Pricing Methodology for Gas Distribution Services

From 1 October 2016

Pursuant to
the Gas Distribution
Information Disclosure Determination 2012

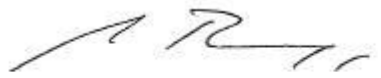
Schedule 18 Certification for Disclosures at the Beginning of the Pricing Year

Clause 2.9.2

We, Philippa Jane Dunphy and Euan Richard Krogh, being directors of First Gas Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

(a) The following attached information of First Gas Limited prepared for the purposes of clause 2.4.1 of the Gas Distribution Information Disclosure Determination 2012 in all material respects complies with that determination;

(b) The prospective financial or non-financial information included in the attached information has been forecast on a basis consistent with regulatory requirements or recognised industry standards.



Director

Director

29 August 2016

TABLE OF CONTENTS

INTRODUCTION

First Gas owns and operates gas distribution networks in the Waikato, Bay of Plenty, Northland, Gisborne and the Kapiti Coast. First Gas distribution networks deliver gas to approximately 60,000 homes and businesses. A map showing the locations of the First Gas distribution networks is provided below. First Gas acquired these gas distribution assets from Vector Ltd on 20 April 2016. This Pricing Methodology covers the price setting process for our gas distribution network from 1 October 2016.

First Gas recovers the cost of owning and operating our distribution networks predominantly through standard prices for gas distribution services, supplement by 17 non-standard connections and capital contributions for new connections. For further information on capital contributions please refer to the Capital Contributions Policy on our website (www.firstgas.co.nz).

First Gas is regulated by the Commerce Commission (Commission) and is required to publish this pricing methodology for gas distribution services (Pricing Methodology). This document describes First Gas' approach to pricing gas distribution services and meets the requirements of the Gas Distribution Information Disclosure Determination 2012 (Disclosure Determination). It provides information to assist interested parties in understanding how our gas distribution prices are set.

Given the limited time between the acquiring the assets and resetting distribution prices, First Gas has used the process previously used by Vector to allocate costs and set prices for customers served by our distribution networks. We have decided that continuing to apply the Vector pricing methodology across our networks is the most appropriate way to ensure price stability and certainty to consumers. We have not separately assessed compliance of the pricing methodology against the Commission's Pricing Principles, and instead rely on Vector's demonstration of compliance as part of its pricing methodology. This provides assurance that the pricing methodology is fit for purpose.

1 REGULATORY CONTEXT

This section sets out the regulatory context within which First Gas provides gas distribution services. It provides an overview of the Commerce Act regulation.

Commerce Act regulation

Under the Commerce Act 1986 (the Act), the Commission regulates markets where competition is limited. This includes gas distribution services. Regulation for gas distribution services is designed to ensure that distributors face incentives and pressures similar to those in a competitive market, so that consumers will benefit in the long term. A number of determinations apply under Commerce Act regulation.

Price-Quality Path Determination[1]

First Gas' gas distribution prices are subject to the Gas Distribution Services Default Price-Quality Path Determination 2013 (Price-Quality Path Determination). The Price-Quality Path Determination regulates First Gas' notional revenue for gas distribution services. It allows for the recovery of pass-through and recoverable costs that are largely outside of First Gas' control. These include council rates and levies. The Price-Quality Path Determination is intended to ensure businesses have incentives to innovate and invest in their infrastructure, and to deliver services efficiently and reliably at a quality that consumers expect, while limiting businesses' ability to earn excessive profits. Compliance with the price-quality path is assessed on a notional basis, using prices multiplied by quantities from two years prior.

Information Disclosure Determination[2]

Under Part 4 of the Act, businesses supplying distribution services are also subject to information disclosure obligations that require information on performance to be published. The purpose of this regulation is to ensure that sufficient information is readily available to interested persons to assess whether the purpose of Part 4 of the Act is being met. As a result, First Gas must disclose particular information under the Information Disclosure Determination. This pricing methodology contains the information that must be disclosed pursuant to clauses 2.4.1 to 2.4.5 of the Information Disclosure Determination.

