

## Pricing Schedule and Policy

Version: v2021.1  
 Effective: 1 April 2021

This is the Pricing Schedule and Policy referred to in Schedule 7 of any Distributor Agreement (which in this schedule shall have the meaning given in the Code) entered into with Vector after 17 December 2020.

### Service charges

In addition to the prices listed in this schedule, the Distributor also charges for other services such as reconciliation/allocation services, disconnection and reconnection services. The table below outlines the charges applicable to these other services. Unless stated otherwise all service charges below will be invoiced directly to the Trader by the Distributor and not to the Customer.

Fee	Description	Charge (exc.GST)
New connection or site visit fee	Payable for any site visit by the Distributor requested by the Trader. Examples of site visits include, but are not limited to, Energising a new Point of Connection for the first time, non-network call outs, Temporary Disconnection/reconnection, urgent after hours disconnection, and Vacant Site Disconnection/reconnection.	\$120 per site visit
Late, incorrect or incomplete consumption data fee	This fee is payable where consumption data does not comply with the requirements of the relevant agreement in respect of which this Pricing Schedule and Policy applies. It will be charged on the basis of the actual time spent by a billing analyst to review, correct, validate and reconcile the information and/or system time to bill or rebill the corrected or amended data.	\$100 per hour

All non-Network fault work, Trader or Customer services not listed above will be charged to the Trader on a time and materials basis at market prices.

### Electricity Network Loss Factors

In accordance with clause 6 of any Distributor Agreement entered into with Vector after 17 December 2020, the Distributor will calculate Loss Factors in accordance with the Loss Factor guidelines, if such guidelines are available. Losses and Loss Factors may be reviewed and amended by Vector from time to time, on reasonable notice to the Trader, to ensure that they reflect unaccounted for electricity on the Network.

# Pricing schedule

## Electricity Distribution Network

Applicable from 1 April 2021

Vector owns the network lines that deliver power to Aucklanders, from Wellsford to Papakura. Our network consists of more than 18,000kms of overhead lines and underground cables.

This schedule describes Vector's standard prices for providing electricity Distribution Services in respect of Customers on the Northern and Auckland electricity distribution networks, where the Customer's Trader is a party to a Distributor Agreement entered into with Vector after 17 December 2020.

The network that Customers are supplied from is determined by Vector from time to time based on the physical location of the Point of Connection of the Customer's Electrical Installation. The approximate areas covered by the Northern and Auckland electricity distribution network are shown in the adjacent map.



### Prices for residential and general Customers (excluding GST)

Customer type	Price Category type	Price Category description	Price Category code(s)	Daily	Daily	Volume anytime	Volume anytime	Volume off-peak	Volume peak	Volume injection
				\$/day	\$/day /fitting	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh
				-FIXD	-FIXD	-24UC	-AICO	-OFFPK	-PEAK	-INJT
Residential - low user	Time of use	Uncontrolled	ARHL, WRHL	0.15				0.0658	0.1647	-
		Controlled	ARHLC, WRHLC	0.15				0.0658	0.1446	-
	Exemption	Uncontrolled	ARUL, WRUL	0.15		0.0963				-
		Controlled	ARCL, WRCL	0.15			0.0901			-
Residential - standard	Time of use	Uncontrolled	ARHS, WRHS	1.09				0.0230	0.1219	-
		Controlled	ARHSC, WRHSC	1.09				0.0230	0.1018	-
	Exemption	Uncontrolled	ARUS, WRUS	1.09		0.0535				-
		Controlled	ARCS, WRCS	1.09			0.0473			-
General	Time of use	General	ABSH, WBSH	1.09				0.0230	0.1219	-
	Exemption	General	ABSN, WBSN	1.09		0.0535				-
	Unmetered	Unmetered	ABSU, WBSU		0.08	0.0257				-

