



GasNet Limited

2017/18 Pricing Methodology Gas Distribution Network Services

Valid from 1 October 2017 to 30 September 2018

Pursuant to:
Gas Distribution Information Disclosure Determination 2012

Document No: GNM-001	Document Name: Pricing Methodology Gas Distribution Network – 1 October 2017	Approved: 31/07/2017	Version: 6.0
		Last Amended: 31/07/2017	
Responsible Manager: General Manager		Effective From: 01/10/2017	Page 1 of 17
		Review Due: 31/07/2018	

Table of Contents

1.0 EXECUTIVE SUMMARY	3
2.0 BACKGROUND	4
2.1 About GasNet	4
2.2 Supply Area Coverage	4
2.3 Regulatory Requirements	4
2.3.1 Pricing Principles	4
2.3.2 Revenue Requirements	4
2.3.3 Information Disclosure	4
2.3.4 Access to Determinations	5
2.4 Strategic Review Leading to New Pricing Methodology	5
3.0 PRICING STRUCTURE	5
4.0 CONNECTION STATUS	5
5.0 PRICING METHODOLOGY	6
5.1 Distribution Networks	6
5.2 Revenue Requirements	6
5.3 Asset Valuation	7
5.4 Revenue Allocation	7
5.4.1 Pricing Model	7
5.4.2 Allocation of Total Revenue Requirement	7
5.4.3 Cost Allocators	8
6.0 2017/18 PRICING YEAR	10
6.1 Revenue Requirements	10
6.2 Revenue Requirement Allocation to Load Groups	10
6.3 Prices for 2017/18 Pricing Year	11
6.4 Fixed and Variable Charge Apportionment	11
7.0 PRICING METHODOLOGY REVIEW	11
8.0 FIVE YEAR PRICING STRATEGY	11
9.0 COMPLIANCE WITH THE PRICING PRINCIPLES	11
Appendix 1 - Network Services Price Schedule: Effective 1 October 2017	
Appendix 2 - Information Disclosure Determination Requirements	
Appendix 3 - Compliance with the Price Path	
Appendix 4 - Director Certification	

Document No: GNM-001	Document Name: Pricing Methodology Gas Distribution Network – 1 October 2017	Approved: 31/07/2017	Version: 6.0
		Last Amended: 31/07/2017	
Responsible Manager: General Manager		Effective From: 01/10/2017	Page 2 of 17
		Review Due: 31/07/2018	

1.0 EXECUTIVE SUMMARY

This is the second pricing methodology based on the new pricing structure proposed in 2013 to reduce the number of Load Groups and closer align to those of other gas distribution network operators in New Zealand.

This document is based on the new pricing structure and prices that apply to the pricing year commencing 1 October 2017. Information on the methodologies and pricing for previous years can be downloaded from GasNet's website at www.gasnet.co.nz.

This pricing covers GasNet's five discrete distribution systems already well-established in the Whanganui, Rangitikei and South Taranaki regions. The existing systems are small and have negligible difference in performance. As such prices are based on consolidation of assets and costs with prices applied evenly across all networks.

Following the sale of GasNet's pre-commissioned assets in Papamoa East to First Gas Limited in early 2017 and with no further interests in the Bay of Plenty, pricing for this region has been excluded from this pricing methodology.

The pricing methodology is designed to demonstrate that GasNet's prices are consistent with the pricing principles and other regulatory obligations in the Gas Distribution Services Information Disclosure Determination 2012.

GasNet's annual target revenue requirement seeks the recovery of costs and an appropriate return on assets employed, expressed as follows:

$$\begin{array}{r} \text{Total} \\ \text{Revenue} \\ \text{Requirement} \\ \text{(TRR)} \end{array} = \begin{array}{r} \text{Return} \\ \text{on} \\ \text{Assets} \end{array} + \text{Depreciation} + \begin{array}{r} \text{Operating} \\ \text{Costs} \end{array} + \begin{array}{r} \text{Pass-} \\ \text{through} \\ \text{Costs} \end{array} - \begin{array}{r} \text{DPP} \\ \text{Revenue} \\ \text{Constraint} \end{array}$$

GasNet's pricing model separately allocates each component of the revenue requirement to each Load Group. This includes the allocation of consumers into the Load Groups.

Cost allocators employed are the number of consumers, throughput (GJ), hourly capacity demand and asset base replacement cost and depreciated replacement cost.

The customer numbers, throughput and revenue for each Load Group for the 2017/18 Pricing Year is set out in the following table:

Load Group	Consumers Connected	Throughput (GJ)	2016/17 Pricing Year		2017/18 Pricing Year	
			Total Revenue	Total Revenue	Change	
G12	9,741	241,728	\$ 3,551,764	\$ 3,281,865	-7.6%	
G50	113	41,022	\$ 393,765	\$ 342,268	-13.1%	
G180	34	68,760	\$ 478,407	\$ 397,658	-16.9%	
G450	7	113,773	\$ 203,709	\$ 177,077	-13.1%	
G1000	9	816,205	\$ 99,198	\$ 146,732	47.9%	
	9,904	1,281,487	\$ 4,726,843	\$ 4,345,600	-8.1%	

The prices that apply for the 2017/18 Pricing Year are set out in the following table.

Load Group	2016/17 Pricing Year		2017/18 Pricing Year			
	Fixed (\$/day)	Variable (\$/GJ)	Fixed (\$/day)	Change	Variable (\$/GJ)	Change
G12	\$0.50	\$7.212	\$ 0.43	-14.0%	\$ 7.252	0.6%
G50	\$2.10	\$7.225	\$ 1.50	-28.6%	\$ 6.835	-5.4%
G180	\$5.00	\$4.740	\$ 5.16	3.2%	\$ 4.852	2.4%
G450	\$45.00	\$0.783	\$ 40.00	-11.1%	\$ 0.658	-15.9%
G1000	Individually Priced		Individually Priced			

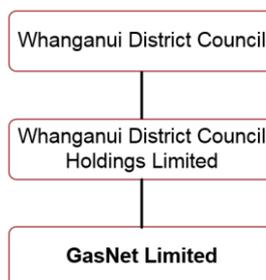
GasNet welcomes feedback from interested persons on any aspect of this Pricing Methodology document.