Input Methodologies Determination[3]

First Gas is also required to develop its prices with reference to the Commission's Pricing Principles (Pricing Principles) listed in clause 2.5.2 of the Gas Distribution Services Input Methodologies Determination 2012. The Information Disclosure Determination requires each gas distribution business (GDB) to either demonstrate consistency with the Pricing Principles or explain the reasons for any inconsistencies. As noted in the introduction, this pricing methodology refers to Vector's demonstration of compliance against the pricing principles (given that this pricing methodology has been developed and applied by Vector).

[1] *Gas Distribution Services Default Price-Quality Path Determination 2013, [2013] NZCC4, 28 February 2013*
[2] *Gas Information Disclosure Determination 2012, Decision NZCC23, 1 October 2012 (the Determination).*
[3] *Gas Distribution Services Input Methodologies Determination 2012 (NZCC 23, 16 December 2012).*

2 OBJECTIVE FOR SETTING PRICES

First Gas provides gas distribution services to consumers via its North Island gas distribution network. First Gas generally recovers the cost of providing gas distribution services to existing consumers through standard prices. However, non-standard pricing to 17 ICPs to address bypass risks and reflect other considerations.

First Gas does not yet have its own pricing strategy as defined in the Information Disclosure Determination. However, as part of the transitional arrangements with Vector, First Gas has replicated the Vector pricing methodology. The overarching objectives used to guide the development of this Pricing Methodology include:

Objective	Rationale
Cost recovery	Ensure First Gas recovers its costs, including the allowed return on and of investment. A key aspect of cost recovery is the predominantly sunk and fixed nature of the costs.
Meet regulatory obligations	Comply with the Price-Quality Path Determination, Information Disclosure Determination and the Pricing Principles.
Clear pricing structure	Pricing should be simple and easily understood by consumers therefore making it attractive for existing consumers to stay connected and for new consumers to connect.
Coherent overall price structure	There should not be incentives for consumers to switch consumer groups or price categories to take advantage of anomalies in the pricing structure.
Cost reflective pricing	• Ensure that all consumers face prices that reflect the cost of providing them with service; • Prices to all new consumers at least cover the incremental costs of connecting them to the network (including costs associated with upstream reinforcement); and • Charges to recover overhead costs and the cost of the shared network are allocated between consumers in a manner that is least likely to distort decisions.
Consumer-centric outcomes	• Take account of the value of the service to consumers; • Provide pricing stability; and • Manage price shock effectively in the transition to new price structures.
Incentivise efficient usage	Encourage more utilisation of gas distribution assets to ensure that sunk investments are not inefficiently by-passed and new investments are efficient.

3 CALCULATION OF TARGET REVENUE

This section sets out the amount of revenue that First Gas expects to recover through prices (target revenue), broken down by key cost components.

To determine target revenue from prices, First Gas uses allowable notional revenue calculated in accordance with the Price–Quality Path Determination, adjusted for forecast volume growth (as disclosed in the forecasts contained in GDB Information Disclosures). This provides the amount of revenue that First Gas expects to earn from distribution services in the 2016/17 pricing year.

Given the transitional nature of ownership and operation of the distribution networks during the time that the pricing reset was occurring, First Gas has used information available from disclosure documents and last year's Vector Pricing Methodology to allocate Target Revenue. Pass-through and Recoverable costs are actual costs that will be incurred over the coming year, while all other allocations shown in Table 1 apply a pro-rata allocation of the target revenue components presented in Vector's 2015/16 gas distribution pricing methodology.

Table 1 below shows the resulting target revenue from prices that First Gas expects to receive for 2016/17 compared with 2015/16. Target Revenue from prices is $28.47m.

Table 1. Target revenue from prices 2016/17 and 2015/16

Component	Cost type	Target revenue ($m)	
		2016/17	2015/16*
Direct costs	Asset	5.7	16
Indirect costs	Non-Asset	1.1	3
Depreciation	Asset	5.9	16
Regulatory tax adjustment & allowance	Asset	5.7	15.5
Pass-through and recoverable costs	Non-Asset	0.4	3
Return on capital	Asset	9.7	26
Target revenue		28.5	79

*Note: Target revenue for 2015/16 includes the Auckland network which remains owned by Vector Ltd

The second column of Table 1 categorises cost components as either 'Asset' or 'Non-Asset'. These categorisations determine the way that the costs are allocated to consumer groups, and are discussed in Section 5. No changes have been made to the classifications from the pricing methodology previously applied by Vector.

4 DEVELOPMENT OF CONSUMER GROUPS

First Gas has adopted the consumer groups defined by Vector. Our consumers are divided into four consumer groups based on the maximum flow rate of their connection, measured in standard cubic metres per hour (scm/h). Table 2 sets out the consumer groups. Consumer groups are mutually exclusive so a consumer can only fit within one group.

First Gas will review the relevance of these consumer groups for the North Island network as part of the process of developing its pricing methodology for the 2017/18 pricing year.

Table 2. Consumer groups

Consumer group	Flow rate (scm/h)
Mass market	< 10
Small commercial	10 < 40
Large commercial	40 < 200
Industrial	> 200

5 ALLOCATION OF TARGET REVENUE TO CONSUMER GROUPS

The following section explains how First Gas has used the Vector cost of service model (COSM) to allocate the costs of owning and operating the distribution network to the consumer groups described in the previous section and determine how much target revenue First Gas intends to recover from each consumer group. Section 11 explains the reasons for using the Vector COSM in this pricing methodology.

5.1 Cost types

Table 1 in Section 3 lists the components of target revenue and categorises these components as either ‘Asset’, or ‘Non-Asset’. This is summarised in Table 3 below.

Table 3. Total target revenue by cost allocation category

Category	Value ($m)
Asset	27.0
Non-Asset	1.5

5.2 Summary of allocation approaches

The allocators for ‘Asset’ and ‘Non-Asset’ costs have been applied to the First Gas network. The allocators used to allocate costs to consumer groups are summarised below:

Table 4. Allocators used in the COSM model adopted by First Gas

Cost category	Allocator
Asset	Flow rate * number of consumers
Non-Asset	Number of consumers or annual consumption

The value of each allocator is shown in Table 5.

Annual consumption (MWh) and number of consumers are based on weighted average data from Schedule 8 of the pre-acquisition Vector Gas Information Disclosures. The values are weighted averages of up to five years’ worth of data, with more recent years weighted more heavily. The connected flow rate of a consumer is derived from the midpoint for scm/h in relation to each consumer group. This approach was chosen in the absence of more detailed information on individual consumer capacity, as we do not have any more detailed flow information than the monthly consumption files provided by gas retailers.

‘Non-asset’ costs can be broadly summarised as overhead costs and pass-through and recoverable costs (other than transmission costs). Costs categorised as ‘Non-asset’ have no direct cost driver.

‘Asset’ costs have been allocated based on the proportion of scm/h*ICP for each consumer group. This allocates based on the weighted average of scm/h per consumer that are in each consumer group, effectively capturing each consumer group’s utilisation of network assets. Scm/h*ICP is an appropriate allocator for assets and direct networks costs as the required pressure of a consumer will affect capacity of the network assets.

Table 5. Value of Allocators

Allocator	Number of consumers	Annual consumption	Flow rate
Units	ICP	MWh	scm/h
Source	Schedule 8 of the Information Disclosures	Schedule 8 of the Information Disclosures	Consumer group definition (midpoint)
Mass market	59,268	390,531	5
Small commercial	1,307	114,069	25
Large commercial	487	224,159	120
Industrial	69	607,643	400
Non-standard	26	1,281,104	400
Total	61,157	2,617,505	950

5.3 Total target revenue allocated to each consumer group

First Gas has allocated target revenue to each consumer group using the method of allocation discussed above. The allocations are shown in Table 6.

Table 6. Target revenue allocation bands by consumer group

Consumer group	Target revenue ($m)	
	Lower	Upper
Mass market	19	20
Small commercial	2	3
Large commercial	4	4
Industrial	1	2
Non-standard	1	1

6 DEVELOPMENT OF PRICE CATEGORIES

The following section provides an overview of the various price categories that First Gas offers within each consumer group (as described in Section 4). In the transitional year, First Gas has maintained the same categories and pricing structures historically used by Vector.

6.1 Mass market consumer group

The mass market consumer group is split into two subgroups: residential and general/business. Residential consumers are more sensitive to fixed charges. Therefore, the residential group has a lower fixed charge than the general/business. The subgroups map directly into price categories as set out in Table 7 below.

6.2 Commercial consumer groups

The small and large commercial consumer groups map directly to price categories based on load.

6.3 Industrial consumer group

The industrial consumer group is split into two subgroups: industrial and large industrial. In practice, the industrial consumer group contains consumers with a large range of annual consumption. Some consumers, usually those with high annual consumption, do not meet the Stand Alone Cost test. In order to reduce the administrative burden of offering these customers individual non-standard prices First Gas has maintained the "large industrial" price category with a higher fixed price. The large industrial price category (GA05) is suitable for consumers with annual consumption greater than approximately 12,000 MWh per annum. The large industrial price category was introduced from 1 October 2015, and as such an adjustment to the historical flows for GA04/05 is required when demonstrating compliance with the price path.

Table 7. Price categories within each consumer group

Consumer group	Price category code	Price category description
Mass market	GA0R	Residential
	GA01	General/business
Small commercial	GA02	Small commercial
Large commercial	GA03	Large commercial
Industrial	GA04	Industrial
	GA05	Large industrial

7 HOW STANDARD PRICES ARE SET FOR EACH PRICE CATEGORY

7.1 Overview of price components that First Gas uses

Each price category has two price components, a fixed daily price ($/day) and a volume price ($/kWh).

Table 8. Description of price components

Price type	Price component	Code	Units	Description
Fixed	Daily	FIXD	$/day	Daily price applied to the number of days each consumer's point of connection is connected to the gas distribution networks.
Variable	Volume	24UC	$/kWh	Volume price, applies to all gas distributed to each consumer.

7.2 How the price for each component is derived

First Gas' price structure reflects the price sensitivity of consumers. The fixed prices for each price category increases with consumer capacity and consumption, i.e. the larger the consumer the higher the fixed price.

First Gas is aware of the effect of price changes for consumers. In response, First Gas' starting point for calculating our 2016/17 prices was the corresponding Vector prices for the North Island network for the previous year.

Most of First Gas' costs are fixed and sunk. As a result, price increases for 2016/17 have been applied to the fixed price for each price category. This year, fixed prices in each standard price category have increased on average by about 4.9%. There is some variation due to the effect of rounding to 3 decimal places. See Section 8 for a table of prices for 2016/17 compared to prices for 2015/16.

Variable prices are then set to recover the remainder of the revenue allocated to each consumer group, while minimising rate shock to consumers. Variable distribution prices for each price category have not changed from 2015/16.

Table 9. Proportion of target revenue by price component by consumer group

Consumer group	Price categories	Fixed prices	Variable prices
		Daily	Volume
Mass market	GN0R	45%	55%
	GN01	39%	61%
Small Commercial	GN02	26%	74%
Large Commercial	GN03	26%	74%
Industrial	GN04	20%	80%
	GN05	64%	36%

7.3 Consultation prior to setting prices

First Gas did not directly seek the views of consumers when setting prices. Rather, First Gas consulted with retailers on behalf of consumers on the proposed price changes. First Gas did not receive any feedback that was unsupportive of the proposal to continue to use the historical Vector pricing methodology or the proposal to increase only the fixed component of distribution prices.

8 IMPACT OF 2016/17 PRICE CHANGES

From 1 October 2016, increases in pass-through and recoverable costs (0.1%), CPI (0.3%), and to allow for headroom under last year's prices (1.5%) result in an overall weighted average increase in First Gas' distribution prices of 1.9%.

Individual prices will change by more or less than the overall weighted average price increase due to differences in individual consumption levels, and the balance of fixed and variable pricing across different price categories. Table 10 illustrates the various changes to the price components for all standard price categories.

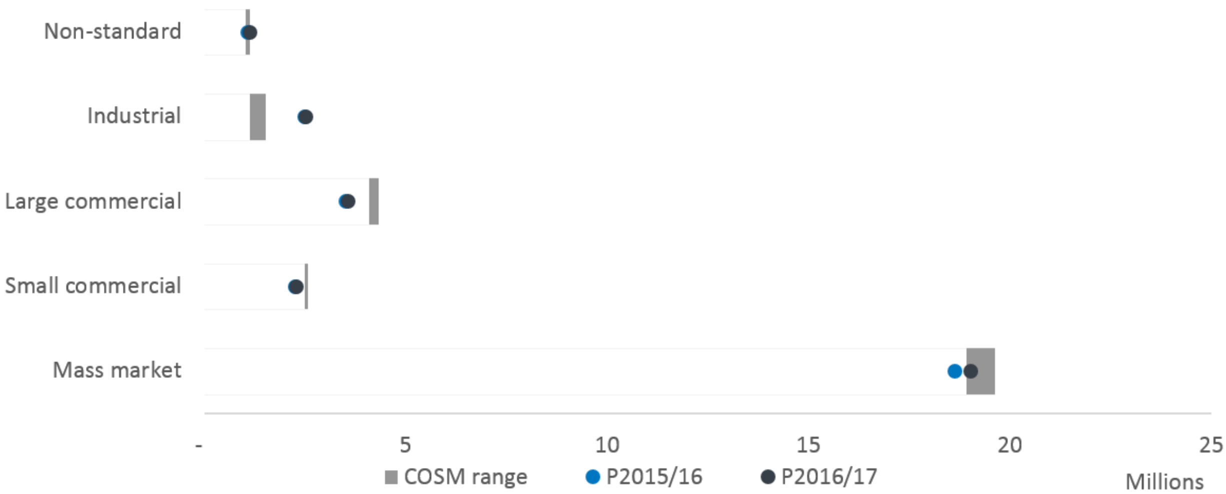
Table 10. Price changes by price category

		2016 Prices		2017 Prices		Price change		
Price category	Number of consumers as at July 2016	Fixed price ($/day)	Volume price ($/kWh)	Fixed price ($/day)	Volume price ($/kWh)	Fixed price change	Volume price change	Estimated total price change*
GN0R	58176	0.34	0.0261	0.357	0.0261	5.0%	0.0%	2.2%
GN01	2100	0.62	0.0165	0.650	0.0165	4.8%	0.0%	1.8%
GN02	1382	1.10	0.0133	1.154	0.0133	4.9%	0.0%	1.2%
GN03	503	4.72	0.0102	4.951	0.0102	4.9%	0.0%	1.2%
GN04	66	14.48	0.0068	15.190	0.0068	4.9%	0.0%	0.9%
GN05	8	200.00	0.0015	209.800	0.0015	4.9%	0.0%	3.1%

*For an average consumer on each price category

Figure 11 below shows 2015/16 and 2016/17 distribution prices compared with outcomes from Vector's COSM. This shows how 2015/16 prices have moved towards the COSM outcome through the application of the Pricing Methodology. In most cases, the change is minor.

Figure 1. 2015/16 and 2016/17 prices compared with COSM outcomes



9 PRICING FOR NON-STANDARD CONTRACTS

In certain circumstances, standard prices on our distribution networks may not:

1. Adequately reflect the actual costs of supplying a consumer;
2. Reflect the economic value of the service to the consumer; or
3. Address the commercial risks associated with supplying that consumer.

Non-standard contracts allow tailored or specific prices and non-standard commercial arrangements to be applied to individual consumers on the distribution system.

9.1 Extent of non-standard contracts

Around $721,000 is expected to be recovered from 17 non-standard consumers in 2016/17, which represents 2.5% of First Gas' distribution target revenue.

9.2 Criteria for non-standard contracts

First Gas has adopted the historical approach used by Vector when determining whether to apply non-standard pricing. Consumers may be assessed for non-standard terms or pricing if they meet one of the following criteria:

- The total annual quantity of gas consumed or forecast to be consumed per annum (AQ) is greater than 20TJ; or
- The AQ between 10TJ to 20TJ and the consumer's point of connection to First Gas' gas distribution network is within 2km of a gas transmission delivery point of a gas distribution network not owned or operated by First Gas; or
- It can be demonstrated that the alternative sources of energy (including but not limited to wood, coal or electricity) that meet the consumer's requirements are technically, operationally and commercially viable and have a reasonable prospect of being able to be successfully implemented.

First Gas will continue to assess whether to apply non-standard pricing and the corresponding contractual arrangements to new consumers on a case by case basis. Generally, if a consumer does not meet at least one of the assessment criteria, they will be subject to published standard distribution prices. Meeting one or more of the assessment criteria does not mean that a non-standard arrangement will apply, but rather that the consumer may be reviewed to determine whether standard pricing and standard contractual terms are suitable, given the consumer's individual circumstances.

