

**Commerce Commission**

Setting of Starting Prices  
for  
Gas Pipeline Businesses  
under the Initial Default Price-Quality Path

**Discussion Paper**

22 August 2011



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## GLOSSARY OF TERMS, ABBREVIATIONS AND DEFINITIONS

Abbreviation	Definition
the Act	Commerce Act 1986
April Discussion Paper	Refers to the Initial Default Price-Quality Path for Gas Pipeline Businesses, Discussion Paper, 1 April 2011
AMP	Asset Management Plan
Capex	Capital Expenditure
Commission	Commerce Commission
CGPI	Capital Goods Price Index
CPI	Consumer Price Index
CPI-X	CPI minus an X-factor
CPP	Customised Price-Quality Path
Discussion Paper	Refers to <i>this</i> discussion paper
DPP	Default Price-Quality Path
Draft Determinations and Reasons Paper	Draft determinations and a separate reasons paper on the Initial DPP that we are aiming to release in November 2011. This will cover all elements of the Initial DPP, including the setting of starting prices for each GPB's price path.
EDBs	Electricity Distribution Businesses
EDB Draft Decision Paper	Refers to the 2010–15 Default Price-Quality Path for Electricity Distribution Businesses —Reset of Starting Prices, CPI Adjustment and Other Amendment, Draft Decisions, 19 July 2011
Gas Authorisation	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
GTBs	Gas Transmission Businesses
ICP	Installation Control Point
IM	Input Methodology
IMs	Refers to the Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010; and the Commerce Act (Gas Distribution

Abbreviation	Definition
	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
Initial DPP	The initial default price-quality path for GPBs that the Commission is required to set under s 55E(2) of the Act, and that will come into effect in 2012
Issues Paper	Refers to the Initial Default Price-Quality Path for Gas Pipeline Businesses, Issues Paper, 12 April 2010
LCI	Labour Cost Index
MDL	Maui Development Limited
MPOC	Maui Pipeline Operating Code
Opex	Operating Expenditure
The Order	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
PPI	Producer Price Index
RAB	Regulatory Asset Base
Section 53K Purpose	Purpose of default/customised price-quality regulation as set out in s 53K of the Act
Starting prices	In this paper references to ‘price’ or ‘starting prices’ should be read to include price and/or revenue, consistent with s 53M(1)(a) and s 52C of the Act.
TFP	Total Factor Productivity
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 We are required to set a default price-quality path (DPP) for gas pipeline businesses (GPBs) under Part 4 of the Commerce Act 1986 (the Act). The Act requires that a s 52P determination must set out, amongst other things, the starting prices that apply to the supply of goods or services during the first regulatory period.<sup>1</sup>
- X.2 Our discussion paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses (April Discussion Paper) did not cover the setting of starting prices for GPBs. Therefore, the primary purpose of this paper is to:
- set out our proposed approach to setting starting prices for GPBs; and
  - 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.3 Submissions to this paper should be received no later than **5pm on Wednesday 28 September 2011**. Following submissions to this paper, we intend to release a Draft Determinations and Reasons Paper for consultation in early November 2011. The Draft Determinations and Reasons Paper will provide our updated views on all components of the Initial DPP for GPBs (Initial DPP), including starting prices for each GPB. We intend to publish final decisions for GPBs by 29 February 2012, and these will take effect from July 2012.
- X.4 This Discussion Paper does not provide any quantitative or illustrative information to establish starting prices for each GPB. We have issued notices to GPBs, under s 53ZD of the Act, requesting information to inform the calculation of starting prices.<sup>2</sup> GPBs must respond to these information requests by 30 September 2011.
- X.5 We consider starting prices that are based on the current and projected profitability of each supplier are likely to better promote the purpose of Part 4 of the Act than continuing with existing prices. We consider such an approach would reduce the likelihood that any individual GPB will be able to extract excessive profits while maintaining incentives for GPBs to invest, and enables us to apply the Input Methodologies (IMs) in setting starting prices.
- X.6 This Discussion Paper signals our intent to apply a total revenue cap to all gas transmission businesses (GTBs) and a weighted average price cap for all gas distribution businesses (GDBs). In our April Discussion Paper we signalled we were considering a weighted average price cap for Vector's transmission network, in line with their earlier preference. In response to the April Discussion Paper, Vector submitted that it would prefer a total revenue cap, and we are amendable to this option.
- X.7 We propose to derive the growth in revenue over the regulatory period by applying CPI-X (with X = 0) and real revenue growth projections (the latter for GDBs only).

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<sup>1</sup> Section 53O(a) of the Act.

<sup>2</sup> Commerce Commission, *Section 53ZD Information Request notice for GDBs Starting Price Adjustment*, 6 July 2011; Commerce Commission, *Section 53ZD Information Request notice for Vector Transmission Starting Price Adjustment*, 6 July 2011; Commerce Commission, *Section 53ZD Information Request notice for MDL Starting Price Adjustment*, 6 July 2011. [http://www.comcom.govt.nz/2012-default-price-quality-path/#\\_msocom\\_2](http://www.comcom.govt.nz/2012-default-price-quality-path/#_msocom_2)

- We will project real revenue growth for GDBs by splitting each supplier's total revenue from variable, fixed and capacity based charges based on information provided by GDBs. We then propose to match these revenue components to revenue drivers and use regional forecasts to estimate revenue growth over the regulatory period, which will commence in July 2012.
- X.8 We will calculate the present value of projected total costs that will allow the businesses to earn a normal return over the regulatory period. The change in operating expenditure (opex) over the period will depend on opex prices, opex partial productivity (assumed to be zero) and output (for GDBs).
- X.9 We intend to use the data requested from GPBs under s 53ZD of the Act, to inform our projections of each GPB's capital expenditure (capex). We consider that information on historical capex requirements is likely to provide an appropriate guide for projecting capex for the setting of the Initial DPP for GPBs. If a GPB is to carry out any step-change in capital expenditure in the first regulatory period it could consider applying for a CPP.
- X.10 CPI will enter our modelling in two places. On an annual basis, the CPI is used to update the price path, so it affects our projections of the maximum amount of revenue that GPBs are permitted to earn (this measure of the CPI would be lagged by the same amount as in the formula used to assess compliance). It will also impact the value of the RAB as it affects the amount of revenue that GPBs would require during the regulatory period in order to earn a normal return. The forecasts that we must use for CPI are determined under the IMs.
- X.11 This paper also welcomes further submissions on how the recovery of pass-through costs should be treated under the Initial DPP for those GPBs currently subject to the Gas Authorisations.

## SECTION 1 INTRODUCTION

### Purpose of this Paper

- 1.1 Under s 55D of Part 4 of the Act, suppliers of gas pipeline services are subject to default/customised price-quality regulation. The following table sets out the businesses that provide gas pipeline services as defined in the Act. We refer to these businesses collectively as gas pipeline businesses (GPBs):

**Table 1.1: GPBs subject to Part 4 regulation**

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 the Act, the Commission is required to set an initial default price-quality path for GPBs (Initial DPP).<sup>3</sup>
- 1.3 Section 55E(2) of the Act requires us to make s 52P determinations for default/customised price-quality regulation for GPBs. We must do this by using the processes in s 53P.<sup>4</sup> In doing so, we must:
- promote the Part 4 Purpose set out in s 52A(1);<sup>5</sup> and
  - apply the relevant IMs (which are a key component of Part 4).<sup>6</sup>
- 1.4 We previously decided to delay decisions on the Initial DPP to 2012 in response to submissions and to allow sufficient time to develop a robust approach so that the Initial DPP could incorporate the final IMs.<sup>7, 8</sup>
- 1.5 The purpose of this paper is to:
- set out our preliminary views on what we consider is an appropriate approach for setting starting prices for GPBs;<sup>9</sup>

<sup>3</sup> Section 55E(2) of the Act.

<sup>4</sup> Section 55F of the Act.

<sup>5</sup> For a further discussion of how starting prices for GPBs will promote the Part 4 Purpose, refer to paragraphs 2.4 to 2.6 and Appendix A of this Discussion Paper.

<sup>6</sup> Section 52S(b) of the Act.

<sup>7</sup> Submissions included, 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.

<sup>8</sup> Commerce Commission *Process Paper – Setting of Default-quality Paths for Suppliers of Gas Pipeline Services* (24 July 2009) at paragraph 7 and confirmed in Commerce Commission *Initial Default Price-quality Path for Gas Pipeline Businesses Issues Paper* (12 April 2010), paragraph 10. As we also observed in August last year, information prepared consistently with IMs could provide useful information for starting prices, particularly in relation to an assessment of a regulated supplier's profitability – Commerce Commission *Starting Price Adjustments for Default Price-quality Paths- Discussion Paper*, 5 August 2010, paragraph 2.18.

<sup>9</sup> In this paper references to 'price' or 'starting prices' should be read to include price and/or revenue, consistent with s 53M(1)(a) and s 52C of the Act.

