

# Auckland electricity distribution network



## Price schedule for residential customers

Effective 1 April 2013

This document describes Vector's standard electricity distribution charges for residential customers on the Auckland electricity distribution network. Our charges cover the cost of transmitting electricity across Transpower's national grid and distributing electricity to you across Vector's local distribution network. Vector offers six price plans for residential customers depending on your annual usage, your metering type and whether Vector can control your hot water cylinder.

### Residential customer definitions

You are classified as a residential customer when you have a metered connection for the purpose of supplying a private dwelling (intended for occupation mainly as a place of residence) not normally used for any business activity. Business activities include, but are not limited to, the following:

- Any prison that is operated by the Department of Corrections or is a police jail;
- Any hospital, home, or other institution for the care of sick, disabled, or aged persons;
- Police barracks, or police cells and lock-ups;
- Barracks conducted by the Armed Forces for the accommodation of persons subject to the Armed Forces Discipline Act 1971;
- Any hostel, barracks, dormitory, or other similar type of premises providing accommodation for any persons or class of persons;
- A building occupied by a club and used by the club for the provision of temporary or transient accommodation to members of the club;
- Any hotel in respect of which there is in force an on-licence under the Sale of Liquor Act 1989;
- Any hotel, motel, boarding house, or lodging house used for the provision of temporary or transient accommodation; and
- Any camping ground, motor camp, or marina.

The network that you are supplied from is determined by Vector from time to time based on the physical location of the connection of your premise or property to our network. The approximate area covered by our Auckland electricity distribution network is shown on the following map.



### Selection of price plan

Where more than one price plan is available, then you (or your retailer acting on your behalf) may select from the available price plans. In selecting a price plan you must meet the requirements of that price plan as specified in this schedule. You may switch onto or from the low user price plans (ARUL and ARCL) no more than once in any 12 month period.

### Residential low user uncontrolled price plan ARUL

The ARUL price plan is available to residential customers who do not have an electrical hot water cylinder in excess of 50 litres connected to Vector's load management system. This price plan is typically suitable for you if you use less than 8,000kWh per annum. As at 1 April 2013 Vector estimates there will be approximately 42,000 customers on this price plan.

Price plan ARUL			
Charge type	Code	Units	Rate
Fixed	ARUL-FIXD	\$/day	0.1667
Variable, uncontrolled	ARUL-24UC	\$/kWh	0.1073

- The fixed charge (code ARUL-FIXD) is a daily charge applied to the number of days you are connected to Vector's network.
- The uncontrolled charge (code ARUL-24UC) applies to all electricity distributed to you.

### Residential low user controlled price plan ARCL

The ARCL price plan is available to residential customers with an electrical hot water cylinder in excess of 50 litres<sup>1</sup> connected to Vector's load management system. The ARCL price plan is not available in all areas, depending on the penetration of Vector's load management system. This price plan is typically suitable for you if you use less than 8,000kWh per annum. As at 1 April 2013 Vector estimates there will be approximately 138,000 customers on this price plan.

Price plan ARCL			
Charge type	Code	Units	Rate
Fixed	ARCL-FIXD	\$/day	0.1667
Variable, controlled	ARCL-AICO	\$/kWh	0.0976

- The fixed charge (code ARCL-FIXD) is a daily charge applied to the number of days you are connected to Vector's network.
- The controlled charge (code ARCL-AICO) applies to all electricity distributed to you. Vector may control load connected to its load management system at any time for a maximum of 5 hours in any 24 hour period subject to the terms and conditions of your contract.

### Residential standard user uncontrolled price plan ARUS

The ARUS price plan is available to residential customers who do not have an electrical hot water cylinder in excess of 50 litres connected to Vector's load management system. This price plan is typically suitable for you if you use more than 8,000kWh per annum. As at 1 April 2013 Vector estimates there will be approximately 13,000 customers on this price plan.

Price plan ARUS			
Charge type	Code	Units	Rate
Fixed	ARUS-FIXD	\$/day	0.8889
Variable, uncontrolled	ARUS-24UC	\$/kWh	0.0744

- The fixed charge (code ARUS-FIXD) is a daily charge applied to the number of days you are connected to Vector's network.

- The uncontrolled charge (code ARUS-24UC) applies to all electricity distributed to you.

### Residential standard user controlled price plan ARCS

The ARCS price plan is available to residential customers with an electrical hot water cylinder in excess of 50 litres<sup>1</sup> connected to Vector's load management system. The ARCS price plan is not available in all areas, depending on the penetration of Vector's load management system. This price plan is typically suitable for you if you use more than 8,000kWh per annum. As at 1 April 2013 Vector estimates there will be approximately 84,000 customers on this price plan.

