

Gas Distribution Pricing Methodology

October 2022 – September 2023



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Definitions

This pricing methodology uses industry standard terms where possible.

Act The Commerce Act 1986.

Allowable Notional Revenue (ANR) the revenue determined under the Price-quality Path Determination that Powerco can earn during the pricing year.

Consumer Price Index (CPI) a measure of changes to the prices for consumer items purchased by New Zealand households giving a measure of inflation.

COSM Cost of Supply Model.

Cost allocators the measure used to allocate costs/ target revenue among consumer groups.

Demand is the term used to denote the peak consumption of gas.

DPM Distribution Pricing Methodology.

Default Price-quality Path (DPP) refers to the Gas Distribution Services Default Price-quality Path Determination 2022 applying for four years to September 2026¹.

Gas consumer is the term used when discussing general characteristics of consumers of natural gas in the New Zealand market.

Gas customer refers to a party who is connected to Powerco's gas network and to whom Powerco provides gas distribution and/or metering services.

GDB Gas Distribution Business

Gigajoule (GJ) is a quantity measure of the energy content of gas.

Installation Control Point (ICP), or individual connection to the gas network is the term used to denote a specific gas customer.

Kilowatt-hour (kWh) is a unit of energy, being the product of power in watts and time in hours.

Load group a category of Powerco gas distribution customer, with a defined capacity and annual consumption that receives a specific distribution tariff.

LPG Liquified Petroleum Gas.

Maximum Allowable Revenue (MAR) means the maximum prices/revenues that are allowed at the start of the regulatory period.

Mass market means load groups to which standard, published tariffs apply. The bulk of Powerco's gas customers are considered mass market.

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

Pricing principles means the pricing principles specified in clause 2.5.2 of the Gas Distribution Services Input Methodologies Determination 2012 (consolidating all amendments as at 3 April 2018) and included in section 5.4.

Pricing strategy means 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 (PY) means the annual reporting period beginning on 1 October and ending on 30 September.

scm/h standard cubic meters per hour. A measure of gas capacity based on the flow rate. **Target revenue** means the revenue Powerco expects to receive from prices during the PY. **Volume** is the term used to denote gas consumption over a period, such as a day or a year. **WACC** means Weighted Average Cost of Capital from the DPP.

¹ https://comcom.govt.nz/regulated-industries/gas-pipelines/gas-pipelines-price-quality-paths/gas-pipelines-default-price-quality-path/2022-2027-gas-default-price-quality-path

1 Executive Summary

Powerco's gas network business is regulated by the Commerce Commission, and part of that regime involves setting allowable revenues. Powerco's allowance for the pricing year 1/10/22 – 30/9/23 is \$58.965m. This pricing methodology summarises the factors that Powerco considered when developing its pricing to meet this allowed revenue.

There have been no substantive changes to Powerco's pricing methodology in the past twelve months. The methodology has been prepared to comply with the requirements of the Gas Distribution Services Information Disclosure Determination 2012² and Gas Distribution Services Input Methodologies Determination 2012³.

² https://comcom.govt.nz/regulated-industries/gas-pipelines/information-disclosure-requirements-for-gas-pipelines

³ https://comcom.govt.nz/regulated-industries/input-methodologies/input-methodologies-for-electricity-gas-and-airports/gas-pipelines-input-methodologies

2 Our network and customers

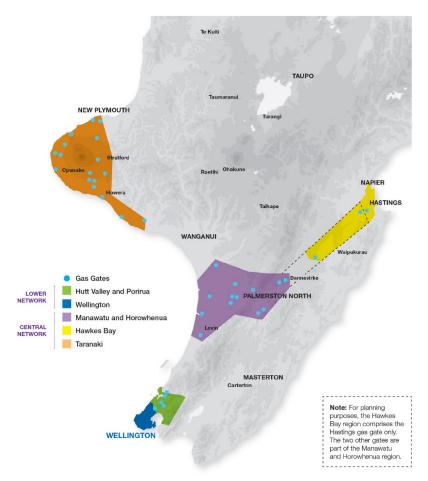
2.1 We are an essential energy infrastructure provider for Aotearoa

Powerco's gas business manages a key infrastructure for Aotearoa economy, safety, and population wellbeing. We are an asset owner and operator. We do not own the gas flowing through our pipelines. Our responsibility is to ensure gas is safely distributed to our customers.

Our gas distribution system starts where Powerco takes custody of a retailer's gas from the Transmission System Operator (TSO) at a designated gate station handover point. It usually ends at the inlet of the Gas Measurement System (GMS) that supplies the end user (our customer). Our network serves customers across five regions

- Wellington
- The Hutt Valley and Porirua
- Taranaki
- Manawatu and Horowhenua
- Hawkes Bay

Across these regions are 36 gate stations that feed 34 individual distribution segments.



2.2 Our customers

Powerco's active gas distribution networks cover approximately 6,000 km of live pipeline and serve approximately 113,000 North Island ICPs including households, businesses and industries.

