CAPITAL CONTRIBUTIONS POLICY

# Gas transmission business

## Effective from 1 July 2020

**First Gas Limited**
July 2020

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## Glossary

| | |
|---|---|
| *Capital Contribution* | Any capital payment by a party other than Firstgas for a new transmission asset that Firstgas will own. |
| *Dedicated DP* | A *Delivery Point* that supplies a single *End-user*, directly or via a *Distribution Network.* |
| *Delivery Point* | A facility at which gas is delivered from Firstgas' transmission system. |
| *Distribution Network* | Any pipeline system with an operating pressure ≤ 20 bar g, not owned by either Firstgas or the *End-user*, which conveys gas from a *Delivery Point* to that *End-user.* |
| *End-user* | A consumer of gas. |
| *ICA* | Interconnection Agreement – an agreement setting out the terms and conditions on which a party may connect to the transmission system, e.g. at a *Delivery Point.* |
| *Input Methodologies* | The "*Gas Transmission Services Input Methodologies Determination 2012*" written by the Commerce Commission. |
| *Interconnected Party* | A party directly connected to the transmission system, with or without an *ICA.* |
| *Interconnection* | A generic term for a facility connected to the transmission system, such as a *Receipt Point* or *Delivery Point*. |
| *Interconnection Fee* | The fee calculated by Firstgas to recover our costs to design, build, commission, operate and maintain an *Interconnection*, payable by the *Interconnected Party.* |
| *Pricing Principles* | The set of pricing principles published by the Commerce Commission in December 2010, reproduced in Appendix 1. |
| *RAB* | Firstgas' regulatory asset base. |
| *Receipt Point* | A facility where gas is injected into Firstgas' transmission system. |
| *Shipper* | A user of the transmission system, being a counterparty to a *TSA* with Firstgas. |
| *TSA* | Transmission Service Agreement – an agreement enabling the *Shipper's* gas to be transported in the transmission system (on standard terms and conditions) |
| *TPA* | Transmission Pricing Agreement – an agreement between Firstgas and an *End-user* which provides security of access to the *End-user* and of transmission revenue to Firstgas, commonly in a situation where Firstgas may undertake major investment to provide transmission service. |
| *TPM* | Firstgas' Transmission Pricing Methodology, which determines the transmission fees payable by *Shippers.* |
| *WACC* | Firstgas' weighted-average cost of capital, determined by the Commerce Commission. |

# 1. Introduction

First Gas Limited (Firstgas) operates 2,500 kilometres of gas transmission pipelines. These gas infrastructure assets transport gas from Taranaki for use by major industrial gas users, electricity generators, businesses and homes, representing around 20 percent of New Zealand's primary energy supply. For further information about Firstgas, please visit our website www.firstgas.co.nz.

## 1.1. Purpose of this policy

Firstgas welcomes opportunities to invest in and grow our gas transmission system. Investment in new transmission assets to supply new *End-users* benefits existing users of the transmission system (*Shippers*), by spreading the fixed costs of the transmission business over a broader base. This puts downwards pressure on transmission fees, while mitigating the impact of existing *End-users* who may cease using gas in the future.

In some circumstances, Firstgas might not be able to invest in a new transmission asset required to supply a new or increased transmission service or maintain an existing service. In such a case, payment of a *Capital Contribution* to Firstgas is one solution that could see the asset get built. A party requiring a new or increased transmission service might also prefer to pay for part or all of any new assets required.

This document is Firstgas' Capital Contribution policy for our gas transmission business. It contains the information required under section 2.4.6 of the *Gas Transmission Disclosure Determination 2012*, which requires Firstgas to disclose the circumstances in which we may require a *Capital Contribution* and how the amount of any *Capital Contribution* will be determined. This policy will be reviewed annually, with updates available online at https://firstgas.co.nz/about-us/regulatory/transmission/.