- provide our updated views on the form of control for Vector's transmission business and our approach to determining whether to apply alternative rates of change for individual GPBs; and
  - seek submissions from interested parties on our proposed approach to the above matters.
- 1.6 Our discussion paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses (April Discussion Paper) set out our views on a number of components of the Initial DPP.<sup>10</sup> However, the April Discussion Paper did not cover the setting of starting prices, as we considered there was merit in considering this after we had further developed an approach for the DPP for EDBs. We considered this would enable us to consider if some elements of that approach would also be suitable for GPBs.<sup>11</sup> This Discussion Paper seeks to address that gap by outlining our proposed approach to setting starting prices for GPBs.
- 1.7 The April Discussion Paper provided our views on a number of matters relevant to the setting of starting prices, including the application of quality standards and the appropriate regulatory control period for GPBs. Apart from the form of control for Vector's transmission business, we do not address these matters in any further detail in this Discussion Paper as we are currently considering the responses we have received from submitters. We will set out our proposed views on these, and all other components of the Initial DPP, in our Draft Determinations and Reasons Paper, that we plan to release in early November 2011.

### Structure of this Paper

- 1.8 This paper is structured as follows:
- Section 2 discusses the role of DPPs, and of starting prices in particular, in the context of the wider regulatory framework for default/customised price-quality regulation;
  - Section 3 describes our proposed approach to setting starting prices for GPBs;
  - Section 4 discusses information required to implement starting prices, and the information sources we propose to use; and
  - Section 5 discusses the transition to the Initial DPP for those GDBs currently subject to the Gas Authorisation.
- 1.9 The appendices provide relevant background information, as follows:
- Appendix A provides an overview of elements of the regulatory context for the Initial DPP; and
  - Appendix B provides an overview of what we consider to be the key features of the gas sector relevant to setting starting prices for GPBs.

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<sup>10</sup> Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses: Discussion Paper*, 1 April 2011.

<sup>11</sup> Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses: Discussion Paper*, 1 April 2011, p. 1, paragraph 1.6.

## Submissions

- 1.10 We invite submissions from all interested parties on our proposed approach to setting starting prices for GPBs. Submissions should be received by us no later than **5pm on Wednesday 28 September 2011**.
- 1.11 We also invite cross-submissions on matters raised in submissions to this discussion paper. The purpose of cross-submissions is to ensure that we are aware of points of agreement or disagreement on matters raised by other submitters. We therefore request that parties providing cross-submissions focus these in that way. We should receive cross-submissions no later than **5 pm on Friday 7 October 2011**.
- 1.12 All submissions and cross-submissions should be supported by documentation and evidence, where appropriate.
- 1.13 Submissions and cross-submissions should be sent to:  
[regulation.branch@comcom.govt.nz](mailto:regulation.branch@comcom.govt.nz);

or

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

### *Form of submissions*

- 1.14 To foster an informed and transparent process, we intend to publish all submissions and cross-submissions on our website. Accordingly, we request an electronic copy of each submission and request that hard copies of submissions not be provided (unless an electronic copy is not available). We also require that these electronic copies be provided in an accessible form (i.e. they are ‘unlocked’ and text can be easily transferred).
- 1.15 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.

### *Confidentiality of submissions*

- 1.16 We discourage requests for non-disclosure of submissions, in whole or in part, as it is desirable to test all information in a fully public way. We are unlikely to agree to any requests that submissions in their entirety remain confidential. However, we recognise that there will be cases where interested parties making submissions may wish to provide confidential information to us.
- 1.17 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 us 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.

1.18 Parties can request that we make 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 us and must identify the reasons why the relevant information should not be made public. We will provide further information on s 100 orders if requested by parties, including the principles that apply 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, we will follow our usual process in response to any request for information under the Official Information Act 1982.

### **Other Relevant Commission Papers**

1.19 We have previously released a number of papers that are relevant to this Discussion Paper and the setting of starting prices for GPBs. These include:

- an Issues Paper on the Initial DPP for GPBs;<sup>12</sup>
- a Discussion Paper on Starting Price Adjustments for Default Price-Quality Paths, released on 5 August 2010;<sup>13</sup>
- a Discussion Paper on the Initial Default Price-Quality Path for Gas Pipeline Businesses, released on 1 April 2011.<sup>14</sup>

1.20 The above papers, and submissions received on them, are available on our website.<sup>15</sup>

### **Information Requests**

1.21 On 6 July 2011 we issued notices to GPBs, under section 53ZD of the Act.<sup>16</sup> The notices requested information to inform decisions on the setting of starting prices for the Initial DPP. GPBs must respond to these information requests by 30 September 2011.

### **Next Steps**

1.22 Our proposed process for setting the Initial DPP is set out below. This proposed timeline is indicative only, and may change over time.

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

<sup>13</sup> Commerce Commission, *Starting Price Adjustments for Default Price-Quality Paths*, 5 August 2010.

<sup>14</sup> Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses Discussion Paper*, 1 April 2011.

<sup>15</sup> [http://www.comcom.govt.nz/2012-default-price-quality-path/#\\_msocom\\_2](http://www.comcom.govt.nz/2012-default-price-quality-path/#_msocom_2)

<sup>16</sup> Commerce Commission, *Section 53ZD Information Request Notice for GDBs Starting Price Adjustment*, 6 July 2011; Commerce Commission, *Section 53ZD Information Request Notice for Vector Transmission Starting Price Adjustment*, 6 July 2011; Commerce Commission, *Section 53ZD Information Request Notice for MDL Starting Price Adjustment*, 6 July 2011 [http://www.comcom.govt.nz/2012-default-price-quality-path/#\\_msocom\\_2](http://www.comcom.govt.nz/2012-default-price-quality-path/#_msocom_2)

**Table 1.2: Proposed process for setting the Initial DPP**

<b>Key Step</b>	<b>Indicative Date</b>
Submissions due	28 September 2011
Cross-submissions due	7 October 2011
Draft Determinations and Reasons Papers	4 November 2011
Submissions due	23 December 2011
Cross-submissions due	20 January 2012
Final Reasons Paper and Final Determination (dependent upon starting the Initial DPP Determination in July 2012)	29 February 2012

## SECTION 2 THE ROLE OF THE INITIAL DPP AND STARTING PRICES FOR GPBS

2.1 Our determination of the Initial DPP will need to incorporate decisions on a number of components. These include:

- the form of control;
- the rate of change under the price-quality path;
- whether claw-back should be applied;
- what quality standards should apply to GPBs under the Initial DPP;
- the timing and duration of regulatory and assessment periods;
- how and when GPBs' compliance with the Initial DPP should be assessed;
- whether alternative rates of change should apply to individual GPBs; and
- the setting of allowable maximum prices or revenues at the start of the regulatory period (starting prices).

2.2 Sections 3 and 4 of this paper concentrate on the setting of starting prices, the form of control for Vector's transmission business, and alternative rates of change. We consulted on the other components listed above in our April Discussion Paper. There will be another opportunity to comment on all components of the Initial DPP following the release of our Draft Determinations and Reasons Paper.

### Overview

2.3 To provide context for the subsequent sections, the remainder of this section:

- discusses the guiding role of the Part 4 Purpose in our determination of the Initial DPP;
- records our view on the role of the Initial DPP in the wider framework of default/customised price-quality regulation; and
- records our view on the setting of starting prices in the Initial DPP under s 53P(3).

### Part 4 Purpose

2.4 The central basis for determining an Initial DPP is to promote the Part 4 Purpose.<sup>17</sup> In setting the Initial DPP, the Commission aims to ensure that GPBs are limited in their ability to extract excessive profits (as required under s 52A(1)(d)), while also having incentives to innovate and to invest as required under s 52A(1)(a) of the Act.

2.5 The Initial DPP will also provide incentives for GPBs to improve efficiency across their networks and to provide services that reflect consumer demands as required

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<sup>17</sup> The April Discussion Paper set out the purpose of Part 4 regulation and Appendix A of this paper sets out further regulatory considerations relevant to the setting of starting prices under the Initial DPP. We have also previously provided our interpretation of the Part 4 Purpose and workably competitive market outcomes in the IM Reasons pp. 20-42.

under s 52A(1)(b). We also consider that, over time, the benefits of these efficiency gains will be shared with consumers consistent with s 52A(1)(c).

- 2.6 The setting of starting prices under the Initial DPP is expected to allow GPBs the opportunity to earn normal returns and, when combined with other components of the Initial DPP, will be consistent with the Part 4 Purpose.

### **Role of DPPs in Default/Customised Price-Quality Regulation**

- 2.7 Default/customised price-quality regulation is intended to be:<sup>18</sup>

*“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 meeting their particular circumstances.”*

- 2.8 There is a limit to the extent to which the Initial DPP can account for supplier-specific circumstances, without replicating the level of detail and verification required for a customised price-quality path (CPP) process. Where a supplier considers that the applicable Initial DPP imposed will not enable the supplier to earn a normal return, the supplier has the option of proposing a CPP. This provides the appropriate ‘safety net’.