Powerco provides gas distribution services to five regions in the North Island. Hawkes Bay is the smallest region in terms of customer connections; Wellington and Hutt Valley / Porirua are the two largest, as shown in the chart below.

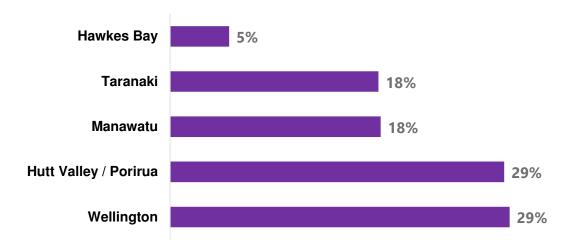
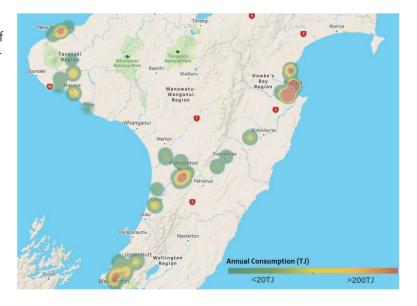


Figure 1: % of customers across our five regions

Industrial and commercial customers consume over 60% of the gas we deliver annually. There are a diverse range of businesses using gas and they're geographically spread across the footprint of our North Island network.

The adjacent figure shows the geographical diversity of gas demand from our larger commercial and industrial customers (around 90). Of these:

- 30% are in the food processing sector
- 20% are in the manufacturing sector
- 10% are in the healthcare sector



The Hawke's Bay region accounts for around 20% of customers though over 40% of the demand from the group.

2.3 Customer groupings for price-setting

Powerco maintains six standard network mass market load groups. These groups are defined by nominal capacity, in scm/h and by annual consumption. They are charged standard published tariffs.

Non-standard customers are those that fall outside these definitions, because they are too large to fall into one of the defined categories and/or because individual pricing arrangements apply to them because of the need to address a perceived bypass risk.

The rationale for grouping consumers in this way is as follows:

- larger pipes with greater reinforcing are required by the higher volume commercial and industrial customers;
- the delivery of gas exhibits significant economies of scale;
- some large customers may have the option of bypassing Powerco and connecting to an alternative network.

These characteristics mean that, for high volume customers, the fixed infrastructure costs are relatively high, but the per unit cost of delivering gas is low. Conversely, for low volume residential customers, the fixed infrastructure costs needed to service them are relatively low, but the per unit cost of delivering energy to them are relatively high. These differences drive the relative balance of fixed and variable charges that apply to the different customer groups. For the large consumers, fixed charges are higher and variable charges lower, and the converse is the case for residential customers. Where commercial bypass is a credible risk, individual non-standard charging arrangements may be justified.

The load group names and the criteria for assigning customers to these groups is described in Table 1.

Table 1: Customer load groups

Load group			Definition⁴	Typical customer		
Standard mass market	Residential	G06	End consumers with a load size ≤10 scm/h, and annual usage: Central North Island: < 15 GJ, Greater Wellington region: < 14 GJ. This tariff group is subject to variable charges only. Consumers that qualify for this group may opt into G11 tariffs (which contain a fixed element).	Small residential customers.		

⁴ Central North Island means ICPs on the Hawkes Bay, Manawatu and Taranaki gas networks. Greater Wellington region means ICPs on the Wellington and Hutt Valley/ Porirua gas networks.

Load group			Definition⁴	Typical customer
		G11	End consumers with a load size ≤10 scm/h and an annual usage: Central North Island: ≥ 15 GJ, Greater Wellington region: ≥14 GJ. Consumers that qualify for this group may opt into G06 tariffs (which are variable only).	Large residential customers Small cafes, takeaways.
	Commercial	G12	End consumers with a load size > 10 scm/h and ≤25 scm/h.	Restaurants, small apartment/ office buildings, small/ medium motels.
		G14	End consumers with a load size > 25 scm/h and ≤ 60 scm/h.	Hotels, large motels, shopping complexes, swimming pools.
		G16	End consumers with a load size > 60 scm/h and ≤ 140 scm/h.	Large apartment/ office buildings, commercial kitchens.
		G18	End consumers with a load size > 140 scm/h and ≤ 200 scm/h.	Commercial laundry's, dry cleaners.
Non- standard		G30	End consumers for whom network services are individually priced.	Large commercial customers, large hotels. Smaller commercial customers which are at risk of bypass.
		G40	End consumers for whom network services are individually priced and who have a time of use meter.	Manufacturing and industrial businesses.

The majority of Powerco's network customers are standard mass market customers. We have approximately 113,000 standard customers compared to 215 non-standard customers. Around 75% of our customer base are in the G11 residential group. The pattern is strikingly different for consumption, where non-standard customers represent ~46% of annual gas consumption, and the G11 Load Group accounts for 32%. These differences are illustrated in the charts below.

