide the mechanism through which the Commission is to promote outcomes consistent with those produced in workably competitive markets. The Commission's interpretation of the

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17 Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, 22 December 2010, pp. 16-53.

18 ibid, p. 20, paragraphs 2.4.2-2.4.3.

Part 4 Purpose (including discussion on workable competition and workably competitive market outcomes and Part 4) is set out in further detail in the IM Reasons.[19]

Purpose of Default/Customised Price-Quality Regulation

2.6 Section 53K of the Act provides that the purpose of default/customised price-quality regulation (Section 53K Purpose) is:

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

2.7 In the Commission's view a DPP should be a generic tool, as far as practicable, such that price-quality regulation can be cost-effectively applied across multiple suppliers. In setting out its current views on the DPP framework, the Commission has considered the Section 53K Purpose in addition to the Part 4 Purpose.

2.8 The Commission's approach to setting a DPP is based on a 'Consumer Price Index minus X' (CPI-X) approach, referred to as such due to the use of the Consumer Price Index (CPI) and an 'X-factor' that reflects expected industry-wide efficiency or productivity improvements (relative to the general economy) as part of the regulated price path. Under s 53P of the Act, the parameters of the CPI-X price path must be reset every regulatory period.

2.9 As set out in the IM Reasons, the use of a CPI-X approach for default/customised price-quality regulation under Part 4 is expected to promote outcomes consistent with those produced in workably competitive markets.[20] This promotes the long-term benefit of consumers. The use of a CPI-X price path provides suppliers with the opportunity to earn greater than normal returns as a reward for improved efficiency (including in respect of efficient investment) and for innovation.

2.10 A DPP may not be able to fully reflect the particular circumstances of a supplier as its low-cost, generic nature means that it is a comparatively non-targeted regulatory instrument. Starting price adjustments are the primary regulatory mechanism for making the price-related aspects of a DPP more specific to individual suppliers, although a DPP can also employ supplier specific rates of change.

2.11 Nevertheless, Part 4 of the Act specifically provides for regulated suppliers to be able to apply for a customised price-quality path (CPP) that better meets their particular circumstances, if the starting price adjustments and/or rates of change are not sufficiently able to do so.

Default/Customised Price-Quality Regulation and Input Methodologies

2.12 The Commission is bound by the IMs that apply to GPBs in respect of the Initial DPP and does not have any scope to deviate from these requirements in any way.[21] Information that is prepared and submitted by suppliers that is consistent with IMs

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19 ibid, pp. 20-42.

20 ibid, pp. 39-40.

21 Note, s 53V(2)(c) of the Act allows the Commission, when determining a CPP for a supplier, to vary an input methodology that would otherwise apply (with the agreement of the supplier).

will be important for the Initial DPP, particularly as inputs to the Commission's assessment of GPB-specific requirements such as starting prices.

2.13 Input methodologies will not inform every aspect of the Initial DPP process. The Commission considers that there are a number of important decisions to be made in addition to those relating to the use of IMs, for instance in relation to the setting of price, rates of change, quality standards, regulatory control periods and compliance assessment periods.

Other Statutory Considerations

2.14 There are a number of additional considerations that the Commission has taken into account when forming its current views on the Initial DPP for GPBs. These include:

- the Gas Authorisations;[22] and
- decisions under the Gas Act 1992, as required under s 55I of the Act.

Gas Authorisations

2.15 Under s 55G(2) of the Act, the Commerce (Control of Natural Gas Services) Order 2005 (the Order) continues in force, despite the repeal of (the old) Part 4 (as it was issued before its repeal), until the date on which the Order expires or is revoked. Section 55G(3) of the Act confirms that the enactment of the new Part 4 does not limit or affect, before the expiry date, the Gas Authorisations, authorising the supply of controlled gas distribution services defined by the Order that are supplied by Powerco and Vector respectively. The Gas Authorisations are due to expire on 1 July 2012. As such, the IMs relevant to default/customised price-quality regulation for gas pipeline services do not apply to those services until after that date.

Gas Act

2.16 Section 55I of the Act sets out provisions relating to the interface with the Gas Act 1992. The Commission is required to take into account any gas governance regulation or rule made pursuant to Part 4A of the Gas Act, and any decision made under those regulations or rules, which relate to or affect quality standards or pricing methodologies for GTBs or GDBs. The Commission is also required to take into account any relevant guidelines or levies payable under the Gas Act.

2.17 The Commission has not to date received any communication from the Gas Industry Company Limited (GIC) (the industry body established by Order-in-Council under s 43ZL of the Gas Act) under s 55I of the Act.

[22] Commerce Commission, *Decision 656: Authorisation – Powerco – Control of Supply of Natural Gas Distribution Services*, 30 October 2008; Commerce Commission, *Decision 657: Authorisation – Vector – Control of Supply of Natural Gas Distribution Services*, 30 October 2008.

SECTION 3 STRUCTURE OF THE DEFAULT PRICE-QUALITY PATH

Introduction

3.1 This section sets out the Commission's current position on a proposed structure for an Initial DPP.

Nature and Scope of the Determination

Commission's Initial Views

3.2 In considering an appropriate structure for the Initial DPP, the Commission has previously put forward its view that gas distribution and transmission should be considered as different types of services which may require separate determinations. This would allow issues that are specific to each type of gas pipeline service to be addressed separately.[23]

3.3 This approach is consistent with the Commission's decision to release separate IMs for each type of gas pipeline service.

Submitters' Views

3.4 Submissions from interested parties were in support of the Commission's initial view and agreed that separate determinations are appropriate.[24]

Commission's Current Position

3.5 The Commission remains of the view that gas distribution and transmission services should be considered as different types of services for the purposes of the Initial DPP, as this is consistent with the separate IM determinations for GDBs and GTBs.

Differentiation of Distribution and Transmission Services

Commission's Initial View

3.6 The Commission has previously discussed its initial thoughts on the various options for defining gas distribution and transmission services.[25]

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23 Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses Issues Paper*, 12 April 2010, p.7, section 2.

24 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper for the Initial DPP for Gas Pipeline Businesses*, 14 May 2010, p. 15; NZIER, *Review of Submissions – For AECT's cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses – Report to Auckland Energy Consumer Trust,* 28 May 2010, p. 3; GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 1; Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 2; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, p. 3.

25 Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses Issues Paper*, 12 April 2010, p. 9, section 2.

3.7 In summary, these options included defining "gas transmission services" using either:

- the definition of a "transmission system" as set out in the Gas Governance (Critical Contingency Management) Regulations 2008. The Commission's initial view was that this was the preferred option;
- references to the definition of "gas transmission" in s 2 of the Gas Act 1992; and/or
- welded points as a point of demarcation for the classification of these services.

Submitters' Views

3.8 Submitters on the Issues Paper agreed with the Commission's initial view that the distinction between distribution and transmission services may be made with reference to the definition of "transmission system" as set out in the Gas Governance (Critical Contingency Management) Regulations 2008.[26]

3.9 Powerco also identified technical issues with the alternative definitions set out in the Issues Paper.[27]

Commission's Current Position

3.10 The Commission considered this issue when developing its IMs for GPBs and concluded that each of the above options could lead to uncertainty around the future definition of gas transmission services for the purposes of the Initial DPP. Furthermore, the Commission considered that s 55A of the Act, with supporting definitions in the respective IMs, is sufficient for defining both gas transmission and gas distribution services.

3.11 Under the IMs, both gas transmission and gas distribution services are defined as meaning any gas pipeline services (as defined in s 55A of the Act) supplied across a network, with "network" being defined differently for each type of service.

3.12 In the case of gas transmission services, the IM[28] defines a network as:

> *"...the high pressure transmission pipeline systems under the control of one* ***person*** *between the place where gas enters those transmission pipeline systems (commonly referred to as a 'receipt point') and the place where gas exits them, provided that where the place of exit is a delivery point to a* ***distribution network*** *owned by the same* ***person*** *who owns the transmission pipeline system in question, the delivery point is the place specified by that* ***person****"*

and where a "person" has the same meaning as defined in s 2 of the Act.

[26] NZIER, *Review of Submissions – For AECT's cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses – Report to Auckland Energy Consumer Trust,* 28 May 2010, p. 3; Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 3; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, p. 3.

[27] Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, pp. 3-4.

[28] Commerce Commission, *Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010*, 22 December 2010, p. 15.

3.13 For gas distribution services, the IM[29] defines a network as:

> *"…the system used to distribute gas to a* ***consumer****, comprising pipelines and associated* ***fittings*** *between-*
>
> *(a) a delivery point from a* ***transmission network****; and*
>
> *(b) the point of supply,*
>
> *provided that where the pipelines and associated* ***fittings*** *are owned by the same* ***person*** *who owns the relevant* ***transmission network****, the delivery point is the place specified by that* ***person****"*

and where the terms "consumer" and "fittings" have the same meanings as defined in s 2(1) of the Gas Act 1992, and a "point of supply" has the same meaning as specified in regulation 5 of the Gas (Safety and Measurement) Regulations 2010.

3.14 The Commission's current position is that gas distribution and transmission services are suitably defined in both the Act and the IMs that apply to them, that the Initial DPP can refer to these definitions, and any further differentiation is not required.

Integrated vs Separate Price and Quality Standards

Commission's Initial View

3.15 The Issues Paper set out the Commission's view that the Initial DPP should consist of separately specified and assessed price path and quality standards, rather than integrated price and quality dimensions.

Submitters' Views

3.16 Greymouth Gas New Zealand Limited (Greymouth Gas), Powerco and MDL submitted that separate price path and quality standards would be appropriate.[30]

3.17 GasNet noted that separate price path and quality standards are appropriate in the interim, but that in the medium term an integrated price-quality path is more appropriate.[31]

3.18 Auckland Energy Consumer Trust (AECT) and Vector submitted that an integrated price-quality path is feasible and that the Commission should undertake a process to identify a type of incentive to integrate price and quality within the DPP.[32]

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29 Commerce Commission, *Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010,* 22 December 2010, p. 13.

30 Greymouth Gas New Zealand Limited, *Cross Submission to Submissions on the Initial Default Price-Quality Path for Gas Pipeline Businesses Issues Paper,* 31 May 2010, p. 2; Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, p. 3; Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 2.

31 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, pp. 2-3.

32 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper for the Initial DPP for Gas Pipeline Businesses*, 14 May 2010, pp. 7-9; Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, p. 4.

3.19 AECT also accepted the setting of separate standards to the extent that it is not practical, feasible or consistent with the low-cost regulatory option to integrate price and quality in the Initial DPP.[33]

Commission's Current Position

3.20 The Commission's position remains that the Initial DPP should consist of a price path that is specified and assessed separately from quality standards.

3.21 Section 7 of this paper sets out the Commission's current position on the challenges it faces in determining appropriate quality standards for the Initial DPP, namely that limited robust historical data pertaining to only some GPBs is available.

3.22 The Commission is of the view that this presents a barrier at this time to the setting of an integrated price-quality path and against which meaningful performance thresholds can be established.

3.23 However, the Commission is of the view that an integrated price-quality path may be achievable at the time the DPP is next reset and following the setting of robust information disclosure requirements that will apply during the Initial DPP period.

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[33] Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2.

SECTION 4 FORM OF CONTROL

Introduction

4.1 In the Issues Paper, the Commission provided an overview of the two forms of control that could be applied to GPBs under a DPP. These were rate of return regulation and incentive regulation.

4.2 The Commission noted that s 52A(1)(b) of the Act sets the regulatory objective to provide incentives to suppliers to improve their efficiency and to provide services at a quality that reflects consumer demands. The Commission considered that incentive regulation is more consistent with this objective than rate of return regulation and considered two forms of incentive regulation were appropriate for the Initial DPP, namely a total revenue-cap and a weighted average price-cap.

Total Revenue Cap

4.3 Under a total revenue-cap, the total revenue a regulated supplier is allowed to earn over the regulatory period is limited.

4.4 The key features of a total revenue-cap are that a supplier's allowed revenue is capped and is much less subject to demand risk. However, the supplier can increase its prices if its volumes reduce within the regulatory period and must decrease prices when volumes rise to stay within the overall revenue-cap.

4.5 Key features of a price path under a total revenue-cap approach are:

- an allowed revenue is specified for each supplier, which applies for the first year of the regulatory period (e.g. in the form of an allowable notional revenue); and
- the allowed revenue is adjusted by CPI-X on an annual basis over the regulatory period.