For new non-standard investments, First Gas applies a capital contributions policy. First Gas' policy for determining capital contributions on our distribution networks is available at http://firstgas.co.nz/about-us/regulatory/distribution.

10 CONSISTENCY WITH PRICING PRINCIPLES

The Pricing Principles are specified in clause 2.5.2 of the Gas Distribution Services Input Methodologies Determination 2010 (Commerce Commission Decision 711, 22 December 2010).

The Pricing Principles state that:

1) *Prices are to signal the economic costs of service provision, by-*
    a) *being subsidy free, that is, equal to or greater than incremental costs and less than or equal to standalone costs, except where subsidies arise from compliance with legislation and/or other regulation;*
    b) *having regard, to the extent practicable, to the level of available service capacity; and*
    c) *signalling, to the extent practicable, the effect of additional usage on future investment costs.*
2) *Where prices based on 'efficient' incremental costs would under-recover allowed revenues, the shortfall is made up by prices being set in a manner that has regard to consumers' demand responsiveness, to the extent practicable.*
3) *Provided that prices satisfy (1) above, prices are responsive to the requirements and circumstances of consumers in order to-*
    a) *discourage uneconomic bypass; and*
    b) *allow negotiation to better reflect the economic value of services and enable consumers to make price/quality trade-offs or non-standard arrangements for services.*
4) *Development of prices is transparent, promotes price stability and certainty for consumers, and changes to prices have regard to the effect on consumers*

First Gas has used the same pricing methodology and COSM for the 2016/17 pricing reset that was historically used by Vector for the same distribution networks. First Gas understands that Vector assesses its own compliance against the Pricing Principles in its distribution pricing methodology available at:

http://vector.co.nz/disclosures/gas/pricing-methodology.

First Gas notified customers of the 2016/17 prices on the 29 July 2016. As mentioned above, First Gas only acquired the distribution assets on the 20 April 2016. Given the limited time available, we wanted to ensure that our consumers of gas pipeline services were provided with stability and certainty of prices through the transitional period. Continuing to use the Vector pricing methodology for the 2016/17 pricing year ensured that our consumers did not face any price shocks.

First Gas intends to review this pricing methodology over the next 12 months. This will provide sufficient time to work closely with retailers (our direct customers) to discuss any proposed changes in the pricing methodology and to understand the likely effects on our consumers. Taking the time to review our pricing methodology will also enable us to manage any potential price shocks appropriately, and to ensure that our consumers do not face multiple year on year pricing methodology changes.

First Gas is particularly conscious of the effect of its pricing on consumers and will look to implement a pricing structure that provides appropriate incentives for consumers to connect to the gas distribution network and continue to use natural gas.

APPENDIX 1. GLOSSARY

2016/17 pricing year: The year from 1 October 2016 through to 30 September 2017

Act: the Commerce Act 1986.

Allowable Notional Revenue (ANR): the revenue determined under the Price-Quality Path Determination that First Gas is allowed to earn during the pricing year.

COSM: Cost of Service Model.

CPI: the Consumers Price Index, a measure of changes to the prices for consumer items purchased by New Zealand households giving a measure of inflation.

Disclosure Determination: the Gas Information Disclosure Determination 2012.

ICP: is an installation control point being a physical point of connection on a local network which a distributor nominates as the point at which a retailer will be deemed to supply gas to a consumer.

kWh: kilowatt-hour, a unit of energy being the product of power in watts and time in hours.

Price-Quality Path Determination: the Gas Distribution Services Default Price-Quality Path Determination 2013.

Price component: the various prices, fees and charges that constitute the components of the total price paid, or payable, by a consumer.

Pricing Principles: the Pricing Principles specified in clause 2.5.2 of the Gas Distribution Services Input Methodologies Determination 2012 (NZCC 23, 16 December 2012).

Pricing strategy: a decision made by the Directors of a GDB on the GDB’s plans or strategy to amend or develop prices in the future, and recorded in writing.

Pricing Year: the annual period beginning on 1 October and ending on 30 September.

RAB: Regulatory Asset Base, the regulated value of the assets that First Gas uses to provide gas distribution services.

scm/h: standard cubic metres per hour a measure of gas capacity based on the flow rate.

Target revenue: the revenue First Gas expects to receive from prices during the pricing year.