### Prices for commercial Customers (excluding GST)

Customer type	Price Category description	Price Category code	Daily	Volume anytime	Capacity	Demand	Excess demand	Power factor	Volume injection
			\$/day	\$/kWh	\$/kVA/day	\$/kVA/day	\$/kVA/day	\$/kVAr/day	\$/kWh
			-FIXD	-24UC	-CAPY	-DAMD	-DEXA	-PWRF	-INJT
Low voltage	Non time of use	ALVN	1.87	0.0568	0.0441			0.2917	-
		WLVN	6.04	0.0351	0.0356			0.2917	-
	Time of use	ALVT		0.0126	0.0441	0.3063		0.2917	-
		WLVH	11.37	0.0054	0.0356	0.2759		0.2917	-
Transformer	Non time of use	ATXN	1.83	0.0557	0.0432			0.2917	-
		WTXN	5.92	0.0344	0.0349			0.2917	-
	Time of use	ATXT		0.0123	0.0432	0.3001		0.2917	-
		WTXH	11.15	0.0053	0.0349	0.2704		0.2917	-
High voltage	Non time of use	AHVN	1.77	0.0540	0.0419			0.2917	-
		WHVN	5.74	0.0334	0.0339			0.2917	-
	Time of use	AHVT		0.0119	0.0419	0.2910	0.9218	0.2917	-
		WHVH	10.82	0.0051	0.0339	0.2623	0.7458	0.2917	-

## Loss Factors

For the purpose of calculating the Distributor's charges for Distribution Services, unless otherwise specified, the Loss Factors detailed in this section do not need to be applied to the electricity measured at each Customer's Point of Connection. These tables show the distribution loss percentages and Loss Factors for each Loss Category code and the Loss Category codes for each Price Category depending on metering configuration.

Loss Category code	Distribution losses with respect to the GXP meter	Distribution Loss Factors with respect to the Customer meter
VECA1	3.68%	1.0383
VECA2	2.68%	1.0276
VECA3	2.68%	1.0276
VECA4	1.38%	1.0140
VECW1	4.92%	1.0518
VECW2	3.90%	1.0410
VECW3	3.90%	1.0410
VECW4	2.09%	1.0213

## Auckland Network

Customer type	Price Category	Loss Category code (LV metered)	Loss Category code (HV metered)
Residential	ARCL, ARUL, ARHL, ARHLC, ARCS, ARUS, ARHS, ARHSC	VECA1	VECA1
General	ABSU, ABSN, ABSH	VECA1	VECA1
	ALVN	VECA1	VECA1
Commercial	ATXN, AHVN	VECA2	VECA4
	ALVT, ATXT, AHVT	VECA3	VECA4

## Northern Network

Customer type	Price Category	Loss Category code (LV metered)	Loss Category code (HV metered)
Residential	WRCL, WRUL, WRHL, WRHLC, WRCS, WRUS, WRHS, WRHSC	VECW1	VECW1
General	WBSU, WBSN, WBSH	VECW1	VECW1
	WLVN	VECW1	VECW1
Commercial	WTXN, WHVN	VECW2	VECW4
	WLVH, WTXH, WHVH	VECW3	VECW4

## Price Category codes

First letter of code	Network
A	Auckland
W	Northern

## Customer definitions

Customer type	Definition
Residential	The Customer's Point of Connection is for a home, not normally used for any business activity, and not a building ancillary to a person's principal place of residence (for example, a shed, pump or garage) that is separately metered
General	The Customer is not a residential Customer and has a capacity less than or equal to 69kVA
Commercial	The Customer is not a residential Customer and has a capacity greater than 69kVA

<sup>1</sup> Exemptions will be provided at the sole discretion of Vector. Traders are required to request an exemption for persistent metering data exceptions including non-interval capable or non-communicating meters via the standard EIEP8 process with an appropriate reason detailed.

<sup>2</sup> The Northern Network controlled price categories (WRHLC, WRHSC) are closed to all Customers, except those migrating from equivalent non-time of use Price Categories, are connected to Vector's gas distribution network or specified by Vector as qualifying for these Price Categories.

## Eligibility criteria for Price Categories

Vector will allocate Price Categories to Customers. Where a Customer meets the eligibility criteria for more than one Price Category, the Trader may request the allocation of an alternative eligible Price Category to a Customer.