### **Setting of Starting Prices in an Initial DPP Under Section 53P(3)**

- 2.9 As stated above, we are required to set price-quality paths for GPBs by adopting the processes in s 53P. Section 53P(3) of the Act provides two options for setting starting prices for a DPP:

- Section 53P(3)(a) - the prices that applied at the end of the preceding regulatory period; or
- Section 53P(3)(b) – prices, determined by the Commission, that are based on the current and projected profitability of each supplier.

- 2.10 We consider that, as a general rule, starting prices that are based on the current and projected profitability of each supplier are likely to better promote Part 4 than the alternative option. This is because the approach would:

- reduce the likelihood that any individual GPB will be able to extract excessive profits (s 52A(1)(d)); and

- 2.11 retain incentives to invest (s 52A(1)(a)), by establishing prices that are not below the level required to earn a normal return (while recognising that in some instances the investment needs of an individual GPB may be better provided for under a CPP). In making decisions or determinations under Part 4 we are required to apply the IMs. Now that relevant IMs for GPBs have been determined, it is possible to use data based on the IMs to calculate starting prices based on each supplier’s current and projected profitability.

- 2.12 Vector has submitted that there is not sufficiently robust data available in relation to gas distribution and transmission to make a judgement about the setting of prices on the basis of s 53P(3)(b).<sup>19</sup> We are currently obtaining cost and revenue data for

<sup>18</sup> Section 53K of the Act.

<sup>19</sup> Vector, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Submission*, 27 May 2011, p. 6, paragraph 22.

individual GPBs through information requests issued under s 53ZD. We intend to supplement this with independent projections of key variables. Where such information is not currently available we will commission independent experts to develop the necessary projections.

- 2.13 Before reaching our draft decision, we will form a view on whether the available data is sufficient to enable us to set prices based on the current and projected profitability of each supplier in a way that is likely to promote the Part 4 Purpose. For the purpose of this paper we assume that the Initial DPP will apply from July 2012.

## SECTION 3 PROPOSED APPROACH TO SETTING STARTING PRICES FOR GPBS

3.1 This section:

- signals our proposed approach to apply a total revenue cap (TRC) to GTBs, and confirms our requirement under the IMs to apply a weighted average price cap (WAPC) to GDBs;
- provides a summary of our proposed approach to setting starting prices for GPBs;
- discusses how our proposed approach to setting starting prices for GPBs compares to the approach we have taken in our Draft Decision for EDBs;
- sets out our current views on how our proposed approach to calculating starting prices is likely to apply to GPBs under a weighted average price cap and a revenue cap; and
- summarises our proposed approach to determining whether alternative rates of change should apply.

### Form of Control for GPBs

- 3.2 The Initial DPP does not directly set the prices a supplier may charge. Rather it determines the maximum weighted average prices a GPB may charge (under a weighted average price cap), or the maximum total revenue a GPB may earn (under a total revenue cap). Under either form of control, suppliers may choose how to reflect their starting price under the Initial DPP in their prices to different classes of customers, provided that prices remain within the overall price or revenue path.
- 3.3 In deciding which form of control is appropriate for GPBs, the Commission must apply the IMs.
- 3.4 The IMs require that a WAPC must apply to GDBs. When determining whether a TRC or a WAPC should be applied in respect of a particular GTB, the IMs stipulate that this determination will be a matter of judgement on the part of the Commission after considering the criteria in paragraph 8.3.15 of the IM Reasons.<sup>20</sup>
- 3.5 For GTBs, our initial view as described in the April Discussion Paper, was predicated on a view that each GTB had unique characteristics which could necessitate a separate form of regulation. Consequently, we considered that a TRC was the most appropriate form of regulation for MDL, and we were agreeable to a WAPC for Vector's transmission business.<sup>21</sup> This approach was consistent with s 55E(2) of the Act which contemplates separate treatment of GPBs under the same Initial DPP.
- 3.6 In response to the April Discussion Paper, there was unanimous agreement from all submitters that a WAPC should apply to GDBs, and that a TRC should apply to MDL. However, Vector changed its previous position, and submitted that a TRC

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<sup>20</sup> Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, 22 December 2010, pp. 192 – 195, paragraph 8.3.7 – 8.3.19.

<sup>21</sup> MDL supported our view that a TRC should apply to its business. MDL, *Submission on Initial Default Price-Quality Path for Gas Pipeline Businesses: Discussion Paper*, 27 May 2011, p.3, paragraph 3.1; Vector Limited, *Submission on Gas DPP Issues Paper – Form of Control*, 30 April 2010, p. 4, paragraph 12.

should apply to its gas transmission business. Vector suggested it would be difficult to operate a common carriage regime under a WAPC due to investment and revenue risks. It considered the Commission should be careful not to lock Vector into a particular contractual regime through its choice of the form of control.<sup>22</sup> Similarly, the Major Gas Users Group (MGUG) submitted that the Commission should not prescribe a particular form of control to either Vector's transmission business or MDL without allowing sufficient flexibility to change the form of control, should the individual circumstances warrant it.<sup>23</sup>

3.7 The IM Reasons noted that the form of control should provide incentives for efficient behaviour by regulated suppliers (consistent with s 52A(1)(b) of the Act).<sup>24</sup> The IM Reasons also identified that we consider a regulated supplier, whose business profile is characterised by the following factors, is better suited to a TRC than a WAPC.<sup>25</sup>

- capacity reservation arrangements managed through common carriage rather than contract carriage; and
- a lack of contractual flexibility to tailor non-standard pricing arrangements for individual customers.

3.8 We made it clear in the IM Reasons that the above factors do not represent a clear dichotomy, and that the decision on whether particular regulated suppliers should be subject to a TRC or WAPC will be a matter of judgement on the part of the Commission.

3.9 We consider that Vector's current transmission arrangements are not representative of a common carriage regime. However, we consider that a form of control should apply to GTBs that facilitates more certain decisions on investment, and the ability of GTBs to tailor their contractual arrangements to better meet the needs of their customers during the Initial DPP. Such an approach would better meet the Part 4 Purpose including promoting better outcomes for consumers.

3.10 Following consideration of submissions to the April Discussion Paper, our emerging view is that a TRC should apply to both GTBs (MDL and Vector) for the Initial DPP.

3.11 With respect to GDBs, our position remains unchanged to that in the April Discussion Paper, as the IMs state that a WAPC is the most appropriate form of control for all GDBs during the Initial DPP.

### **Summary of Our Proposed Approach to Setting Starting Prices**

3.12 Under our proposed approach to setting starting prices, we would specify the maximum net revenue each supplier would be permitted to earn from the supply of regulated services in the first year of the regulatory period.

3.13 This maximum net revenue would be calculated based on projections of costs and revenue growth over the regulatory period. Revenue growth would be calculated

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<sup>22</sup> Vector Limited, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Submission*, 27 May 2011, pp. 7-12.

<sup>23</sup> MGUG, *Initial Default Price-Quality Path for Gas Pipeline Businesses – Commerce Commission Discussion Paper dated 1 April 2011*, 27 May 2011, p 2.

<sup>24</sup> Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, 22 December 2010, p. 191, paragraph 8.3.4.

<sup>25</sup> *ibid*, p. 194, paragraph 8.3.15.

using CPI-X indexing (with  $X = 0$ ) along with projections of real revenue growth (the latter for GDBs only). The maximum net revenue for the first year of the regulatory period would be set such that the present value of revenues would be projected to provide suppliers with the opportunity to earn a normal return on a forward-looking basis.

- 3.14 The base year data we use to determine starting prices and, to the extent applicable, other assumptions that affect cost forecasts over the regulatory period, would be consistent with the IMs that were determined in December 2010.
- 3.15 The forecasting of costs requires two types of input assumptions:
- assumptions about each supplier's current cost structure based on supplier-specific information obtained through requests under s 53ZD, including information on the value of each supplier's asset base, current levels of operating expenditure (opex) and capital expenditure (capex), and tax asset value; and
  - assumptions about projected rates of growth in each supplier's capital and operating expenditure and, where a price cap is to be applied, growth in real revenue. Section 4 of this paper describes our proposed method for deriving these projections.
- 3.16 Our projections of expenditure growth and revenue growth would use historical data and independent reputable forecasts. We would adapt these projections to individual suppliers, for example by:
- using revenue weightings specific to each supplier to project revenue growth; and
  - using data to derive projections on a regional basis where appropriate.

### **How Our Approach to Setting Starting Prices for GPBs Compares to the Draft Decision for EDBs**

- 3.17 Our EDB Draft Decision Paper discusses how we propose to reset starting prices for EDBs.<sup>26</sup> We expect there will be some differences in the approach we favour for GPBs relative to the approach we used in the EDB Draft Decision Paper. These include:
- tax costs for GTBs calculated using a tax payable approach;
  - the WACC for GPBs being higher than that for EDBs because the asset beta for GPBs is higher;
  - the asset lives for GPBs differing from those relevant to EDBs;
  - the Initial DPP for GPBs being for the whole regulatory period; and
  - for capex projections, extrapolating historic data as no objective company AMPs are available.

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<sup>26</sup> Commerce Commission, *2010–15 Default Price-Quality Path for Electricity Distribution Businesses —Reset of Starting Prices, CPI Adjustment and Other Amendments*, 19 July 2011.