Price plan ARCS			
Charge type	Code	Units	Rate
Fixed	ARCS-FIXD	\$/day	0.8889
Variable, controlled	ARCS-AICO	\$/kWh	0.0647

- The fixed charge (code ARCS-FIXD) is a daily charge applied to the number of days you are connected to Vector's network.
- The controlled charge (code ARCS-AICO) applies to all electricity distributed to you. Vector may control load connected to its load management system at any time for a maximum of 5 hours in any 24 hour period subject to the terms and conditions of your contract.

### Residential uncontrolled smart price plan ARUH

The ARUH price plan is available to residential customers with metering capable of recording half hourly data who do not have an electrical hot water cylinder in excess of 50 litres connected to Vector's load management system. As at 1 April 2013 Vector estimates there will be 0 customers on this price plan.

Price plan ARUH			
Charge type	Code	Units	Rate
Fixed	ARUH-FIXD	\$/day	0.8889
Variable, off-peak	ARUH-OFPK	\$/kWh	0.0596
Variable, shoulder	ARUH-SHLD	\$/kWh	0.0744
Variable, peak	ARUH-PEAK	\$/kWh	0.0983

- The fixed charge (code ARUH-FIXD) is a daily charge applied to the number of days you are connected to Vector's network.
- The variable off-peak charge (code ARUH-OFPK) applies to electricity distributed to you during the off-peak period. The off-peak period covers the

1. An electrical hot water cylinder may be substituted with appliances of a similar rating and load profile at Vector's discretion.

period of time from 22:00 to 06:00 (time periods 45 to 12) the following day.

- The variable shoulder charge (code ARUH-SHLD) applies to electricity distributed to you during the shoulder period. The shoulder period covers the periods of time from 06:00 to 07:30, 09:30 to 17:30 and 19:30 to 22:00 (time periods 13 to 15, 20 to 35 and 40 to 44) on weekdays including public holidays, and from 06:00 to 22:00 (time periods 13 to 44) on weekends.
- The variable peak charge (code ARUH-PEAK) applies to electricity distributed to you during the peak period. The peak period covers the periods of time from 07:30 to 09:30 and 17:30 to 19:30 (time periods 16 to 19 and 36 to 39) on weekdays including public holidays.

time from 07:30 to 09:30 and 17:30 to 19:30 (time periods 16 to 19 and 36 to 39) on weekdays including public holidays.

- Vector may control load connected to its load management system at any time for a maximum of 5 hours in any 24 hour period subject to the terms and conditions of your contract.

## Residential controlled smart price plan

### ARCH

The ARCH price plan is available to residential customers with metering capable of recording half hourly data who have an electrical hot water cylinder in excess of 50 litres<sup>2</sup> connected to Vector's load management system. As at 1 April 2013 Vector estimates there will be 0 customers on this price plan.

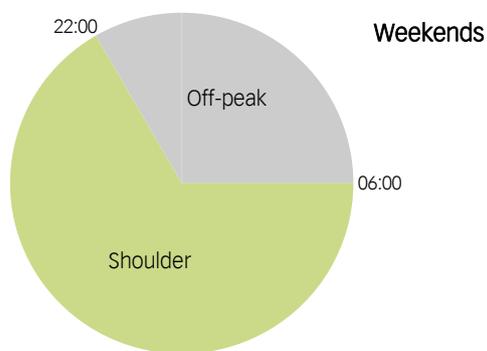
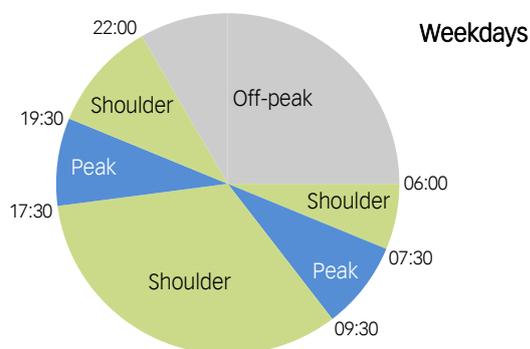
Price plan ARCH			
Charge type	Code	Units	Rate
Fixed	ARCH-FIXD	\$/day	0.8889
Variable, off-peak	ARCH-OFPK	\$/kWh	0.0518
Variable, shoulder	ARCH-SHLD	\$/kWh	0.0647
Variable, peak	ARCH-PEAK	\$/kWh	0.0854