Weighted Average Price Cap

4.6 A weighted average price-cap sets a limit for the prices that suppliers are allowed to charge during the regulatory period. In practice, in a multi-output and multi-tariff context, the price is the weighted average of the prices in one or several defined baskets of services. The key features of a weighted average price-cap are:

- a supplier's allowed revenue is not dependent on total volume – a supplier can adjust its prices irrespective of volume, subject to the overall price-cap; and
- the supplier bears the demand risk (regarding revenue), i.e. reducing volumes may lead to revenue shortfalls, and increasing volumes may result in revenues above those required to cover costs.

4.7 Key features of a price path under a weighted average price-cap approach are:

- a starting price is specified for each supplier, which applies for the first year of the regulatory period (e.g. which affects allowable notional revenue);
- the starting price is allowed to be adjusted by CPI-X on an annual basis over the regulatory period; and

- the quantities used in the price path assessment formula may be specified in different ways (including fixed, annually updated or forecasted).

Form of Control for Gas Distribution Businesses

4.8 The Commission has determined that, for GDBs (where multiple services are supplied and where demand can be influenced to a reasonable extent by the supplier), the maximum prices that may be charged, or revenues that may be earned, will be specified by a weighted average price cap.[34] The weighted average price cap is defined in terms of a relationship between notional revenue and allowable notional revenue, which are both defined in the IM.[35]

4.9 The IM Reasons note that a weighted average price cap has a number of features that make it appropriate for the regulation of gas distribution services, particularly with regard to the promotion of efficiency. For example, a weighted average price cap:

- generally provides incentives to price efficiently, subject to the overall revenue constraint being met, as regulated suppliers can utilise their knowledge of consumers' price responsiveness when pricing to maximise profits and manage demand risk – potentially reducing allocative inefficiency;
- allocates the demand risk to regulated suppliers – which is appropriate as they are generally better placed than their consumers to manage this risk;
- provides incentives to invest in new infrastructure and to connect new consumers to the network, as it provides the regulated suppliers with additional revenue from new consumers and new volume immediately;
- is suitable for situations where the (multiple) services supplied are relatively small in number and do not change regularly – meaning the 'tariff basket' of services is reasonably stable; and
- is familiar to most gas distribution businesses.

4.10 Previously, the Commission has used a weighted average price cap for the Gas Authorisations that apply to the controlled gas distribution services of Powerco and Vector.[36] The existing DPP for EDBs under Part 4 of the Act also uses a weighted average price cap, as did the prior price path thresholds for EDBs under the old Part 4A.

34 Commerce Commission, *Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010,* 22 December 2010, p. 52, clause 3.1.1(1).

35 ibid, clauses 3.1.1(2)-3.1.1(3).

36 Commerce Commission, *Decision 656: Authorisation – Powerco – Control of Supply of Natural Gas Distribution Services*, 30 October 2008; Commerce Commission, *Decision 657: Authorisation – Vector – Control of Supply of Natural Gas Distribution Services*, 30 October 2008.

Submitters' Views

4.11 In their submissions on the Issues Paper, interested parties generally agreed that a weighted average price cap is the most appropriate form of control for gas distribution businesses.[37]

Commission's Current Position

4.12 The Commission has established in the IMs that a weighted average price cap is appropriate for suppliers of gas distribution services. Submissions on the Issues Paper were considered in setting the IMs and did not highlight any significant issues that changed the views of the Commission in this regard.

Form of Control for Gas Transmission Businesses

Determining Different Forms of Control for Suppliers of the Same Type of Service

4.13 In deciding whether to opt for differing forms of control for GTBs, the Commission is bound by the requirements of the Act and the IMs.

4.14 As noted in the IM Reasons, Part 4 of the Act provides the Commission with a number of options for 'capping' revenues or prices under price-quality regulation.[38]

4.15 Section 53M(1) allows price-quality paths to be specified in terms of maximum revenues and/or prices, and 'price' is defined in s 52C of the Act as meaning any one or more of individual prices, aggregate prices, or revenues (whether in the form of specific numbers or in the form of formulae by which specific numbers are derived).

4.16 It is also noted in the IM Reasons that the form of control should provide incentives for efficient behaviour by regulated suppliers (consistent with s 52A(1)(b) of the Act) and, depending on the mechanism used, will have different effects on suppliers' incentives and the allocation of risk between suppliers and consumers.[39]

4.17 Total revenue caps are generally considered appropriate where demand risk is largely outside the control of the supplier. Conversely, weighted average price caps are generally preferred where multiple services (within the same regulated service) are supplied and where demand can be influenced to a reasonable extent by the supplier. In considering whether suppliers or consumers are best placed to bear demand and cost risks, the following factors are relevant:

- The nature and size of the customer base;
- The extent to which a supplier can control or predict a cost;

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37 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper (on the Form of Control) for the Initial DPP for Gas Pipeline Businesses,* 30 April 2010, p. 6; Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2; GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Section 4: Form of Price Control,* 29 April 2010, p. 3; GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 3; Powerco Limited, *Powerco Submission on Form of Control in Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 30 April 2010, p. 1; Vector Limited, *Submission on Gas DPP Issues Paper – Form of Control,* 30 April 2010, p. 4.

38 Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, 22 December 2010, p.191, paragraph 8.3.3.

39 ibid, p. 191, paragraph 8.3.4.

- The extent and type of contracting undertaken between suppliers and their customers;
- The volatility of demand; and
- The extent to which costs are fixed or variable.[40]

4.18 The IM Reasons note that the ways in which gas transmission services are supplied in New Zealand, in particular the specific capacity reservation arrangements and lack of contractual flexibility in certain cases, warrant the extra complexity and flexibility afforded by specifying price in terms of both a weighted average price cap and a total revenue cap, depending on the supplier.[41]

4.19 A supplier operating under a common carriage capacity reservation agreement has little influence over the gas volumes transported through its pipelines. Where demand is subject to significant variability over the price review period, a weighted average price cap may lead to insufficient revenues being recovered to cover costs.[42]

4.20 In such circumstances, consumers can be expected to be better placed to deal with demand risk and hence a total revenue cap is more appropriate. As they are closer to the underlying determinants of demand for gas consumption, consumers can be expected to have access to better information than the supplier. This allows consumers to deal with demand risk through alternative strategies.[43]

4.21 A supplier may also attempt to manage demand risk resulting from the common carriage arrangement by attempting to expand demand through flexible pricing with existing or new customers. If a supplier does not have this flexibility, the ability to deal with demand risk is further reduced.[44]

4.22 The Maui Pipeline Operating Code (MPOC) sets out in Schedule 10 a set of tariff principles which effectively require MDL to charge all shippers the same tariffs. MDL may not unilaterally change the MPOC, and it is therefore not able to influence demand by offering non-standard contracts. By contrast, the Vector Transmission Code (VTC) does not require Vector to charge all shippers the same tariffs. As a consequence, Vector is able to offer non-standard contracts and set different tariffs for each.[45]

4.23 Therefore, as set out in clause 3.1.1(2) of the GTB IMs, the Commission has determined that the following factors will be taken into account when determining whether a GTB is better suited to a total revenue cap or a weighted average price cap:

- The extent to which capacity is managed through contract carriage arrangements (as opposed to common carriage arrangements); and

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40 ibid, p. 191, paragraphs 8.3.5-8.3.6.

41 ibid, pp. 193-194, paragraph 8.3.14.

42 ibid, p. 194, paragraph 8.3.16.

43 ibid, p. 194, paragraph 8.3.16.

44 ibid, p. 194, paragraph 8.3.16.

45 ibid, p. 194, paragraph 8.3.17.

- The extent to which the GTB supplies services on the basis of non-standard pricing arrangements.[46]

4.24 The Commission is required to use these criteria when determining whether a total revenue cap or weighted average price cap should be applied in respect of a particular GTB. These criteria do not represent a clean dichotomy and, accordingly, whether a particular GTB should be subject to a total revenue cap or weighted average price cap is a matter of judgement on the part of the Commission after considering these criteria.

Submitters' Views

4.25 Submissions to the Issues Paper indicated the importance for the Commission to have regard to the characteristics and commercial circumstances of each pipeline and to set the form of control that best achieves or incentivises the regulatory objectives.[47]

4.26 Submitters did not agree on the most appropriate form of control for gas transmission businesses.

4.27 While MDL noted a number of relative benefits of a price cap over a revenue cap, it supported a revenue cap and agreed with the Commission's initial view that it would allow a GTB to better manage its demand risk.[48]

4.28 Vector and AECT both provided arguments against revenues caps. Vector advocated a weighted average price cap, suggesting it best allows adjustments in revenues to accommodate new customer connections.[49]

4.29 AECT, Vector and MDL suggested that differences in business structure mean that the same form of control is unlikely to work for both MDL and Vector.[50]

4.30 AECT's preferred approach was a revenue cap where the cost structure (including investment) is largely fixed and the revenue driver is variable (as typically occurs with common carriage) and a weighted average price cap for where the cost structure

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46 Commerce Commission, *Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010*, 22 December 2010, p.50.

47 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper (on the Form of Control) for the Initial DPP for Gas Pipeline Businesses,* 30 April 2010, p. 14; Contact Energy Limited, *Submission to the Commerce Commission on its Initial Default Price-Quality Path for Gas Pipeline Businesses: Form of Control,* 30 April 2010, p. 3; Greymouth Gas New Zealand Limited, *Cross Submission to Submissions on the Initial Default Price-Quality Path for Gas Pipeline Businesses Issues Paper,* 31 May 2010, p. 1; Maui Development Limited, *Form of Control - Commerce Commission Submission,* 30 April 2010, p. 3.

48 Maui Development Limited, *Form of Control - Commerce Commission Submission,* 30 April 2010, pp. 5-6.

49 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper (on the Form of Control) for the Initial DPP for Gas Pipeline Businesses,* 30 April 2010, p. 11; Vector Limited, *Submission on Gas DPP Issues Paper – Form of Control,* 30 April 2010, pp. 4-5.

50 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper (on the Form of Control) for the Initial DPP for Gas Pipeline Businesses,* 30 April 2010, p. 8; Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2; Maui Development Limited, *Form of Control - Commerce Commission Submission,* 30 April 2010, p. 10; Vector Limited, *Submission on Gas DPP Issues Paper – Form of Control,* 30 April 2010, pp. 3-4.

(including investments in connections and capacity) is variable and the revenue driver is manageable (as typically occurs with contract carriage). In the absence of this AECT suggested an alternative of a weighted average price cap for all gas businesses.[51]

4.31 Vector also recommended that individual businesses should be able to choose the form of control that best suits their business structure.[52] Greymouth Gas disagreed with Vector and submitted that such an approach would be unlikely to result in all decisions being consistent with the Part 4 Purpose.[53]

Commission's Current Position

4.32 For each GTB, maximum prices that may be charged, or revenues that may be recovered, will be specified by either a weighted average price cap or a total revenue cap. In both circumstances, the cap is defined in terms of a relationship between notional revenue and allowable notional revenue, which are both defined in the IM. As outlined above, the specification of price IM also defines how costs that can be passed through to consumers are treated, i.e. they are netted off notional revenue.

4.33 Section 55E(2) of the Act also states that the s 52P determinations, specifying how default/customised price-quality regulation applies to each supplier of gas pipeline services, must be made in the manner set out in s 55F of the Act. The use of "each supplier" rather than "suppliers" in this section lends support to the approach set out in the GTB IMs of individual suppliers being able to be treated slightly differently under the same DPP.

4.34 Furthermore, s 55F(1) of the Act states that the Commission must use the processes set out in s 53P of the Act in making the first s 52P determinations that set out how a DPP applies to suppliers of gas pipeline services. Section 53P of the Act also contains references to supplier-specific provisions (e.g. at 3(b) and (8)) which suggest that it is consistent with the statutory regime to have a supplier-specific form of control.

4.35 Section 52P(3)(c) of the Act provides that the determination must specify which IMs apply. The DPP will specify that Parts 3 and 4 of the IM determination, including rules and processes IMs, apply. This permits the Commission to implement supplier-specific forms of control in the DPP.

4.36 It is recognised in the Issues Paper that the nature of gas transmission services are different to distribution services in a number of respects (i.e. demand profiles, geographic spread, cost structures and capital expenditure requirements) and that these factors can also vary between suppliers of those services.

4.37 It is important to re-emphasise that a DPP should provide incentives for suppliers to make efficiency gains but that these efficiency gains may be limited where there are a high percentage of fixed costs. Following consideration of submissions to the Issues Paper, and in setting the IMs, the Commission has therefore amended its

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51 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper (on the Form of Control) for the Initial DPP for Gas Pipeline Businesses,* 30 April 2010, p. 15; Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2.