Firstgas' gas distribution business[1] has its own policy relating to capital contributions, which is available here: https://firstgas.co.nz/wp-content/uploads/FGL-DX-Capital-Contributions-Policy-1-July-2019.pdf

## 1.2. Other policies referenced

This Capital Contributions policy also refers to the following Firstgas policies:

- Interconnection Policy, available here: https://firstgas.co.nz/wp-content/uploads/GTAC-Interconnection-Policy.pdf
- Supplementary Agreements Policy, available here: https://firstgas.co.nz/wp-content/uploads/GTAC-Supplementary-Agreements-Policy.pdf

## 1.3. Further information

For further information regarding this policy, please contact:

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[1] Firstgas' distribution business services more than 63,000 customers with natural gas, via Distribution Networks comprising 4,700 km of pipelines in the North Island of New Zealand. The Firstgas Group also owns energy infrastructure assets across New Zealand through our affiliate Gas Services NZ Limited (GSNZ), a separate business with common shareholders which owns the Ahuroa gas storage facility and the Rockgas LPG business.

## 2. What a Capital Contribution represents

A *Capital Contribution* is an upfront, one-off payment for part or all of a new transmission asset. In this context, “new” includes:

- An asset that does not currently exist, but which is required to provide a transmission service (or an increased service)
- An existing asset that requires a major upgrade, e.g. to maintain or increase existing capacity by replacing obsolete or under-sized equipment
- An existing asset that needs to be relocated.

Examples of such assets include:

- A new *Receipt Point*
- A new *Delivery Point* (to supply a new *End-user* or *Distribution Network*)
- An upgrade of an existing *Receipt Point* or *Delivery Point* (either to maintain or increase capacity)
- New compression equipment or a stretch of new pipeline to provide increased transmission capacity (which may be remote from the *End-user*)
- A stretch of pipeline that needs to be replaced to enable unrelated infrastructure (e.g. a new road) to be built.

A *Capital Contribution* will be paid by a direct user or beneficiary of the new asset. Such a party may be an *End-user*, an *Interconnected Party* or a *Shipper*, or have more than one of these roles.

# 3. When Firstgas may require a Capital Contribution

In general, Firstgas welcomes opportunities to invest in our gas transmission system since that increases our asset base, broadens our customer base, and ensures continued revenue to recover the fixed costs of the system.

Where new investment is required to provide a service but Firstgas considers that investment requires additional upfront funding, we may ask the party who needs the service to pay a *Capital Contribution*. Some scenarios in which we might require a *Capital Contribution* are set out below. More than one scenario may apply in any given situation. We may also require a *Capital Contribution* even where the likely future revenue stream arising from that capex appears to be sufficient to recover the cost.

## 3.1. Sub-economic investment

Where a new asset is required to increase gas throughput, Firstgas will estimate the incremental revenue from transmission charges. This analysis could include expected revenue growth over time, e.g. from projected growth in *End-user* connections to a *Distribution Network*.

If the expected incremental revenue is insufficient to support the costs of the investment, transmission fees might have to rise to support that investment (see further discussion on pricing in **Appendix 1**), which could amount to a subsidy from other users of the transmission system.

To avoid any cross-subsidies and maintain compliance with the *Pricing Principles*, Firstgas may require payment of a *Capital Contribution*.

## 3.2. Risk profile

Firstgas may decide that the risk of investing in a new asset to serve a single *End-user* is excessive if there is a significant risk of that asset becoming stranded should that *End-user* fail, or cease using gas. A *Capital Contribution* could mitigate that risk and enable the asset to be built by reducing the upfront investment cost and providing a firm commitment from the *End-user* to the project.

## 3.3. Shorter economic life

The *Input Methodologies* stipulate the physical lives of gas transmission assets:

- Pipelines (including valves): 80 years
- Stations (including Interconnections): 35 years

Where a new asset is dedicated to a single *End-user*, its expected economic life could be less than the regulated physical life. If so, to avoid imposing extra costs on other users of the transmission system in future, Firstgas may require a *Capital Contribution* to ensure that our investment is fully recovered during the asset's expected economic life.