- The fixed charge (code ARCH-FIXD) is a daily charge applied to the number of days you are connected to Vector's network.
- The variable off-peak charge (code ARCH-OFPK) applies to electricity distributed to you during the off-peak period. The off-peak period covers the period of time from 22:00 to 06:00 (time periods 45 to 12) the following day.
- The variable shoulder charge (code ARCH-SHLD) applies to electricity distributed to you during the shoulder period. The shoulder period covers the periods of time from 06:00 to 07:30, 09:30 to 17:30 and 19:30 to 22:00 (time periods 13 to 15, 20 to 35 and 40 to 44) on weekdays including public holidays, and from 06:00 to 22:00 (time periods 13 to 44) on weekends.
- The variable peak charge (code ARCH-PEAK) applies to electricity distributed to you during the peak period. The peak period covers the periods of

2. An electrical hot water cylinder may be substituted with appliances of a similar rating and load profile at Vector's discretion.

## Peak periods for smart price plans

The following charts show the time periods to which the different variable charges apply for the ARUH and ARCH residential advanced price plans:



## Extent of charges

Our distribution charges published in this schedule relate to the cost of owning, operating and maintaining the network as it currently exists but do not include amongst other things, energy charges for the electricity you use, metering charges, load management equipment located at your connection to the network, the cost of reading meters and the cost of your fittings or appliances.

- In order for us to supply any new or changed distribution service to you including but not limited to; changes to security or service levels, the connection to the network of additional connections and the modification, relocation or removal of current connections, we may apply non-standard charges other than those outlined in this schedule on a case by case basis.
- Our distribution charges incorporate pass through and recoverable costs from third parties including but not limited to: transmission (and avoided transmission) charges, council rates, Electricity Authority, Commerce Act and Electricity and Gas Complaints Commissioner levies. Transmission charges account for 30% of the rates listed in this schedule.

- Our distribution charges do not recover ancillary service charges and loss constraint excess payments from the System Operator and Transpower respectively. These charges are passed through by Vector in their entirety with no mark-up directly to your electricity retailer.
- All rates are exclusive of GST and are eligible for a 10% discount if paid to your retailer by the due date.

## For further information

Your electricity retailer bills you for our distribution charges on our behalf. This avoids the additional expense of both Vector and your retailer establishing a billing system, and the need for you to make two separate payments. If you would like to discuss how Vector's distribution charges are applied to your bill, please contact your electricity retailer.

## Price schedule for business customers

Effective 1 April 2013

This document describes Vector's standard electricity distribution charges for business customers on the Auckland electricity distribution network. Our charges cover the cost of transmitting electricity across Transpower's national grid and distributing electricity to you across Vector's local distribution network. Vector offers two price plans for business customers depending on your metering type.

### Business customer definitions

You are classified as a business customer when you are not a residential customer (as outlined in Vector's residential customer price schedule) and your connection has a capacity less than or equal to 69kVA.

The network that you are supplied from is determined by Vector from time to time based on the physical location of the connection of your premise or property to our network. The approximate area covered by our Auckland electricity distribution network is shown on the following map.



### Selection of price plan

Where more than one price plan is available, then you (or your retailer acting on your behalf) may select from the available price plans. In selecting a price plan you must meet the requirements of that price plan as specified in this schedule.

### Business unmetered price plan ABSU

The ABSU price plan applies to business customers where the customer's connection; does not have a meter measuring consumption, has a capacity less than 1kVA and consists of fixed wired equipment with a predictable annual electricity usage. Where any of these criteria is not met, the customer will be required to install a meter and will be placed on the appropriate

metered price plan. As at 1 April 2013 Vector estimates there will be approximately 1,800 customers on this price plan.

Price plan ABSU			
Charge type	Code	Units	Rate
Fixed	ABSU-FIXD	\$/day	0.1444
Variable	ABSU-24UC	\$/kWh	0.0814

- The fixed charge (code ABSU-FIXD) is a daily charge applied to the number of days each unmetered fitting is connected to Vector's network.
- The variable charge (code ABSU-24UC) applies to all electricity distributed to each unmetered fitting.
- Customer consumption is determined by Vector based on load profile and appliance input wattages. A minimum load factor of 1.1 is applied to the input wattage for non-streetlight appliances and 1.0 for streetlight appliances.
- Streetlight customer consumption 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 following table:

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

## Business metered price plan ABSN

The ABSN price plan applies to business customers who have a metered connection. As at 1 April 2013 Vector estimates there will be approximately 34,000 customers on this price plan.