52 Vector Limited, *Submission on Gas DPP Issues Paper – Form of Control,* 30 April 2010, p. 3.

53 Greymouth Gas New Zealand Limited, *Cross Submission to Submissions on the Initial Default Price-Quality Path for Gas Pipeline Businesses Issues Paper,* 31 May 2010, pp. 1-2.

initial view that a total revenue cap may be the most appropriate form of control for all GTBs.

4.38 The Commission has also considered submissions on whether there are significant differences between the providers of transmission services that may affect the form of control appropriate for each supplier.

4.39 The Commission is aware that the Maui Pipeline frequently experiences volatility in demand that is largely beyond the control of MDL and is difficult to forecast. The Maui Pipeline has a relatively high fixed cost base and it appears unlikely, from informal discussions with MDL, that significant one-off investment will be required to meet additional demand requirements during the Initial DPP. This suggests the most appropriate form of control for MDL will be a total revenue cap. Should MDL's situation change following the setting of a price-quality path, then MDL may apply for a CPP.

4.40 In contrast, the transmission services provided by Vector cover a larger geographical area while delivering much smaller volumes of gas to a larger number of delivery points than the Maui Pipeline. This suggests the most appropriate form of control for Vector will be a weighted average price cap and which should enable the recovery of revenues that may be generated through increased growth on its transmission network.

4.41 For the reasons outlined above, the Commission considers that it is appropriate to specify different forms of control for each GTB given the different characteristics and future requirements of the Vector and Maui pipelines. These different characteristics are summarised in Table 4.1 below:

Table 4.1: Main Characteristics of the Vector and Maui Transmission Pipelines

Vector Transmission Pipeline	Maui Pipeline
Smaller diameter than Maui pipeline covering a wide geographical area across the North Island.	Large diameter pipe covering a relatively short distance (Oaonui to Huntly).
Supplies smaller volumes to a larger number of delivery points.	Supplies large volumes to a small number of high demand customers.
Contract carriage arrangements apply.	Common carriage arrangements apply.
Can experience large fluctuations in demand with ability to control some variations through offering non-standard terms.	Can experience large fluctuations in demand with limited ability to control the variations.
Significant expansion and investment in some assets is possible during Initial DPP.	Maintenance investment may be required but significant expansion to meet increased demand is unlikely to be required during Initial DPP.

4.42 In the case of the Maui Pipeline, the Commission is of the view that a total revenue cap remains the most appropriate form of control. In respect of the transmission services provided by Vector, the nature of these services has lead the Commission to the view that a weighted average price cap is the most appropriate form of control.

SECTION 5 CLAW-BACK AND PRICE UNDER THE DEFAULT PRICE-QUALITY PATH

Introduction

5.1 This section discusses the Commission's updated views on when it may be reasonable and appropriate to apply claw-back to GPBs, compliance with price paths for GPBs, and the ability for the price path to cater for future investment needs.

Revenue Assessment and Application of Claw-Back

Commission's Initial View

5.2 At the time of its release, the Issues Paper noted that the Act provides for the application of claw-back under certain circumstances.

5.3 It highlighted that s 55F(2) of the Act states the following:

> *"However, **if a supplier has increased its weighted average prices by more than the movement, or forecast movement, in the all groups index number of the New Zealand Consumer Price Index in the period beginning 1 January 2008 and ending with the date that the determination is made**, the Commission may apply claw-back to the extent of requiring the supplier to lower its prices in order to compensate consumers for some or all of any over-recovery of revenues that occurred during that period."* [emphasis added].

5.4 Whether claw-back can be applied is contingent on the condition contained in the bolded text of the provision as set out above (i.e. the CPI Criterion).

5.5 The Commission notes that price increases above CPI may be deemed as an 'over-recovery' under the Act, but that this in itself does not imply excessively high profit taking.

5.6 The Commission's initial view on the application of claw-back under s 55F(2) of the Act was to require GPBs to demonstrate compliance using a specified assessment methodology. It was envisaged at that time that an assessment methodology would ascertain whether or not a GPB has increased its weighted average prices by more than the movement in CPI over the period 1 January 2008 to the date when the determination is made.

5.7 Alternatively, it was proposed that a GPB may propose an amendment to the assessment methodology where the GPB can demonstrate that the assessment methodology is not practicable in its particular circumstances and the amended methodology has an equivalent effect.

5.8 The Commission initially proposed that where a GPB is shown to have increased its weighted average prices by more than the movement in CPI, the Commission would assess whether the GPB has over-recovered any revenue and determine the extent of any over-recovery.

Submitters' Views

5.9 Submitters (other than Greymouth Gas) were generally opposed to the Commission's proposal to compare the prices for each year up to the date of the determination with the prices applying on 1 January 2008. Submitters considered that just one comparison should be made for the whole period, namely between 1 January 2008 and the prices applying at the determination date.[54]

5.10 In its cross-submission, Greymouth Gas submitted that if the Commission were to adopt the approach of applying the CPI test for the whole period rather than applying it for each year, a business would be incentivised to apply a large catch-up price increase if its price increases in previous years had been less than CPI. It submitted that this would undermine the credibility and stability of the regime, and not be of long-term benefit to consumers.[55]

5.11 Submissions proposed that the following factors should be taken into account in determining whether claw-back should be applied:

- Whether over-recoveries are technical in nature or where pricing is justified in terms of incremental investment or providing an adequate return in prevailing conditions on contemporaneous investment values (AECT);[56]
- Actions by the GPB to mitigate or compensate for any perceived over-recovery (GasNet);[57] and
- The specific circumstances of the supplier (MDL).[58]

5.12 GasNet submitted that under-recovery of revenues should be taken into account as well as over-recovery.[59] In considering GasNet's submission (and Greymouth's submission above), the Commission notes that s 55F(2) only applies to instances of over-recovery.

5.13 MDL submitted that each of its two tariffs should be combined for the purpose of claw-back calculations, and that the CPI calculations should be applied to revenue rather than to price.[60]

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54 Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2; GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 5; Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, p. 4; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, pp. 4-6.

55 Greymouth Gas New Zealand Limited, *Cross Submission to Submissions on the Initial Default Price-Quality Path for Gas Pipeline Businesses Issues Paper,* 31 May 2010, p. 3.

56 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper for the Initial DPP for Gas Pipeline Businesses*, 14 May 2010, pp. 10-11; Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2.

57 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 4.

58 Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, p. 4.

59 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 6.

60 Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, pp. 3-4.

5.14 In addition, Vector disagreed with the Commission's proposed approach and expressed disappointment that the Commission appears to have disregarded Vector's efforts to maintain price increases to less than CPI and to keep the Commission informed of its approach. Vector expressed the view that the Commission's proposed approach would be a breach of natural justice and is not reasonable.[61]

Vector's Previous Request for Confirmation Regarding its Methodology for Demonstrating Compliance with s 55F(2) of the Act

5.15 In previous correspondence with the Commission, Vector outlined its intended process of ensuring price increases were at less than CPI, with this being based on the Gas Authorisation methodology.[62]

5.16 Vector sought confirmation from the Commission that its approach would be acceptable.

5.17 The Commission had previously responded to Vector that it could not provide such confirmation at that time but that it intended to consider this issue further as the Initial DPP was developed.[63]

Services Controlled under the Commerce (Control of Natural Gas Services) Order 2005

5.18 The Commission's initial view was that the suppliers of services controlled under the Order should not have to demonstrate whether compliance with CPI Criterion (defined in paragraphs 5.3 and 5.4 above) has been met.

5.19 This would effectively mean that gas pipeline services provided by Powerco and Vector's Auckland distribution network would not be subject to potential claw-back provisions contained in the Act.

5.20 Both Powerco and Vector agreed with the Commission's initial view that services controlled under the Order, which are price compliant with the Gas Authorisations, should not have to demonstrate that CPI Criterion has been met for the purposes of claw-back.[64]

Commission's Current Position

5.21 The Commission has re-examined the rationale for applying claw-back to GPBs and, more specifically, Vector's proposed approach to meet the requirements of s 55F(2) of the Act.

5.22 Upon further examination and subject to the same methodology being applied to the setting of prices in 2010 and 2011 as was proposed by Vector, the Commission

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61 Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, pp. 4-6.

62 Vector Limited, *Submission on Setting the Default Price-Quality Path for suppliers of Gas Pipeline Services: Process Paper*, 10 August 2009.

63 Commerce Commission, *Request for confirmation regarding Vector's methodology for demonstrating compliance with section 55F(2)*, 1 October 2009.

64 Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 2; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, p. 4.

considers that this should result in Vector not being subject to claw-back applied under s 55F(2) of the Act.

5.23 The Commission's current position is that, for the same reasons set-out in the Issues Paper, suppliers of services controlled under the Gas Authorisations that are made pursuant to the Commerce (Control of Natural Gas Services) Order 2005 (the Order) should not have to demonstrate that the CPI Criterion has been met or not with respect to those services.

5.24 Under these circumstances, and subject to no claw-back provisions applying to any period between July and October 2012,[65] the Commission's view is that claw-back would not be applicable to any gas pipeline services provided by Powerco or Vector.

5.25 The Commission is also aware it is unlikely MDL would meet the CPI Criterion, given that it already utilises a building blocks approach to the setting of prices for the pipeline services it provides. While a building blocks approach does not imply that CPI increases have been taken into account, the Commission's understanding is that MDL's tariff model does include annual adjustments for CPI.

5.26 Subject to submissions on this matter, the Commission is of the view that issues around whether a GPB has met the CPI Criterion, the extent of any over-recovery, the appropriateness to apply claw-back and how this should be implemented will not be of relevance to GPBs for the Initial DPP.

5.27 However, before confirming its view on this matter, the Commission welcomes submissions from all suppliers and customers confirming how their prices have been set, how this has been assessed and what (if any) effect this has had on their businesses.

Compliance with the Price Path for Gas Pipeline Businesses

5.28 Under both a weighted average price-cap and a total revenue-cap, the Commission notes that annual compliance may be monitored by comparing the supplier's performance against the cap.

5.29 More specifically, the Commission still considers that it is appropriate to set the cap as an allowable notional revenue and monitor performance using a notional revenue figure, where notional revenue is determined using prices for an assessment period multiplied by the relevant quantities (e.g. base or updated reference quantities, as determined by the price path assessment formulae). Under both a weighted average price-cap and a total revenue-cap, a supplier would be in breach of the cap if notional revenue exceeds the allowable notional revenue.

Revenue Differential Term

5.30 The Commission has previously provided its reasoning for applying a revenue differential term to compliance assessment formulae for EDBs.[66] The Commission is of the view that these same principles should apply to GPBs who are subject to a weighted average price-cap, and this is reflected in the proposed compliance formula detailed below.

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65 Refer to section 8 of this paper.

66 Commerce Commission, *2010-2015 Electricity Distribution Default Price-Quality Path Refinements Discussion and Draft Decisions Paper*, 13 August 2010, Chapter 2, pp. 4-8.

5.31 However, the Commission does not consider that a revenue differential term is required for GPBs who are subject to a total revenue-cap. This is because the compliance formula proposed will determine allowable notional revenues (ANRs) for the current year using the ANR from the previous year and making an adjustment for CPI and any applicable rates of change.

5.32 In the compliance formula below, the revenue differential term is denoted by (R_{t-1} – NR_{t-1}).

Gas Distribution Businesses

5.33 For all GDBs who are subject to a weighted average price-cap, notional revenue (NR_t) at any time during the assessment period must not exceed the allowable notional revenue (ANR_t) for the assessment period, such that:

$$\frac{NR_t}{ANR_t} \leq 1$$

where:

NR_t is the notional revenue for the assessment period t, being equal to:

$$\sum_i P_{i,t} Q_{i,t-2} - K_t - V_t$$

ANR_t is the allowable notional revenue for the assessment period t, being equal to:

$$((\sum_i P_{i,t-1} Q_{i,t-2} - K_{t-1} - V_{t-1}) + (R_{t-1} - NR_{t-1})) \times ((1 + \Delta CPI_t) \times (1 - X))$$

where:

t	denotes the year of the assessment date in the assessment period, for which compliance is being assessed;
i	denotes each price relating to a gas distribution service;
$P_{i,t}$	is the i^{th} price during any part of the assessment period t;
$P_{i,t-1}$	is the i^{th} price during any part of the pricing period t-1;
$Q_{i,t-2}$	is the quantity corresponding to the i^{th} price during the pricing period t-2;
K_t	is the sum of all pass-through costs during the assessment period t;
K_{t-1}	is the sum of all pass-through costs during the assessment period t-1;
V_t	is the sum of all recoverable costs during the assessment period t;
V_{t-1}	is the sum of all recoverable costs during the assessment period t-1;
R_{t-1}	is the allowable notional revenue during the assessment period t-1;
NR_{t-1}	is the notional revenue during the assessment period t-1;
X	is the rate of change; and
ΔCPI_t	is the derived change in the CPI to be applied during the assessment period t, being equal to:

$$\frac{CPI_{Dec,t-3} + CPI_{Mar,t-2} + CPI_{Jun,t-2} + CPI_{Sep,t-2}}{CPI_{Dec,t-4} + CPI_{Mar,t-3} + CPI_{Jun,t-3} + CPI_{Sep,t-3}} - 1$$

5.34 The IMs provide criteria that must be complied with when specifying prices for GDBs.[67]

5.35 The Commission considers that historical quantities should be used for the purposes of determining an appropriate ANR_t and NR_t for the first year of the Initial DPP, as this provides the greatest level of certainty and removes the need for any 'wash-up' to cater for inaccurate forecasts of future demand.