Figure 2: Consumption by Load Group

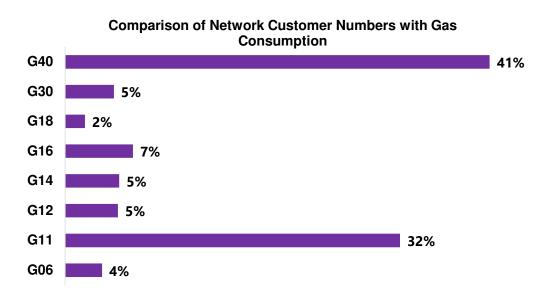
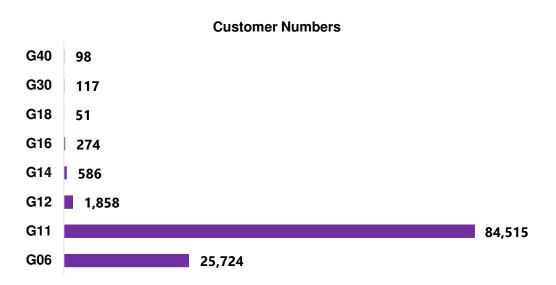


Figure 3: Customer numbers



3 Regulatory Requirements

The requirements of Powerco's pricing methodology is governed by our regulatory obligations under Part 4 of the Act, enforced by the Commerce Commission.

3.1 Disclose pricing methodology in September

Section 2.4 of the Gas Distribution Information Disclosure Determination 2012 requires Powerco to publicly disclose the pricing methodology (this document) used to determine the prices payable for the provision of gas distribution services. This needs to be done before the pricing year begins (1 October).

3.2 Assess methodology against pricing principles

The pricing principles are specified in clause 2.5.2 of the Gas Distribution Service Input Methodologies Determination 2012. Section 5.4 of this report assesses the compliance with each criterion.

3.3 Set prices so expected revenue < allowable revenue

Powerco is regulated under the Commerce Commission's DPP. This regulation includes setting revenue according to an 'average price' cap. This permits allowable revenue to change in proportion to the movement in CPI each year except in the first year of a regulatory period, which is the case this year (the period is 4 years, For PY23, the allowable revenue was set by the Commission in its May 2022 Determination⁵.

The requirements of the DPP are intended to provide the suppliers of regulated goods and services with enough incentives to innovate and invest, while limiting any ability to extract monopoly profits, and to share with consumers the benefits of any efficiency gains achieved in the supply of the regulated goods and services. These objectives are promoted by simulating the outcomes produced by competitive markets.

The prices applied to the tariff groups on our distribution network are set in accordance with this pricing methodology, which ensures that the notional revenue is at or below the allowable notional revenue as defined by the DPP.

Overall, the revenue allowance for the 2022/2023 pricing year is a net increase of 4.62%. This pricing methodology describes the process for translating this revenue increase to customer prices. Appendix 2 contains the pricing for each load group across our five regions for this and the previous pricing year.

⁵ https://comcom.govt.nz/regulated-industries/gas-pipelines/gas-pipelines-price-quality-paths/gas-pipelines-default-price-quality-path/2022-2027-gas-default-price-quality-path

4 Pricing Strategy Framework and Objectives

4.1 Medium Term Pricing Strategy

Powerco's medium-term pricing strategy is, over time, to remove pricing anomalies between regions and customer load groups and set prices that better reflect the actual costs of supplying those load groups, but to do so in a way that:

- maintains compliance with the DPP,
- is acceptable to retailers and end use customers, and
- achieves a reasonable degree of price stability and certainty.

Powerco uses a cost-of-supply model COSM to establish the supply cost for each load group within each of the five network regions and assesses this against existing tariff structures. The COSM is used to evaluate how current tariff structures recover different categories of cost. This process of verifying tariffs through the COSM is used for all regions of the Powerco gas network.

Powerco's commercial team will liaise with customers and retailers to help ensure that customers are obtaining the best value possible from Powerco's services. The pricing strategy is consistent with the prior PY.

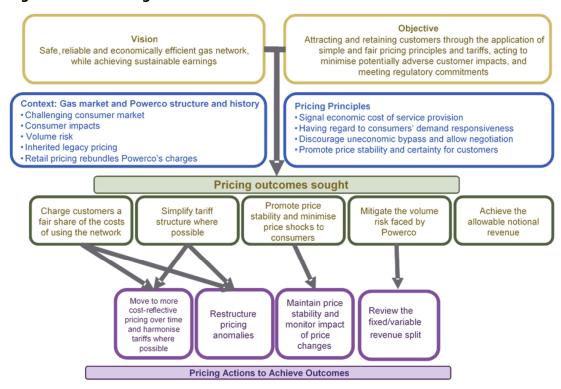
4.2 Framework

Powerco's pricing methodology framework begins with its vision for its gas business: to provide safe, reliable, and economically efficient gas network distribution services while achieving sustainable earnings. The framework aims to:

- attract and retain customers through the application of simple and fair pricing principles and tariffs,
- minimise potentially adverse customer impacts, and
- meet its regulatory commitments.

