

# Northern electricity distribution network



## Price schedule for transformer consumers

Applicable from 1 April 2016

This schedule describes Vector’s standard prices for providing electricity distribution services in respect of transformer consumers on the Northern network. Vector offers two price categories for transformer consumers on the Northern network depending on the consumer’s metering type.

### Transformer consumer definitions

A transformer consumer is where: the consumer is not a residential consumer (as defined in Vector’s price schedule for residential consumers); the consumer’s metered point of connection has a capacity greater than 69KVA; and the consumer’s low voltage (400V three phase or 230V single phase) network is supplied directly from transformers owned by Vector.

The network that consumers are supplied from is determined by Vector from time to time based on the physical location of the point of connection of the consumer’s electrical installation. The approximate area covered by the Northern electricity distribution network is shown in green on the following map.



### Distribution prices and pass-through and recoverable cost prices

In the following pricing tables the “Delivery Price” column represents the Tariff Rate for Distribution Services and is the sum of the following components:

- “Dist. Price” is an indicative value for the distribution component of prices. These relate to Vector’s costs of owning and operating our network; and
- “Pass. Price” is an indicative value for the pass-through and recoverable component of prices which relates to the costs from third parties including but not limited to: Council rates, Electricity Authority, Commerce Act and Electricity and Gas Complaints Commissioner levies, and transmission charges from Transpower.

### Transformer price category WTXN

The WTXN price category is available to transformer consumers where the consumer’s metered point of connection has a capacity less than or equal to 345kVA.

Price category WTXN					
Description	Code	Units	Dist. Price	Pass. Price	Delivery Price
Fixed	WTXN-FIXD	\$/day	4.9500	-	4.9500
Volume	WTXN-24UC	\$/kWh	0.0193	0.0204	0.0397
Capacity	WTXN-CAPY	\$/kVA/day	0.0292	-	0.0292
Power factor	WTXN-PWRF	\$/kVAr/day	0.2917	-	0.2917
Volume, injection	WTXN-INJT	\$/kWh	-	-	-

- The fixed price (WTXN-FIXD) applies to the number of days each WTXN transformer consumer’s point of connection is energised.
- The volume price (WTXN-24UC) applies to all electricity distributed to each WTXN transformer consumer.
- The capacity price (WTXN-CAPY) applies to the capacity of each WTXN transformer consumer connected to Vector’s network.
- The power factor price (WTXN-PWRF) is a daily price applied to the power factor amount.
- The volume injection price (WTXN-INJT) applies to all electricity injected into the network by each WTXN transformer consumer.

## Transformer price category WTXH

The WTXH price category is available to transformer consumers with metering capable of recording half hourly data.

Price category WTXH					
Description	Code	Units	Dist. Price	Pass. Price	Delivery Price
Fixed	WTXH-FIXD	\$/day	9.3400	-	9.3400
Volume	WTXH-24UC	\$/kWh	0.0056	-	0.0056
Capacity	WTXH-CAPY	\$/kVA/day	0.0292	-	0.0292
Demand	WTXH-DAMD	\$/kVA/day	0.0283	0.2480	0.2763
Power factor	WTXH-PWRF	\$/kVAr/day	0.2917	-	0.2917
Volume, injection	WTXH-INJT	\$/kWh	-	-	-

- The fixed price (WTXH-FIXD) applies to the number of days each WTXH transformer consumer's point of connection is energised.
- The volume price (WTXH-24UC) applies to all electricity distributed to each WTXH transformer consumer.
- The capacity price (WTXH-CAPY) applies to the capacity of each WTXH transformer consumer connected to Vector's network.
- The demand price (WTXH-DAMD) is a daily price applied to the average of each WTXH transformer consumer's ten highest kVA demands (twice the kVAh half hourly reading) between 08:00 and 20:00 (time periods 17 to 40) on weekdays including public holidays in any one month.
- The power factor price (WTXH-PWRF) is a daily price applied to the power factor amount.
- The volume injection price (WTXH-INJT) applies to all electricity injected into the network by each WTXH transformer consumer.

## Power factor prices

Vector's distribution code requires consumers to maintain a power factor of greater than 0.95 lagging. If the consumer's power factor is below 0.95 lagging, Vector may apply power factor prices. Where the consumer's metering equipment does not record power factor, Vector may install power factor monitoring equipment and monitor the consumer's power factor.

The power factor amount is determined each month where a consumer's power factor is less than 0.95 lagging. This power factor amount (kVAr) is represented by twice the largest difference between the consumer's kVArh recorded in any one half-hour period and the kWh demand divided by three recorded in the same half-hour period, during each month. The price is applicable between 08:00 and 20:00 (time

periods 17 to 40) on weekdays including public holidays.

## Consumer capacity

The capacity used to allocate consumers to a price category and for calculating the consumer's charges is based on the nearest standard capacity of each consumer's point of connection as determined by Vector subject to the following conditions:

- Vector may require the consumer's demand not to exceed the capacity of their point of connection at any time;
- Changes to the capacity of the consumer's point of connection may be requested by the retailer;
- Any change to the consumer's capacity requires the current limiting device (such as a fuse or transformer) to be changed by Vector to the nearest standard capacity;
- Vector may pass some or all of the costs associated with the change in capacity on to the retailer (including removal of stranded assets such as transformers); and
- Changes to the consumer's capacity are subject to the agreement of Vector and the availability of spare capacity on Vector's network and may be subject to additional charges (such as capital contributions).

## Extent of prices

Vector's prices published in this schedule relate to the cost of owning, operating and maintaining the distribution network as it currently exists but do not include amongst other things, energy charges for the electricity consumers use, metering equipment charges, load control equipment located at the point of connection to the network, the cost of reading meters and the cost of consumer electrical installations or fittings.

In order for Vector to supply any new or changed distribution service, including but not limited to; changes to service standards, distributed generation, the connection to the network of additional points of connection and the modification, increased capacity, relocation or removal of current points of connection, Vector may apply non-standard prices other than those outlined in this schedule, or require a capital contribution on a case by case basis.

Vector's prices do not include ancillary service charges and loss constraint excess payments from the system operator and transmission provider respectively. These costs may be passed through by Vector directly to electricity retailers.

Should Vector forecast a potential price breach under the regulated price path, then Vector may provide a refund or rebate of electricity distribution charges directly to the electricity retailer in order to avoid such a breach.

All prices are exclusive of GST.

### **Provision of billing information**

The consumer's retailer must provide Vector with consumption data for each transformer consumer and for each price as described in this schedule.

Where more than one meter at a point of connection is in use, but a single volume price applies, consumption data must be aggregated by the retailer before submitting to Vector.

Where a half hourly meter is fitted and the consumer's price category requires half hourly data, the consumer's retailer must submit half hourly consumption information.

Half hourly data provided by the retailer should contain the following channels; kWh, kVArh and kVAh, but must contain no less than two of these.