5.36 In determining an appropriate time series for quantities to be used, the Commission is of the view that quantities from the year two years prior to the current period should be used. This is because quantities from the previous year to which the ANR_t will be set (i.e. t-1) may not be available at the time of setting the ANR_t for the current year.

5.37 The Commission has also examined the possibility of using quantities from earlier than two years before the current year, and possibly averaging these over time. However, the Commission is of the view that using quantities from two years prior to the current period presents the most accurate data that is relevant for the setting of an ANR_t for a current year.

Gas Transmission Businesses

5.38 In respect of GTBs, the Commission is of the view that a weighted average price cap would best cater for the needs of Vector's transmission network. Therefore, in relation to Vector Transmission's compliance with the price path, the Commission considers this will be the same as GDBs and does not require re-iteration.

5.39 For MDL, notional revenue (NR_t) at any time in the assessment period must not exceed the allowable notional revenue (ANR_t) for the assessment period, such that:

$$\frac{NR_t}{ANR_t} \leq 1$$

where:

NR_t is the notional revenue for the assessment period t, being equal to:

$$\sum_i P_{i,t} Q_{i,t-2} - K_t - V_t$$

ANR_t is the allowable notional revenue for the assessment period t, and for the base year (i.e: the first year of the Initial DPP) this will be equal to the ANR that is set by the Commission using its building blocks approach. For all subsequent years in the Initial DPP, the ANR will be equal to:

$$ANR_{t-1} \times ((1 + \Delta CPI_t)(1 - X))$$

67 Commerce Commission, *Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010*, 22 December 2010, pp. 52-54, subpart 1.

where:

t denotes the year of the assessment date in the assessment period, for which compliance is being assessed;

i denotes each price relating to a gas transmission service;

$P_{i,t}$ is the i^{th} price during any part of the assessment period t;

$P_{i,t-1}$ is the i^{th} price during any part of the pricing period t-1;

$Q_{i,t-2}$ is the quantity corresponding to the i^{th} price during the pricing period t-2;

K_t is the sum of all pass-through costs during the assessment period t;

V_t is the sum of all recoverable costs during the assessment period t;

X is the rate of change; and

ΔCPI_t is the derived change in the CPI to be applied during the assessment period t, being equal to:

$$\frac{CPI_{Dec,t-3} + CPI_{Mar,t-2} + CPI_{Jun,t-2} + CPI_{Sep,t-2}}{CPI_{Dec,t-4} + CPI_{Mar,t-3} + CPI_{Jun,t-3} + CPI_{Sep,t-3}} - 1$$

5.40 The IMs provide criteria that must be complied with when specifying prices for GTBs.[68]

5.41 For the same reasons that apply to GDBs and that are discussed previously, the Commission considers that historical quantities should be used for the purposes of determining an appropriate ANR_t and NR_t for each year of the Initial DPP.

5.42 In the case of the MDL, the Commission has considered the option of applying a 'wash-up' mechanism that could accommodate the inclusion of forecasted data when setting ANRs for each year of the Initial DPP. However, the Commission is of the view that the setting of an ANR, and the monitoring of compliance, may become extremely complex under such an approach without providing any more accuracy in the setting of ANRs for a current time period.

5.43 The Commission also understands that it may be difficult for any GTB to accurately forecast exact quantities across its network and that this could be problematic in utilising forecasted data in the setting of ANRs.

5.44 The Commission is aware that the quantities used in the setting of the ANR_t for the base year of the Initial DPP will be extremely important in determining an appropriate price path for MDL, and is willing to work with industry participants to ensure an appropriate outcome is achieved.

[68] Commerce Commission, *Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010*, 22 December 2010, pp. 50-52, subpart 1.

Starting Prices

5.45 As indicated in the executive summary, this paper does not contain a detailed discussion of the setting of starting prices for GPBs. However, it is useful to note that s 53P(3) of the Act provides two options for the setting of starting prices:

- The prices that applied at the end of the preceding regulatory period;[69] or
- Prices, determined by the Commission, that are based on the current and projected profitability of each supplier.[70]

5.46 The Commission will proceed with the second of the above options as no regulatory regime is currently in place for some GPBs. For Powerco and Vector's Auckland distribution network, the second of the above options is also likely to be appropriate given that default customised price-quality regulation is different to the Gas Authorisations.

5.47 IMs now establish rules for measuring costs for GPBs and the Commission considers it appropriate to align prices and costs from the outset of the Initial DPP.

5.48 The Commission is developing a proposed approach for setting starting prices for EDBs under s 53P(3)(b) of the Act and will release a consultation paper shortly. While this will focus on starting price adjustments for EDBs, there are likely to be parallels with decisions on the setting of starting prices for GPBs.[71] It is important to note that starting price adjustments for EDBs will be applied for a regulatory period that has already started, but this will not be the case for GPBs.

5.49 The Commission intends to make information requests for the setting of starting prices for GPBs in the near future. These information requests are likely to take a similar form to those issued to EDBs.[72] The Commission has already advised that suppliers should make all the necessary arrangements to ensure they are in a position to complete the information requests by any due dates.[73]

Catering for Future Investment Needs

Vector's Initial View

5.50 Vector has previously submitted to the Commission that it considers future DPP price paths should specifically cater for significant investments on gas transmission networks and that the CPP application process under Part 4 is not a satisfactory mechanism for this purpose.[74]

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69 Section 53P(3)(a) of the Act.

70 Section 53P(3)(b) of the Act.

71 http://www.comcom.govt.nz/2010-2015-default-price-quality-path/.

72 Further information can be found at http://www.comcom.govt.nz/assets/Electricity/201015-Reset-DPP/SPA-Info-Request/SPA-Issues-Register/Section-53ZD-Information-Request-Notice-EDB-Starting-Price-Adjustments-16-March-2011.pdf

73 Further information can be found at http://www.comcom.govt.nz/2012-default-price-quality-path/.

74 Vector Limited, *Submission in response to the Commerce Commission's Revised Draft Determinations and Consultation Update Papers for Electricity Distribution Businesses and Gas Pipeline Businesses Part 5*, 19 November 2010, pp. 3-10.

5.51 At the time of its submission, Vector emphasised the need for amendments to the draft input methodologies to enable GTB investment to be accommodated in the DPP. At the very least, Vector urged the Commission to endorse one of the following:

- Provision for GTB investment to be recovered as a pass-through/recoverable cost where the investment meets an investment test; or
- Provision for a re-opener of the DPP where an investment test (to be developed) is satisfied.

Commission's Current Position

5.52 Since the receipt of Vector's submission on this matter, the Commission has released its input methodology determinations for GTBs and an IM Reasons.[75]

5.53 Paragraph 9.5.25 of the IM Reasons notes that:

> *"…the Commission has incorporated additional mechanisms for dealing with uncertain or unforeseen gas transmission investments by adopting a contingent/unforeseen project approach, whereby:*
>
> - *The costs of particular large investments are not provided for in the ex ante revenue allowance where the need, timing, and/or costs of the project are uncertain or the project is unforeseen when a proposal is submitted;*
> - *The Commission will only reconsider the price path if the GTB satisfies the Commission that the project will proceed; and*
> - *The amendment to the price path will not take effect until the year in which assets associated with the project are forecast to be commissioned."*

5.54 Paragraph 9.5.37 of the IM Reasons also makes it clear that the Commission does not consider it appropriate to provide a re-opener under a DPP, as this does not establish a level of forecast expenditure against which incremental changes can be assessed.

5.55 The Commission's current position on this issue is that both the IMs and the option of applying for a customised price-quality path do provide sufficient flexibility under the Part 4 regulatory framework to cater for the future investment needs of GTBs.

5.56 The Commission also considers that, where future investment may result in providing dedicated pipeline services, interested parties also have the option of applying for these services to be included under Schedule 6 of the Act which exempts suppliers from Part 4 regulation for those services.

5.57 The Commission welcomes further submissions from interested parties on this matter as part of their response to this Discussion Paper.

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75 Commerce Commission, *Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010*, 22 December 2010; Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, 22 December 2010.

SECTION 6 RATE(S) OF CHANGE

Introduction

6.1 In accordance with s 53P(1) of the Act the Commission must set out the rate(s) of change (X-factor) that apply to suppliers for the Initial DPP. The Commission has adopted the term "X-factor" to represent the "X" component of the CPI-X indexation component of the price path. While the overall rate of permitted change in weighted average prices under the DPP will, in practice, be CPI-X, the Commission notes that s 53P(5) of the Act provides an example that refers to the "rate of change" as being solely the "X" in a "CPI-X" path.

6.2 The X-factor limits the maximum amount (relative to the CPI) by which GPBs are permitted to increase their weighted average price or revenue each year. Efficiencies made over and above those implicit in the X-factor of the CPI-X price path can be retained by GPBs, allowing above normal profits to be earned, at least until the next price reset.

6.3 Generally a single X-factor will apply for each regulated service, although the Commission may set alternative rates of change for individual suppliers in certain circumstances.[76] This section outlines the Commission's current position on setting the rate(s) of change that will apply to GPBs for the Initial DPP.

6.4 The Act specifies that the X-factor for regulated suppliers under a DPP is to be:

> *"…based on the **long run average productivity improvement rate** achieved by either or both of suppliers in New Zealand, and suppliers in other comparable countries, of the relevant goods or services, using whatever measures of productivity the Commission considers appropriate}."*[77] [emphasis added].

6.5 The Commission may use whichever measures of productivity it considers appropriate to set the X-factor. There are a number of methods for measuring productivity growth rates, including partial productivity and total factor productivity (TFP).

Setting the X-factor

Commission's Initial View

6.6 The Issues Paper set out the Commission's initial views on setting the rate(s) of change (X-factor) that will apply to GPBs for the Initial DPP, including that:

- TFP was the preferred measure of productivity and the Commission proposed to use TFP to inform its decision on the level of an X-factor;
- of the three options proposed,[78] New Zealand gas sector productivity analysis was of most direct relevance for the purposes of setting the X-factor and, to the extent practicable, the Commission intended to consider undertaking a New

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76 Sections 53P(5) & (8) of the Act.

77 Section 53P(6) of the Act.

78 (i) Undertake a New Zealand Productivity Analysis (similar to the approach used for the Electricity DPP); (ii) Use Overseas Gas Sector Productivity Growth Estimates; or (iii) Use Information from Other Sectors of the Economy (i.e. consider the productivity of the New Zealand gas sector against other regulated sectors or the economy as a whole).

Zealand-based study. However, recognising that the robustness of such analysis may be limited, other indirect approaches for assessing productivity may be used as an alternative if data issues cannot be resolved; and

- the results of any productivity analysis should not apply mechanistically. Rather, the results from any analysis should be used to inform the Commission's view on the appropriate value of the X-factor with those results given appropriate weight in light of other considerations.[79]

Submitters' Views

6.7 Some parties were explicitly supportive of the use of TFP.[80] With the exception of GasNet, which considered the outputs of a study will not be credible,[81] submitters considered it appropriate to undertake a New Zealand gas sector TFP study for the Initial DPP.[82] However, reservations were raised about the availability of appropriate data to undertake the study in the first instance.[83]

6.8 Regarding undertaking a New Zealand gas sector TFP study:

- submitters supported the use of the 'B-factor' approach used for the thresholds regime and for the gas sector in Australia;[84]

- GasNet commented that past performance may not be a good indicator for the future (e.g. past amalgamations have resulted in one-off productivity gains that are not expected to be repeated);[85]

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79 Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses Issues Paper*, 12 April 2010, pp. 24-28, section 6.