When developing its pricing methodology, Powerco has considered several characteristics of gas distribution markets and has given effect to the Commission's pricing.

Figure 4: Price setting framework



The framework illustrates that we consider several outcomes when setting prices, as expanded on below.

Charge customers a fair share of the costs of using the network

As far as practicable, customers should be charged a price that reflects the costs of providing the service to them. However, cost reflective charging is not the only objective considered when determining prices. Powerco aims to set tariffs that are cost reflective, but equally aims to ensure that customers face prices that they perceive to be a reasonable and fair reflection of the service provided. Powerco aims to treat low volume residential customers equitably.

Simplify tariff structure where possible

Simpler price structures can benefit customers, because they make understanding distribution tariffs easier. In addition, simple tariff structures benefit retailers through lower administration costs.

Promote price stability and minimise price shocks to customers

Existing customers have chosen to invest in natural gas appliances with an expectation that future prices will be reasonably comparable to past prices. Therefore, any necessary price movements should be implemented gradually over time. Future price movements will be informed by customer feedback on previous changes as well as by customer consultation on prices.

Mitigate the volume risk faced by Powerco

Prices should be structured in a way that, to the extent practicable, fairly reflects the extent of Powerco's fixed costs, and consequently mitigates the risk associated with annual fluctuations in consumption, while responding to customers' preferences for variable tariffs.

Achieve the allowable target revenue

Powerco's primary pricing objective with respect to its gas network is for pricing to contribute as part of an overall strategy to a vibrant and sustainable gas business; that is, Powerco seeks to recover its allowed target revenue to sustain the gas network business and provide for future required investment.

5 Setting prices

The methodology for setting Powerco's network prices applies the following steps:

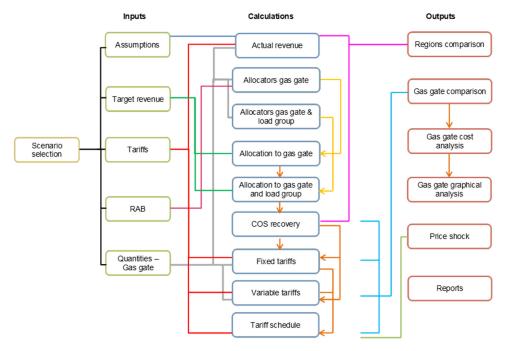
- i. determine Powerco's costs of gas distribution;
- ii. allocate customers to network load groups, based on capacity (scm/h);
- iii. allocate costs to customer groups using an appropriate allocation factor. Powerco's network cost of supply model analyses costs within each of its five gas network areas for each of its six standard and two non-standard customer classes;
- iv. assess price structures to determine consistency with the pricing principles and objectives; and
- v. establish medium term price paths to make prices more cost reflective and consistent across regions, while satisfying the Commission's pricing principles.

5.1 Cost of Supply Model (COSM)

Powerco's COSM for the gas network business allows the user to allocate costs and revenues across the respective tariff load groups using alternate allocation methods. The model develops a total cost per network load group as well as a cost per kWh.

A diagram of COSM is presented below. There are several assumptions and input sheets that include parameters such as WACC, CPI figures, demand forecasts, and cost and revenue forecasts. Calculation sheets (coded grey in the diagram) allocate ICPs to defined load groups and allocate costs based on the parameters selected. Output sheets show distributed costs, analyse the subsidy-free tariff range and evaluate pricing scenarios for compliance with the aggregate price cap.

Figure 5: COSM schematic



5.2 Cost allocators

Cost allocation is handled by allocating costs to identifiable regions and/or load groups, with the residual shared across all. The allocation approach

Identifiable region and load group

These are costs are directly attributable to a specific load group within a specific region do not need to be allocated; they can merely be assigned to the relevant load group. The COSM allows costs of this nature to be included in the evaluation, though none has been identified.

Identifiable region

These costs are attributable to a specific region but not a specific load group. For example, costs for reactive maintenance, scheduled maintenance and customer-initiated maintenance.

Table 2: Regional network cost allocators

Directly attributable costs to regions	Cost allocator
Service interruptions and emergences	Customer numbers
Routine and corrective maintenance – inspections lines	Total line length (rural/urban weighted)
Routine and corrective maintenance – inspections other	Customer numbers
Routine and corrective maintenance – location checks	Customer numbers
Depreciation of network assets	Replacement cost
Other direct costs	Cost allocator
Direct rates to regional property	Weighted ICP/GJ
Other direct regional costs	GJ

The costs attributable to a specific region tend to be related to the value of network assets servicing the region. For this reason, we allocate regional network asset values to load groups. Broadly, the methodology estimates the percentage of regional assets used by each load group based on the types of assets employed and the annual consumption of each load group.

The process involves three steps outlined below.

- i. Group network assets into system categories (Table 3)
- ii. Assign load groups to one or more system categories depending on the assets used to supply their loads (Table 4)
- iii. Assign a load group's share of the total annual consumption for the system category to a portion of that system category's value. These system category value portions are summed for each individual load group to give its total asset value allocation.