Document No: GNM-001	Document Name: Pricing Methodology Gas Distribution Network – 1 October 2017	Approved: 31/07/2017	Version: 6.0
		Last Amended: 31/07/2017	
Responsible Manager: General Manager		Effective From: 01/10/2017	Page 3 of 17
		Review Due: 31/07/2018	

2.0 BACKGROUND

2.1 About GasNet

GasNet Limited is 100% owned by Whanganui District Council Holdings Limited, a “Council Controlled Trading Organisation”.



GasNet Limited (“GasNet”) commenced trading on 1 July 2008 after purchasing the network and metering business from Wanganui Gas Limited. Previously GasNet had been operating as an independent trading division of Wanganui Gas Limited and was responsible for managing the network and metering assets for the company.

On 30 June 2017 GasNet Limited and its parent Wanganui Gas Limited were amalgamated to become GasNet Limited.

2.2 Supply Area Coverage

GasNet’s natural gas distribution network comprises approximately 10,000 connections across 5 discrete distribution systems located within the Whanganui, Rangitikei and South Taranaki regions serving the following areas:

- Whanganui;
- Marton;
- Bulls;
- Flockhouse; and
- Waitotara.

Further information on these networks and their coverage can be found within GasNet’s Asset Management Plan which can be downloaded at www.gasnet.co.nz/disclosures.

2.3 Regulatory Requirements

2.3.1 Pricing Principles

The Commerce Commission’s *Gas Distribution Services Input Methodologies Determination 2012* requires compliance of GasNet’s pricing and its methodology with specified pricing principles in addition to disclosure of the extent of consistency with the principles and reasons for any inconsistency. The pricing principles are provided in section 9.0 along with an explanation of how they are reflected in this pricing methodology.

2.3.2 Revenue Requirements

GasNet’s revenue requirement is established in accordance with the Commerce Commission’s *Gas Distribution Services Default Price-quality Path Determination 2017*.

2.3.3 Information Disclosure

The Commerce Commission’s *Gas Distribution Information Disclosure Determination 2012* requires GasNet and all other gas distribution businesses to publicly disclose at the beginning of each Pricing Year, the methodology used to determine the prices payable for the provision of gas distribution services.

An extract of the specific requirements from the determination has been provided in Appendix 2.

Document No:	Document Name:	Approved:	31/07/2017	Version: 6.0
GNM-001	Pricing Methodology Gas Distribution Network – 1 October 2017	Last Amended:	31/07/2017	
Responsible Manager:		Effective From:	01/10/2017	Page 4 of 17
General Manager		Review Due:	31/07/2018	

2.3.4 Access to Determinations

The latest version of the determinations referred to in 2.3.1, 2.3.2 and 2.3.3 above can be downloaded from the Commission's website at www.comcom.govt.nz.

2.4 Strategic Review Leading to New Pricing Methodology

The Pricing Methodology and Pricing Structure specified within this document presents the results from a strategic review undertaken by GasNet in 2013 aimed at delivering a price structure that:

- a) more closely reflected the underlying costs incurred to service each consumer group by incorporating an updated cost allocation methodology;
- b) was streamlined where possible by removing unnecessary price options to improve administration efficiency;
- c) reflected the high fixed cost component of operating a gas distribution pipeline business;
- d) minimised, if not eliminated, the need to offer special "non-standard" prices;
- e) provided for the cessation of charges when a consumer's installation is physically isolated from GasNet's distribution network;
- f) was subject to an implementation plan that minimised price shock for consumers; and
- g) complied with the law, in particular the Commerce Commission's "Pricing Principles" (section 2.5.2 of the Commerce Act (Gas Distribution Services Input Methodologies) Determination 2012).

In order to minimise price shock to consumers, GasNet transitioned to this Pricing Methodology and Pricing Structure from 2013 until its implementation on 1 October 2016.

Information on the methodologies and pricing for previous years and the reasoning for the reform to the pricing methodology can be downloaded from GasNet's website at www.gasnet.co.nz.

3.0 PRICING STRUCTURE

The following table provides the Load Groups applicable from 1 October 2017.

Load Group	Criteria	Consumers (No.)	Throughput (GJ)
G12	Up to 13 scmh	9,741	241,728
G50	> 13 and ≤ 50 scmh	113	41,022
G180	> 50 and ≤ 180 scmh	34	68,760
G450	>180 scmh	7	113,773
G1000	Individually Priced	9	816,205
		9,904	1,281,487

4.0 CONNECTION STATUS

Each consumer connection on GasNet's network is identified by a unique identifier, known as an ICP, which is assigned a status code based on its connection status.

In the case of an ICP that has been disconnected there are a range of status codes reflecting the wide range of scenarios that could give cause for a disconnection. In this situation where an ICP is physically disconnected from the network and gas cannot flow, daily fixed charges do not apply.

Document No:	Document Name:	Approved:	31/07/2017	Version: 6.0
GNM-001	Pricing Methodology Gas Distribution Network – 1 October 2017	Last Amended:	31/07/2017	
Responsible Manager:		Effective From:	01/10/2017	Page 5 of 17
General Manager		Review Due:	31/07/2018	

The following table lists each status code and whether the fixed daily charges apply.