### Residential time of use

The table below sets out the eligibility criteria for residential time of use Price Categories. To be eligible for a particular Price Category, a residential Customer must meet the criteria in both the applicable row and column. Vector expects all Traders to reconcile with Vector on these Price Categories unless a specific exemption has been provided.<sup>1</sup>

		Low user	Standard
All	Customer has metering capable of recording half hourly data	Connection is at a Customer's principal place of residence	<i>No additional criteria</i>
Uncontrolled	<i>No additional criteria</i>	ARHL, WRHL	ARHS, WRHS
Controlled <sup>2,3</sup>	Customer has an electrical hot water cylinder <sup>4</sup> connected to Vector's Load Control System or have an active gas ICP connection to Vector's gas distribution network	ARHLC, WRHLC	ARHSC, WRHSC

<sup>3</sup> For Customers in these Price Categories with load connected to Vector's Load Control System, Vector may control this load at any time for a maximum of 5 hours in any 24 hour period.

<sup>4</sup> An electrical hot water cylinder must be in excess of 50 litres but may be substituted with fittings of a similar rating and load profile at Vector's discretion.

### Residential non-time of use

The table below sets out the eligibility criteria for residential non-time of use Price Categories. To be eligible for a particular Price Category, a residential Customer must meet the criteria in both the applicable row and column and an exemption from the residential time of use Price Categories must have been provided by Vector.

		Low user	Standard
All	Vector has provided exemption from time of use Price Categories	Connection is at a Customer's principal place of residence	No additional criteria
Uncontrolled	No additional criteria	ARUL, WRUL	ARUS, WRUS
Controlled <sup>5,6</sup>	Customer has an electrical hot water cylinder <sup>7</sup> connected to Vector's Load Control System or has an active gas ICP connection to Vector's gas distribution network	ARCL, WRCL	ARCS, WRCS

The following condition applies to the residential Price Categories:

- The Customer may only change between low user and standard Price Categories once in a 12-month period.

<sup>5</sup> The Northern Network controlled Price Categories (WRCL, WRCS) are closed to all Customers, except those migrating from equivalent time of use Price Categories, are connected to Vector's gas distribution network or specified by Vector as qualifying for these Price Categories.

<sup>6</sup> For Customers in these Price Categories with load connected to Vector's Load Control System, Vector may control this load at any time for a maximum of 5 hours in any 24 hour period.

### General

The table below sets out the eligibility criteria for general Price Categories. Vector expects all Traders to reconcile Customers with a metered Point of Connection with Vector on time of use Price Categories unless a specific exemption has been provided.<sup>8</sup>

Type	Price Category codes	Eligibility criteria
Unmetered	ABSU, WBSU	Customer's point of connection: <ul style="list-style-type: none"> <li>• does not have a meter measuring consumption;</li> <li>• has a capacity less than 1kVA; and</li> <li>• consists of fixed wired equipment with a predictable annual electricity usage<sup>9</sup></li> </ul>
Exemption	ABSN, WBSN	Customer has a metered Point of Connection and Vector has provided exemption from time of use Price Categories
Time of use	ABSH, WBSH	Customer has metering capable of recording half hourly data

<sup>7</sup> An electrical hot water cylinder must be in excess of 50 litres but may be substituted with Fittings of a similar rating and load profile at Vector's discretion.

<sup>8</sup> Exemptions will be provided at the sole discretion of Vector. Traders are required to request an exemption for persistent metering data exceptions including non-interval capable or non-communicating meters via the standard EIEP8 process with an appropriate reason detailed.

<sup>9</sup> Where any of these criteria are not met, the Customer will be required to install a meter and will be placed on the appropriate metered Price Category.

### Commercial

The following table sets out the eligibility criteria for Price Categories for commercial Customers. To be eligible for a particular Price Category, a commercial Customer must meet the criteria in both the applicable row and column.