80 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 6; Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 4; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, p. 6.

81 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, pp. 6-7.

82 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper for the Initial DPP for Gas Pipeline Businesses*, 14 May 2010, pp. 12-14; Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2; Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, p. 6; Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 4.

83 Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 4; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, pp. 6-7.

84 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper for the Initial DPP for Gas Pipeline Businesses*, 14 May 2010, pp. 12-14; Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, pp. 6-7.

85 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 6.

- Powerco identified various matters that need to be specifically considered for such a study, including that productivity driven by consolidation and high growth has ended, the impact of increasing costs (e.g. traffic management costs), and the impact of the recession on available data;[86]

- MDL noted that TFP was not calculated for it as part of the Gas Control Inquiry (and hence data was not collected) and highlighted various business specific considerations for such a study, including that MDL has a low number of connections, experiences volatile levels of throughput, that gas supply may be constrained in future, capex requirements are lumpy and uncertain and MDL has a high proportion of fixed costs in its cost base.[87]

6.9 AECT suggested that overseas data may offer useful insights[88] and Powerco was of the same view but noted that there are limitations to using such data due to differences with other regulatory regimes and the scale of overseas gas sectors.[89] GasNet considered overseas data not to be relevant due to the scale of the New Zealand sector.[90]

6.10 Submitters also considered that another appropriate indirect method is to use the rate of change set for the electricity EDB DPP, with some commenting that a zero value would be pragmatic for the first regulatory period.[91]

6.11 Vector considers it may be most pragmatic to reform information disclosure requirements to improve available data and undertake a robust TFP study for the second regulatory period.[92]

6.12 Submitters generally agreed that the results of any productivity analysis should not apply mechanistically,[93] but that analysis of data should be transparent and Powerco

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86 Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 6.

87 Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, pp. 5-6.

88 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper for the Initial DPP for Gas Pipeline Businesses*, 14 May 2010, pp. 12-14; Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2.

89 Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 5.

90 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 7.

91 Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2; GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 7.

92 Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, pp. 6-7.

93 Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 2; GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 6; Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, p. 6; Vector Limited,

believed that the Commission should not be provided extensive discretion. Powerco submitted that the process must have credibility to maintain investor confidence and the X-factor should be set in a conservative manner to ensure a "do no harm" approach for all lines businesses.[94]

Economic Insights' Analysis

6.13 In determining the appropriate X-factor rate of change to be established and applied to GPBs for the Initial DPP, the Commission has engaged Economic Insights to provide advice on the productivity differential between the gas pipeline industry and the economy, and the input price differential between the gas pipeline industry and the economy.[95] The report provided to the Commission by Economic Insights is available on the Commission's website.[96]

6.14 The main objective of the report was to assess whether there is robust evidence to suggest that the long–run productivity growth rate of New Zealand GTBs and GDBs is significantly different from that of the New Zealand economy as a whole. Economic Insights also examined available evidence on whether input price growth for New Zealand GPBs is significantly different to that for the New Zealand economy as a whole.

6.15 Three broad approaches were used as follows (listed in order of preference):

- A direct approach using information currently available on New Zealand GPBs;
- An indirect approach using information available on overseas GPB performance; and
- An indirect approach using information from other industries.

6.16 The information obtained from early analysis using the direct approach above suggests that, over both the longer term and the short term, there has been no robustly identifiable productivity differential between the gas distribution and gas transmission industries and the economy as a whole.

6.17 Similarly, based on the limited information available, there does not appear to have been an identifiable input price difference between these industries and the economy as a whole.

6.18 While not providing definitive guidance, the initial review of overseas GPB TFP studies is not inconsistent with the conclusion that GPB productivity performance has not been demonstrably different from that of the New Zealand economy as a whole.

6.19 Economic Insights has concluded that the longer run Multi Factor Productivity (MFP) growth rate of 0.5 per cent for the New Zealand economy as a whole is within

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Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper, 14 May 2010, p. 6.

94 Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, pp. 4-7.

95 Economic Insights Pty Limited, *Regulation of Suppliers of Gas Pipeline Services – Gas Sector Productivity*, 10 February 2011, section 1.

96 http://www.comcom.govt.nz/2012-default-price-quality-path/.

the range of TFP growth rates observed for Australian GDBs (which arguably face more favourable operating conditions) and similar to that reported for North American GDBs over a comparable period.

6.20 While again not providing definitive guidance for the purpose of considering the X-factor for New Zealand GPBs, the review of New Zealand and overseas electricity network TFP studies lends support to the case for allocating a value of zero to the productivity differential between GPBs and the economy as whole.

6.21 Similarly, information available on the New Zealand EDB input price differential supports the case for also allocating a value of zero to the input price differential for New Zealand GPBs.

6.22 While recognising the shortage of complete, consistent and robust relevant data, Economic Insights' initial review of both direct and indirect approaches to assessing whether GPB TFP growth and GPB input price growth have been similar to those for the New Zealand economy as a whole, points to there being no strong evidence to the contrary.

6.23 The evidence available at this time lends support to allocating values of zero to both the productivity differential and the input price differential when considering an appropriate X-factor for the Initial DPP for GPBs.

6.24 To the extent that historical productivity and input price differentials provide a good guide to future relative performance, this lends support to the case for a zero X-factor for the first regulatory period.

6.25 Economic Insights also notes that the start of productivity–based regulation can be expected to provide GPBs with stronger incentives to improve productivity performance in the future.

Commission's Current Position

6.26 After considering submissions and the subsequent report from Economic Insights, the Commission remains of the view that TFP is the preferred measure of productivity to inform its decision on the level of an X-factor and that New Zealand gas sector productivity analysis is of most direct relevance. However, other indirect approaches for assessing productivity may be used as an alternative if limited information is available to inform such analysis. The Commission also agrees with submitters that the results of any productivity analysis should not apply mechanistically.

6.27 Having considered the results of the Economics Insights report, the conclusions it draws and the recommendations it makes, the Commission acknowledges that the evidence available lends support to GPB TFP growth and input price growth being similar to those for the New Zealand economy as a whole. It therefore appears appropriate to allocate a value of zero to the X-factor for GPBs under an Initial DPP, without needing further analysis.

6.28 The start of productivity-based regulation can be expected to provide GPBs with incentives to continue improving productivity performance as this may affect their future price paths under subsequent DPP resets.

6.29 Values of zero may not be truly indicative of the productivity performance of individual GPBs. However, a shortage of complete, consistent and relevant data relating to the historical performance of GPBs has limited the ability of Economics

Insights to obtain more robust results and the Commission accepts that this presents limitations in setting an X-factor other than zero.

6.30 This emphasises the need for more robust information disclosure requirements than are currently in place (i.e. the requirements that were set under the Gas Act 1992) during the Initial DPP period. The Commission is currently developing information disclosure requirements under Part 4 of the Act to rectify this issue and will require GPBs to collate and report data throughout the Initial DPP period that will be of use in determining X-factors in future DPP resets.

6.31 In the interim, and for the reasons discussed above, the Commission proposes to set an X-factor of zero for GPBs for the Initial DPP regulatory period.

Data Requirements for Calculating Future TFPs for GPBs

6.32 Economic Insights has also been requested to advise the Commission on the likely future data requirements for the setting of TFPs for GPBs at the next DPP reset.

6.33 This work is ongoing, but early indications are that previous work conducted by Economic Insights for the Australian Energy Market Commission in 2009 may serve as a useful initial reference in this regard.[97]

6.34 This includes a list of the variables required to support TFP analysis across the Australian gas sector and these are shown under Appendix A. The Commission is of the view that most, if not all, of these requirements may be useful in a New Zealand gas industry context.

6.35 However, the Commission also considers that additional data requirements may be necessary to sufficiently cater for the specific needs of the New Zealand gas sector and that these may also include information currently disclosed as part of the Gas (Information Disclosure) Regulations 1997.

6.36 The Commission welcomes submissions from interested parties setting out their views on future data requirements (either under a DPP or through separate information disclosure) that may be needed for undertaking TFP analysis for GPBs.

97 Economic Insights, *Assessment of Data Currently Available to Support TFP-based Network Regulation*, 9 June 2009, Appendix A, pp. 52-58. http://www.aemc.gov.au/Media/docs/Economic%20Insights%20-%20Assessment%20of%20data%20currently%20available%20to%20support%20TFP-based%20network%20regulation,%209%20June%202009-d56686ba-b5f5-4f64-a474-3d79c900d614-0.pdf.

SECTION 7 QUALITY STANDARDS

Introduction

7.1 Section 7 of the Issues Paper outlined the Commission's initial views on an approach to defining, setting and assessing quality standards for the Initial DPP.

7.2 The Commission's current views are largely the same as those outlined in the Issues Paper but this section further expands on the issues the Commission faces regarding quality standards. This section also discusses what information in relation to quality may be included in the information disclosure regime.

Quality Standards

7.3 Section 53M(1)(b) of the Act requires every price-quality path to specify the quality standards that must be met by the regulated supplier.

7.4 Section 53M(3) of the Act states that quality standards may be prescribed in any way the Commission considers appropriate, including as targets, bands or formulae.

7.5 Quality standards are important within a price control regime, as they can mitigate potential incentives for suppliers to reduce expenditure (and so increase profit levels under a price-cap and/or revenue cap) to the detriment of service quality.

7.6 The Commission considered quality measures used by overseas regulators and those applied under the Gas Authorisations.[98] However, most other overseas regulators that apply quality standards to GPBs benefit from having robust historical data sets on performance over a number of years. This type of information is not available to the Commission when setting quality standards for GPBs in New Zealand, especially for those GPBs not subject to the Gas Authorisations.

7.7 Therefore, the Commission faces two main issues in relation to setting quality standards for the Initial DPP:

- The quality standards that are appropriate for the Initial DPP given the limitations of current data; and
- Further requirements for GPBs to collate and disclose data during the Initial DPP (that may enable the setting of more appropriate quality standards for any subsequent DPP reset) but that may not be applied to a quality standard under the Initial DPP.

7.8 The Commission considers it desirable for a discussion of gas quality standards to encompass both the setting of quality standards under a DPP and also the quality measures that may be required to be disclosed under a separate information disclosure regime under Part 4 of the Act.[99]

7.9 For the reasons outlined below, a number of quality measures that were discussed in the Issues Paper as possible quality standards under a DPP are now proposed in this

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[98] Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses Issues Paper*, 12 April 2010, Appendix E.

[99] The Commerce Commission, *Information Disclosure Regulation Electricity Lines Services and Gas Pipeline Services Process and Issues Paper*, 23 February 2011 signalled that the information disclosure requirements in respect of gas quality indicators may prove to be consistent with gas DPP quality standards.

paper as possible quality measures under an information disclosure regime. In reaching these views, the Commission has considered submissions on the setting of quality standards in response to the Issues Paper.

Commission's Initial View

7.10 The Issues Paper set out the Commission's initial views on an approach to defining, setting and assessing quality standards for the Initial DPP, including that:

- to the extent practicable, the regime will put in place objective quality standards with defined and measurable indicators;
- the Commission considers reliability as being central to service quality, as a deterioration of reliability is likely to affect the quality of the service experienced by consumers; and
- it is important that any such standards are meaningful in terms of assessing compliance.

Submitters' Views

7.11 There was no consensus among parties as to an appropriate approach for setting and assessing quality standards.

7.12 Most parties considered that the Initial DPP should only include one or two enforceable quality measures and that other measures (such as those reported under the Gas Authorisations) be reported under information disclosure.

Reliability

7.13 AECT did not support the use of System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI), asserting that the measures are less useful for gas than electricity. AECT was also of the view that unplanned interruptions are less frequent for gas and more reflective of third party events rather than network condition and infrequent major events are likely to result in a high standard deviation.[100]

7.14 GasNet supported the use of SAIDI only and considered that:

- only one enforceable measure is appropriate;
- the standard should be set on the basis of no material deterioration; and
- should include an allowance for extreme events.[101]

7.15 MDL supported use of a measure of reliability that is relevant, but considered that SAIDI and SAIFI measures are not appropriate for low frequency, high duration events. MDL also suggested that any quality standards should exclude events beyond the control of GPBs (e.g. unplanned outages and interruptions that are caused

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100 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper for the Initial DPP for Gas Pipeline Businesses*, 14 May 2010, pp. 15-16; Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 3.

