



**Policy for determining capital
contributions on Vector's gas
transmission system**

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Pursuant to:
Gas Transmission Information Disclosure Determination 2012

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2 Introduction

- 2.1 Vector provides gas transmission services to shippers and consumers via its gas transmission system spanning the North Island. Vector generally recovers the cost of providing gas transmission services to existing shippers and consumers through transmission prices, including published standard prices and (in a limited number of cases) non-standard prices.
- 2.2 A key feature of a gas transmission system is that many of the assets used to convey gas are used by multiple shippers and many consumers. The way the system has been built up over time is something that Vector now has limited ability to change, however Vector is able to determine present and future investment decisions in the gas transmission system. Vector's transmission prices are designed, in line with pricing principles published by the Commerce Commission, to efficiently recover the cost of the existing gas transmission system and send efficient signals to users when new investments are required.
- 2.3 Vector's transmission prices are set to recover the costs of owning and operating the gas transmission system as it currently exists. The most significant cost element reflected in Vector's transmission prices relates to physical gas transmission assets, for example pipes, stations and compressors. These assets are about half way through their useful life, meaning their value is also about half that of equivalent new assets. This means that Vector's transmission prices are lower than they would be if the assets were new or, in other words, the transmission prices may be insufficient to recover the full cost of a new investment in the system.
- 2.4 In simple terms, to send the right signals to shippers and consumers to ensure new investments in the system are as efficient as possible, those shippers and consumers need to be charged for the full or proportionate cost of those assets (new and existing) they will be using. However, Vector's published standard prices are only sufficient to recover a portion of that cost (particularly in relation to any new assets). Vector may use capital contributions to fill the gap.
- 2.5 Capital contributions may take the form of an upfront one-off payment with respect to a new connection to the gas transmission system where augmentation of the system is required. This document sets out Vector's policy for determining such capital contributions.
- 2.6 The Input Methodologies require that capital contributions received are netted off the value of new assets added to the RAB. This means that new assets only contribute to future revenue requirements to the extent they have not already been paid for via a capital contribution.

3 Objective of capital contribution policy

- 3.1 Vector's capital contribution policy has been developed with the following in mind:

- (a) The addition of a new connection or new connection should not make existing consumers worse off either now or in the future.
- (b) Ideally, the addition of a new connection should benefit existing consumers as the new connection should contribute to shared costs and assets.
- (c) The cost of providing new connection services should be determined using a “but for” approach that identifies the costs attributable to the new connection.
- (d) Capital contributions should incentivise improved utilisation of the gas transmission system and not incentivise inefficient construction (for example: over-sized system assets).

4 Circumstances for requiring a capital contribution

- 4.1 Vector may require a connection applicant to pay a capital contribution when any augmentation of the gas transmission system is required to provide new connection services.

5 Methodology for determining the amount of a capital contribution

- 5.1 Vector has developed its capital contribution policy in order to meet the objectives outlined in section 3. Vector has achieved this by:

- (a) Adopting an approach to determine individual capital contributions so that the revenue from new connections is sufficient on average to recover the costs of new connections. This avoids cross subsidies between new and existing connections;
- (b) Developing approaches to identify the costs relevant to the new connection and include these costs in the determination of capital contributions; and
- (c) Ensuring connection applicants have financial incentives (through capital contributions) to assess the technical requirements of their new connection carefully so that efficiently sized connection assets are provided.

- 5.2 The amount of any capital contribution is the difference between the incremental revenue and incremental cost of the new connection service subject to maximum capital contribution limits. Capital contributions are determined in accordance with an incremental profitability assessment described in Equation 1.

Equation 1: Capital contribution formula

$$CC = IC - IR$$

where:

CC capital contribution (in dollars) where $CC \leq MAX$;

IC incremental cost are the shipper or consumer specific costs arising from the new connection service determined in accordance with section 6;

- IR incremental revenue is the revenue expected from the new connection service determined in accordance with section 9; and
- MAX is the maximum capital contribution determined in accordance with section 8.