## 3.4. Approved capex already allocated

Firstgas seeks approval in advance for planned capital expenditure (see **Appendix 1**). Within a five-year regulatory control period, unforeseen capital projects (e.g. connection of a major new *End-user*) may emerge. If our approved capital expenditure for that period is fully allocated, we may nevertheless undertake the additional investment and accept that cost recovery will not commence until the following regulatory period. However, if delaying cost recovery is not considered appropriate, Firstgas may request a *Capital Contribution*.

### 3.5. Replacement of an existing asset

Occasionally an existing Firstgas asset is physically in the way of another party's proposed infrastructure. Most commonly this occurs where a state highway upgrade or new road would impinge on a stretch of pipeline located in what was, at the time it was built, private land or road reserve.

It is almost never practical to move an existing pipeline. What generally happens is:

- We install a new stretch of pipeline, out of the way of the other party's infrastructure, and tie it into the existing pipeline upstream and downstream of the affected section
- We then isolate the original stretch of pipeline and makes it safe
- Then, to the extent necessary, the old stretch of pipeline is removed (usually by the other party).

Such work usually involves a "like for like" replacement of assets, albeit in a slightly different location. Since we would not undertake this work but for the other party's development, we normally require the other party to pay 100% of the actual cost. We treat such a payment as a capital contribution.

## 4. Customer choice

For Firstgas to provide a new *Interconnection* or a new (or increased) transmission service, new assets will generally need to be constructed. The party requiring the *Interconnection* or transmission service may have alternatives to Firstgas' normal means of recovering the cost of the new asset(s) required.

### 4.1. Offset Interconnection Fee

As set out in Firstgas' *Interconnection Policy*[2], a party may choose to pay a *Capital Contribution* even where Firstgas does not require one. This would reduce the *Interconnection Fee* otherwise payable. An *Interconnected Party* with a lower cost of capital than Firstgas might choose this option.

### 4.2. Build and transfer

An *Interconnected Party* may (with Firstgas' agreement) elect to build a new asset then transfer it to Firstgas to own and operate. Firstgas could agree to pay an amount for the asset that is anywhere between zero and the asset's actual cost.

This is unlikely to be practical where the asset in question is a significant length of pipeline but may be feasible for an *Interconnection*.

An *Interconnected Party* might want to build and transfer an asset for several different reasons. Financially speaking:

- Any amount Firstgas pays for the asset is likely to be recovered from the *Interconnected Party* via an *Interconnection Fee*
- Only the amount Firstgas pays for the asset will be included in our *RAB*.

[2] Sections 2.6.1 and 2.6.2 of Firstgas' Interconnection Policy.

# 5. Amount of a Capital Contribution

Firstgas obtains most of its allowable revenue via transmission fees, paid by Shippers. As discussed in **Appendix 1**, our *RAB* is a major driver of transmission fees and all new capital investment increases our *RAB*. In some cases, including the full cost of a new investment in the *RAB* could increase transmission fees (all other things being equal and taking any increased throughput into account). To avoid that outcome, where the investment is required to provide a particular service, Firstgas may charge the party requiring the service a *Capital Contribution*.

Firstgas will calculate the amount of a *Capital Contribution* to, where practicable, avoid imposing additional costs on users of the transmission system with no connection to the relevant investment.

## 5.1. Selection of investment option

When it comes to transmission assets such as pipelines, economies of scale can arise. For example, say a new pipeline (or looping of an existing pipeline) is required to supply additional transmission services:

- A 100 mm pipeline may be just enough for the immediate capacity requirement
- A 150 mm pipeline would provide significant spare capacity for what could be a small extra cost.

If there is a reasonable prospect that future growth would require the 150 mm pipeline it would be prudent to install it, since the cost of coming back later to lay a further pipeline would be much greater.