101 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, pp. 8-9.

by welded parties) and that there is potential to measure reliability in the form of available pipeline capacity.[102]

7.16 Powerco supported SAIDI and SAIFI, and considered these to be useful measures that reflect customer service. It also noted that data and operational issues are likely to prevent the use of SAIDI and SAIFI for the Initial DPP. Powerco also considered there to be a weak relationship between investment and SAIDI and SAIFI measures, and that low frequency, high duration events can distort SAIDI and SAIFI measures and present difficulties for undertaking statistical analysis to establish an enforceable standard.

7.17 Powerco was also of the view that normalisation for extreme events for gas networks is very important and that statistical analysis specific to gas should be undertaken. To this end, it considered a similar approach to that applied to EDBs may not be wholly appropriate and should not be carried over to gas businesses.[103]

7.18 Vector supported the use of SAIDI for the Initial DPP for transmission, but not for distribution and noted that SAIDI is a derivative of line pressure (i.e. a failure to provide sufficient pressure will often result in a loss of supply from a gas transmission network). Vector proposed the use of five year rolling averages to set and assess standards and avoid volatility in the setting of standards.

7.19 Vector was also of the view that SAIDI / SAIFI measures are not particularly useful as this could lead to GPBs being incentivised to avoid disconnecting customers due to safety concerns. Vector also considered that the relationship between a gas network interruption and the disruption to customer service is not well defined; and that, if SAIDI / SAIFI measures are used, they should be limited to unplanned outages to avoid incentives to reduce planned outages.[104]

<u>Public Reported Escapes</u>

7.20 Powerco considered that public reported escapes (PREs) as a quality measure has limitations because it is not objective, is transient, dependent on climatic conditions, often cannot be verified and could be affected by pipelines and equipment not under the remit of the Commission's responsibilities under Part 4.[105]

7.21 Vector supported the use of PREs for GDBs, and noted that no material deterioration in the number of confirmed PREs per annum on the network is a well established performance measure and that current thresholds exist under the Gas Authorisations.[106]

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102 Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, pp. 7-8.

103 Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, pp. 7-9.

104 Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, pp. 7-11.

105 Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 9.

106 Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, p. 7.

Unaccounted For Gas

7.22 GasNet, Powerco and Vector did not support the use of unaccounted (UFG) as a quality measure as it is largely determined by factors such as third party measurement and emergency events.[107] MDL supported the use of UFG, but considered that any measure would need to consider accuracy of meters.[108]

Safety Measures

7.23 In responding to whether appropriate safety measures could be used as quality standards, MDL considered that a safety-based measure would be a duplication of other existing safety regulations.[109] Powerco, however, supported the use of a safety measure as an interim arrangement and believed that the application of safety standards result in higher levels of quality.[110] Vector supported the use of responses to emergencies (i.e. proportion of emergencies responded to within one hour) for GDBs and considered this to be a valid performance measure that is crucially important to the service provided by a distribution business. Vector also noted that current thresholds exist under the Gas Authorisations.[111]

Other Comments

7.24 In respect of other measures that could be applied as quality standards under the Initial DPP, GasNet did not support the use of quality standards that could measure system integrity (as it is outside of the control of GPBs) or assess the quality of gas transmitted through a pipeline, or other general customer service parameters.[112]

7.25 Greymouth Gas supported the use of measures based on reliability (which are set at a level consumers want), responsiveness to consumer requests and complaints, and the provision of opportunities to provide informed feedback to GPBs.[113]

7.26 Vector supported the use of compressor uptime and failure to meet pressure thresholds (for transmission) despite its view that information would not be available to set compressor uptime standards for the Initial DPP.[114]

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107 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 8; Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, pp. 9-10; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, p. 10.

108 Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, p. 8.

109 ibid, p. 8.

110 Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, p. 10.

111 Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, p. 7.

112 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 8.

113 Greymouth Gas New Zealand Limited, *Cross Submission to Submissions on the Initial Default Price-Quality Path for Gas Pipeline Businesses Issues Paper,* 31 May 2010, p. 4.

114 Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, pp. 10-11.

7.27 In more general terms, Vector also considered that different quality standards should be set for transmission and distribution services and that the same standards should apply to MDL and Vector. Vector was also of the view that any quality measure selected for this regulatory period will most likely be sub-optimal. For these reasons, Vector is of the view that the Commission should take a flexible approach to the monitoring and enforcement of any breaches of quality standards during the first regulatory period, and that the Commission should use the Initial DPP to gather robust data on quality and reliability performance of GPBs and use this data to set credible quality standards at the next DPP reset.[115]

Commission's Current Position

7.28 The Commission's current view is that one quality standard should apply to GPBs for the Initial DPP and that this should be related to safety.

7.29 However, the Commission considers that a number of quality measures should also be applied to GPBs' information disclosure requirements throughout the Initial DPP to facilitate the setting of further quality standards at future DPP resets.

7.30 The Commission proposes that some of these measures should have associated quality thresholds and that, in the event of the threshold not being met, a further level of reporting would be required to explain the failure to achieve the threshold. The majority of the quality measures will not have an associated threshold level.

7.31 The proposed quality standards, measures and thresholds are discussed below.

<u>Proposed DPP Quality Standards for GDBs and GTBs</u>

Emergency Response Times

7.32 A quality standard regarding emergency response times is proposed for the Initial DPP. This would require that 95% of all emergencies must be attended to within 60 minutes (this being the time from the GPB being advised of the emergency to the time a representative of the GPB reaches the site of the emergency not exceeding 60 minutes). An emergency would be defined as an incident for which one of the emergency services (police, fire service, etc.) is called.

7.33 The Commission does not consider that the quality of existing data would allow the setting of a meaningful threshold for PREs for the first regulatory period, but notes that this may be possible for the second regulatory period. The Commission also considers that continual improvements to the way in which GPBs receive, record and monitor PREs will be required to allow such a quality standard to be used in future. All GPBs therefore would need to ensure that their internal processes allow such an approach to be adopted for future DPP resets.

<u>Proposed DPP Quality Measures for GDBs</u>

7.34 The Commission proposes the following quality measures for GDBs, which are largely based on the quality measures in place under the Gas Authorisations for Powerco and Vector, as amended.[116, 117]

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[115] Vector Limited, *Cross-submission to Commerce Commission on Gas Default Price-Quality Path: Issues Paper,* 31 May 2010, pp, 2- 6.

[116] Commerce Commission, *Decision 656: Authorisation – Powerco – Control of Supply of Natural Gas Distribution Services*, 30 October 2008; Commerce Commission, *Decision 657: Authorisation – Vector – Control of Supply of Natural Gas Distribution Services*, 30 October 2008.

7.35 The Commission proposes the following quality measures should be disclosed on an annual basis and that electronic formats (such as publication on company websites) may be considered as an acceptable format for disclosing such information:

Table 7.1: Proposed Gas Quality Measures for GDBs - Reliability

Reliability Measure	Calculation	Threshold	Regional Breakdown Required[118]
SAIDI - unplanned, excluding transmission faults	[(Sum of (unplanned interruption durations) - Sum of (unplanned interruption durations caused by transmission faults))/ average total customer numbers] x1000	To be determined	Yes
SAIFI - unplanned, excluding transmission faults	[Sum of (no of customers affected by each unplanned interruption not caused by transmission faults)/ average total customer numbers] x 1000	To be determined	Yes
CAIDI - unplanned, excluding transmission faults	SAIDI - unplanned, excl transmission faults/SAIFI - unplanned, excl transmission faults	Not applicable for Initial DPP	Yes
SAIDI planned	Sum of (planned interruption durations)/ average total customer numbers	Not applicable for Initial DPP	Yes
SAIFI planned	Sum of (number of planned interruptions) / average total customer numbers	Not applicable for Initial DPP	Yes
Outage Events	Number of Outage events	Not applicable for Initial DPP	Yes
Outage Events caused by third party damage	Number of Outage events caused by Third Party Damage	Not applicable for Initial DPP	Yes

Table 7.2: Proposed Gas Quality Measures for GDBs – System Condition & Integrity

System Condition & Integrity Measure	Calculation	Threshold	Regional Breakdown Required
Third Party Damage Events	Number of third party damage events/total length of pipeline	Not applicable for Initial DPP	Yes
Leaks	Number of leaks detected by routine survey / total length of pipeline surveyed	Not applicable for Initial DPP	Yes

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117 Commerce Commission, *Amendments to Authorisation for the Supply of Controlled Natural Gas Services by Powerco Limited and Vector Limited*, New Zealand Gazette, 29 March 2010. http://www.dia.govt.nz/pubforms.nsf/NZGZT/Supplement_ContNatGas35Mar10.pdf/$file/Supplement_ContNatGas35Mar10.pdf.

118 Regional breakdowns should distinguish between different networks and their respective geographic locations.

System Condition & Integrity Measure	Calculation	Threshold	Regional Breakdown Required
PREs	Number of confirmed public reported escapes of gas / total length of pipeline [kms] x 1000	Not applicable for Initial DPP	Yes
Poor pressure due to network causes	Number of poor pressure events	Not applicable for Initial DPP	Yes

Table 7.3: Proposed Gas Quality Measures for GDBs – Customer Service

Customer Service Measure	Calculation	Threshold	Regional Breakdown Required
Responses to Emergency	Sum of (emergency response time) / total number of emergencies	95% of emergency should be responded to within 60 minutes	Yes
Answering Telephone calls	Telephone calls to the emergency number will be answered by an individual within 30 seconds	Not applicable for Initial DPP	No
Complaints	Number of complaints / average total customer numbers	Not applicable for Initial DPP	No

7.36 If the quality threshold on any aspect of a quality measure shown above is not met, then further information regarding that quality measure will be requested by the Commission. For instance if, after an initial assessment of a GPB's information disclosure, the Commission is of the view that insufficient commentary has been provided in support of the SAIDI, SAIFI and PRE measures, then the Commission may make additional requests to individual companies for further information beyond the statutory information disclosure requirements. This further information may include a description of the incidents that contributed to the quality measure not meeting the threshold:

- the amount of the quality measure contributed by the incident;
- the location of the incident;
- a description of the incident, including its nature and cause; and
- the number of consumers affected.

Proposed DPP Quality Measures for GTBs

7.37 The availability of capacity on some parts of the Vector transmission system has been the subject of discussion within the gas industry in recent months and the Commission notes that the GIC is currently progressing work on this issue.[119]

7.38 While not seeking to replicate the work of the GIC, the Commission considers that a comparison of the capacity at differing points of a transmission system, the amount of this capacity that has been reserved under a capacity reservation regime and the amount of gas that has actually been transmitted at various points of the network can provide useful insights into the adequacy of a transmission system in meeting the Part 4 Purpose.

7.39 In forming a view on the proposed quality measures that should be applied to GTBs, the Commission is aware that there are many quality measures and other terms and conditions between suppliers, shippers and interconnected parties that are comprehensively covered and monitored through contracts rather than by regulation. However, for this mechanism to be fully effective, transmission service agreements and interconnection agreements must be in place.

7.40 The Commission has also considered previous comments from submitters that the same quality standards should apply to the GTBs of MDL and Vector. However, MDL does not operate the Maui pipeline on a contract carriage basis and, therefore, the Commission considers that some quality measures relating to capacity reservations will not be of relevance to that business and that exemptions may apply in those circumstances.

7.41 The Commission is of the view that the following quality measures are appropriate for GTBs under the Initial DPP:

- *Gas Demand by Gas Gate* – The peak hourly demand for each of the days in the disclosure year for each gas gate, including gates at which gas is injected and also those at which it is delivered;

- *Total Gas Reservations that have been Issued by Gas Gate* – The amount of the reservations issued in those cases where the reservation has been constant for the whole disclosure year, and the weighted average reservation over the disclosure year for those gas gates where the total reservation level has varied;

- *Total Gas Reservations that have been Requested by Gas Gate* – The amount of the reservation requested, rather than the amount issued. This would provide a measure of the amount of unserved demand for gas transmission capacity reservations;

- *Total number of Gas Reservation Requests that have been Granted in Full by Gas Gate* – The number of demands not granted in full for gas transmission capacity, as distinct from the total level of unserved demand;

- *Total number of Users of a Transmission Pipeline* – The total number, and respective names, of shippers operating on a transmission system and the number of these shippers that have current transmission service agreements in

119 A summary of this work and relevant documents can be found at: http://www.gasindustry.co.nz/work-programme/transmission-pipeline-capacity.

place. It is also proposed that each GTB disclose the total number of interconnection users on its transmission system and the number of these that have a current interconnection agreement for all interconnected points with the GTB. Where the number of shippers does not correspond to the number of transmission service agreements and/or the number of interconnected users does not correspond to the number of interconnection agreements, the GTB should also provide commentary as to why this is the case; and

- *Compressor Availability* – It is proposed that for each compressor unit, the following information be disclosed:
  - The reference code or name used by the GTB to identify the unit;
  - The compressor station at which it is installed;
  - The number of hours in the disclosure year that the compressor was running;
  - The number of hours in the disclosure year that the compressor was available to start,[120] excluding the running hours disclosed in the previous item; and
  - The number of instances where the compressor failed to start or otherwise failed to provide its normal service when it was required.