Price plan ABSN			
Charge type	Code	Units	Rate
Fixed	ABSN-FIXD	\$/day	0.8889
Variable	ABSN-24UC	\$/kWh	0.0744

- The fixed charge (code ABSN-FIXD) is a daily charge applied to the number of days you are connected to Vector's network.
- The variable charge (code ABSN-24UC) applies to all electricity distributed to you.

## Customer capacity

The capacity used to allocate you to a price plan is based on the nearest standard capacity of your connection as determined by Vector subject to the following conditions:

- Vector may require your demand not to exceed the capacity of your connection at any time;
- Changes to the capacity of your connection may be requested by you;
- Any change to your capacity requires the current limiting device (such as 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 you (including removal of stranded assets such as transformers); and
- Changes to your capacity are subject to the agreement of Vector and the availability of spare capacity on Vector's network.

## Extent of charges

Our distribution charges published in this schedule relate to the cost of owning, operating and maintaining the network as it currently exists but do not include amongst other things, energy charges for the electricity you use, metering charges, load management equipment located at your connection to the network, the cost of reading meters and the cost of your fittings or appliances.

- In order for us to supply any new or changed distribution service to you including but not limited to; changes to security or service levels, the connection to the network of additional connections and the modification, relocation or removal of current connections, we may apply

non-standard charges other than those outlined in this schedule on a case by case basis.

- Our distribution charges incorporate pass through and recoverable costs from third parties including but not limited to: transmission (and avoided transmission) charges, council rates, Electricity Authority, Commerce Act and Electricity and Gas Complaints Commissioner levies. Transmission charges account for 30% of the rates listed in this schedule.
- Our distribution charges do not recover ancillary service charges and loss constraint excess payments from the System Operator and Transpower respectively. These charges are passed through by Vector in their entirety with no mark-up directly to your electricity retailer.
- All rates are exclusive of GST and are eligible for a 10% discount if paid to your retailer by the due date.

## For further information

Your electricity retailer bills you for our distribution charges on our behalf. This avoids the additional expense of both Vector and your retailer establishing a billing system, and the need for you to make two separate payments. If you would like to discuss how Vector's distribution charges are applied to your bill, please contact your electricity retailer.

# Auckland electricity distribution network



## Price schedule for low voltage customers

Effective 1 April 2013

This document describes Vector's standard electricity distribution charges for low voltage customers on the Auckland electricity distribution network. Our charges cover the cost of transmitting electricity across Transpower's national grid and distributing electricity to you across Vector's local distribution network. Vector offers two price plans for low voltage customers depending on your metering type.

### Low voltage customer definitions

You are classified as a low voltage customer when you are not a residential customer (as outlined in Vector's residential customer price schedule) and you have a metered connection greater than 69kVA connected to Vector's low voltage (400V three phase or 230V single phase) network.

The network that you are supplied from is determined by Vector from time to time based on the physical location of the connection of your premise or property to our network. The approximate area covered by our Auckland electricity distribution network is shown on the following map.



### Selection of price plan

Where more than one price plan is available, then you (or your retailer acting on your behalf) may select from the available price plans. In selecting a price plan you must meet the requirements of that price plan as specified in this schedule.

### Low voltage price plan ALVN

The ALVN price plan is available to low voltage customers. Metering capable of recording half hourly data is not required on this price plan. As at 1 April

2013 Vector estimates there will be approximately 1,500 customers on this price plan.

Price plan ALVN			
Charge type	Code	Units	Rate
Fixed	ALVN-FIXD	\$/day	1.6667
Variable	ALVN-24UC	\$/kWh	0.0708
Capacity	ALVN-CAPY	\$/kVA/day	0.0356

- The fixed charge (code ALVN-FIXD) is a daily charge applied to the number of days you are connected to Vector's network.
- The variable charge (code ALVN-24UC) applies to all electricity distributed to you.
- The capacity charge (code ALVN-CAPY) is a daily charge applied to the capacity of your connection to Vector's network.

### Low voltage price plan ALVH

The ALVH price plan is available to low voltage customers. Metering capable of recording half hourly data is required on this price plan. As at 1 April 2013 Vector estimates there will be approximately 1,500 customers on this price plan.