Table 3: Asset classes assigned to each system category

Intermediate pressure	Medium pressure	Services		
Cathodic protection	Land	LP services		
IP mains	LP mains	MP services		
IP services	MP mains			
IP valves	MP valves			
SCADA	Stations			
Crossings	Crossings			
Standby pipe	Standby pipe			
Traffic management	Traffic management			

Table 4: Load groups assigned to each system category

Intermediate pressure	Medium pressure	Services
G06	G06	G06
G11	G11	G11
G12	G12	
G14	G14	
G16	G16	
G18	G18	
G30	G30	
G40		

The annual consumption volumes for each load group are entered into the appropriate table, and total volumes within each system category are calculated to give the total annual demand for that category.

Shared costs

These costs are not easily or pragmatically attributable to a region or a load group include administration costs, information technology costs and some pass-through costs.

Generally, costs that are asset-related (which include depreciation and return on assets and, by extension, taxation) are allocated based on the share of the gas volume that a load group uses. Costs that are not directly related to assets, such as administration and pass through costs, are allocated by an ICP/GJ weighting across all customers. These allocators are summarised in Table 5.

Table 5: Indirect network cost allocators

Indirect costs	Cost allocator
Administration	Weighted ICP/GJ
System operations and network / business support	Weighted ICP/GJ
Pass through costs	
Audit fees	Weighted ICP/GJ
Indirect rates	Weighted ICP/GJ
Statutory levies	Weighted ICP/GJ
Other indirect costs	Weighted ICP/GJ
Return on assets	
Depreciation of network assets	GJ
Amortisation of intangibles	Customer numbers
• WACC	GJ
Taxation	
Taxation expense	GJ

5.3 Subsidy-free prices

As part of complying with the pricing principles, prices must be subsidy-free. This means:

incremental cost ≤ prices ≤ standalone costs

The remainder of this section outlines what these terms mean and our approach to making this assessment.

Standalone Cost (SAC) methodology

A consumer's standalone cost is the cost of delivering the energy they require from an alternative network or fuel source (assuming equivalent quality of supply).

Practically, bypassing Powerco's network with supply from an alternative gas distribution network is unlikely as it would be uneconomic to duplicate network expenditure. However, there are examples in New Zealand of alternative bypass networks that operate within proximity to a gas transmission gate.

The cost of substituting gas distribution supply with an alternative fuel source (such as electricity or bottled LPG) is a greater concern for the Powerco gas distribution business. Reticulated natural gas is to a certain extent a competitive service, as it competes for

customers with both electricity supply and LPG. The standalone cost for the gas distribution business is therefore the cost of supply from these alternative energy sources.

Standard customers

For standard gas distribution services, SAC costs are established by estimating the costs by load group likely to be incurred by a notional efficient competitor to Powerco's distribution network. In other words, the SAC methodology estimates the bypass cost of supplying each of Powerco's load groups. This is an appropriate approach to determine standalone costs for the tariff group and is consistent with how standalone costs have been calculated in other regulatory jurisdictions. A tariff group is the smallest practical grouping of customers that could be used for this analysis.

The Gas Hub website provides smaller consumers (G06 and G11) with a calculator to compare the cost of reticulated gas supply against comparable costs for supply of bottled LPG and electricity.

The standalone cost is compared at a retail and distribution network level for gas and electricity to identify the total cost and the network cost component which consumers face. Ultimately consumers base their fuel consumption decisions on final retail prices.

Non-standard customers

Many commercial and industrial consumers also have energy supply options. For these consumers, standalone cost also means the cost of alternative supply, but, for this group, the cost of switching may be sizeable due to the need to convert large scale plant and equipment eg from gas to electricity.

Powerco calculates the the annual cost of supply for a notional G30 and G40 consumer (commercial and industrial, respectively) as follows:

- LPG: The cost of supply from the Gas Hub website provides limited information for large commercial and industrial consumers, but we can use LPG prices from the price comparison tool to calculate the annual cost of supply for LPG.
- Gas and electricity retail: We source average retail gas and electricity charges from MBIE price surveys. We use these prices to calculate the average annual retail cost of gas and electricity
- Gas Distribution: We source gas distribution costs from the COSM and existing Powerco pricing schedules. We were not able to source commercial and industrial distribution prices for electricity.

Incremental cost methodology

Powerco's COSM calculates average incremental costs for the gas distribution network with reference to both short run average incremental cost and long run average incremental cost.

Short run incremental cost

Short run average incremental cost is calculated as the average annualised connection cost per connection for the following connection types:

- residential/small commercial
- commercial

industrial

The amount for each consumer is calculated using the following process:

- 10-year forecasts of future real connections capex are sourced from Powerco's Gas Distribution Asset Management Plan (AMP) by connection type;
- divide this value by the expected annual increase in connections for each connection type (sourced from the Powerco Gas AMP) to determine average connections capex per connection;
- annualise the ten-year average using the WACC as a discount rate, and assuming a 60-year asset life) to derive an annual connection cost per connection type.