ICP Status Code	Valid Connection Status	Connection Status Code	Network Fixed Daily Charges Apply
NEW	Pre-activation, service has not yet been installed	NEW	✗
READY	Gas ready to flow	GIR	✗
ACTC	Gas able to flow	GAS	✓
ACTV	Gas able to flow	GAS	✓
INACT	Gas vacant disconnect – GMS remains, supply capped or plugged	GVC	✗
	Gas vacant disconnect – GMS removed, supply capped or plugged	GVM	✗
	Gas currently not required – GMS remains, supply capped or plugged	GNC	✗
	Gas currently not required – GMS removed, supply capped or plugged	GNM	✗
	Gas maintenance disconnect – GMS remains, supply capped or plugged	GMC	✗
	Gas maintenance disconnect – GMS removed, supply capped or plugged	GMM	✗
	Gas maintenance disconnect – GMS remains, service disconnected upstream of service valve by network operator	GMU	✗
	Gas safety disconnect – GMS remains, supply capped or plugged	GSC	✗
	Gas safety disconnect – GMS removed, supply capped or plugged	GSM	✗
	Gas safety disconnect – GMS remains, service disconnected upstream of service valve by distributor	GSU	✗
INACP	Gas permanent disconnect ready for GMS removal – GMS remains, supply capped or plugged	GPC	✗
	Gas permanent disconnect ready for decommissioning – GMS removed, supply capped or plugged	GPM	✗
DECR	Service disconnected from network outside property and service abandoned	GDE	✗

5.0 PRICING METHODOLOGY

5.1 Distribution Networks

As the combined size of GasNet’s gas distribution networks is small and as there are negligible differences in performance within or between each of the 5 existing discrete networks listed in section 2.2 above, there is no benefit in segmenting them into different pricing networks, sub-networks, or geographic areas. The Pricing Methodology and prices are therefore based on consolidation of assets and costs, with prices applied evenly across all networks.

5.2 Revenue Requirements

GasNet’s annual target revenue seeks the recovery of costs and an appropriate return on the assets employed, expressed mathematically as follows;

$$\text{Total Revenue Requirement (TRR)} = \text{Return on Assets} + \text{Depreciation} + \text{Operating Costs} + \text{Pass-through Costs} - \text{DPP Revenue Constraint}$$

Where:

Return on Assets = a target return on the forecast Regulatory Asset Base (RAB), using a pre-tax weighted average cost of capital of 7.95% (based on the 75th percentile estimate of vanilla WACC of 6.41% allowable under the DPP with the cost of equity grossed up for tax)

Depreciation = the forecast Regulatory Asset Base (RAB) depreciation for the Pricing Year

Operating Costs = the forecast Operating Costs attributable to the network business over the Pricing Year but excluding Pass-through Costs

Document No: GNM-001	Document Name: Pricing Methodology Gas Distribution Network – 1 October 2017	Approved: 31/07/2017	Version: 6.0
		Last Amended: 31/07/2017	
Responsible Manager: General Manager		Effective From: 01/10/2017	Page 6 of 17
		Review Due: 31/07/2018	

- Pass-through Costs = the forecast operating costs to be paid during the Pricing Year that fall within the same definition in the *Gas Distribution Services Input Methodologies Determination 2012*, which for GasNet include, but are not limited to:
- Local and Regional Authority rates on GasNet's network assets payable under the Local Government (Rating) Act 2002; and
 - Levies payable to the Commerce Commission under the Commerce (Levy for Control of Natural Gas Services) Regulations 2005; and
 - Levies payable as a member of the Utility Disputes Limited Scheme.
- DPP Revenue Constraint = the amount, if any, that is required to align the target revenue with the Allowable Notional Revenue (ANR) under the Default Price-quality Path (DPP).

5.3 Asset Valuation

The 30 June 2016 RAB, being the most recent audited valuation, has been applied in GasNet's Pricing Model for 2017/18 Pricing Year.

5.4 Revenue Allocation

5.4.1 Pricing Model

The pricing model separately allocates each component of the Revenue Requirement, as outlined in 5.2 above, to each Load Group using appropriate cost allocators, based on the following key processes:

- Identification of the Total Revenue Requirement to be recovered from fixed and variable charges, by cost component as outlined above in 5.2;
- Allocation of consumers into the Load Groups consistent with the structure discussed above in 3.0;
- Input of the identifying characteristics for each Load Group (e.g. number of ICPs, GJ, MHQ, etc.) which are used to allocate costs;
- Allocation of each component of the Total Revenue Requirement to the Load Groups using cost of supply allocators (referred to in 5.4.2 and 5.4.3 below) in order to determine the revenue to be recovered from each Load Group;
- Once the revenue requirement for each Load Group is determined, specification of the proportion of fixed and variable prices in order to test alternative price options;
- Application of the price options developed for each Load Group across the throughput bands evident in each Load Group to test the impact on high/average/low use consumers within each Load Group; and
- Refinement the price options as required in order to meet regulatory requirements, management of price shock, and implementation of pricing signals consistent with the pricing principles.

5.4.2 Allocation of Total Revenue Requirement

The Total Revenue Requirement is derived from the sum of different cost components as outlined in 5.2 above, each of which being allocated using a range of applicable allocators. Allocators are selected from available data and where such data is not available, proxies based on the underlying cost drivers.

Document No:	Document Name:	Approved:	31/07/2017	Version: 6.0
GNM-001	Pricing Methodology Gas Distribution Network – 1 October 2017	Last Amended:	31/07/2017	
Responsible Manager:		Effective From:	01/10/2017	Page 7 of 17
General Manager		Review Due:	31/07/2018	

The following table provides the cost allocators that have been applied to the cost components that comprise the Total Revenue Requirement.

Total Revenue Requirement Cost Item	Cost Allocator
Return on Assets	Depreciated Replacement Cost
Depreciation	Replacement Cost
Operating Costs	
Direct	Depreciated Replacement Cost
Indirect	Number of ICP's
Pass-through	Depreciated Replacement Cost
DPP Revenue Constraint	Depreciated Replacement Cost

Please note that the DPP Revenue Constraint cost item is not technically a cost but the amount, if any, by which the Total Revenue Requirement may be required to be reduced such that GasNet does not breach its price/revenue cap set by the Commerce Commission under its DPP.