## Calculating Starting Prices for GPBs

3.18 The determination of the Initial DPP will require us to develop a financial model similar to that prepared for the EDBs Draft Decisions Paper. We expect the model for the GPBs to take into account:

- a revenue cap rather than a weighted average price cap, where applicable;
- the differing treatment of tax between GTBs and GDBs;<sup>27</sup> and
- differences in the nature of businesses, for example different assets and different asset lives.

3.19 The discussion below sets out how we think the proposed approach to setting starting prices should apply to GPBs under a WAPC and a TRC.

### Starting prices under a weighted average price cap

3.20 We propose to specify the maximum net revenue each supplier would be permitted to earn. GDBs operating under a WAPC would need to calculate the maximum prices they can charge in the first year of the regulatory period from the maximum net revenue we allow. We are currently considering how we will assess compliance and will set out our proposed approach in our Draft Determinations and Reasons Paper.

### Starting prices under a total revenue cap

3.21 As our approach to setting starting prices already estimates an allowed revenue figure, we do not consider substantial changes are required to apply the same method to GTBs that operate under a TRC.

3.22 Under its existing arrangement, MDL operates an unders and overs regime.<sup>28</sup> If demand in any year is higher than expected, such that actual revenue exceeds the target level for MDL to meet its costs and margins, MDL refunds the difference to its customers through adjustments to tariffs in subsequent periods. Similarly, if demand is lower than expected, shortfalls between target revenue and actual revenue in a given year are reflected in adjustments to tariffs in the following periods.

3.23 It is our preliminary view that it is more appropriate to account for MDL's unders and overs adjustment through the way in which we assess compliance with the Initial DPP, rather than directly through starting prices. We are considering our current position on this and will set out our views on this matter in our Draft Determinations and Reasons Paper, which we expect to release in November 2011.

3.24 The above issue only applies to MDL, as the other GTB, Vector, does not currently operate an unders and overs arrangement of this nature.

## Alternative Rates of Change

3.25 The Commission may set an alternative rate of change for a particular supplier as an alternative, in whole or in part, to changes in starting prices if this is necessary or

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<sup>27</sup> A tax payable approach for GTBs is indicated in Section 5.3.1 of the *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, December 2010.

<sup>28</sup> As MDL has noted in previous submissions, unders and overs adjustments are provided for in Schedule 10 of the Maui Pipeline Operating Code.

desirable to minimise any undue financial hardship to the supplier or to minimise price shocks to consumers.<sup>29</sup>

- 3.26 In deciding whether to set an alternative rate of change to minimise undue financial hardship to the supplier, we consider that a GPB would need to demonstrate that any proposed price reduction would cause them financial hardship.
- 3.27 We consider that an increase in net revenue greater than 10 percent in the year of setting starting prices could be considered to cause a price shock to consumers. Accordingly, we would consider setting an alternative rate of change to smooth adjustments to prices where our proposed approach to starting prices could lead to an increase in net revenue greater than 10 percent.

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<sup>29</sup> Section 53P(8) of the Act.

## SECTION 4 INFORMATION REQUIRED TO SET STARTING PRICES

- 4.1 This section discusses the our overall approach to sourcing data for setting starting prices, the specific revenue and cost information we consider will be needed to calculate starting prices for GPBs, and reasonableness checks we propose to apply.
- 4.2 Calculation of starting prices requires projections, over the period of the Initial DPP, of:<sup>30</sup>
- revenue growth;
  - operating expenditure;
  - capital expenditure; and
  - CPI indexation.

### Overall Approach to Sourcing Data for Setting Prices

- 4.3 Our approach to setting starting prices requires us to forecast costs and revenues for each GPB over the regulatory period.
- 4.4 Our approach to developing projections for revenue and costs for GDBs and GTBs will be similar. Projections of some inputs required for this assessment are not currently available, specifically throughput and capital expenditure. We are planning to obtain independent expert advice on these matters. This advice will also inform our Draft Determinations and Reasons Paper which will outline our view on appropriate cost and revenue drivers for GDBs and GTBs.
- 4.5 On 3 June 2011 we released a draft information request for consultation. In that consultation paper, we proposed to use data for the 2010/2011 year to inform our decision on the setting of starting prices for GPBs.<sup>31</sup>
- 4.6 Submissions received to this consultation indicated that disclosure of data for this time period may be problematic for some GPBs. Therefore, the formal statutory information request that was issued on 6 July 2011, under s 53ZD of the Act, requested data for the period 2009/2010. We will therefore be using 2009/2010 data for the setting of starting prices that will be included in our Draft Decisions Paper in November.<sup>32</sup>
- 4.7 We welcome submissions from GPBs as to whether 2010/2011 data should also be requested and used for our final determination for GPBs.

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<sup>30</sup> This approach is similar to that applied for EDBs, please refer to Commerce Commission, *2010–15 Default Price-Quality Path for Electricity Distribution Businesses —Reset of Starting Prices, CPI Adjustment and Other Amendments, Draft Decisions Paper*, 19 July 2011, Chapter 3.

<sup>31</sup> Commerce Commission, *Default Price Quality Path for GPBs Draft Information Requests and Process Update Consultation Paper*, 3 June 2011; Commerce Commission, *Draft Section 53ZD Information Request Notice GDB*, 3 June 2011; Commerce Commission, *Draft Section 53ZD Information Request Notice GTB*, 3 June 2011 [http://www.comcom.govt.nz/2012-default-price-quality-path/#\\_msocom\\_2](http://www.comcom.govt.nz/2012-default-price-quality-path/#_msocom_2)

<sup>32</sup> Commerce Commission, *Section 53ZD Information Request Notice for GDBs Starting Price Adjustment*, 6 July 2011; Commerce Commission, *Section 53ZD Information Request Notice for Vector Transmission Starting Price Adjustment*, 6 July 2011; Commerce Commission, *Section 53ZD Information Request Notice for MDL Starting Price Adjustment*, 6 July 2011 [http://www.comcom.govt.nz/2012-default-price-quality-path/#\\_msocom\\_2](http://www.comcom.govt.nz/2012-default-price-quality-path/#_msocom_2)

## Projecting Revenue Growth

4.8 We discuss our approach to deriving revenue growth for GDBs and GTBs separately below.

### *Revenue drivers for GDBs*

4.9 We propose to use the same method to project real revenue growth for GDBs as we have applied to EDBs. For EDBs, we have established real revenue growth for each supplier by:

- breaking down each supplier's revenue into revenue from variable charges, fixed charges, and capacity or demand based charges, based on information provided by the suppliers;
- matching these revenue components to revenue drivers; and
- using independent regional forecasts for each revenue driver to estimate revenue growth over the regulatory period.

4.10 Appendix C of the EDBs Draft Decisions Paper discusses this approach in further detail.<sup>33</sup>

4.11 Table 4.1 summarises our current views on appropriate revenue drivers for GDBs, and identifies proposed sources of information. In the subsections below we discuss revenue drivers for each revenue component, and the availability of independent regional forecasts, for GDBs.

4.12 For GTBs we would not have to rely on a forecast of real revenue growth when setting starting prices. Revenue growth estimates for GTBs will rely only on the forecast of CPI-X and will be needed for the reasons described in paragraph 4.27 to 4.35 of this Discussion Paper.

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<sup>33</sup> Commerce Commission, *2010–15 Default Price-Quality Path for Electricity Distribution Businesses —Reset of Starting Prices, CPI Adjustment and Other Amendments, Draft Decisions Paper*, 19 July 2011, Appendix C.

**Table 4.1 Proposed information sources for modelling of current and projected profitability**

Description	Time Period	Source
Regional population growth	2012 – 2017	Statistics NZ (sub-national population projections tables, 2006 (base) - 2031 update). <a href="http://www.stats.govt.nz/tools_and_services/tools/tablebuilder/population-projections-tables.aspx">http://www.stats.govt.nz/tools_and_services/tools/tablebuilder/population-projections-tables.aspx</a>  Projections of household numbers will be used where available.
Regional throughput	2002 – 2010	Historical throughput available from information disclosures.  No independent projections for future demand and throughput currently available.
Regional real GDP growth	2012 – 2017	NZIER forecasts (Quarterly Predictions-June 2011, Table A25 Regional Outlook).
CPI	2011-2016 (for lagged CPI) and 2012 – 2017 (for Regulatory Asset Base revaluations)	NZ Reserve Bank Monetary Policy Statement <a href="http://www.rbnz.govt.nz/monpol/statements/">http://www.rbnz.govt.nz/monpol/statements/</a>
CGPI	2012 – 2017	NZIER estimates and forecasts.
PPI (all industries)	2012 – 2017	NZIER forecast.
LCI (all industries)	2012 - 2017	NZIER forecast.
ICPs (including growth rates)	2008 – 2011	Gas Industry Company quarterly industry performance reports <a href="http://gasindustry.co.nz/">http://gasindustry.co.nz/</a>
Revenue weights	Current	GPBs (responses to s 53ZD Notices issues 6 July 2011).

4.13 We consider a number of factors drive the revenues of GDBs. These can be broadly separated into fixed and variable revenue drivers.