6 Determining incremental cost

- 6.1 Incremental costs are the costs incurred by Vector from augmenting the gas transmission system which Vector would not otherwise face but for the new connection. Incremental costs may relate to:
- (a) assets for use only by the connection applicant, consumer or shipper, and the associated costs (sole use costs); or
 - (b) wider system assets used by the connection applicant as well as other shippers or consumers, and the associated costs (shared costs).
- 6.2 Sole use costs relating to the new connection may include but are not limited to the following:
- (a) Design and certification costs;
 - (b) Any costs for conducting a tender process for the connection applicant;
 - (c) The costs of procuring materials and services, building, constructing and commissioning assets;
 - (d) Any legal or administrative costs, including procuring appropriate easements, statutory consents and negotiating suitable contractual arrangements;
 - (e) The estimated (or actual) maintenance and operating costs associated with (c) above; and
 - (f) Augmentation of existing assets to provide the new connection.
- 6.3 Where incremental cost relates to sole use costs, these are attributed directly to the new connection in the incremental profitability assessment referred to in 5.2.
- 6.4 Shared costs relating to the new connection may include but are not limited to the portion of costs applicable to the new connection for the following:
- (a) Design and certification costs;
 - (b) Any costs for conducting a tender process for the connection applicant;
 - (c) The costs of procuring materials and services, building, constructing and commissioning assets;
 - (d) Any legal or administrative costs, including procuring appropriate easements, statutory consents and negotiating suitable contractual arrangements;
 - (e) The estimated (or actual) maintenance and operating costs associated with (c) above;
 - (f) Augmentation of existing assets to provide the new connection; and

(g) The financial cost of bringing forward planned shared gas transmission system investment in order to facilitate the new connection.

6.5 Where the incremental cost relates to shared costs, Vector determines the incremental cost with reference to:

- (a) changes in the timing of capital expenditure compared with its asset management plan on a 'but for the new connection' basis; and/or
- (b) the connection applicant's allocated share of the actual capital expenditure in shared assets required to provide new connection services.

6.6 Where a new connection requires the removal of assets with a useful remaining life and Vector determines such assets can be redeployed elsewhere on the gas transmission system, Vector will include an appropriate consideration in its determination of the incremental cost. This will generally be a credit equal to the replacement cost of the recovered asset.

6.7 The incremental cost will be calculated as the net present value of sole use and shared costs (described above) over the life of the investment using the weighted average cost of capital as the discount rate.

7 Extent of incremental cost and non consumer related capacity augmentation

7.1 Vector may elect to augment the gas transmission system to a greater extent than required by the new connection. This may arise due to the economies of scale of installing new gas transmission system infrastructure and the provision of spare capacity to support further load growth in the future.

7.2 Subject to 7.4 the incremental cost will only include those costs necessary to provide the gas transmission services requested by the connection applicant at the least cost and technically acceptable standard (as determined by Vector). Incremental cost will not include the costs referred to in 7.1.

7.3 If the connection applicant requests augmentation of a higher standard or of a more costly nature than Vector considers necessary, then the incremental cost may include the greater costs (if any) that may result.

7.4 Where a connection applicant's requirements fall between the capacity of two standard size system elements (for example pipe sizes) capable of meeting such requirements and Vector installs the larger of the two, this does not constitute Vector electing to perform the work to a higher standard or capacity.

8 Maximum capital contribution

8.1 Vector incorporates a maximum capital contribution in its incremental profitability assessment. This ensures that the capital contribution will be no greater than the incremental cost of a new connection. The maximum capital contribution is equal to the incremental cost.

9 Incremental revenues under the incremental profitability assessment

- 9.1 Incremental revenue is forecast by Vector based on the expected life of the new connection assets. Vector's revenue forecasts are based on Vector's transmission prices, future price adjustments including CPI, regulatory resets and any other price restructuring and the estimated consumption for the consumer.
- 9.2 Vector will determine the consumption and capacity requirements for a proposed new connection having regard to the consumption and capacity requirements both of similar consumers currently supplied on the gas transmission system as well as information provided by the Shipper in relation to the new connection. Vector will also take into account whether the new connection has different technical or commercial requirements.
- 9.3 The incremental revenue will be calculated as the net present value of the expected revenue over the life of the investment using the weighted average cost of capital as the discount rate.