Long run average incremental cost (LRAIC)

LRAIC are calculated as short run average incremental cost plus the average incremental investment in upstream capacity. Powerco calculates upstream capacity costs per connection type as follows:

- the 10-year forecast of future real systems growth capex is taken from Powerco's Gas AMP;
- this value is divided by the forecast annual change in maximum monthly load (also sourced from the AMP) to determine systems growth per GJ of demand;
- the ten-year average of this figure is multiplied by average load per connection by connection type to derive a long run average incremental cost of additional upstream capacity.

Appendix 1 demonstrates that gas distribution prices fall between the incremental cost and the standalone cost both on average and across a range of annual consumption thresholds.

5.4 Compliance with Pricing Principles

An Information Disclosure requirement is that this methodology discusses how our pricing complies with the pricing principles descried in Section . These principles and our compliance assessment is contained in Table 6.

Table 6: Compliance with pricing principles

Principles	Compliance assessment
1) Prices are to signal the economic costs of service provision, by	
	The proposed prices fall within the subsidy-
a) being subsidy free, that is, equal to or	free range, of the pricing methodology as
greater than incremental costs and less than or equal to standalone costs, except where	demonstrated by the graphs in Appendix 1.
subsidies arise from compliance with	Coincident peak demand charging was
legislation and/or other regulation	considered but would be impractical to
	implement for mass market customers. The
b) having regard, to the extent practicable, to the level of available service capacity;	ability to store gas in the network ("line pack") also undermines the economic case
and,	for coincident peak charging as higher peak
	demand does not necessarily trigger the
c) signalling, to the extent practicable, the	need for additional capex.
impact of additional usage on future investment costs.	Locational capacity signalling is used in the case of high-volume users and subdivisions
investment costs.	located away from the existing network.
2) Where prices based on 'efficient'	This pricing principle envisages the possible
incremental costs would under-recover	use of Ramsey pricing ⁶ or some form of
allowed revenues, the shortfall should be made up by prices being set in a manner	coincident peak charging. However, Ramsey pricing is impracticable as there is very
that has regard to consumers' demand	limited information available on the price
responsiveness, to the extent practicable.	elasticity of demand for gas. In any event,
	distribution charges are invariably smaller
	than the charges for the energy that is
	consumed in conjunction with distribution services, so any price signals provided by
	the distribution charge are bound to be
	substantially diluted. With respect to
	coincident peak demand charging see the
	comment in the cell above.
	Powerco has tailored the G06 residential
	tariff to reflect the preferences of small
	residential customers.

⁶ Ramsey pricing requires process to be set in inverse proportion to the price elasticity of demand for the product concerned.

Principles	Compliance assessment
3) Provided that prices satisfy (1) above,	Powerco offers non-standard tariffs to
prices should be responsive to the	industrial and commercial customers to
requirements and circumstances of	address the risk of bypass and to enable
consumers in order to:	arrangements that are tailored to
a) discourage uneconomic bypass, and,	customers' needs.
b) allow negotiation to better reflect the	
economic value of services and	These tariffs are reviewed to ensure they do
enable consumers to make	not exceed stand alone cost (as a proxy for
price/quality trade-offs or non-	bypass).
standard arrangements for services.	
4) Development of prices is transparent,	Price stability and the effect of price
promotes price stability and certainty for	changes on consumers have been
consumers, and changes to prices should	important considerations when designing
have regard to the effect on consumers.	the pricing methodology and the future
	strategy. With few exceptions, price
	increases are less than 10 per cent of yearly
	distribution charges for all individual
	customers.

5.5 Non-Standard Pricing

All customers in the G30 and G40 load groups are subject to non-standard tariffs. At March 2022, this amounted to 215 customers with an estimated annual contract value of \$6.3m. Powerco offers non-standard tariffs to large commercial and industrial customers in response to customer preferences or to address bypass risk.

Non-standard tariffs may be offered to customers that satisfy the following criteria:

- 1. commercial and industrial consumers that require capacity of more than 200 scm/h with more than 10 TJ of annual consumption (G40 load group);
- 2. commercial and industrial consumers that are located near to a potential bypass pipeline (G30 load group) with consumption of less than 10 TJ per annum.

When developing non-standard tariffs, we consider:

- specific customer needs and preferences, such as load requirements, estimated usage and specific location of investment
- the most effective and efficient network solution and design to meet consumer requirements, including the capacity of the existing Powerco network to supply the customer's needs
- the cost of constructing a competitive network solution
- the investment risk for Powerco associated with constructing a dedicated network solution for the customer. This assessment would include the risk associated with the customer's business and the period that the consumer would be willing to commit to remain connected to the Powerco network. For a higher risk business, the contract price may be set with higher fixed component and the contract period may be shorter.