Price plan ALVH			
Charge type	Code	Units	Rate
Variable, summer day	ALVH-SMDY	\$/kWh	0.0163
Variable, summer night	ALVH-SMNT	\$/kWh	0.0026
Variable, winter day	ALVH-WNDY	\$/kWh	0.0450
Variable, winter night	ALVH-WNNT	\$/kWh	0.0026
Capacity	ALVH-CAPY	\$/kVA/day	0.0356
Demand	ALVH-DAMD	\$/kVA/day	0.3018

- The summer day variable charge (code ALVH-SMDY) applies to electricity distributed to you during the period of time from 07:00 to 22:00 (time periods 15 to 44) during the calendar period between midnight on 30 September and midnight on 30 April the following year.

- The summer night variable charge (code ALVH-SMNT) applies to electricity distributed to you during the period of time from 22:00 to 07:00 (time periods 45 to 14) the following day during the calendar period between midnight on 30 September and midnight on 30 April the following year.
- The winter day variable charge (code ALVH-WNDY) applies to electricity distributed to you during the period of time from 07:00 to 22:00 (time periods 15 to 44) during the calendar period between midnight on 30 April and midnight on 30 September.
- The winter night variable charge (code ALVH-WNNT) applies to electricity distributed to you during the period of time from 22:00 to 07:00 (time periods 45 to 14) the following day during the calendar period between midnight on 30 April and midnight on 30 September.
- The capacity charge (code ALVH-CAPY) is a daily charge applied to the capacity of your connection to Vector's network.
- The demand charge (code ALVH-DAMD) is a daily charge applied to the average of your 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.

### Power factor charges

Vector's distribution code requires you to maintain a power factor of greater than 0.95 lagging. Where your metering equipment does not record power factor, Vector may install power factor monitoring equipment and monitor your power factor. If your power factor is below 0.95 lagging Vector may apply additional power factor charges as outlined below.

The power factor charge (code ALVN-PWRF or ALVH-PWRF) is a daily charge applied where your power factor is less than 0.95 lagging. This charge is applied to the kVAr amount represented by twice the largest difference between the kVArh amount recorded in any one half-hour period and one third (to two decimal places) of the kWh demand recorded in the same half-hour period during each month with a power factor less than 0.95 lagging. The charge is applicable to the kVArh determined between 08:00 and 20:00 (time periods 17 to 40) on weekdays including public holidays.

Price plans ALVN and ALVH			
Charge type	Code	Units	Rate
Power factor	ALVN-PWRF	\$/kVAr/day	0.0731
Power factor	ALVH-PWRF	\$/kVAr/day	0.0731

### Customer capacity

The capacity used to allocate you to a price plan and for calculating your distribution charges is based on the nearest standard capacity of your connection as determined by Vector subject to the following conditions:

- Vector may require your demand not to exceed the capacity of your connection at any time;
- Changes to the capacity of your connection may be requested by you;
- Any change to your capacity requires the current limiting device (such as 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 you (including removal of stranded assets such as transformers); and
- Changes to your capacity are subject to the agreement of Vector and the availability of spare capacity on Vector's network.

### Extent of charges

Our distribution charges published in this schedule relate to the cost of owning, operating and maintaining the network as it currently exists but do not include amongst other things, energy charges for the electricity you use, metering charges, load management equipment located at your connection to the network, the cost of reading meters and the cost of your fittings or appliances.

- In order for us to supply any new or changed distribution service to you including but not limited to; changes to security or service levels, the connection to the network of additional connections and the modification, relocation or removal of current connections, we may apply non-standard charges other than those outlined in this schedule on a case by case basis.
- Our distribution charges incorporate pass through and recoverable costs from third parties including but not limited to: transmission (and avoided transmission) charges, council rates, Electricity Authority, Commerce Act and Electricity and Gas Complaints Commissioner levies. Transmission charges account for 30% of the rates listed in this schedule.
- Our distribution charges do not recover ancillary service charges and loss constraint excess

payments from the System Operator and Transpower respectively. These charges are passed through by Vector in their entirety with no mark-up directly to your electricity retailer.

- All rates are exclusive of GST and are eligible for a 10% discount if paid to your retailer by the due date.

### **For further information**

Your electricity retailer bills you for our distribution charges on our behalf. This avoids the additional expense of both Vector and your retailer establishing a billing system, and the need for you to make two separate payments. If you would like to discuss how Vector's distribution charges are applied to your bill, please contact your electricity retailer.