10 Capital contributions for non-standard new connections

- 10.1 The incremental profitability assessment determines capital contributions based on expected future revenues. For non-standard new connections future revenues are not restricted to Vector's standard published prices as Vector is able to determine bespoke non-standard prices for each new non-standard connection.
- 10.2 The capital contribution for each non-standard consumer is circumstance specific and, depending on the negotiated non-standard price agreed with the consumer, the contribution may be nil.
- 10.3 Vector's determines whether to offer a consumer non-standard pricing on a case by case basis subject to the Supplementary Agreements Policy.

11 Adherence to pricing principles

- 11.1 Vector's capital contribution policy is consistent with the pricing principles published by the Commerce Commission in December 2010. These are included in Appendix 1. In summary the pricing principles require Vector to:
 - (a) set prices within the subsidy free range (greater than incremental cost and less than stand alone cost);
 - (b) have regard to the level of available service capacity;
 - (c) signal the impact of additional usage on future investment costs; and
 - (d) have regard to consumers' demand responsiveness.
- 11.2 The incremental profitability assessment coupled with a cap on the maximum capital contribution ensures that any capital contribution falls within the subsidy free range.

11.3 The attribution of incremental cost in relation to the capacity requirements of a new connection ensures that the capital contribution will have regard to the available service capacity.

11.4 Vector's transmission prices recover the costs of the existing gas transmission system. Vector's incremental profitability assessment means that capital contributions recover incremental costs. These two mechanisms combined ensure that allowed revenues are fully recovered. As a consequence Vector has not considered revenue under-recoveries in the development of this contribution policy.

12 Use of independent contractors

12.1 In some circumstances the connection applicant may undertake some of the work that would otherwise be covered by the capital contribution. Vector may allow the connection applicant, shippers or consumers to undertake preparatory work using appropriately trained and qualified personnel familiar with Vector's standards and requirements, prior to Vector installing the new gas infrastructure. Depending on the circumstances, Vector may allow the connection applicant, shippers or consumers to install the assets also.

12.2 If the connection applicant, shippers or consumers perform some of the work or installs new assets that Vector will then own, then the costs will be excluded from the costs used to determine the capital contribution. Likewise they will be excluded from the RAB and hence the determination of transmission prices.

13 Definitions

Augmentation means the expansion, upgrade, increase, addition to, removal, relocation or enhancement of any part of the gas transmission system which would not otherwise be required but for the new connection service. Augmentation may include the allocation of extant spare capacity (i.e. prior augmentation) to a new connection service.

Capital contribution means the money or monetary value or other consideration charged to or received from a connection applicant, shipper, consumer or other party to fund augmentation that is in addition to, and separate from any ongoing revenue obtained through transmission prices.

Connection applicant means a local authority and any association of persons whether incorporated or not applying for a new connection service and may include an interconnected party, shipper or consumer.

Consumer means a local authority and any association of persons whether incorporated or not who is supplied with gas from the gas transmission system and includes shippers.

Gas transmission system means the Vector owned assets that are used or intended to be used by Vector to provide gas transmission services.

Gas transmission services means the provision of gas transmission services as defined in the Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010 and provided by Vector.

Incremental cost (IC) means the costs determined in accordance with section 6.

New connection means a new point on the gas transmission system or an existing point, either of which requires augmentation in order for Vector to provide gas transmission services to a consumer or connection applicant.

New connection service means the provision of gas transmission services on the gas transmission system to a new connection.

RAB means Vector's regulatory asset base, in respect of the gas transmission system.

Shipper means a person named as such in a transmission services agreement (where such agreement is defined in the Vector Transmission Code), including its successors and permitted assigns.

Transmission price means Vector's standard published prices and non-standard prices.

Vector means Vector Limited and its related companies (as defined in the Companies Act 1993).

Weighted average cost of capital (WACC) means the Vanilla WACC (75th Percentile) of 7.44% determined by the Commerce Commission in their Cost of capital determination for default price-quality paths for suppliers of gas distribution and gas transmission services, and customised price-quality path proposals made by Vector Limited and GasNet Limited [2012] NZCC 38, on 20 December 2012, applying to Vector's gas transmission system for the first DPP regulatory period.

Appendix 1 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.