5.4.3 Cost Allocators

The Cost Allocators described in 5.4.2 above and others used within the Pricing Model in the determination of prices, are described in further detail as follows.

5.4.3.1 Number of Consumers (ICP's)

The number of ICP's within each Load Group is based on the number of consumers expected to be connected during the Pricing Year with an ICP Status Code of "ACTC" and "ACTV" in the Gas Registry.

The ICP inventory is then consolidated to provide the number of ICP's that are connected to each of the 3 network pressure systems (IP, MP & LP) within each Load Group, for further use in establishing the value of the assets allocated to each Load Group, discussed in further detail in 5.4.3.4 below.

Load Group	Network Pressure System			Number of ICP's
	Intermediate Pressure (IP)	Medium Pressure (MP)	Low Pressure (LP)	
G12	3	2,534	7,204	9,741
G50	6	78	29	113
G180	5	27	2	34
G450	3	4	-	7
G1000	7	2	-	9
	24	2,645	7,235	9,904

5.4.3.2 Throughput (GJ)

The annual throughput for each Load Group is the consolidation of the throughput for each individual ICP (consumer) averaged over the four year period from 1 July 2013 to 30 June 2017.

Load Group	Network Pressure System			Total Consumption (GJ)
	Intermediate Pressure (IP)	Medium Pressure (MP)	Low Pressure (LP)	
G12	26	73,333	168,369	241,728
G50	3,486	29,901	7,635	41,022
G180	8,476	78,721	755	87,952
G450	19,042	94,731	-	113,773
G1000	766,987	30,025	-	797,012
	798,017	306,711	176,759	1,281,487

Document No: GNM-001	Document Name: Pricing Methodology Gas Distribution Network – 1 October 2017	Approved: 31/07/2017	Version: 6.0
Responsible Manager: General Manager		Last Amended: 31/07/2017	
		Effective From: 01/10/2017	Page 8 of 17
		Review Due: 31/07/2018	

5.4.3.3 Hourly Capacity Demand

For the purpose of allocating asset values to each Load Group the hourly capacity demands of the consumers within each group has been attributed by their MHQ adjusted to allow for diversity of consumer demand.

The largest population of consumers of all the Load Groups are those with the industry standard 6m³ entry level meter making up almost 96%, the majority of which are domestic. A capacity demand MHQ of 0.5scmh has been assigned to the predominantly domestic population of consumers with these meters, based on the actual maximum hourly quantity consumed in a metered residential suburb of 92 consumers within GasNet's Wanganui network in 2012. Engineering judgements have been made to adjust the hourly capacity demand for all other Load Groups with the ratio of diversified MHQ progressively increasing as the capacity of the Load Groups increase and the number of consumers decrease, until at the largest Load Group the capacity demand is very close to the actual rated capacity.

Load Group	Network Pressure System			Total Hourly Capacity Demand (scmh)
	Intermediate Pressure (IP)	Medium Pressure (MP)	Low Pressure (LP)	
G12	5	1,408	3,958	5,370
G50	55	969	323	1,347
G180	340	2,135	110	2,585
G450	798	964	-	1,762
G1000	-	-	-	-
	1,198	5,476	4,391	11,064

Note that the values for the G1000 Load Group are nil as this Hourly Capacity Demand cost allocator is used for asset allocation purposes only, and the G1000 Load Group has been allocated their share of the actual assets as outlined in 5.4.3.4 below.

5.4.3.4 Replacement Cost and Depreciated Replacement Cost

The 30 June 2016 Regulatory Asset Base (RAB) has been applied as the latest audited valuation.

With the exception of the G1000 Load Group, assets are allocated to each Load Group based on their Hourly Capacity Demand on each of the 3 pressure systems within the networks (IP, MP & LP) as outlined in 5.4.3.3 above.

In the case of the G1000 Load Group, the assets for each individual ICP within the group are allocated on their share of the value of the specific assets utilised by each ICP from the Sales Gate to the GMS installation, plus an allocation for non-infrastructure assets, the latter treatment being consistent with that applied to the other Load Groups. This variation is necessary due to the distortion created by these ICP's being located close to the Sales Gate and with relatively high hourly capacity demands, which results in an over-allocation of asset value.

Based on the allocation methodology described above, the apportionment of asset values to Load Groups for the 30 June 2016 RAB are as follows:

Document No:	Document Name:	Approved:	31/07/2017	Version: 6.0
GNM-001	Pricing Methodology Gas Distribution Network – 1 October 2017	Last Amended:	31/07/2017	
Responsible Manager:		Effective From:	01/10/2017	Page 9 of 17
General Manager		Review Due:	31/07/2018	

Replacement Cost	IP		MP		LP		Total	
G12	\$ 2,125	0.2%	\$ 2,530,850	23.9%	\$ 31,730,260	90.1%	\$ 34,263,235	72.7%
G50	\$ 25,972	2.0%	\$ 1,741,757	16.4%	\$ 2,589,734	7.4%	\$ 4,357,464	9.2%
G180	\$ 160,557	12.1%	\$ 3,837,617	36.2%	\$ 881,953	2.5%	\$ 4,880,126	10.4%
G450	\$ 376,836	28.4%	\$ 1,732,769	16.3%	\$ -	0.0%	\$ 2,109,605	4.5%
G1000	\$ 761,204	57.4%	\$ 757,484	7.1%	\$ -	0.0%	\$ 1,518,688	3.2%
	<u>\$1,326,694</u>		<u>\$10,600,476</u>		<u>\$35,201,947</u>		<u>\$47,129,118</u>	