		Non time of use	Time of use
		Capacity of Customer's connection is less than or equal to 345 kVA	Customer has metering capable of recording half hourly data which contains at least two of the following channels: kWh, kVArh, kVAh
Low voltage	Customer is connected to Vector's low voltage (400V three phase or 230V single phase) network	ALVN, WLVN	ALVT, WLVH
Transformer	Customer's low voltage (400V three phase or 230V single phase) network is supplied directly from transformers owned by Vector	ATXN, WTXN	ATXT, WTXH
High voltage	Customer is supplied directly from Vector's high voltage (11kV or higher) network	AHVN, WHVN	AHVT, WHVH

<sup>10</sup> Vector will allocate a Price Category to the Customer. The Trader may request allocation of an alternative eligible Price Category.

To aid with interpretation of the eligibility criteria for commercial Price Categories, the following table presents as an example the Price Categories available to low voltage Customers on the Auckland network for different capacities and metering configurations.

		Customer has metering capable of recording half hourly data which contains at least two of the following channels: kWh, kVArh, kVAh?	
		Yes	No
Customer capacity	Less than or equal to 345kVA	ALVN, ALVT <sup>10</sup>	ALVN
	Greater than 345kVA	ALVT	Not available <sup>11</sup>

<sup>11</sup> Customers must either: reduce their connection capacity to 345kVA or lower; or install metering capable of recording half hourly data which contains at least two of the following channels: kWh, kVArh, kVAh.



## Price component definitions

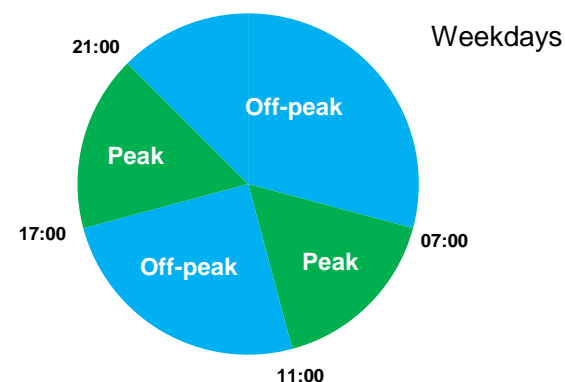
Description	Price component code(s)	Applies to
Daily	-FIXD	The number of days each Customer's point of connection is Energised <sup>12</sup>
Volume	-24UC, -AICO	All electricity distributed to each Customer
Volume off-peak	-OFFPK	Electricity distributed to each Customer during off-peak periods
Volume peak	-PEAK	Electricity distributed to each Customer during peak periods
Volume injection	-INJT	All electricity injected into the Network by each Customer
Capacity	-CAPY	The capacity of each Customer's connection to Vector's Network
Demand	-DAMD	The average of each Customer'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
Excess demand	-DEXA	The difference between the anytime maximum kVA demand (twice the maximum kVAh half hourly reading) and the nominated capacity in any one month, where the Customer's anytime maximum demand is greater than the nominated capacity
Power factor	-PWRF	The power factor amount

<sup>12</sup> Except for the daily prices ABSU-FIXD and WBSU-FIXD, which apply to the number of days each Customer's unmetered Point of Connection or Fitting is Energised.

## Peak and off-peak periods for residential and general time of use Price Categories

Period type	Days	Times	Period numbers
Peak	Monday to Friday (including public holidays)	07:00 – 11:00	15 – 22
		17:00 – 21:00	35 – 42
Off-peak	Monday to Friday (including public holidays)	11:00 – 17:00	23 – 34
		21:00 – 07:00	43 – 14
	Saturday and Sunday	All times	All periods

The following chart shows the times on weekdays to which the peak and off-peak volume prices apply for the half hourly Price Categories:



### Missing interval data and persistent metering issues

In instances of missing interval data, Traders are to use good industry practice to estimate missing data and the standard wash-up process to adjust estimated to actual data as appropriate. Vector expects all Traders to reconcile with Vector using aggregated half hourly data unless there are persistent metering issues.

In instances of persistent metering issues for residential and general Customers, Traders are to use good industry practice in identifying affected ICPs and request an exemption for persistent metering data exceptions including non-interval capable or non-communicating meters via the standard EIEP8 process with an appropriate reason detailed.