7.42 The Commission is of the view that various measures could be proposed which would be the average of some or all of the data for individual compressors. It is difficult however to determine which of such summary measures would be most useful and it is therefore proposed that each GTB disclose data related to each compressor unit, so as to make the data available at a relatively detailed level. There are less than 30 compressors in total and the regulatory burden of disclosing data for each compressor will not be materially different from disclosing data as a summary statistic, such as an average.

120 The hours counted as available would include those periods when the unit was understood to be available, even though it subsequently failed to start at the end of the period.

SECTION 8 SETTING THE REGULATORY AND ASSESSMENT PERIODS

Introduction

8.1 Under s 55F(1) of the Act, the Commission is required to set an initial default price-quality path for GPBs. Pursuant to Part 4, every default price-quality path must specify:

- the date or dates on which the default price-quality path (or any part of it) takes effect;[121]
- the annual date by which compliance with the DPP must be demonstrated in accordance with s 53N;[122] and
- the regulatory period.[123]

8.2 As part of the development of the Initial DPP to meet the above requirements, this section sets out discussion on the regulatory and assessment periods for the Initial DPP. This discussion has been structured under the following headings:

- Background;
- Submitters' views; and
- Options for regulatory and assessment periods.

Background

8.3 In its July 2009 Process Paper, the Commission set out that it would rely on s 55E(2) and start the Initial DPP on 1 July 2011.[124] At that time, the Commission considered a 1 July 2011 date would have allowed the Initial DPP to be based on finalised input methodologies, a greater amount of time for consultation with interested parties and the collation of useful data.

8.4 Submissions to the July 2009 Process Paper supported the use of s 55E(2) to determine the start of the Initial DPP, but suggested a date later than 1 July 2011.[125] Submitters considered a later date would afford greater time to take account of finalised input methodologies. Submissions also recognised that more time may be required to develop a DPP compared to electricity distribution services, given that default/customised price-quality regulation is largely new to gas pipeline services.

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121 Section 53O(d) of the Act.

122 Section 53O(f) of the Act.

123 Section 53M(1)(c) of the Act.

124 Commerce Commission, *Setting of the Default Price-Quality Path for Suppliers of Gas Pipeline Services – Process Paper*, 24 July 2009, p. 1.

125 For example, GasNet, *Submission on the Setting of the Default Price-Quality Path for Suppliers of Gas Pipeline Services Process Paper,* 10 August 2009, p. 3, paragraph 9; Vector, *Submission on Setting the Default Price-Quality Path for Suppliers of Gas Pipeline Services: Process Paper,* 10 August 2009, pp. 1-2, paragraph 3.

8.5 In response to submissions, the Commission subsequently proposed a start date for the Initial DPP of 1 July 2012.[126] The Commission noted that this date would coincide with the expiry of the Gas Authorisations for Powerco and Vector on 1 July 2012.

8.6 In its Issues Paper, the Commission reiterated its intention to start the Initial DPP on 1 July 2012 and presented two options for assessment periods within the regulatory period.[127] The first option was for an assessment period 1 July to 30 June each year with the second option being 1 October to 30 September. The two options were reflective of the different pricing years for suppliers of gas pipeline services and the Commission sought feedback on how best to accommodate this difference.

Submitters' Views

8.7 Submitters' views on assessment periods were mixed. GasNet and MDL expressed a preference for an assessment period commencing 1 July, while AECT and Vector preferred an assessment period commencing 1 October.[128, 129] Vector and Powerco also proposed additional options, including a regulatory period commencing 1 October 2012.[130] A brief summary of the main points from each submitter is set out below.

8.8 GasNet:

- expressed a preference for a July to June assessment period because this aligns with its financial year (re-emphasised in its cross-submission);
- considered that annual assessment formula could be designed to accommodate a change in prices part way through an assessment period; and

126 Commerce Commission, *Setting of the Default Price-Quality Path for Suppliers of Gas Pipeline Services – Updated Process Paper*, 9 October 2009, p. 2.

127 Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper*, 12 April 2010, pp. 37-38.

128 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 10; Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, p. 10.

129 Auckland Energy Consumer Trust, *Submission to the Commerce Commission on its Issues Paper for the Initial DPP for Gas Pipeline Businesses*, 14 May 2010, p. 16; Auckland Energy Consumer Trust, *Cross-submission on the Commerce Commission's Issues Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses,* 31 May 2010, p. 30; Vector Limited, *Cross-submission to Commerce Commission on Gas Default Price-Quality Path: Issues Paper,* 31 May 2010, p. 8; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, p. 15.

130 Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, pp. 11-13; Vector Limited, *Cross-submission to Commerce Commission on Gas Default Price-Quality Path: Issues Paper,* 31 May 2010, p. 8; Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, p. 15.

- indicated it could also accommodate a 1 October assessment period if necessary, but did not support an approach that would require it to change its pricing year (currently GasNet resets prices 1 October each year).[131]

8.9 MDL:

- expressed a preference for a July to June assessment period, because it aligns with its tariff year and would involve minimal disruption to its business operation; and

- indicated it could change its tariff year to align with 1 October if there is sufficient reason.[132]

8.10 Powerco:

- did not support either option;

- did not support any option that may force GPBs to change prices in July, when winter and peak gas consumption is at its highest;

- considered that assessing compliance over two pricing periods is not practical or efficient;

- proposed a third option of beginning the DPP on 1 July 2012 with price changes occurring on 1 October 2012, where the initial starting price adjustment can be changed to provide the same revenue in NPV terms, as if price changes had occurred on 1 July 2012; and

- recognised that the Commission may interpret the intent of the Act as ensuring gas distribution services are regulated throughout this period and be unwilling to have a three month period where no regulation is applied. If this is the case, the Commission is still able to start the DPP on 1 July, but make the starting price adjustment and price path take effect from 1 October.[133]

8.11 Vector:

- did not support either option, and considered that it is perverse to require suppliers to incur additional costs to comply with partial year assessment periods simply to deal with an administrative oddity regarding the dates set out in legislation and the pricing years of suppliers;

- did not support any option that may force GPBs to change prices in July, when winter and peak gas consumption is at its highest and suggested this could result in negative impacts on households' ability to budget for their gas bills;

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131 GasNet Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper – Submission on Sections 1-3 and 5-9,* 14 May 2010, p. 10; GasNet Limited, *Cross-submission on Initial Default Price-Quality Path for Gas Pipeline Businesses – Issues Paper,* 31 May 2010, p. 2.

132 Maui Development Limited, *Submission 2 – Initial Default Price-Quality Path for Gas Pipeline Businesses*, 14 May 2010, p. 10.

133 Powerco Limited, *Powerco Submission on the Issues Paper: Initial Default Price-Quality Path for Gas Pipeline Businesses,* 14 May 2010, pp. 11-13.

- suggested an alternative option of setting regulatory period of 1 October 2012 to 30 September 2017 to inconvenience fewest GPBs (this was re-emphasised in Vector's cross-submission);

- noted that a pricing year beginning on 1 October would allow firms that supply both gas and electricity (i.e. Vector and Powerco) to spread the work of price development and regulatory compliance relatively evenly over the year, reducing the overall costs of regulatory compliance; and

- indicated its second preference was a shortened regulatory period of four years and three months to avoid mid-year price changes, which would add to administrative costs and complexities.[134]

Options for Regulatory and Assessment periods

8.12 Following consideration of submissions at all stages of the consultation on the Initial DPP, the Commission considers there to be two options for setting the start of the initial regulatory period:

- 2 July 2012; or

- 1 October 2012.

8.13 Each option has different implications for assessment periods and, in presenting the two options above, the Commission has taken into account submitters' preferences not to change pricing year periods for the majority of GPBs.

8.14 The Commission's reasoning for this, and the implications for assessment periods, is set out below. An overview of each option is provided in Table 8.1.

2 July 2012 Regulatory Period

8.15 A regulatory period beginning 2 July 2012 would allow for continuity of regulation for Powerco and Vector by coinciding with the expiry of the Gas Authorisations on 1 July 2012.

8.16 The Commission is of the view that setting a 2 July 2012 start date is consistent with starting the Initial DPP as soon as reasonably practicable as set out in s 55E(2) of the Act.

8.17 The Commission has considered starting the Initial DPP on 1 July 2012. However, this would result in Powerco and Vector's Auckland distribution business being subject to two separate forms of regulation at the same time, albeit for a single day. The Commission has considered options for revoking the existing Gas Authorisations to accommodate a 1 July 2012 start date (i.e. to terminate them one day early), but considers this to be a complex process as an Order in Council would be required to effect such a change.

8.18 Section 55H(2) of the Act provides that the expiry of the Order which gives effect to the Gas Authorisations is to be treated as if it were the expiry of a CPP, and that s 53X of the Act applies accordingly. Under s 53X of the Act, when a CPP ends, the

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[134] Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, pp. 13-15; Vector Limited, *Cross-submission to Commerce Commission on Gas Default Price-Quality Path: Issues Paper,* 31 May 2010, p. 8.

supplier is subject to the DPP that is generally applicable to other suppliers of those goods or services. This suggests that a DPP should be in place at the time of the expiry of the Gas Authorisations.

1 October 2012 Regulatory Period

8.19 A regulatory period beginning 1 October 2012 would offer the advantage of an additional three months for the development of the Initial DPP. This starting time would also allow assessment periods to align with the majority of GPBs' pricing years (with the exception of MDL) for the Initial DPP, avoiding the need for partial year compliance. Consistent with this, a full five-year regulatory period (i.e. 1 October 2012 – 30 September 2017) may be applied.

8.20 However, the additional three-month period afforded by the later start of the Initial DPP will create a gap in regulation for Powerco and Vector following the expiry of the Gas Authorisations on 1 July 2012. The Commission considers that if the Initial DPP were to start on 1 October 2012, this gap in regulation would need to be handled in a way consistent with the Part 4 Purpose.

8.21 To address this, the Commission could ask both Powerco and Vector to provide formal undertakings that their prices will not increase over the three months prior to the start of the Initial DPP.

8.22 The Commission is also of the view that setting a 1 October 2012 start date may not be consistent with starting the Initial DPP as soon as reasonably practicable as set out in s 55E(2) of the Act. Furthermore, a 1 October 2012 start date may not meet the requirements of s 55H(2) and s 53X of the Act as discussed above.

8.23 For these reasons, a 1 October 2012 start date is not the Commission's preferred position.

Commission's Current Position

8.24 The Commission's preferred position is for the Initial DPP regulatory period to start on 2 July 2012 and that this will be for a period of 4 years and 3 months. This means that the Initial DPP regulatory period will terminate on 30 September 2016 and will allow the DPP reset to align with current pricing years of GPBs that start on 1 October each year. The Commission considers that the pricing years of most GPBs (with the exception of MDL) will not need to change. In reaching this position, the Commission has also considered options for the setting of assessment periods and this is discussed further in this section.

Alignment of Pricing Year and Assessment Periods for the Initial DPP

8.25 As part of good regulatory practice, it is desirable for the assessment of compliance to be simplified where possible. A simplified compliance assessment minimises the time and resources required for businesses to demonstrate compliance and for the Commission to assess this information against the DPP.

8.26 Where pricing periods and assessment periods do not align, the assessment of compliance is unnecessarily complex as it requires two sets of prices to be submitted across the assessment period. This situation is described as "split period pricing".

8.27 One approach to simplifying compliance is to align pricing years and assessment periods by making a short assessment of compliance to cover the period between the start of the regulatory period and the start of the first full pricing year and corresponding first full-year assessment period ("partial year compliance"). In this way, two sets of prices are not used in the same assessment period. This was the approach used by the Commission for the existing Gas Authorisations.[135] The Commission's view is that partial year compliance is feasible for the Initial DPP and preferable to split period pricing as it is less complex.

8.28 The Commission notes submitters have previously voiced reservations over the potential to incur additional costs where partial-year compliance is used.[136] As an alternative to partial year compliance, the start of the Initial DPP could be aligned with the timing of annual pricing years and start of the first assessment period. However, MDL has a pricing year beginning 1 July while the remainder of GPBs have pricing years starting 1 October. This inconsistency in pricing years between GPBs means this option would not easily work, as at least one GPB would be required to have partial year compliance depending on the start of the Initial DPP.