#### Revenue from fixed charges

4.14 We intend to use a measure of population growth as a primary driver of fixed revenue for GDBs. We consider that projections of household numbers have a relationship with residential fixed charges growth for GDBs and will be applied where available.

4.15 Although revenue is obtained from both domestic and industrial/commercial fixed charges, information disclosures for GDBs do not provide information on relevant weights. We have requested these revenue weights from GDBs as part of the s 53ZD information requests issued on 6 July 2011.

4.16 GDBs serve around 264,000 installation control points (ICPs) around the North Island. Of these, the majority, around 248,000 (94 percent), are domestic customers.

It can therefore reasonably be expected that there is a correlation between the growth in connections for GDBs and growth in population.

- 4.17 We propose to develop an uptake factor to estimate the projected growth in revenue from fixed charges for GDBs, based on regional population growth and existing ICP numbers.
- 4.18 We will explore ways to develop an appropriate uptake factor, although a sensible starting position appears to be regional household numbers/regional ICPs. This uptake factor will then be multiplied by household growth (based on population growth) to determine household ICP growth over the regulatory control period. We invite submissions on the merits or otherwise of this starting point for domestic customers.
- 4.19 Provided our uptake factor is appropriately trended, it will inherently take account of the fact that gas is a more discretionary energy choice for users than is the case with electricity. Electricity is a substitute for domestic gas use as it may be used for heating and cooking. However, gas is not a substitute for all services provided by electricity. As a result, while we would expect all new households to have an electricity connection, only some new households will choose to connect to the gas network (where available).
- 4.20 With respect to drivers of industrial/commercial fixed charges, information on the relevant weights has been requested from GDBs. If GDBs are able to provide information on relevant weights between domestic and industrial/commercial customers, we will then consider what drivers of growth in revenue might best be used. Population growth or regional GDP are two possible options we will consider further.
- 4.21 We invite submissions on our forecasting methods described above.

#### Revenue from variable charges

- 4.22 Throughput is the primary driver of variable revenue for GDBs. As we are not aware of any existing independent projections of throughput for GDBs we are planning to obtain independent expert advice on a preferred option for forecasting variable charges for GDBs.
- 4.23 Historic data on throughput for GPBs is available from previous information disclosures made under the Gas (Information Disclosure) Regulations 1997.

#### Revenue from demand or capacity based charges

- 4.24 We consider regional real GDP growth would be an appropriate driver on which to base projections of revenue from demand or capacity based charges. Demand quantities are likely to be linked to the level of economic activity. NZIER produces independent regional projections of GDP which we propose to use for this purpose.

#### Matching projected drivers to GDBs' regions

- 4.25 In resetting the DPP for EDBs, we propose to use regional information on projected revenue drivers, and to match this regional information to the EDBs. Appendix C of the EDB Draft Decisions Paper describes the approach to matching regional data to

EDB regions.<sup>34</sup> We consider this regional approach is likely to increase the accuracy of our revenue projections. We also consider this approach is more consistent with the low-cost nature of setting DPPs rather than attempting supplier-specific matching.

4.26 In summary, this approach involves:

- identifying the regions used for projections of regional drivers, as described in table 4.3 below;
- determining the number of ICPs each supplier has within each region; and
- allocating regions to suppliers based on the spread of ICPs across regions. Where suppliers have ICPs in more than one region, the allocation of suppliers to regions would use an ICP-based weighting.

4.27 A similar matching exercise may be appropriate for GPBs in determining the rate of growth of revenue from variable charges, and from demand or capacity based charges.

**Table 4.2: Summary of proposed regions allocated to each GPB**

GPB	Region
GasNet	Manawatu
MDL	Taranaki / Waikato / Auckland
Powerco	Taranaki / Manawatu / Hawke's Bay / Wellington
Vector	Taranaki / Waikato / Bay of Plenty / Gisborne / Auckland / Northland / Wellington / Manawatu / Hawkes Bay

### **Revenue drivers for GTBs**

4.28 As discussed in paragraphs 3.2 to 3.11, our emerging view is that a TRC should apply to both GTBs (MDL and Vector) for the Initial DPP. This has implications for the way in which notional revenue and allowable notional revenue are calculated, as we discussed in our April Discussion Paper, and consequently for the way in which we set starting prices for these businesses.<sup>35</sup>

4.29 We propose to set starting prices for GTBs by using a building blocks approach to derive a revenue level for each GTB for the first year of the regulatory period (i.e. year ending June 2013). In order to set the starting price, we will need to convert this revenue into an allowable notional revenue for each GTB, using actual price and quantity data. As actual quantities for the first year of the regulatory period will not be available when we set starting prices, we will need to project forward the most recent available quantity data for each GTB. For this purpose we will need to derive projections of quantity growth from year ending 30 June 2011 to the year ending 30 June 2013. We welcome submissions on this approach.

<sup>34</sup> Commerce Commission, *2010–15 Default Price-Quality Path for Electricity Distribution Businesses—Reset of Starting Prices, CPI Adjustment and Other Amendments: Draft Decisions Paper*, 19 July 2011, Appendix C paragraphs C13–C18.

<sup>35</sup> Commerce Commission, *Initial Default Price-Quality Path for Gas Pipeline Businesses, Discussion Paper*, 1 April 2011, pages 25-26, paragraphs 5.39 to 5.41.

- 4.30 Once we have established the allowable notional revenue for the first year of the Initial DPP, we will estimate revenue growth over the regulatory period by projecting CPI-X forward (with  $X = 0$ ).
- 4.31 Revenue for GTBs is principally driven by the amount of gas passed through their network.
- 4.32 MDL currently charges for its services using two tariffs. Tariff 1 is a GJ/km tariff that is calculated by multiplying the volume of gas transported by the distance travelled. Tariff 2 is a \$/GJ tariff.
- 4.33 Vector Transmission tariffs are based on a capacity reservation charge (calculated as \$/GJ of reserved capacity per year) and a throughput charge (\$/GJ). Additional overrun charges also apply in some instances.
- 4.34 The s 53ZD information requests released on 6 July 2011 ask for information on the weight of each revenue component. This will enable us to confirm whether we need to develop projections of fixed revenue and revenue from demand or capacity based charges for GTBs.
- 4.35 If responses to the information request show that GTBs collect revenue from fixed charges, we may need to identify the most appropriate driver of changes in this revenue component.
- 4.36 As we noted in paragraph 4.4, we are planning to obtain independent expert advice, including on appropriate revenue drivers for GTBs. We are also interested in the GTBs' views on the key determinants of revenue growth for their businesses, and welcome submissions on this topic.

### **Projecting Operating Expenditure**

- 4.37 We will forecast nominal opex using a combination of a labour cost index and a producer price index (with no allowance for productivity changes), and using output growth in the case of GDBs.
- 4.38 For both GDBs and GTBs, we consider that changes in both input prices and partial productivity growth will have an effect on the rate of change in opex. However, for GDBs, we also consider that the rate of change in opex will vary to some extent in light of changes in output quantity. A similar relationship is unlikely to exist for GTBs.<sup>36</sup>

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<sup>36</sup> The EDBs Draft Decisions Paper sets out our proposed approach to indexing operating expenditure, see Commerce Commission, *2010–15 Default Price-Quality Path for Electricity Distribution Businesses—Reset of Starting Prices, CPI Adjustment and Other Amendments: Draft Decisions Paper*, 19 July 2011, paragraphs 3.14–3.28 and Appendix C38 – C61. The rate of change formula set out in that paper has been applied to GDBs. However, for GTBs, the change in output quantity has been removed from the formula.

4.39 The formula we propose to use to project opex growth for GDBs is therefore:

$$\Delta \text{ Opex} = \Delta \text{ Opex Price} - \Delta \text{ Opex Partial Productivity} + \Delta \text{ Output Quantity}$$

where:<sup>37</sup>

$\Delta$ Opex	is the <i>supplier-specific</i> projected growth in nominal operating expenditure used in the starting price modelling
$\Delta$ Opex Price	is the <i>industry wide</i> projected growth in the <b>opex input price</b> index, a weighted average of input price indices for labour costs and non-labour costs
$\Delta$ Opex Partial Productivity	is the <i>industry wide</i> projected <b>growth in opex partial productivity</b>
$\Delta$ Output Quantity	is the <i>supplier-specific</i> projected <b>output</b> quantity growth

4.40 This approach is similar to methods used by other regulators, and to the approach we used to develop opex projections for the Gas Authorisation.<sup>38 39</sup>

4.41 The formula we use for GTBs would be likely to be similar, except that it will not include an output term.

#### ***Opex input price***

4.42 Changes in opex prices depend on changes in labour costs, and in the cost of non-labour components. We propose to project opex prices using a weighted average of the labour cost index and a producer price index.

4.43 We propose to use a projection of labour costs for all sectors of the economy that will be provided by NZIER.

4.44 In the Gas Authorisation we used projections of labour price (private sector ordinary time average hourly earnings) increases produced by NZIER to project opex for future years.<sup>40</sup> Similarly, we propose to use projected growth in the Labour Cost Index for all industries prepared by NZIER in setting starting prices for GPBs.<sup>41</sup>

4.45 To index the non-labour component of output prices, we propose to use projections of the overall PPI for all industries prepared by NZIER.<sup>42 43</sup> This is consistent with our approach for EDBs, and in the Gas Authorisation.

<sup>37</sup> The symbol  $\Delta$  is used here to represent ‘the proportional change in a variable’.

<sup>38</sup> Commerce Commission, *Authorisation for the Control of Supply of Natural Gas Distribution Services by Powerco Ltd and Vector Ltd: Decisions Paper*, 30 October 2008. See Chapter 8 (paragraphs 830 to 840) and Appendix I (paragraphs I.63 to I.69).

<sup>39</sup> For example, the Victorian Essential Services Commission used this approach to roll forward opex from a nominated base year value. Meyrick and Associates, *Victorian Gas Distribution Business Opex Rate of Change*, Report prepared for Envestra, Multinet and SP AusNet, Denis Lawrence, 26 March 2007.

<sup>40</sup> Commerce Commission, *Authorisation for the Control of Supply of Natural Gas Distribution Services by Powerco Ltd and Vector Ltd: Decisions Paper*, 30 October 2008, page 444, paragraph I.67.

<sup>41</sup> Commerce Commission, *2010–15 Default Price-Quality Path for Electricity Distribution Businesses—Reset of Starting Prices, CPI Adjustment and Other Amendments: Draft Decisions Paper*, 19 July 2011, paragraphs 3.18-3.20 and Appendix C43 – C52.

<sup>42</sup> Commerce Commission, *Authorisation for the Control of Supply of Natural Gas Distribution Services by Powerco Ltd and Vector Ltd: Decisions Paper*, 30 October 2008, page 198, paragraph 838.

- 4.46 In the Gas Authorisation we indexed operating costs using a weighting of 62 percent of the labour price index and 38 percent of the PPI index. This weighting was based on experiences by the Victorian Essential Services Commission and confirmed in light of information provided by Powerco and Vector.<sup>44</sup>
- 4.47 In the EDBs Draft Decisions paper, we proposed to use a similar weighting, 60 percent for labour costs and 40 percent for non-labour costs. We propose to adopt the same weighting of 60:40 for the Initial DPP, as analysis has found a similar split for gas distribution businesses is appropriate given that their functions are broadly analogous.<sup>45</sup>
- 4.48 We welcome submissions on applying this approach to both GDBs and GTBs in light of the different opex drivers faced by gas distribution and transmission businesses.

### ***Opex partial productivity growth***

- 4.49 Economic Insights has undertaken a productivity analysis of the gas pipeline industry for the Commission.<sup>46</sup> Economic Insights' analysis was limited by the shortage of complete, consistent and robust data. However, they found that the evidence available at this time lends support to allocating values of zero to the productivity differential for GPBs.
- 4.50 Available data on historic partial productivity growth rates for GPBs is insufficient to inform projections of achievable future productivity growth.
- 4.51 Given the lack of data in relation to partial productivity growth for GPBs, and the findings of Economic Insights, we consider a prudent approach is to assume an annual opex partial productivity rate of zero percent for the gas sector for the Initial DPP. While this value may not be truly indicative of the productivity performance of individual GPBs, Economic Insights concluded that there is insufficient evidence to suggest a rate of zero is inappropriate.<sup>47</sup>

### ***Real output***

- 4.52 For output quantity growth, we propose to use real revenue projections for GDBs for the entire regulatory control period, as discussed previously in this section.

## **Projecting Capital Expenditure**

- 4.53 Our proposed approach to assessing capex for setting the Initial DPP is to base projected capital expenditure on similar levels of capex to that which they have required in the past. In the absence of Asset Management Plans or robust verified

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<sup>43</sup> Commerce Commission, *2010–15 Default Price-Quality Path for Electricity Distribution Businesses—Reset of Starting Prices, CPI Adjustment and Other Amendments: Draft Decisions Paper*, 19 July 2011, paragraphs 3.18-3.20 and Appendix C40 – C52.

<sup>44</sup> Meyrick and Associates, *The Total Factor Productivity Performance of Victoria's Gas Distribution Industry*, Report prepared for Envestra, Multinet and SP AusNet, Denis Lawrence, 2007.

<sup>45</sup> *ibid.*

<sup>46</sup> The Economic Insights report is available on our website, at <http://www.comcom.govt.nz/2012-default-price-quality-path/>. We provided a summary of the report's key findings in Commerce Commission, *Discussion Paper: Initial Default price-Quality Path for Gas Pipeline Businesses*, 1 April 2011, pages 32–33, paragraphs 6.13–6.25.

<sup>47</sup> *ibid.*

projection of capex, we consider that this is likely to provide an appropriate basis for considering expenditure for the first regulatory period. A supplier can apply for an alternative path if it considers that it faces a step change in investment and proposes a CPP on that basis.

4.54 We have therefore requested information from GPBs, under s 53ZD, on historical levels of capex. We intend to use this data to inform our projections of capex for each GPB.

4.55 We propose to adjust capex for inflation using the overall Capital Goods Price Index (CGPI) for all industries. We welcome submissions on whether indices tailored to the gas sector can and should be applied to GPBs to accommodate for specific factors, such as the differences between steel and polyethylene pipelines.

### **Projections of CPI**

4.56 CPI will enter our modelling in two places. On an annual basis, the CPI is used to update:

- the price path, so it affects our projections of the maximum amount of revenue that GPBs are permitted to earn (this measure of the CPI would be lagged by the same amount as in the formula used to assess compliance); and
- the value of the regulatory asset base (RAB), so it affects the amount of revenue that GPBs would require during the regulatory period in order to earn a normal return.

4.57 CPI assumptions are important because they determine the return on capital that suppliers can expect to earn through their cash flows during the period. We do not consider that GPBs should be exposed to general inflation risk because they are not well placed to manage that risk. During the period, we therefore propose to update the price path and the RAB value for actual inflation which protects the value of GPBs' real returns.

4.58 At the start of the period, we must rely on the forecasts of CPI published as close to the date at which we estimate the WACC. This ensures that the rate of return we allow before inflation is consistent with the rate of return we allow after inflation.

4.59 The forecasts that we must use for CPI (forecast CPI) are determined under the IMs.<sup>48</sup> We will therefore use the most recent forecasts of CPI that are consistent with this definition and which are available at the time of our draft and final decision.

### **Application of Reasonableness Checks for GPBs**

4.60 In our proposed reset of starting prices for EDBs we considered whether a margin might be appropriate in the context of addressing uncertainty in projections. We indicated that we considered applying a margin to be a poor way to address uncertainty because it is not consistent with promoting long-term benefits for consumers as they are likely to bear the associated costs of higher prices caused by the inclusion of a margin.

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<sup>48</sup> See definition of forecast CPI, *Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010*, 22 December 2010, page 12; *Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010*, 22 December 2010, page 12.

- 4.61 Our preliminary view for GPBs is that it is also inappropriate to include a margin when setting the initial DPP. GPBs have the option to apply instead for a CPP to better reflect their particular circumstances, for instance due to a step-change in investment or because the base data we propose to use is not representative of their costs.
- 4.62 For EDBs, we carried out a reasonableness check to ensure that the expenditure provided for over the regulatory period for the EDBs was broadly consistent with expenditure incurred by those EDBs over similar time periods in the past. We are likely to undertake a similar reasonableness check in setting starting prices for GPBs, and we welcome submissions on how this should be conducted.

## **SECTION 5 TRANSITION TO THE INITIAL DPP FOR THOSE GDBS CURRENTLY SUBJECT TO THE GAS AUTHORISATION**

### **General Approach**

- 5.1 We propose to exercise our powers under s 55E(2) to set the Initial DPP. Section 55E(2) of the Act requires us to set the Initial DPP as soon as reasonably practicable after 1 July 2010.
- 5.2 The Gas Authorisations, which currently control gas prices for distribution services supplied by Powerco and Vector's gas distribution business in Auckland, expire on 1 July 2012. Accordingly, we consider it is sensible to set the Initial DPP to have effect from July 2012. In accordance with s 53X(2) of the Act we intend to inform Powerco and Vector Auckland of any alteration to their starting prices from those prices provided for under the Authorisations before 29 February 2012.
- 5.3 In submissions on the April Discussion Paper, Powerco raised a concern in relation to the transition from regulated prices under the Gas Authorisations to the Initial DPP. Specifically, Powerco's concern is that, under the Commission's proposed compliance formula, the GDBs subject to the Gas Authorisations may be prevented from recovering pass-through costs for the year ending June 2011. This is because the Gas Authorisation has a greater lag than the proposed Initial DPP.
- 5.4 Powerco submitted that the Initial DPP should allow recovery of pass-through costs for the year ending June 2011, by:
- allowing recovery of these pass-through costs in the first year of the Initial DPP, thus amortising the costs over the entire Initial DPP period; or
  - amending the compliance formula to use pass-through costs from the previous year.
- 5.5 We are considering Powerco's submission on this topic, and would welcome any further comment on:
- the specific categories of pass-through costs that may be affected;
  - the extent to which these pass-through costs are known, or can be estimated with confidence, in advance; and
  - more detailed proposals on how starting prices, or the compliance formula, could be amended to address this concern.

## **APPENDIX A: REGULATORY CONSIDERATIONS FOR THE INITIAL DPP**

A1 This appendix sets out further discussion on the regulatory context relevant to the Initial DPP, including:

- the interpretation of the Part 4 Purpose (s 52A);
- the role of default/customised based price-quality regulation in promoting the Part 4 Purpose; and
- statutory provisions relevant to setting a DPP (s 53P).

### **Part 4 Purpose (s 52A)**

A2 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.

A3 The central purpose, therefore, 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. ‘Competition’ in the context of Part 4 of the Act means ‘workable or effective competition’ (s 3(1) of the Act).<sup>49</sup>

A4 This central purpose is to be achieved by promoting outcomes consistent with those produced in workably competitive markets such that the objectives set out in s 52A(1)(a) to (d) of the Act are achieved. These objectives are integral to promoting the long-term benefit of consumers, and reflect the key areas of supplier performance that characterise workable and effective competition.

A5 Gas pipeline services are regulated under Part 4. The legislature has determined that markets in which these services are supplied are not subject to competition (or at least little competition) and there is little or no likelihood of a substantial increase in competition and should therefore be subject to Part 4 regulation, including default/customised price-quality regulation.<sup>50</sup> Section 52A(1) requires the Commission to promote outcomes that are consistent with outcomes produced in workably competitive markets. Those outcomes are identified in s 52A(1)(a) to (d)

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<sup>49</sup> Except where references specifically refer to ‘effective competition’, ‘workable competition’ is used hereafter to refer to both workable and effective competition, and ‘workably competitive markets’ to refer to workably or effectively competitive markets.

<sup>50</sup> Sections 52, 55B and 55D of the Act.

and we are having regard to them in developing our proposed approach to the Initial DPP.

- A6 For further detail on our interpretation of the Part 4 Purpose, see Chapter 2 of the IM Reasons Paper.<sup>51</sup>

### **Purpose of Default/Customised Price-Quality Regulation**

- A7 Section 53K of the Act provides that the purpose of default/customised price-quality regulation is:

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

- A8 In developing our views on setting the Initial DPP we are taking into account s 53K, as well as the Part 4 Purpose.

### **Statutory Provisions for Setting a DPP (s 53P)**

- A9 Section 53P sets out provisions relevant to setting DPP starting prices, alternative rates of change, and quality standards. The particular subclauses relevant to resetting starting prices are:

- (3) The starting prices must be either—
  - (a) the prices that applied at the end of the preceding regulatory period; or
  - (b) prices, determined by the Commission, that are based on the current and projected profitability of each supplier.
- (4) Starting prices set in accordance with subsection (3)(b) must not seek to recover any excessive profits made during any earlier period.
- ...
- (8) The Commission may set alternative rates of change for a particular supplier—
  - (a) as an alternative, in whole or in part, to the starting prices set under subsection (3)(b) if, in the Commission’s opinion, this is necessary or desirable to minimise any undue financial hardship to the supplier or to minimise price shock to consumers;
- ...
- (9) Any alternative rates of change set under subsection (8) may include step changes.
- (10) The Commission may not, for the purposes of this section, use comparative benchmarking on efficiency in order to set starting prices, rates of change, quality standards, or incentives to improve quality of supply.

- A10 The Commerce Commission intends to release a Draft Determinations and Reasons Paper in November 2011 which will set out the relevant details the Commission is

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<sup>51</sup> Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, 22 December 2010.

proposing to meet these requirements. This paper is aimed at setting out our proposed approach to setting starting prices.

## APPENDIX B: KEY FEATURES OF THE GAS SECTOR

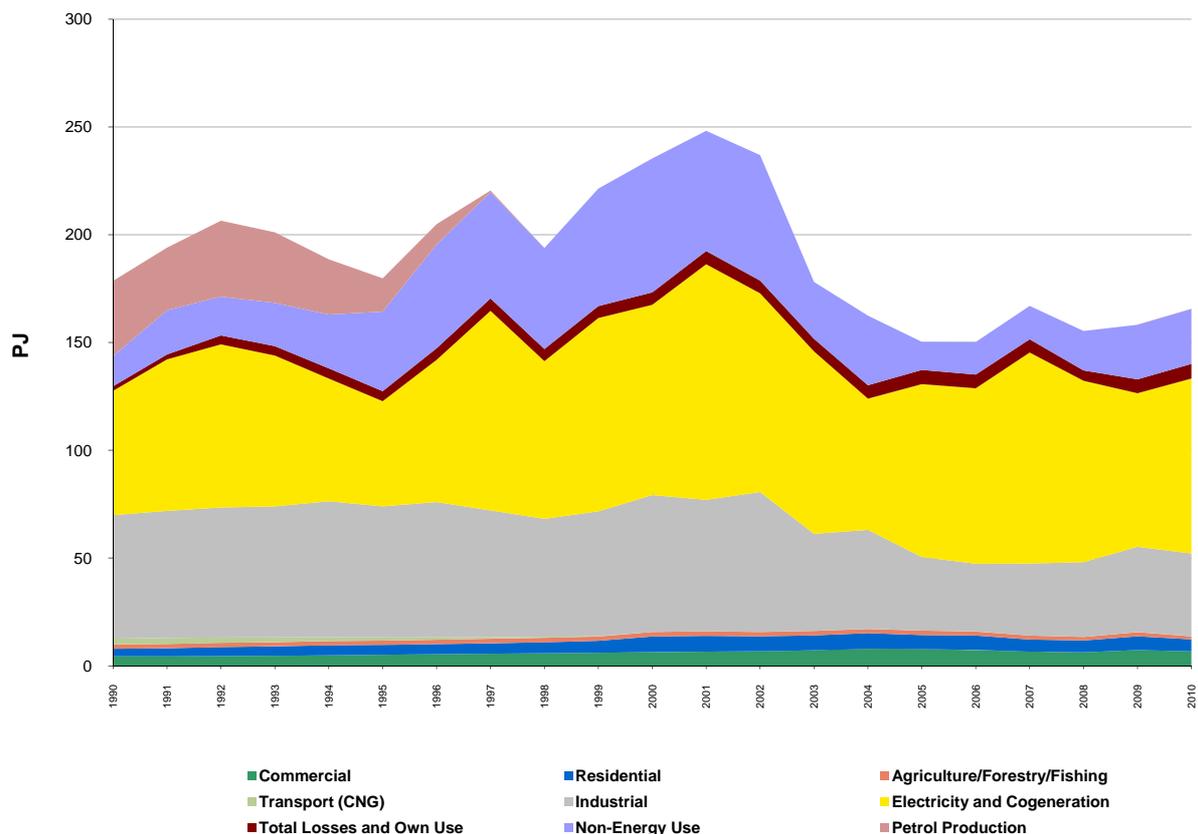
B1 This appendix describes what the Commission considers are the key features of the gas sector to provide context for consideration of starting prices for the Initial DPP. This appendix considers both demand side factors and supply side factors.

### Demand Side Factors

B2 Annual demand for gas varies from year to year. Figure B1 illustrates that total gas demand in 2001 peaked at 248PJ, but that this decreased to 150PJ in 2005. Demand has been relatively stable in recent years, fluctuating between 150PJ and 160 PJ between 2005 and 2009, and in 2010 was around 168PJ.

B3 Electricity generation (approximately 51 percent) and industrial processes (approximately 24 percent) account for the majority of gas consumption in New Zealand. The residential and commercial sectors only account for around 13PJ per annum (around 8 percent of total demand in 2010).

**Figure B1: Natural Gas Use by Sector**



Source: Energy Data File, Ministry of Economic Development, 2011

- B4 Large users are typically located in Taranaki (approx. 65PJ), Waikato (approx. 40PJ) or greater Auckland (approx. 32PJ). Combined, these three areas account for around 90 percent of total natural gas consumption in New Zealand.