Depreciated Replacement Cost	IP		MP		LP		Total	
G12	\$ 1,105	0.1%	\$ 1,410,113	13.3%	\$ 14,687,424	41.7%	\$ 16,098,642	34.2%
G50	\$ 13,507	1.0%	\$ 970,454	9.2%	\$ 1,198,746	3.4%	\$ 2,182,707	4.6%
G180	\$ 83,497	6.3%	\$ 2,138,205	20.2%	\$ 408,242	1.2%	\$ 2,629,943	5.6%
G450	\$ 195,971	14.8%	\$ 965,447	9.1%	\$ -	0.0%	\$ 1,161,418	2.5%
G1000	\$ 435,633	32.8%	\$ 441,069	4.2%	\$ -	0.0%	\$ 876,702	1.9%
	<u>\$ 729,713</u>		<u>\$ 5,925,288</u>		<u>\$ 16,294,411</u>		<u>\$ 22,949,413</u>	

6.0 2017/18 PRICING YEAR

6.1 Revenue Requirements

Based on current estimates of the cost components and the methodology outlined in 5.2 above, the Total Revenue Requirement for the 2017/18 Pricing Year is as follows:

Cost Item	Total Revenue Requirement
Return on Assets	\$ 1,892,900
Depreciation	\$ 825,000
Operating Costs	
Direct	\$ 820,000
Indirect	\$ 820,000
Pass-through	\$ 108,700
DPP Revenue Constraint	-\$ 121,000
Total Revenue Requirement	\$ 4,345,600

When compared to last year the significant drop in revenue is due predominantly to a reduction in the pre-tax weighted average cost of capital of 7.95% from 9.09% in 2016/17, initiated by the Commerce Commission's 2017 Default Price-quality Path reset. Further information on the DPP reset can be found at <http://www.comcom.govt.nz/regulated-industries/gas-pipelines/gas-default-price-quality-path/2017-2022-gas-dpp>.

6.2 Revenue Requirement Allocation to Load Groups

Based on the methodology and cost components outlined above, the Revenue Requirement for 2017/18 for each Load Group is as set out in the following table.

Load Group	Consumers Connected	Throughput (GJ)	2016/17 Pricing Year		2017/18 Pricing Year	
			Total Revenue	Total Revenue	Total Revenue	Change
G12	9,741	241,728	\$ 3,551,764	\$ 3,281,865		-7.6%
G50	113	41,022	\$ 393,765	\$ 342,268		-13.1%
G180	34	68,760	\$ 478,407	\$ 397,658		-16.9%
G450	7	113,773	\$ 203,709	\$ 177,077		-13.1%
G1000	9	816,205	\$ 99,198	\$ 146,732		47.9%
	<u>9,904</u>	<u>1,281,487</u>	<u>\$ 4,726,843</u>	<u>\$ 4,345,600</u>		<u>-8.1%</u>

Document No: GNM-001	Document Name: Pricing Methodology Gas Distribution Network – 1 October 2017	Approved: 31/07/2017	Version: 6.0
Responsible Manager: General Manager		Last Amended: 31/07/2017	
		Effective From: 01/10/2017	Page 10 of 17
		Review Due: 31/07/2018	

6.3 Prices for 2017/18 Pricing Year

The prices that apply from 1 October 2017 for the 2017/18 Pricing Year are set out in the following table, in Appendix 1 and can be downloaded from GasNet's website at www.gasnet.co.nz/disclosures.

Load Group	2016/17 Pricing Year		2017/18 Pricing Year			
	Fixed (\$/day)	Variable (\$/GJ)	Fixed (\$/day)	Change	Variable (\$/GJ)	Change
G12	\$0.50	\$7.212	\$ 0.43	-14.0%	\$ 7.252	0.6%
G50	\$2.10	\$7.225	\$ 1.50	-28.6%	\$ 6.835	-5.4%
G180	\$5.00	\$4.740	\$ 5.16	3.2%	\$ 4.852	2.4%
G450	\$45.00	\$0.783	\$ 40.00	-11.1%	\$ 0.658	-15.9%
G1000	Individually Priced		Individually Priced			

In order to ensure that the reduction in revenue for the 2017/18 Pricing Year was distributed across consumers as fairly as possible, the daily charges for all but the G180 Load Group have reduced. Movements in the variable pricing was then based on the total revenue requirement for each group less the expected revenue from fixed charges.

The only exception to this was the G180 Load Group where prices were rebalanced after a consumer was moved from G180 to individual pricing (G1000). In this case the fixed and variable charges were balanced so that all consumers were affected equally on a percentage basis, resulting in price increases ranging between 2.4% and 3.2%. The impact on each consumer was based on the revenue from fixed daily charges and variable charges on their gas usage in the 12 months to 30 June 2017.

In respect of the consumer that moved from the G180 to G1000 Load Group, this consumer had been a Large Site under the old pricing methodology and it had been planned to move them to standard pricing on 1 October 2016. Unfortunately the pricing for G180 would have significantly increased their network charges due to higher gas usage than had been modelled, an unintended consequence of moving a high volume consumer to a variable based charging regime. The pricing for this consumer subsequently reverted to a daily fixed charge based on the revenue expected in 2016/17.

6.4 Fixed and Variable Charge Apportionment

On aggregate the total revenue from fixed daily charges comprise 43.8% and the variable throughput charges 56.2% of the total annual Revenue Requirement for the 2017/18 Pricing Year based on the pricing indicated in section 6.3 above.

7.0 PRICING METHODOLOGY REVIEW

Whilst the review of GasNet's pricing methodology in 2013 was considered to be a periodic review that would apply to the following five or more years (at least for the first regulatory period from 1 July 2013 to 30 September 2017), the methodology is subject to on-going review.

Significant changes to the methodology are subject to consultation with interested parties as considered appropriate for the change proposed. Changes that are minor by nature are referred to in the annual Pricing Methodology document produced by GasNet and published on its website prior to the commencement of the Pricing Year to which it applies.

8.0 FIVE YEAR PRICING STRATEGY

Having implemented its new Pricing Methodology in 2016, there are no plans to make further changes to GasNet's pricing structure in the next five year period.