Similar considerations apply to the cost of a new *Interconnection*.

In all cases, Firstgas will determine the most appropriate type of asset and investment it will build to provide the service required.

## 5.2. Maximum Capital Contribution

A *Capital Contribution* is payable before an asset is built and is therefore likely to be based on Firstgas' estimate of the cost. **Appendix 2** summarises the cost elements which may be included in the estimate.

Depending on the circumstances, Firstgas may be willing to cap the cost estimate and absorb any cost in excess of the cap. Should the actual cost of the asset turn out to be less than the *Capital Contribution*, Firstgas will refund the difference. Firstgas aims never to charge a *Capital Contribution* greater than the actual capital cost of the new asset.

## 5.3. Notional asset

If Firstgas requires a *Capital Contribution* to provide a service, the maximum amount charged will be the cost of the least-cost asset (of the appropriate technical standard, determined by Firstgas) required to provide that service.

As discussed above, Firstgas may choose to build a different (larger capacity) asset, in which case the *Capital Contribution* will be based on the estimated cost of a notional asset (determined in accordance with **Appendix 2**). Should the cost of the actual asset turn out to be less than the *Capital Contribution*, Firstgas will refund the difference.

## 6. Impact of a Capital Contribution

As indicated in **Appendix 1**, all Firstgas' capital investment adds to our *RAB*.

The *Input Methodologies* stipulate that a *Capital Contribution* is deducted from the value of a new asset to be added to the *RAB*. Therefore, a *Capital Contribution* reduces what would otherwise be Firstgas' regulated capital expenditure.

Accordingly, a Capital Contribution:

- Is not regulated income for Firstgas
- Does not contribute to capital-related costs to be recovered from users of the transmission system.

### 6.1. No change of ownership

Payment of a *Capital Contribution* does not give the party who pays it any ownership of the asset in question. For example, an *Interconnected Party* pays for a new *Delivery Point*, will not own that *Delivery Point* (or part of it) even where it is the sole user of that *Delivery Point*.

### 6.2. Transmission capacity

A major *End-user* may not be able to take gas, or increased quantities of gas, without a major investment in additional pipeline capacity. Such investment could relate to assets remote from the *End-user's* site, either on the upstream or downstream pipeline.

Firstgas may choose to roll the cost of such an investment into our *RAB* and recover the cost via transmission fees payable by *Shippers*.

Alternately, Firstgas may require the *End-user* to pay a *Capital Contribution*. That will not of itself guarantee the availability of transmission capacity to the *End-user* for any future period. The *End-user* can then enter into a *TPA* with Firstgas to ensure they are able to access the transmission capacity[3] relating to the investment.

Where the *Capital Contribution* does not cover the full cost of the new asset, the *TPA* may require the *End-user* to underwrite the investment made by Firstgas.

[3] Under a TPA, transmission capacity is made available to the Shipper(s) supplying gas to the End-user, via a "Supplementary Agreement" (or more than one). The Shipper(s) pay the transmission fees as set out in the TPA.

# APPENDIX 1: Revenue and pricing

## Allowable revenue

Firstgas' transmission business is regulated under Part 4 of the Commerce Act. The Commerce Commission determines Firstgas' allowable transmission revenue, for 5-year regulatory periods, in advance.

## Revenue components

In very simplified terms, Firstgas' allowable revenue comprises:

> (RAB × WACC) + depreciation + approved operating expenditure + pass-through and recoverable costs + an allowance for tax

As part of our annual Asset Management Plan, Firstgas updates its future capital expenditure (capex) forecasts for the next 10 years. These forecasts, together with Firstgas' disclosures of actual expenditure, feed into the Commerce Commission's reset of our five-yearly price-quality path. Approved capex is incorporated into the Commission's calculation of Firstgas' allowable revenue for the regulatory period.

Firstgas may choose to spend more than the approved capex for a regulatory period, but such capex is not added to our *RAB* until the start of the next regulatory period.