Powerco does not differentiate non-standard customers from standard customers if supply of gas distribution services to customers on non-standard contracts is interrupted. Basic load shedding categories are industry driven and the status of customers at the ICP level are held in the Gas Industry Company's gas registry.

5.6 Customer consultation

Powerco has not undertaken direct consultation with our gas customers about variations in these distribution prices and quality. The main reason is that changes to distribution prices do not flow through to end use customers in a transparent way – retailers determine how final charges are set and reflect incorporating other costs like gas and transmission. Powerco does conduct market research (via both focus groups and customer interviews), which helps to identify forms of pricing which may create barriers to the uptake of gas. Customers have identified increases in fixed charges as the largest barrier to the use of gas.

6 Additional services

This pricing methodology applies to the conveyance of gas. Powerco also sets prices for a range of other services such as connection of new customers, reconnection, disconnection, and decommissioning. The approach differs, depending on how the services are likely to result in future network use.

- For services aligned with continued network use, Powerco's approach is to weigh the
 cost of providing the service against future expected revenue from the site. In many
 cases, Powerco will charge a price that is less than its cost of providing the service to
 reflect the financial impact of continued use.
- For services not aligned with continued network use, such as disconnection and decommissioning, Powerco charges a price that reflects the costs that Powerco incurs to provide the service.

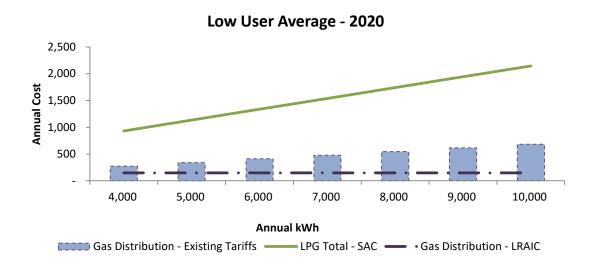
Powerco's approach to these services is summarised in Table 7.

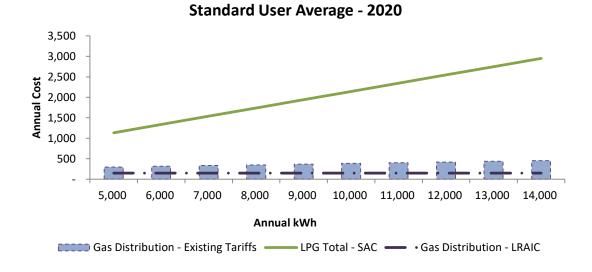
Table 7: Additional services

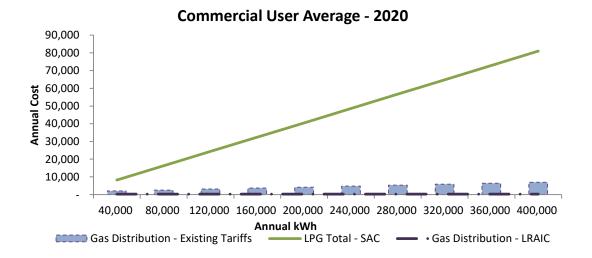
	Service type	Definition	Approach
Service will	New connection	To establish a new point of	Powerco will
provide	services	connection.	contribute to the
increased			cost.
future	Reconnection	To reinstate a connection	Powerco will
revenues	services	where an accessible point of	contribute to the
		connection exists.	cost.
	Meter upgrades	To install a larger capacity	Powerco will
		meter.	contribute to the
			cost.
Service will not	Disconnection	To disconnect the Gas	Price based on cost
provide	services	Metering System and to plug	recovery.
increased		the riser (service pipe).	
future	Decommissioning	To disconnect and to cap the	Price based on cost
revenues	services	service main at a	recovery.
		decommissioned point of	
		connection.	
	Meter	To install a smaller capacity	Price based on cost
	downgrades	meter.	recovery.

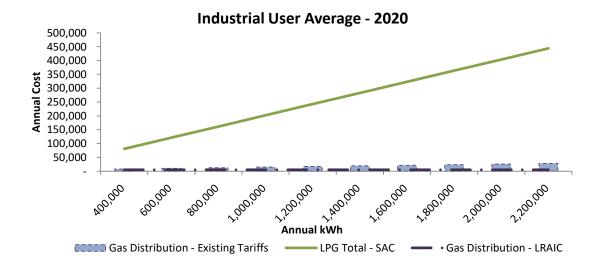
Appendix 1: Assessment of subsidy-free prices

This appendix sets out the results of a 2020 analysis of the standalone and the incremental cost of supply, against the average tariff revenue per kWh. The network charges fell within the subsidy-free range at that time and this finding is unlikely to have changed in the intervening period









Appendix 2: Prices and expected revenue

Powerco's allowable revenue for the pricing year 1 October 2022 to 30 September 2023 is \$58,964,720. Applying the pricing methodology yields the prices in Table 8. Table 9 illustrates the aggregate impact of these prices across each load group.