### Consumption for the unmetered Price Category (ABSU, WBSU)

Consumption for non-streetlight unmetered Customers is determined by Vector based on load profile and fitting input wattages.

Consumption for streetlight unmetered Customers is determined by multiplying the input wattage of each fitting in a database administered by Vector, with the load factor, the number of days in each month and the night hours per day stated in the adjacent table:

A minimum load factor of 1.1 is applied to the input wattage for non-streetlight appliances and 1.0 for streetlight appliances.

Month	Night hours per day
January	9.61
February	10.57
March	11.61
April	12.87
May	13.81
June	14.33
July	14.13
August	13.29
September	12.17
October	11.00
November	9.93
December	9.32

### Power factor prices

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

The power factor amount is determined each month where a Customer's power factor is less than 0.95 lagging. This power factor amount (kVAr) is represented by twice the largest difference between the Customer'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.

### Customer capacity

Price Category	Capacity charging basis
All except AHVT, WHVH	The nearest standard capacity of each Customer's point of connection as determined by Vector.
AHVT, WHVH	Capacity nominated by the Trader.

The following conditions apply to all Price Categories:

- Vector may require the Customer's demand not to exceed the capacity of their Point of Connection at any time;
- Changes to the capacity of the Customer's Point of Connection may be requested by the Trader;

- Vector may pass some or all of the costs associated with the change in capacity on to the Trader (including removal of stranded assets such as transformers); and
- Changes to the Customer'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).

The following condition applies all Price Categories except AHVT and WHVH:

- Any change to the Customer's capacity requires the current limiting device (such as a fuse or transformer) to be changed by Vector to the nearest standard capacity.

The following conditions apply to the AHVT and WHVH Price Categories:

- The nominated capacity may only be changed once in each 12 month period ending on 31 March each year;
- Nominated capacities must reasonably estimate the capacity requirement of each high voltage Customer connected to Vector's network;
- Vector does not guarantee the availability of increased nominated capacity at any time; and
- The application of excess demand prices does not imply or guarantee the availability of increased nominated capacity above the Customer's existing nominated capacity.

### **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 Customers 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 Customer 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.

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 Trader in order to avoid such a breach.

All prices are exclusive of GST.

### **Provision of billing information**

The Customer's Trader must provide Vector with consumption data for each Customer 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 Trader before submitting to Vector.

For residential and general Customers, where a half hourly meter is fitted, consumption data must be aggregated by the Trader to match the appropriate prices and time periods before submitting the data to Vector.

For commercial Customers, where a half hourly meter is fitted and the Customer's Price Category requires half hourly data, the Customer's Trader must submit half hourly consumption information. Half hourly data provided by the Trader must contain at least two of the following channels: kWh, kVAh and kVAh.

The following table shows the EIEP file type required to be submitted to Vector for each Price Category.

Customer type	Price Category type	Price Category	EIEP file type
Residential	Time of use	ARHL, ARHLC, ARHS, ARHSC, WRHL, WRHLC, WRHS, WRHSC	EIEP1
	Exemption	ARCL, ARUL, ARCS, ARUS, WRCL, WRUL, WRCS, WRUS	EIEP1
General	Unmetered	ABSU, WBSU	EIEP1
	Time of use	ABSH, WBSH	EIEP1
	Exemption	ABSN, WBSN	EIEP1
Commercial	Non time of use	ALVN, ATXN, AHVN, WLVN, WTXN, WHVN	EIEP1
	Time of use	ALVT, ATXT, AHVT, WLVH, WTXH, WHVH	EIEP3

# Vector electricity distribution networks

## High Voltage nominated capacity request form

Please provide the following information and send to [vector.billing@vector.co.nz](mailto:vector.billing@vector.co.nz) or directly to your Vector account manager.

Business name:

Contact person:

Connection network: Auckland / Northern

Connection address:

Postal address (if different from connection address):

Email address:

Phone number:

Fax number:

ICP number:

Installed capacity (kVA):

Nominated capacity request (kVA):

Energy Trader (at time of application):

Request date from which nominated capacity is to apply:

Signed on behalf of:

By:

Signature of Customer:

Name of signatory:

Date: