



Pursuant to *section 7(5)* of the Commerce Act (Natural Gas Services) Provisional Authorisation 2005

## **Public Disclosure of Information**

**12 November 2007**

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## Introduction

- 1.1 The information in subsequent sections of this document is disclosed by Vector Limited pursuant to *section 7(5)* of the Commerce Act (Natural Gas Services) Provisional Authorisation 2005 ("the Authorisation"). The information is an excerpt from the Gas Compliance Statement 2007 provided by Vector to the Commerce Commission ("Commission"). In this document, references to Vector relate only to Vector's regulated gas business, the Auckland Gas Network. The line function services provided by that business are subject to control under the Commerce (Control of Natural Gas Services) Order 2005.
  
- 1.2 In accordance with *section 7(5)* of the Authorisation, Vector must provide the information described in subclauses (3)(a)(iii) (pricing methodology) and (v) (policies and procedures used for recording quality standards). This document therefore describes the methodology used and rationale for determining the prices charged on 1 October 2007, and describes the policies and procedures which Vector uses for monitoring its compliance with quality standards. This document is also available for viewing at Vector's head office, 101 Carlton Gore Rd, Newmarket, Auckland. It can be obtained from Vector's Group Manager Regulatory Performance, or from [http://www.vector.co.nz/information\\_disclosure/compliance-statements.php](http://www.vector.co.nz/information_disclosure/compliance-statements.php).

### **7(3)(a)(iii) – Pricing Methodology**

- 2.1 In this section, Vector describes the methodology used and rationale for determining the prices charged on 1 October 2007.
- 2.2 Up to 1 October 2007, Vector's pricing was set in accordance with its publicly disclosed pricing methodology (disclosed on 31 July 2004, pursuant to the Gas (Information Disclosure) Regulations 1997). On 1 October 2005, Vector made changes to its pricing to ensure compliance with the Authorisation. The new pricing schedule that applies to prices since 1 October 2005 is available on the Vector website.

#### **Pricing Methodology Context**

- 2.3 Vector's development and use of a pricing methodology needs to be considered in light of the acquisition of UnitedNetworks in 2002 (and the associated inheritance of pricing approaches and models for the acquired network).
- 2.4 Subsequent to the acquisition of the Auckland Gas Network, the Commerce Commission (the Commission) began an enquiry into natural gas pipeline businesses. This resulted in a draft report titled Gas Control Inquiry, published on 21 May 2004. The draft report stated there was likely to be net benefits to acquirers resulting from control and that Vector (amongst others) should be controlled.
- 2.5 The Authorisation came into effect on the 25 August 2005 and required Vector to maintain prices from that date until 1 October 2005 and then to lower prices by 9.5% effective on 1 October 2005. Standard tariffs are essentially the same as those introduced on 1 July 2004 (with a 9.5% reduction applied). The following methodology description is based on tariffs introduced on 1 July 2004 which are derived from tariff structures and methodology inherited from UnitedNetworks.

#### **Methodology used to calculate prices charged**

- 2.6 Vector's existing gas tariffs represent an evolution of the tariff structure inherited from UnitedNetworks after the acquisition of the gas network. These prices reflect the discretionary and competitive nature of the gas business with competing networks, distribution channels and alternative fuel availability. After its acquisition of the Auckland gas network, the former

UnitedNetworks introduced zonal pricing for standard gas contracts. Zones A, B and C were introduced on 1 January 2003 and zones X and Y introduced on 1 July 2004.

- 2.7 Vector has changed the contracting methodology for non-standard end consumers. The former Delivery Point Request (DPR) contracts have been gradually replaced with new Line Charge Agreements (LCAs) to customers and Line Charge Notifications (LCNs) to retailers. DPRs were specific to the retailer requesting the price – LCAs are specific to the customer and are neutral to the retailer and were implemented in order to ensure transparent delivery of non-standard pricing via the interposed retailer to the end consumer. DPR contracts are no longer offered and all new non-standard agreements are being signed onto LCAs. As DPRs expire they are being replaced with either standard prices or LCA contracts.
- 2.8 Vector has undertaken some preliminary work in developing a cost of supply methodology applicable to the gas network. Preliminary work indicated that some rebalancing may be required between consumer groups to better reflect the cost of supply. Vector has not taken into account any cost of service modeling in any of its published tariffs, and following the provisional authorisation has suspended work on pricing development, pending an understanding of the process by which price setting may occur under the final authorisation.

## **Consumer groups**

The following broad consumer groups are defined:

- Domestic
- Small Commercial
- Medium Commercial
- Large Commercial
- Industrial
- Non-standard priced
- Compressed Natural Gas (CNG)
- Co-generation

### *Domestic*

This consumer group contains all the end consumers in a private dwelling not normally used for any business activity. These consumers generally have an installed equipment/meter capacity of less than 10 standard cubic meters per hour (scm/hr).

### *Small Commercial*

Commercial end consumers with a load size (installed equipment/meter capacity) of less than 10 scm/hr.

### *Medium Commercial*

Commercial end consumers with a load size greater than 10 scm/hr and less than or equal to 40 scm/hr.

### *Large Commercial*

Commercial end consumers with a load size greater than 40 scm/hr and less than or equal to 200 scm/hr.

### *Industrial*

End consumers with a load size greater than 200 scm/hr.

### *Non-standard priced*

Customers who are on individual contracts or prices.

### *CNG*

End consumers who use or sell CNG, such as petrol stations.

### *Co-generation*

End consumers who use gas for co-generation purposes.

- 2.9 End consumers are placed into consumer groups based on the end consumers' peak network usage. The peak network usage will be equivalent to either:
- the meter set capacity; or
  - the rating of a load limiting device where a device is fitted; or
  - a lesser quantity than the meter set capacity where it can be demonstrated to the Vectors satisfaction that such a lesser quantity is appropriate based on the load characteristics and capacity requirement.

## *Pricing zones*

2.10 Standard gas network line charges are based on a zonal system. This system is distance - related: it is less expensive to distribute gas to end consumers close to a transmission gate station than it is to reach end consumers who are further from a transmission gate station.

2.11 There are five pricing zones on the gas network, providing end consumers with appropriate pricing for the delivery of their gas:

- Zone A: End consumers located within 1 km of either a transmission gate station or a designated gas network.
- Zone B: End consumers located more than 1 km away and within 5 km of either a transmission gate station or a designated gas network.
- Zone C: End consumers not located in any of zones A, B, X or Y.
- Zone X: End consumers located within 1 km of a designated gas network.
- Zone Y: End consumers located more than 1 km away and within 2 km of a designated gas network.

2.12 Zones A, B or C are applicable to end consumers that are in:

- Load Group \*G23 (40 to 200 scm/hr)
  - Load Group \*G24 (>200 scm/hr)
- Where \* is the appropriate zone

2.13 Zones X or Y are applicable to end consumers that are in:

- Load Group \*G22 (10 – 40 scm/hr)
  - Load Group \*G23 (40 – 200 scm/hr)
  - Load Group \*G24 (>200 scm/hr)
- Where \* is the appropriate zone

2.14 A consumer is categorised into the appropriate zone based on their geospatial location in relation to either a transmission gate station or designated gas network.

## *Extent of charges*

Line charges do not cover:

- The cost of the gas itself
- The cost of the end consumer fittings
- The provision of metering equipment which is located at the point of connection to the gas network
- Gas transmission costs (charged by Vector Transmission)
- Unaccounted for gas (UFG)
- Gas measurement systems (GMS)
- Reading of meters and/or TOU (time of use) devices
- Reconciliation/allocation services
- Specific network charges

Specific network charges cover:

- Connection to the network of additional end consumers
- The modification, relocation or removal of current end consumer point of connection
- Disconnection and reconnection of points of connection
- Additions to existing points of connection required for TOU metering
- The distributor's telemetry system (Telenet)

### **7(3)(a) v,- Quality standards applicable to controlled services; policies and procedures relevant to those standards**

- 3.1 In this section, Vector describes the quality standards that were applicable to the supply of Vector's controlled services on 24 August 2005, as well as the policies and procedures Vector uses for monitoring its compliance with those standards.

#### **Quality standards on 24 August 2005**

- 3.2 Vector has a team which identifies, monitors and reports to the business on a set of relevant performance measures.
- 3.3 Vector does not make any specific undertakings to its customers on the quality of service, as measured by statistical measures to its customers (other than undertaking to the retailer to maintain sufficient pressure in the pipeline for supply under normal operating conditions). This reflects the fact that, as the Commission found in the gas inquiry, there are very limited quality-related issues or concerns with gas pipeline performance. Therefore, Vector has no quality "standards" as such that it is required to contractually comply with.
- 3.4 In Vector's understanding, however, the term "quality standards" in the Authorisation broadly refers to quality measures that Vector records and targets internally. In the Compliance Statement of 12 November 2007, Public Reported Escapes (PRE) was used by Vector to measure its performance in accordance with the Authorisation. Accordingly, Vector has prepared the quality portion of this public disclosure using PRE as the measure by which its compliance with *clause 6* is measured.
- 3.5 Vector notes that the description of these measures pertains to self-imposed internal measures and targets. The internal targets, noted below, are set with reference to historical performance of the network and any expected changes to that performance. It cannot automatically be assumed that internal targets are suitable for regulatory purposes, including given the limitations of some measures that would make requiring 'hard-and-fast' compliance unfair. Detailed consideration of appropriate regulatory targets will, therefore, be necessary in future to the extent the Commission wishes to regulate quality performance.

### Public Reported Escapes (PRE)

- 3.6 PRE is commonly used in New Zealand and Australia to measure the integrity of gas distribution systems. PRE has been reported publicly via the Gas Association of New Zealand (GANZ) for a number of years. The Ministry of Economic Development (MED) also proposed that it be included in the revised information disclosure requirements for gas distribution businesses.
- 3.7 Vector uses PRE as its primary technical network service quality measure for operational purposes, as it is a critical safety measure and a reliable indicator of the condition of the network. This measure is impacted by a number of factors, including the effectiveness of renewal strategies, the condition and composition of assets, the level of odorant and the extent and effectiveness of leakage surveys.
- 3.8 Vector considers it a suitable measure for regulatory purposes and, therefore, best suited for the purpose of *clause 6*.
- 3.9 PRE is calculated by adding up the total number of confirmed escapes of gas reported, excluding third party interference damage (TPID) on the entire distribution system (including mains, service pipes, valves, pressure stations and gas measurement systems) each year and expressing this as a number per 1000 km of gas mains and service pipes in use in that year.
- 3.10 One downside of this measure is that leaks can and do arise from the distribution system under the control of Vector, but also from gas meters, which Vector does not own or control. The historical data on PRE incorporates leaks from gas meters and, although they are ostensibly recorded separate from other leaks, in practice the distinction between them and leaks from around the flange of the gas distribution system is not precise. Vector considers the inclusive measure should be retained (and is currently using the inclusive measure) as this is comparable to the historical data and is the standard industry method of collection.
- 3.11 The monitoring of PRE events, the determination of their causes and the implementation of programs directed at reducing them are all internationally recognised as fundamental to improving safety and reliability of gas networks.

## **Relevant policies and procedures for recording quality measures and statistics using PRE**

### Data collection procedure

- 4.1 Vector's call centre is responsible for receiving and dispatching all calls regarding network faults. Where a member of the public reports a fault, Vector's call centre notifies Siemens (Vector's contracting partner) and issues a job request. Siemens receive the request and notify Ace Gas (Siemens' sub-contractor) to respond. Upon attending to site, Ace Gas confirms whether or not a fault has occurred, and if so, records this as a public reported incident. Ace Gas also checks whether the leak is a result of TPID (if so, the fault is recorded as a TPID, rather than a PRE). Ace Gas then manually complete a network damage report form and indicate the appropriate closure code (PRE). This form is sent to the relevant Siemens area manager for processing.
- 4.2 Each month, the Siemens area manager requests from Ace Gas a list of network faults and extracts the information relating to PRE incidents. The details of each PRE are recorded manually in an Excel spreadsheet, which is then used to populate a table that is sent to Vector. Vector reviews the information, confirming the accuracy of data and makes any manual adjustments if necessary. The final reviewed information is then used to calculate PRE.

### Vector initiatives implemented to reduce PRE

- 4.3 Vector routinely undertakes proactive leakage surveys to identify leaks at an earlier stage so subsequent action can be taken. In November 2004 Vector implemented a low pressure pipeline replacement program to reduce escapes from low pressure pipelines. This included a 7 year programme to replace all low pressure pipes and provided a robust strategy and thinking into the risks surrounding gas leakage, and an aggressive replacement program. The replacement program has been designed based on a number of projects sequenced and scoped to address the highest leakage rate sections of the network first.