Table 8: FY23 distribution prices

			Distribut	ion	charges e	ffecti	ve					
			1	tober 2022			Previous charges			arges		
		Variable Variable								Fixed	Variable	
	Load group	Fixed	l (\$/day)		(\$/GJ)	(c/	kWh)		(\$/day)		(\$/GJ)	
	G06	\$	-	\$	19.8876	\$	0.07		\$	-	\$	19.1595
	G11	\$	0.6365	\$	4.7696	\$	0.02		\$	0.6132	\$	4.5950
Haveleas Bay	G12	\$	1.6567	\$	4.0901	\$	0.01		\$	1.5960	\$	3.9403
Hawkes Bay	G14	\$	4.4750	\$	3.5835	\$	0.01		\$	4.3112	\$	3.4523
	G16	\$	5.9409	\$	3.3848	\$	0.01		\$	5.7234	\$	3.2609
	G18	\$	10.3420	\$	3.2700	\$	0.01		\$	9.9634	\$	3.3030
	G06	\$	-	\$	19.8876	\$	0.07		\$	-	\$	19.1595
	G11	\$	0.6365	\$	4.7696	\$	0.02		\$	0.6132	\$	4.5950
Taranaki	G12	\$	1.6567	\$	4.0901	\$	0.01		\$	1.5960	\$	3.9403
Ididilaki	G14	\$	4.4750	\$	2.3149	\$	0.01		\$	4.3112	\$	2.1984
	G16	\$	5.9409	\$	2.2563	\$	0.01		\$	5.7234	\$	2.1428
	G18	\$	10.3420	\$	2.0531	\$	0.01		\$	9.9634	\$	1.9498
	G06	\$	-	\$	19.8876	\$	0.07		\$	-	\$	19.1595
	G11	\$	0.6365	\$	4.7696	\$	0.02		\$	0.6132	\$	4.5950
Manawatu	G12	\$	1.6567	\$	4.0901	\$	0.01		\$	1.5960	\$	3.9403
Ivialiawatu	G14	\$	4.4750	\$	3.5835	\$	0.01		\$	4.3112	\$	3.4523
	G16	\$	5.9409	\$	3.3848	\$	0.01		\$	5.7234	\$	3.2609
	G18	\$	10.3420	\$	3.2700	\$	0.01		\$	9.9634	\$	3.3030
	G06	\$	-	\$	21.7560	\$	0.08		\$	-	\$	20.9595
	G11	\$	0.6444	\$	5.4903	\$	0.02		\$	0.6208	\$	5.2893
Hutt Valley/	G12	\$	1.1093	\$	5.5030	\$	0.02		\$	1.0535	\$	5.6732
Porirua	G14	\$	6.3875	\$	5.4696	\$	0.02		\$	6.1537	\$	5.6975
	G16	\$	9.8589	\$	5.1149	\$	0.02		\$	9.4980	\$	4.9276
	G18	\$	15.1513	\$	4.9582	\$	0.02		\$	14.5967	\$	4.7767
	G06	\$	-	\$	21.7560	\$	0.08		\$	-	\$	20.9595
	G11	\$	0.6444	\$	5.4903	\$	0.02		\$	0.6208	\$	5.2893
Wellington	G12	\$	1.1093	\$	5.5030	\$	0.02		\$	1.0535	\$	5.6732
- Weilington	G14	\$	6.3875	\$	5.4696	\$	0.02		\$	6.1537	\$	5.6975
	G16	\$	9.8589	\$	5.1149	\$	0.02		\$	9.4980	\$	4.9276
	G18	\$	15.1513	\$	4.9582	\$	0.02		\$	14.5967	\$	4.7767

Table 9: Expected revenue by load group (PY34)

Load Group	Fixed Revenue	Va	ariable Revenue	Total Revenue		
G06	\$ -	\$	6,773,392	\$	6,773,392	11%
G11	\$ 20,243,364	\$	15,288,754	\$	35,532,118	60%
G12	\$ 914,788	\$	2,362,493	\$	3,277,281	6%
G14	\$ 1,180,258	\$	2,064,676	\$	3,244,933	6%
G16	\$ 752,412	\$	2,224,272	\$	2,976,684	5%
G18	\$ 227,091	\$	588,750	\$	815,841	1%
G30	\$ 453,496	\$	961,531	\$	1,415,027	2%
G40	\$ 1,583,417	\$	3,346,028	\$	4,929,444	8%
Total	\$ 25,354,826	\$	33,609,894	\$	58,964,720	100%

Directors' Certificate

Director's Certification for Disclosures at the Beginning of a Pricing Year

Pursuant to clause 2.9.2 of section 2.9 of the Gas Distribution Information Disclosure Determination 2012

We, Michael Cumming and John Loughlin

being directors of Powerco Limited certify that, having made all reasonable enquiry, to the best of our knowledge –

- a) the following attached information of Powerco Limited prepared for the purposes of 2.4.1 of the Gas
 Distribution Information Disclosure Determination 2012 in all material respects complies with that
 determination; and
- 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

Date

Director

Date