9.0 COMPLIANCE WITH THE PRICING PRINCIPLES

GasNet is required under the IDD to describe the extent to which its pricing methodology is consistent with a set of gas distribution pricing principles. The table below summarises these pricing principles and how they are reflected in this pricing methodology.

Document No:	Document Name:	Approved:	31/07/2017	Version: 6.0
GNM-001	Pricing Methodology Gas Distribution Network – 1 October 2017	Last Amended:	31/07/2017	
Responsible Manager:		Effective From:	01/10/2017	Page 11 of 17
General Manager		Review Due:	31/07/2018	

Pricing Principle	Extent to which pricing methodology is consistent with pricing principles
(1) Prices are to signal the economic costs of service provision, by:	
(a) being subsidy free (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;	<p>Incremental costs are the additional upfront and ongoing costs GasNet face in connecting a new consumer to the network. This typically includes costs associated with connection assets, ongoing operations and maintenance costs specific to that consumer, and network augmentation costs.</p> <p>GasNet's capital contributions policy requires a capital contribution from new consumers when the incremental capital costs associated with a new connection exceed the present value of expected future revenues. The combination of capital contributions and gas distribution prices therefore ensures that our prices are in excess of incremental capital costs.</p> <p>Operating and maintenance expenditure is recovered through distribution prices. Our fixed charge, based on a daily charge, ensures that we at least recover some of these incremental costs regardless of throughput. Charges also increase with the capacity size of the connection, which aligns pricing to incremental operating costs associated with various connection sizes.</p> <p>Stand alone costs are the full cost a consumer would face in being supplied from an alternative gas distribution system or alternative form of supply. For gas, stand alone cost is most likely to represent the full cost of converting from gas to electricity, including the cost of replacing gas appliances. GasNet has set its prices and pricing structures mindful of the fact that consumers have alternative supply options. Our pricing, and commercial business proposition, seeks to incentivise consumers connecting, and remaining connected, to distributed gas.</p> <p>Large consumers may also have options to bypass the distribution network for alternative networks, particularly where the consumer is close to a gas sales gate. GasNet offers non-standard pricing contracts to a number of large sites. These non-standard pricing arrangements are individually priced but based on the same cost-based methodology as applied to other consumers. They reduce bypass risk by making it economic for these consumers to connect, and remain connected, to the network.</p>
(b) having regard, to the extent practicable, to the level of available service capacity; and	<p>GasNet sets its consumer groups to align with standard load group types based on typical connection sizes. This aligns pricing with various end-consumer usage profiles and with the capacity of their connection assets, a key network cost driver.</p>

Document No: GNM-001	Document Name: Pricing Methodology Gas Distribution Network – 1 October 2017	Approved: 31/07/2017	Version: 6.0
		Last Amended: 31/07/2017	
Responsible Manager: General Manager		Effective From: 01/10/2017	Page 12 of 17
		Review Due: 31/07/2018	

Pricing Principle	Extent to which pricing methodology is consistent with pricing principles
(c) signalling, to the extent practicable, the impact of additional usage on future investment costs.	<p>GasNet's prices are based on a daily fixed supply charge and a throughput based tariff (in GJs).</p> <p>The throughput tariff ensures consumers that use more are charged more. This basic principle is effective in signalling the impact of additional usage on future investment costs.</p> <p>Similarly, the supply charge applying to each load grouping increases relative to the standard capacity size of the connection. This signals that larger connections typically have higher throughput and peak demand and therefore create higher investment costs.</p>
(2) Where prices based on 'efficient' incremental costs would under-recover allowed revenues, the shortfall should be made up by setting prices in a manner that has regard to consumers' demand responsiveness, to the extent practicable.	<p>GasNet's pricing is not based on willingness to pay or demand responsiveness considerations as this is not practicable to assess, but on load groupings based on typical connection sizes. We consider this most appropriately aligns with our investments in capacity, which is a key network cost driver.</p>
(3) Provided that prices satisfy (1) above, prices should be responsive to the requirements and circumstances of stakeholders in order to:	
(a) discourage uneconomic bypass;	<p>This principle allows for pricing and other incentives to discourage consumers bypassing GasNet's network to another supply alternative. As discussed above, GasNet seeks to discourage consumers bypassing the network in setting non-standard prices for large consumers close to a sales gate. This pricing recognises the alternative supply options these consumers have available to them.</p>
(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.	<p>This principle allows for negotiation over price in recognition of different levels of service or other arrangements of value to consumers.</p> <p>Price and quality trade-offs are primarily addressed under our capital contributions policy when scoping connection asset specifications. We are also always open to discussing non-standard pricing arrangements where appropriate.</p>
(4) Development of prices is transparent, promotes price stability and certainty for consumers, and changes to prices have regard to the effect on consumers.	<p>This methodology transparently sets out the approach we have adopted to determine prices for consumers connection to the network, and is publicly available via GasNet's website www.gasnet.co.nz.</p>

Document No: GNM-001	Document Name: Pricing Methodology Gas Distribution Network – 1 October 2017	Approved: 31/07/2017	Version: 6.0
		Last Amended: 31/07/2017	
Responsible Manager: General Manager		Effective From: 01/10/2017	Page 13 of 17
		Review Due: 31/07/2018	

Appendix 1 – Network Services Price Schedule: Effective 1 October 2017



Network Services Price Schedule

Effective from 1 October 2017

Load Group	Capacity (m ³ /hr)		Estimated Number of Consumers	Charge Type	Unit Charges	New Prices from 1 October 2017	Prices up to 30 September 2017
	More Than	Less than or Equal To					
G12	0	13	9,741	Fixed	\$/day	0.43	0.500
				Variable	\$/GJ	7.252	7.212
G50	13	50	113	Fixed	\$/day	1.500	2.100
				Variable	\$/GJ	6.835	7.225
G180	50	180	34	Fixed	\$/day	5.160	5.000
				Variable	\$/GJ	4.852	4.740
G450	Greater than 180		7	Fixed	\$/day	40.000	45.000
				Variable	\$/GJ	0.658	0.783

Notes

- All rates are exclusive of GST.
- Charges apply when the ICP Status Code in the Gas Registry is ACTC or ACTV.
- Additional information is available on our website www.gasnet.co.nz.
- If you have any questions please email us at enquiries@gasnet.co.nz or call us at (06) 349 2050.

Document No: GNM-001	Document Name: Pricing Methodology Gas Distribution Network – 1 October 2017	Approved: 31/07/2017	Version: 6.0
		Last Amended: 31/07/2017	
Responsible Manager: General Manager		Effective From: 01/10/2017	Page 14 of 17
		Review Due: 31/07/2018	

Appendix 2 - Information Disclosure Determination Requirements

Clause 2.4 of the Commerce Act (Gas Distribution Services Information Disclosure) Determination 2012 states that, before the start of each Pricing Year (which for GasNet is 1 October – 30 September), every gas distribution business must publicly disclose a pricing methodology that satisfies the following extract, taken directly from the Commerce Commission's determination, which can be downloaded in its entirety from their website at www.comcom.govt.nz/gas-information-disclosure. Any uncertainty regarding the terms used in the extract or its context may be able to be resolved by referring to the source document.

2.4 PRICING AND RELATED INFORMATION

Disclosure of pricing methodologies

- 2.4.1 Every GDB must publicly disclose, before the start of each pricing year, a pricing methodology which-
- (1) Describes the methodology, in accordance with clause 2.4.3, used to calculate the prices payable or to be payable;
 - (2) Describes any changes in prices and target revenues;
 - (3) Explains, in accordance with clause 2.4.5, the approach taken with respect to pricing in non-standard contracts;
 - (4) Explains whether, and if so how, the GDB has sought the views of consumers, their expectations in terms of price and quality, and reflected those views in calculating the prices payable or to be payable. If the GDB has not sought the views of consumers, the reasons for not doing so must be disclosed.
- 2.4.2 Any change in the pricing methodology or adoption of a different pricing methodology, must be publicly disclosed at least 20 working days before prices determined in accordance with the change or the different pricing methodology take effect.
- 2.4.3 Every disclosure under clause 2.4.1 must-
- (1) Include sufficient information and commentary to enable interested persons to understand how prices were set for each consumer group, including the assumptions and statistics used to determine prices for each consumer group;
 - (2) Demonstrate the extent to which the pricing methodology is consistent with the pricing principles and explain the reasons for any inconsistency between the pricing methodology and the pricing principles;
 - (3) State the target revenue expected to be collected for the pricing year to which the pricing methodology applies;
 - (4) Where applicable, identify the key components of target revenue required to cover the costs and return on investment associated with the GDB's provision of gas pipeline services. Disclosure must include the numerical value of each of the components;
 - (5) State the consumer groups for whom prices have been set, and describe-
 - (a) the rationale for grouping consumers in this way;
 - (b) the method and the criteria used by the GDB to allocate consumers to each of the consumer groups;
 - (6) If prices have changed from prices disclosed for the immediately preceding pricing year, explain the reasons for changes, and quantify the difference in respect of each of those reasons;
 - (7) Where applicable, describe the method used by the GDB to allocate the target revenue among consumer groups, including the numerical values of the target revenue allocated to each consumer group and the rationale for allocating it in this way;
 - (8) State the proportion of target revenue (if applicable) that is collected through each price component as publicly disclosed under clause 2.4.18.
- 2.4.4 Every disclosure under clause 2.4.1 must, if the GDB has a pricing strategy-
- (1) Explain the pricing strategy for the next 5 pricing years (or as close to 5 years as the pricing strategy allows), including the current pricing year for which prices are set;
 - (2) Explain how and why prices are expected to change as a result of the pricing strategy;
 - (3) If the pricing strategy has changed from the preceding pricing year, identify the changes and explain the reasons for the changes.
- 2.4.5 Every disclosure under clause 2.4.1 must-
- (1) Describe the approach to setting prices for non-standard contracts, including-
 - (a) the extent of non-standard contract use, including the number of ICPs represented by non-standard contracts and the value of target revenue expected to be collected from consumers subject to non-standard contracts;
 - (b) how the GDB determines whether to use a non-standard contract, including any criteria used;
 - (c) any specific criteria or methodology used for determining prices for consumers subject to non-standard contracts, and the extent to which these criteria or that methodology are consistent with the pricing principles;
 - (2) Describe the GDB's obligations and responsibilities (if any) to consumers subject to non-standard contracts in the event that the supply of gas pipeline services to the consumer is interrupted. This description must explain-
 - (a) the extent of the differences in the relevant terms between standard contracts and non-standard contracts;
 - (b) any implications of this approach for determining prices for consumers subject to non-standard contracts.

Document No:	Document Name:	Approved:	31/07/2017	Version: 6.0
GNM-001	Pricing Methodology Gas Distribution Network – 1 October 2017	Last Amended:	31/07/2017	
Responsible Manager:	General Manager	Effective From:	01/10/2017	Page 15 of 17
		Review Due:	31/07/2018	

Appendix 3 – Compliance with the Price Path

The following information is provided for informative purposes to demonstrate GasNet’s compliance of the Pricing Methodology and the Prices that apply from 1 October 2017 with the Commerce Commission “Gas Distribution Services Default Price-Quality Path Determination 2017”.