### *Gas Transmission*

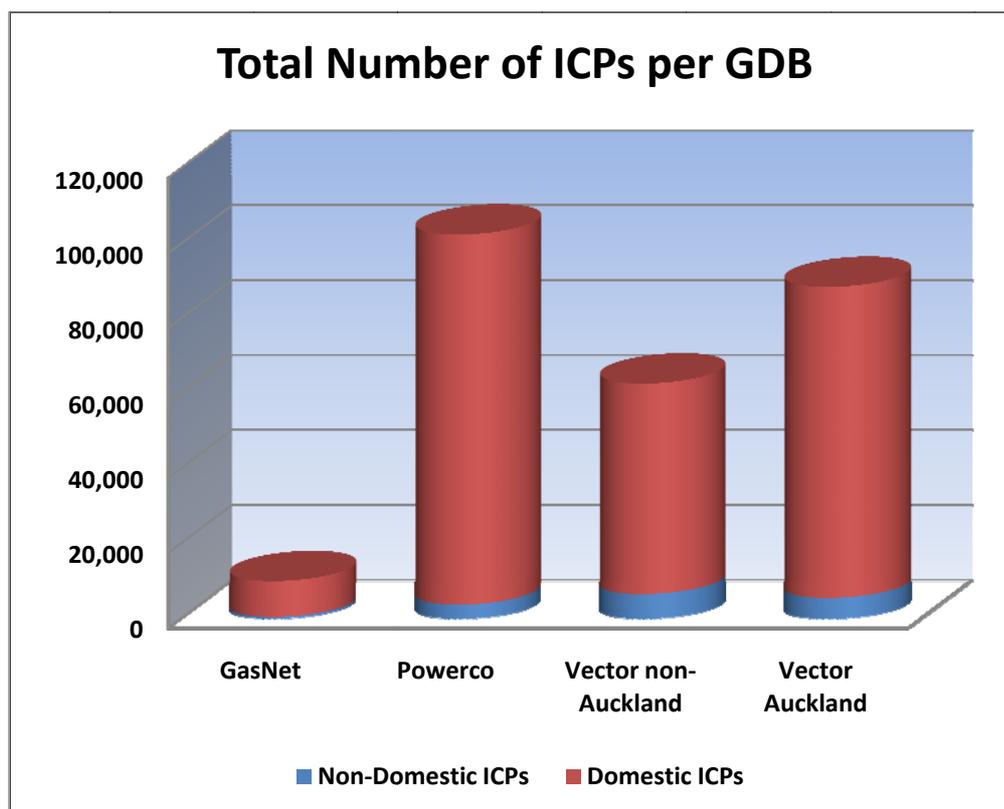
- B5 There are fewer than thirty welded points on the Maui Pipeline. The number of direct receipt and delivery points on Vector's transmission network is also small when compared to the total number of connections or ICPs.<sup>52</sup>
- B6 GTBs may be exposed to potentially large variations in demand that are sometimes beyond their control. For example, a decision by Methanex to commission or decommission their methanol plants in Taranaki could influence throughput on the Maui Pipeline by as much as 50PJ (or nearly one third of total annual demand).
- B7 The exposure of such demand shocks increases the risks to a GTB's future revenue stream, as a single customer can have a significant impact on demand and throughput requirements. In turn, this may influence output growth and impact upon costs, including opex and capex requirements.

### *Gas Distribution*

- B8 The gas sector accounts for around 264,000 ICPs, with approximately 248,000 of these being domestic connections that are supplied by GDBs. ICPs located north of Huntly account for approximately 122,000 of this total number, including around 89,000 ICPs in the greater Auckland region. There are around 117,000 ICPs in the Manawatu, Hawke's Bay and Wellington areas. A further 22,000 ICPs are located in the Bay of Plenty.
- B9 The number of ICPs, in addition to throughput, may influence real revenue growth and costs across a GDB's network.
- B10 Vector's gas distribution network is responsible for delivering gas to around 151,000 ICPs. The majority of Vector's ICPs are concentrated in Auckland and the Bay of Plenty.
- B11 GasNet supplies consumers in a relatively confined area in Wanganui but only accounts for around 10,000 ICPs.
- B12 Powerco is responsible for delivering gas to around 103,000 ICPs, a high proportion of which are low use domestic consumers covering a wide geographic area.

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<sup>52</sup> For a complete and up to date list of welded receipt and delivery points, please refer to MDL's Vector's information on the OATIS website  
<https://www.oatis.co.nz/Ngc.Oatis.UI.Web.Internet/Common/Publications.aspx>.

**Figure B2: Total number of ICPs per GDB**

Source: Gas Industry Company, July 2011

- B13 Demand across distribution networks is generally more stable and less subject to significant one-off changes in throughput arising from the decisions of large individual users. However, changes in both the number of connections and throughput do occur.
- B14 This is mainly because retailers charge end users for the services provided, and GDBs do not have direct relationships with end users on their network. Therefore, GDBs are often unable to directly influence end user behaviour. This lack of influence has a lesser effect on GDBs' revenue streams than is the case for GTBs because GDBs serve a much larger number of ICPs.
- B15 The Commission considers that supply and demand factors in the gas sector are very closely linked, as a third party is unlikely to invest in new infrastructure and create new demand unless they are able to secure gas from a producer.

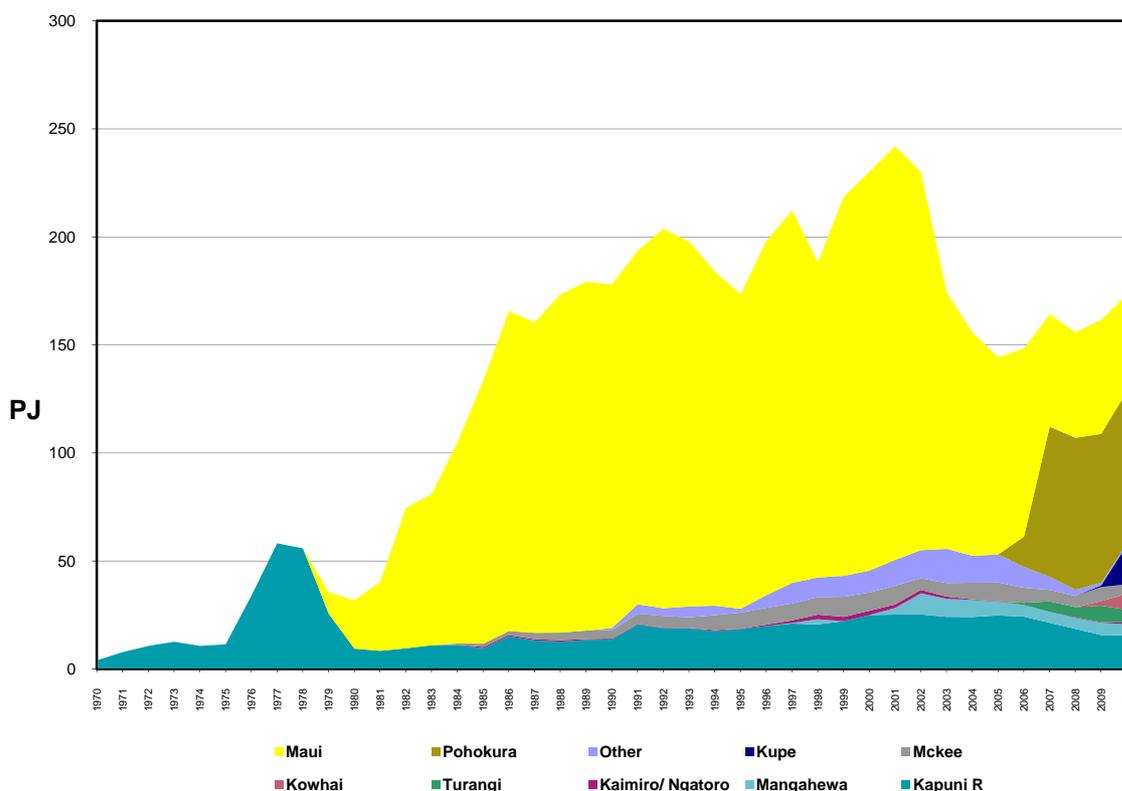
### Supply Side Factors

- B16 The Taranaki region is responsible for producing all of the natural gas in New Zealand.<sup>53</sup> Despite current government initiatives to promote increased exploration and development in other areas, Taranaki is likely to remain the primary petroleum producing area for the foreseeable future.

<sup>53</sup> The one exception to this statement is L&M Coal Seam Gas Ltd's coal seam gas project in Ohai, Southland which recently booked an initial resource (3P) of 173 petajoules (PJ). <http://www.nzpam.govt.nz/cms/news/2009/l-m-csg-books-173-pj-of-coal-seam-gas-at-ohai>

- B17 The Maui gas field was discovered in 1969, and initially offered more gas than New Zealand needed for domestic use. In the early 1980s, the government sponsored a number of large construction projects to promote economic development in the face of sharply rising world oil prices. Some of these projects were dependant on Maui gas, including an ammonia-urea plant (owned by Balance Agri-Nutrients), the Motunui synthetic petrol plant and the Waitara methanol plant (owned by Methanex). In addition, other types of gas demand, particularly power generation, continued to grow.
- B18 Whilst output from Maui has historically supplied the New Zealand market and has been flexible enough to cope with swings in demand, output from Maui has continued to decline in recent years.
- B19 The sector is now witnessing the development of multiple, smaller fields in the Taranaki region that positively contribute to the overall supply position. Production is currently dominated by the Pohokura field, which started production in 2006.
- B20 However, improved information on existing reserves and further discoveries may be required to encourage increased demand across the gas transmission and gas distribution networks.<sup>54</sup>

**Figure B3: Total Production of Natural Gas by Field**



Source: Energy Data File, Ministry of Economic Development, 2011

<sup>54</sup> The Commission notes the Ministry of Economic Development is currently consulting on a petroleum reserves option paper. This can be found at [http://www.med.govt.nz/templates/StandardSummary\\_13833.aspx](http://www.med.govt.nz/templates/StandardSummary_13833.aspx)