Firstgas' TPM aims to set prices which come as close as practicable to recovering the allowable revenue, without significant under or over-recovery that would have to be washed-up in a later year.

## Transmission fees

The bulk of Firstgas' transmission assets, e.g. high-pressure transmission pipelines, are used by multiple Shippers (i.e. "shared assets"). By far the largest part of our allowable revenue is obtained from Shippers using shared assets, via:

- Standard transmission fees (which generate most of our transmission revenue), and
- Non-standard transmission fees.

While specific transmission fees are not regulated, the content of our TPM is prescribed under information disclosure regulations. A regulatory requirement is that the TPM should describe how transmission fees align with the *Pricing Principles* (see below), or explain any deviations from the *Pricing Principles*.

The cost of new capex relating to shared assets is generally rolled-in to standard transmission fees payable by the Shippers who use those assets. If the expenditure clearly relates to a particular *End-user's* gas demand, and rolling-in the costs of servicing that *End-user* would increase transmission fees costs for unrelated Shippers, Firstgas may limit the roll-in of costs so that current standard transmission fees don't increase. The remaining costs of servicing the *End-user* will then be recovered in another way, e.g. by:

- a *Capital Contribution*
- non-standard transmission fees (probably requiring a *TPA*), or
- An Interconnection Fee (where relevant).

## Interconnection fees

Some assets are used by a single *Interconnected Party* or *End-user*, a *Dedicated DP* being the most common example.

Where a new *Interconnection* is required, Firstgas' preference is that the party requiring that investment should pay for it, via an *Interconnection Fee*. This ensures that, while the actual capital cost of the *Interconnection* will go into our *RAB* in the normal way, its cost will be recovered from the *Interconnected Party* and not from other users of the transmission system. This is most consistent with the *Pricing Principles*.

Firstgas' revenue from *Interconnection Fees* forms part of Firstgas' allowable revenue determined by the Commerce Commission.

## Capital Contributions

Since a *Capital Contribution* is not regulated income for Firstgas, there is no direct relationship between a *Capital Contribution* and Firstgas' transmission fees or *Interconnection Fees*. However, since it substitutes for capital expenditure that would otherwise (sooner or later) have contributed to Firstgas' allowable revenue, a *Capital Contribution* will have a downward influence on transmission fees or an *Interconnection Fee*, as the case may be.

## Pricing Principles

In December 2010, the Commerce Commission published its *Pricing* Principles, set out below. [4]

**Pricing Principles**

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.*

[4] Under the proposed Gas Transmission Access Code, if transmission capacity becomes scarce the value of existing capacity (and need for further investment) may be signalled via congestion management charges and priority rights.

## APPENDIX 2: Asset costs

### Asset types

New assets required to provide a service may comprise:

- Pipelines (including compression facilities)
- An *Interconnection* (*Receipt Point* or *Delivery Point*).

Providing a new service may require assets of both these types.

### Cost elements

The cost of an asset may include costs arising from the following:

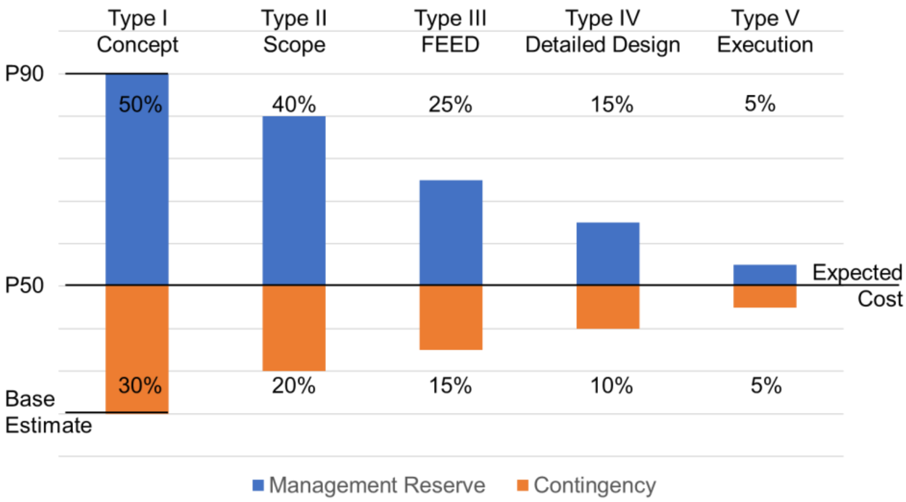
- Time spent by Firstgas staff
- Any charges paid by Firstgas to its agents, advisors, consultants, contractors or any other parties
- Investigatory work (including of the feasibility of connecting to a pipeline in a particular location)
- Asset and equipment selection
- Pipeline route selection
- The cost of a FEED[5]
- Any other design costs, drafting and production of required project documentation
- Pipeline certification
- Legal work (including negotiation of contracts with the party who requested the service)
- Obtaining access to land (including easements) and any statutory consents
- Purchase of land (e.g. for a new *Interconnection*), including subdivision costs
- Materials
- Tendering
- Removal of existing assets (including, if applicable, maintaining services to existing customers)
- Installation, including for civil works, mechanical, instrument and electrical
- Project management
- Site supervision
- Interest (cost of money) during the period up to commissioning of the asset (not applicable to the amount of a *Capital Contribution*)
- Commissioning.

### Standard of estimate

A *Capital Contribution* will generally be based on a P90 estimate of costs. Firstgas will use all reasonable diligence and skill in estimating the cost of a new asset – using its own staff and contractors as required. However, any estimate will have a level of uncertainty, reflected in the sums included to allow for unknowns. This uncertainty can be reduced by more extensive engineering or investigatory work, at additional cost, as shown in the diagram below for various estimate types.

Firstgas will consult the party requesting a service to determine the appropriate uncertainty level. For larger and more expensive assets a Type III estimate (requiring a FEED) will be required.

[5] Front-end engineering design.




Notes:

- P50 and P90 represent the probability that the final cost will not exceed the estimate. For example, for a Type I estimate the P90 cost (only a 10% probability of exceeding this cost) is the expected cost plus 50%
- The contingency is the amount to bring the Base Estimate to the Expected Cost (P50).

### Cost reimbursement

Before undertaking any work, Firstgas may require an agreement with the party requesting a service which requires it to reimburse Firstgas' costs should the party elect not to take up the service.

## APPENDIX 3: Alignment with regulatory requirements

The following sets out how this policy aligns with the requirements set out in section 2.4.6 of the *Gas Transmission Information Disclosure Determination 2012.*

| Information Disclosure Determination clause | Section of Firstgas policy |
|---|---|
| 2.4.6 Every **GTB** must at all times **publicly disclose**- | |
| 1) A description of its current policy or methodology for determining **capital contributions**, including- | |
| (a) the circumstances (or how to determine the circumstances) under which the **GTB** may require a **capital contribution**; | Section 3, page 6 |
| (b) how the amount payable of any **capital contribution** is determined. Disclosure must include a description of how the costs of any assets (if applicable), including any **shared assets** and any **sole use assets** that are included in the amount of the **capital contribution**, are calculated; | Section 5, page 9<br>Appendix 2 |
| (c) the extent to which any policy or methodology applied is consistent with the relevant **pricing principles**; | Section 3.1, page 6<br>Appendix 1 |
| 2) A statement of whether a **consumer** or any other **person** can use an independent contractor to undertake some or all of the work covered by the **capital contribution** sought by the **GTB**; | Section 4.2, page 8 |
| 3) If the **GTB** has a standard schedule of **capital contributions** charges, the current version of that standard schedule. | Firstgas does not have a schedule of *Capital Contributions* for its transmission business. Firstgas will determine a *Capital Contribution* in accordance with this policy based on the specific circumstances of the proposed investment. |