

Transmission pass through methodology

Effective 1 April 2009



1.1 Overall Principles

This document describes the methodology Vector uses to allocate Transmission Costs to the Customer. The method by which Transmission Costs are incurred by Vector (as transmission counterparty) is determined largely by parties other than Vector. Vector may change its allocation methodology from time to time to account for changes in Transmission Costs or the methodology used to determine Transmission Costs. When making changes to the allocation methodology Vector will attempt to align the allocation methodology with the way costs are incurred as far as is reasonable considering the practicalities of allocating these to multiple parties.

Transmission pass through is used so that large customers are allocated costs on a basis that reflects their individual circumstances and usage, rather than bundling the transmission charges into line charges as for mass market type customers.

1.2 Definitions

Capacity Measurement Period means, for a particular Pricing Year, the 12 month period from September 1 to August 31 immediately prior to the start of the Pricing Year.

Customer means a party with whom Vector has a connection contract allocating Transmission Costs on a transmission pass through basis.

Customer Demand means the average of the Customer's metered half hourly demand, adjusted for losses (measured in kW), that occur at the same time as the Regional Demand. Where meaningful metered demand information is not available, for example in regards to new Customers or Customers upgrading their load and capacity, then Customer Demand will be estimated by Vector based on the Customer's nominated demand.

Grid Exit Point (GXP) means the point on the electricity transmission system at which the distribution network is connected or at which any embedded generators are deemed to be connected. All quantities including demand and volume referred to at the GXP have the effect of embedded generation removed. For the avoidance of doubt the demand and volume from an embedded generator is added to the GXP metered data to measure what would have been taken from the transmission system as if the embedded generator did not exist.

GXP Demand means the average of the GXP metered half hourly demands (measured in kW and adjusted for embedded generation) that occur at the same time as the Regional Demands.

Lower North Island means the North Island area excluding Upper North Island.

Network means the electricity distribution network in each area that Vector supplies distribution services, as defined by the following table:

Network	Brand	GXP
Auckland	Vector	Hepburn Mangere Otahuhu Pakuranga Penrose Roskill Takanini Wiri
Lichfield	Vector	Lichfield
Northern	Vector	Albany Henderson Hepburn Silverdale Wellsford

Pricing Year means the 12 month period from April 1 to March 31, each year.

Regional Demands means:

- For the Upper North Island: the 12 highest half hourly regional demands (measured in kW) which occur during the Capacity Measurement Period.
- For the Lower North Island: the 100 highest half hourly regional demands (measured in kW) which occur during the Capacity Measurement Period.

Transmission Costs means the charges payable to a Transmission Service Provider or to any other party in respect of the transmission of electricity, the avoided transmission of electricity and the costs incurred by Vector as a result of those charges.

Transmission Service Provider means Transpower or any owner or operator of any transmission system or embedded generator.

Transpower means Transpower New Zealand Limited and any successors or permitted assigns.

Upper North Island means the geographical area north of Huntly, including Glenbrook, Takanini, Auckland and the Northern Isthmus, as defined in Transpower's transmission pricing methodology.

Vector means Vector Limited and any successors or permitted assignees.

1.3 Allocation methodology

The Transmission Costs that Vector currently incurs consist of; connection charges, new investment charges and interconnection charges. Current components and their allocation methodologies are described below;

Interconnection charges are charges for the use of the national grid which connects each GXP together. The interconnection rate is notified by Transpower and is fixed at the beginning of each Pricing Year, based on the Regional Demands. Interconnection charges are allocated to Customers on a monthly basis based on Customer Demand. The calculation is:

Customer Demand * interconnection rate/12

Connection charges are charges for the connection of each GXP to the national grid, set by Transpower at the beginning of each Pricing Year. The connection charges are generally fixed for the Pricing Year. Connection charges are allocated to Customers on a monthly basis based on the Customer's share of GXP Demand. The calculation is:

Customer Demand / GXP Demand * monthly GXP connection charge

New investment charges (NIC) are based on a fixed charge for new connection assets which are typically set by Transpower on 1 July each year, but may change if investment contracts are entered into during the year. Other miscellaneous charges received from Transpower are also included with the NIC total, for example SCADA monitoring fees. NIC are allocated to Customers on a monthly basis based on the Customer's share of GXP Demand. The calculation is:

Customer Demand / GXP Demand * monthly GXP NIC

Where a portion of a Transmission Cost relates to a particular Customer, wherever possible these will be allocated directly to that Customer and excluded from the Transmission Costs allocated to other Customers connected at the same GXP.

1.4 Payment of Transmission costs

The Transmission Costs allocated to the Customer will be invoiced to the Customer each month in arrears. The payment terms of each invoice will be determined in accordance with the Customer's connection contract with Vector.

1.5 Transpower's transmission pricing methodology

The methodology used by Transpower to determine its transmission charges is outlined in the pricing methodology document - "Transmission Pricing Methodology". This can be found on the Electricity Commission's website at;

<http://www.electricitycommission.govt.nz/pdfs/opdev/transmis/tpm/Appendix2-TPM-final.pdf>