8.29 The Commission considers it preferable, but not essential, to align the pricing years and assessment periods of all GPBs. There are two reasons for this view.

8.30 First, as all suppliers are subject to the same length of regulatory period, the mismatch between the different assessment periods of suppliers would continually require partial year compliance for one or more GPBs in future regulatory periods. Secondly, the alignment of pricing years and assessment periods for GPBs potentially allows for useful comparisons between businesses at future DPP resets. To simplify the reset of a DPP, consistent information spanning the same period for all suppliers is desirable.

8.31 Assuming a regulatory period starting 2 July, assessment periods could either start on 2 July or 1 October with differing implications for suppliers.

8.32 Assessment periods starting 2 July would allow for a full five year regulatory period (i.e. 2 July 2012 – 1 July 2017) without any partial year compliance, as the end of the regulatory period would align with the start of the next pricing year and assessment period for the subsequent regulatory period.

8.33 Under a 1 October assessment period, and to align the pricing years of most GPBs (with the exception of MDL) with assessment periods, partial year compliance would be required for the period 2 July 2012 to 30 September 2012. To ensure partial compliance is a one-off event, the regulatory period would be four years and three months (i.e. 2 July 2012 – 30 September 2016) to align with the start of the first pricing year and assessment period for the subsequent regulatory period.

8.34 To reduce the cost of partial year compliance, assessment of the three-month period 2 July 2012 – 30 September 2012 could be combined with the following assessment period, creating a 15 month assessment on a '3+12' basis to combine audit and verification costs and minimise the financial impacts upon GPBs.

Commission's Current Position

8.35 The Commission's current position is that the pricing and assessment periods of all GPBs should align to either 2 July or 1 October each year. The Commission's

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135 The Gas Authorisations included a start date of 1 January 2009, and Powerco and Vector had an annual pricing year of 1 October to 30 September. This mismatch was addressed by providing for an initial assessment period of nine months (requiring partial year compliance) and thus aligning the regulated suppliers' pricing year and future assessment periods.

136 For example, Vector Limited, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Issues Paper,* 14 May 2010, pp. 13-15.

preferred option is for annual assessment periods of 1 October – 30 September. This will require partial year compliance for the period 2 July 2012 – 30 September 2012 and MDL will also need to change their pricing year to start 1 October each year.

8.36 A summary of each option for both regulatory and assessment periods is provided in Table 8.1 below.

Table 8.1: Options for Setting Regulatory and Assessment Periods

	2 July 2012 (1)	2 July 2012 (2)	1 October 2012
Pricing Year	**1 October**	**1 July**	**1 October**
	• Will require MDL to change its pricing year	• Will require suppliers (except MDL) to change pricing year	• Will require MDL to change its pricing year
Assessment Period	**1 October - 30 September**	**2 July - 1 July**	**1 October - 30 September**
	• Requires partial year compliance for the period 2 July 2012 - 30 September 2012*	• No partial year compliance	• No partial year compliance
Regulatory Period	**2 July 2012 - 30 September 2016 (4 years & 3 months)**	**2 July 2012 - 30 June 2017 (5 years)**	**1 Oct 2012 - 30 September 2017 (5 years)**
	• Shortened regulatory period to align subsequent regulatory period and assessment with pricing year from outset to avoid partial year compliance • Earliest DPP reset: 1 October 2016 • Earliest date for potential starting price adjustments • Provides continuity of regulation for Powerco and Vector following expiry of Gas Authorisations on 1 July 2012	• Maximum length of regulatory period allowable under Part 4 • Earliest date for potential starting price adjustments • Provides continuity of regulation for Powerco and Vector following expiry of Authorisations on 1 July 2012	• Maximum length of regulatory period allowable • Latest DPP reset: 1 October 2017 under Part 4 • Latest date for potential starting price adjustments • Requires some form of assurance from Powerco and Vector that the gap in regulation between 2 July 2012 and 30 September 2012 is consistent with the Part 4 Purpose

*The cost of partial year compliance could be reduced by first assessing compliance for the Initial DPP for the 15 month period 2 July 2012 to 30 September 2013 on a '3+12' basis to take advantage of combined audit and verification costs.

APPENDIX A: INFORMATION REQUIRED TO SUPPORT TFP ANALYSIS FOR GAS DISTRIBUTION AND GAS TRANSMISSION BUSINESSES IN AUSTRALIA

This appendix includes a list of variables required to support TFP analysis across the Australian gas sector. The Commission is of the view that most, if not all, of these requirements may be useful in a New Zealand gas industry context.

However, the Commission also considers that additional data requirements may be required to sufficiently cater for the specific requirements of the New Zealand gas sector and that these may also include information currently disclosed as part of the Gas (Information Disclosure) Regulations 1997.

Gas Distribution

OUTPUTS

Gas delivered

- Total
  - Energy – TJ per annum
  - Maximum hour – TJ / hr
  - Distribution Revenue – $M
  - Number of Customers – no.
- Domestic Volume Based Tariffs
  - Energy – TJ per annum
  - Maximum hour – TJ / hr
  - Distribution Revenue – $M
  - Number of Customers – no.
- Non–domestic Volume Based Tariffs
  - Energy – TJ per annum
  - Maximum hour – TJ / hr
  - Distribution Revenue – $M
  - Number of Customers – no.
- Capacity Based Tariffs
  - Energy – TJ per annum
  - Maximum hour – TJ / hr
  - Distribution Revenue – $M
  - Number of Customers – no.

Revenue/penalties from incentive schemes (eg S factor) – $m

System Performance

- SAIDI

SAIFI
Number of interruptions affecting 5 customers or fewer
Number of interruptions affecting more than 5 customers

Unaccounted for Gas – %

INPUTS

Opex

Total distribution opex (excluding depreciation and all capital costs) – $m

Shared allocation of opex to distribution activities (eg head office) included in above – $m

Operating expenses – $m

Network Operations
Customer Connections
Meter Reading Services
Billing and Revenue Collection
Advertising and Marketing
Regulatory Costs
Change in Provisions
Other Operating Costs (excl those below)

Subtotal of above – $m

Maintenance expenses – $m

City Gate Stations
Transmission mains
Distribution mains
Services
Cathodic protection
Supply Regulators
Meters
SCADA and remote control
Other

Subtotal of above – $m

Direct employees

Number of full–time equivalent employees in operating and maintenance activities (including shared overhead allocation). Employee time spent on capital construction projects is to be excluded.

Direct labour cost – $m

Labour cost (including on–costs) of employees in operating and maintenance activities (including *shared overhead allocation). Cost of time spent on capital construction projects is to be excluded.*

SYSTEM PHYSICAL DATA

Distribution System Quantities and Capacity

- Transmission mains – over 1050 kPa g
  - Weighted average of max sustainable pressure
  - Weighted average of pipe diameter – mm
  - Pipeline Length – km
- High Pressure Distribution mains – up to 1050 kPa g
  - Weighted average of max sustainable pressure
  - Weighted average of pipe diameter – mm
  - Pipeline Length – km
- Medium Pressure Distribution mains – 20 to 210 kPa g
  - Weighted average of max sustainable pressure
  - Weighted average of pipe diameter – mm
  - Pipeline Length – km
- Low pressure distribution mains – to 7 kPa g
  - Weighted average of max sustainable pressure
  - Weighted average of pipe diameter – mm
  - Pipeline Length – km
- Pipeline length by material – km
  - Polyethylene
  - PVC
  - Protected Steel
  - Unprotected Steel
  - Cast iron
  - Other
- Service connections (from mains to customer)
  - Number
  - Length – km
- City Gate Stations – number
- Field regulators – number
- District Regulators – number
- Meter Regulator Installations
  - Meters over 10 cubic metres/hour
  - Meters up to 10 cubic metres/hour

ASSET VALUES

Regulatory Asset Base Values – $m

- City Gate Stations
- Transmission mains
- High pressure distribution
- Medium pressure distribution
- Low pressure distribution

Cathodic protection
Services
Supply Regulators / Valve Stations
Meters
SCADA and other remote control
Other – IT
Other – non IT
Total – $m

RAB Reconciliation – $m

Opening value
Inflation addition
Regulatory depreciation
Physical additions (recognised in RAB)
Retirements
Revaluation adjustments
Resulting summation for asset value

Smoothed asset value wrt revaluations

Basis for initial RAB, eg DORC, adjusted DORC, historic cost, etc

Have DORC valuations been undertaken? If so, for which years?

Replacement Cost or Optimised Replacement Cost Asset Values – $m

City Gate Stations
Transmission mains
High pressure distribution
Medium pressure distribution
Low pressure distribution
Cathodic protection
Services
Supply Regulators / Valve Stations
Meters
SCADA and other remote control
Other – IT
Other – non IT
Total – $m

Actual Capital Expenditure – $m

City Gate Stations
Transmission mains
High pressure distribution
Medium pressure distribution
Low pressure distribution
Cathodic protection

Services
Supply Regulators / Valve Stations
Meters
SCADA and other remote control
Other – IT
Other – non IT
Total – $m

Asset Lives – estimated total and residual in years

City Gate Stations
Transmission mains
High pressure distribution
Medium pressure distribution
Low pressure distribution
Cathodic protection
Services
Supply Regulators / Valve Stations
Meters
SCADA and other remote control
Other – IT
Other – non IT

Value of Capital Contributions or Contributed Assets – $m

Price Index for Labour Inputs

Price Index for O&M Expenditure

Price Index for Network Assets

Gas Transmission

OUTPUTS

Revenue – $m

From capacity charges
From throughput charges
From other charges
Total

Revenue/penalties from incentive schemes (eg S factor) – $m

Number of gas input locations

Listing of inputs

Number of off–take locations

Listing of off–takes

Gas actual throughput – TJ

Annual total delivery
Maximum Daily Quantity
Maximum Hourly Quantity
Delivered to connected distribution systems
Delivered to other connected transmission systems
Delivered to directly connected end–users
Delivered to other

Gas maximum throughput capacity – TJ

Annual total delivery
Maximum Daily Quantity
Maximum Hourly Quantity

Reliability

Gas transmission reliability indicators are not well developed.

Unaccounted for Gas – %

INPUTS

Opex

Total Transmission opex (excluding depreciation and all capital costs) – $m

Shared allocation of opex to transmission activities (eg head office) included in above – $m

Operating expenses – $m

Maintenance expenses – $m

Compressor Stations
City Gate Stations
Transmission mains
Other

Direct employees

Number of full–time equivalent employees in operating and maintenance activities (including shared overhead allocation). Employee time spent on capital construction projects is to be excluded.

Direct labour cost – $m

Labour cost (including on–costs) of employees in operating and maintenance activities (including shared overhead allocation). Cost of time spent on capital construction projects is to be excluded.

SYSTEM PHYSICAL DATA

Transmission System Quantities and Capacity

Transmission mains – over 1050 kPa g
- Weighted average of max sustainable pressure
- Weighted average of pipe diameter – mm
- Pipeline Length – km

Other mains – less than 1050 kPa g
- Weighted average of max sustainable pressure
- Weighted average of pipe diameter – mm
- Pipeline Length – km

Compressor Stations – number

City Gate Stations – number

ASSET VALUES

Regulatory Asset Base Values – $m

- Transmission mains
- Other mains
- Compressor stations
- City Gate Stations
- SCADA and other remote control
- Other – IT
- Other – non IT
- Total – $m

RAB Reconciliation – $m

- Opening value
- Inflation addition
- Regulatory depreciation
- Physical additions (recognised in RAB)
- Retirements
- Revaluation adjustments
- Resulting summation for asset value

Smoothed asset value wrt revaluations

Basis for initial RAB, eg DORC, adjusted DORC, historic cost, etc

Have DORC valuations been undertaken? If so, for which years?

Replacement Cost or Optimised Replacement Cost Asset Values – $m

- Transmission mains
- Other mains

Compressor stations
City Gate Stations
SCADA and other remote control
Other – IT
Other – non IT
Total – $m

Actual Capital Expenditure – $m

Transmission mains
Other mains
Compressor stations
City Gate Stations
SCADA and other remote control
Other – IT
Other – non IT
Total – $m

Asset Lives – estimated total and residual in years

Transmission mains
Other mains
Compressor stations
City Gate Stations
SCADA and other remote control
Other – IT
Other – non IT

Value of Capital Contributions or Contributed Assets – $m

Price Index for Labour Inputs

Price Index for O&M Expenditure

Price Index for Network Assets