Allowable notional revenue for the First Assessment Period (Schedule 3 of the DPP Determination)

Allowable Notional Revenue for 2018 (ANR₂₀₁₈)

$$ANR_{2018} = MAR / \Delta D$$

Where:

MAR (\$m) is the starting price specified in Sch 1 of the DPP Determination (\$4.154m)

ΔD is the value specified in Table 2 of Sch 3 in the DPP Determination (0.9909)

Therefore:

$$ANR_{2018} (\$m) \quad \$ 4.192$$

Notional revenue for the First Assessment Period (Clause 8.4(a) of the DPP Determination)

Notional Revenue for 2018 (NR₂₀₁₈)

NR₂₀₁₈ is the Notional Revenue for the Pricing Period ending in 2018 being equal to:

$$NR_{2018} = \sum_i P_{i,2018} \times Q_{i,2016} - (K_{2018} + V_{2018})$$

$\sum_i P_{i,2018} \times Q_{i,2016}$ is the revenue from all Load Groups based on the 2016 quantities and the 2018 prices as calculated in the table below (\$1.896m + \$2.401m)

K₂₀₁₈ is the sum of all Pass-through Costs for the Pricing Year ending in 2018 (\$0.109m)

V₂₀₁₈ is the sum of all Recoverable Costs for the Pricing Year ending in 2018 (nil)

Therefore:

$$NR_{2018} (\$m) \quad \$ 4.188$$

Compliance with the Price Path (clause 8.3 of the DPP Determination)

Notional Revenue for each Assessment Period must not exceed the Allowable Notional Revenue for the Assessment Period, such that for the Assessment Period 1 October 2017 to 30 September 2018):

$$ANR_{2018} \geq NR_{2018}$$

Where:

ANR₂₀₁₈ is the Allowable Notional Revenue for the Pricing Period ending in 2017 as calculated above (\$4.192m)

NR₂₀₁₈ is the Notional Revenue for the Pricing Period ending in 2017 as calculated above (\$4.188m)

Therefore:

As Notional Revenue (NR) of \$4.188 does not exceed Allowable Notional Revenue (ANR) of \$4.192 the condition is satisfied

Load Group		Fixed Charges (\$ per day)			Variable Charges (\$ per GJ)		
Prior to 1 Oct 16	From 1 Oct 16	Q ₂₀₁₆	P ₂₀₁₈	P ₂₀₁₇ × Q ₂₀₁₅	Q ₂₀₁₆	P ₂₀₁₈	P ₂₀₁₇ × Q ₂₀₁₅
C12323	G1000 (C12323)	366	\$ 41.548	\$ 15,207	133,847	\$ -	\$ -
C12328	G450	366	\$ 40.000	\$ 14,640	7,054	\$ 0.658	\$ 4,642
C12329	G1000 (C12329)	366	\$ 18.119	\$ 6,632	54,361	\$ -	\$ -
C12337	G1000 (C12337)	366	\$ 27.719	\$ 10,145	29,567	\$ -	\$ -
C14688	G450	366	\$ 40.000	\$ 14,640	65,358	\$ 0.658	\$ 43,006
C14691	G450	366	\$ 40.000	\$ 14,640	24,204	\$ 0.658	\$ 15,926
C16459	G1000 (C16459)	366	\$ 14.362	\$ 5,256	26,611	\$ -	\$ -
C17499	G450	366	\$ 40.000	\$ 14,640	15,328	\$ 0.658	\$ 10,086
C26262	G1000 (C26262)	366	\$ 26.761	\$ 9,795	32,100	\$ -	\$ -
C26444	G1000 (C26444)	366	\$ 22.099	\$ 8,088	123,724	\$ -	\$ -
C26779	G1000 (C26779)	366	\$ 156.199	\$ 57,169	21,521	\$ -	\$ -
C31266	G1000 (C31266)	366	\$ 52.565	\$ 19,239	165,928	\$ -	\$ -
C31778	G1000 (C31778)	366	\$ 42.635	\$ 15,604	195,524	\$ -	\$ -
M12	G12	116,753	\$ 0.430	\$ 50,204	21,610	\$ 7.252	\$ 156,718
M142	G180	4,026	\$ 5.160	\$ 20,774	37,129	\$ 4.852	\$ 180,148
M200	G450	480	\$ 40.000	\$ 19,200	3,550	\$ 0.658	\$ 2,336
M23	G50	26,367	\$ 1.500	\$ 39,551	23,312	\$ 6.835	\$ 159,338
M33	G50	4,030	\$ 1.500	\$ 6,045	1,130	\$ 6.835	\$ 7,724
M43	G50	11,376	\$ 1.500	\$ 17,064	15,852	\$ 6.835	\$ 108,349
M450	G450	366	\$ 40.000	\$ 14,640	181	\$ 0.658	\$ 119
M6	G12	3,444,322	\$ 0.430	\$ 1,481,058	214,087	\$ 7.252	\$ 1,552,558
M85	G180	8,052	\$ 5.160	\$ 41,548	33,066	\$ 4.852	\$ 160,434
Total		3,620,530		\$ 1,895,779	1,245,044		\$ 2,401,384
				$\sum_i P_{i,2018} \times Q_{i,2016}$			$\sum_i P_{i,2018} \times Q_{i,2016}$

Document No: GNM-001	Document Name: Pricing Methodology Gas Distribution Network – 1 October 2017	Approved: 31/07/2017	Version: 6.0
		Last Amended: 31/07/2017	
Responsible Manager: General Manager		Effective From: 01/10/2017	Page 16 of 17
		Review Due: 31/07/2018	

Appendix 4 - Director Certification

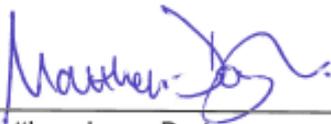
(Pursuant to the Gas Distribution Information Disclosure Determination 2012)

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

Clause 2.9.2

1. We, Matthew James Doyle and Harvey George Green, being directors of GasNet Limited certify that, having made all reasonable enquiry, to the best of our knowledge:
 - a) the following attached information of GasNet 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.

Dated 31st day of JULY 2017



Matthew James Doyle



Harvey George Green

Document No:	Document Name:	Approved:	31/07/2017	Version: 6.0
GNM-001	Pricing Methodology Gas Distribution Network – 1 October 2017	Last Amended:	31/07/2017	
Responsible Manager:		Effective From:	01/10/2017	Page 17 of 17
General Manager		Review Due:	31/07/2018	