# Auckland electricity distribution network



## Price schedule for transformer customers

Effective 1 April 2013

This document describes Vector's standard electricity distribution charges for transformer customers on the Auckland electricity distribution network. Our charges cover the cost of transmitting electricity across Transpower's national grid and distributing electricity to you across Vector's local distribution network. Vector offers two price plans for transformer customers depending on your metering type.

### Transformer customer definitions

You are classified as a transformer customer when you are not a residential customer (as outlined in Vector's residential customer price schedule), have a metered connection greater than 69kVA and your low voltage (400V three phase or 230V single phase) network is supplied directly from transformers owned by Vector.

The network that you are supplied from is determined by Vector from time to time based on the physical location of the connection of your premise or property to our network. The approximate area covered by our Auckland electricity distribution network is shown on the following map.



### Selection of price plan

Where more than one price plan is available, then you (or your retailer acting on your behalf) may select from the available price plans. In selecting a price plan you must meet the requirements of that price plan as specified in this schedule.

### Transformer price plan ATXN

The ATXN price plan is available to transformer customers. Metering capable of recording half hourly data is not required on this price plan. As at 1 April

2013 Vector estimates there will be approximately 140 customers on this price plan.

Price plan ATXN			
Charge type	Code	Units	Rate
Fixed	ATXN-FIXD	\$/day	1.6222
Variable	ATXN-24UC	\$/kWh	0.0687
Capacity	ATXN-CAPY	\$/kVA/day	0.0344

- The fixed charge (code ATXN-FIXD) is a daily charge applied to the number of days you are connected to Vector's network.
- The variable charge (code ATXN-24UC) applies to all electricity distributed to you.
- The capacity charge (code ATXN-CAPY) is a daily charge applied to the capacity of your connection to Vector's network.

### Transformer price plan ATXH

The ATXH price plan is available to transformer customers. Metering capable of recording half hourly data is required on this price plan. As at 1 April 2013 Vector estimates there will be approximately 820 customers on this price plan.

Price plan ATXH			
Charge type	Code	Units	Rate
Variable, summer day	ATXH-SMDY	\$/kWh	0.0159
Variable, summer night	ATXH-SMNT	\$/kWh	0.0024
Variable, winter day	ATXH-WNDY	\$/kWh	0.0437
Variable, winter night	ATXH-WNNT	\$/kWh	0.0024
Capacity	ATXH-CAPY	\$/kVA/day	0.0344
Demand	ATXH-DAMD	\$/kVA/day	0.2928

- The summer day variable charge (code ATXH-SMDY) applies to electricity distributed to you during the period of time from 07:00 to 22:00 (time periods 15 to 44) during the calendar period between midnight on 30 September and midnight on 30 April the following year.

- The summer night variable charge (code ATXH-SMNT) applies to electricity distributed to you during the period of time from 22:00 to 07:00 (time periods 45 to 14) the following day during the calendar period between midnight on 30 September and midnight on 30 April the following year.
- The winter day variable charge (code ATXH-WNDY) applies to electricity distributed to you during the period of time from 07:00 to 22:00 (time periods 15 to 44) during the calendar period between midnight on 30 April and midnight on 30 September.
- The winter night variable charge (code ATXH-WNNT) applies to electricity distributed to you during the period of time from 22:00 to 07:00 (time periods 45 to 14) the following day during the calendar period between midnight on 30 April and midnight on 30 September.
- The capacity charge (code ATXH-CAPY) is a daily charge applied to the capacity of your connection to Vector's network.
- The demand charge (code ATXH-DAMD) is a daily charge applied to the average of your 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.

### Power factor charges

Vector's distribution code requires you to maintain a power factor of greater than 0.95 lagging. Where your metering equipment does not record power factor, Vector may install power factor monitoring equipment and monitor your power factor. If your power factor is below 0.95 lagging Vector may apply additional power factor charges as outlined below.

The power factor charge (code ATXN-PWRF or ATXH-PWRF) is a daily charge applied where your power factor is less than 0.95 lagging. This charge is applied to the kVAr amount represented by twice the largest difference between the kVArh amount recorded in any one half-hour period and one third (to two decimal places) of the kWh demand recorded in the same half-hour period during each month with a power factor less than 0.95 lagging. The charge is applicable to the kVArh determined between 08:00 and 20:00 (time periods 17 to 40) on weekdays including public holidays.

Price plans ATXN and ATXH			
Charge type	Code	Units	Rate
Power factor	ATXN-PWRF	\$/kVAr/day	0.0731
Power factor	ATXH-PWRF	\$/kVAr/day	0.0731

### Customer capacity

The capacity used to allocate you to a price plan and for calculating your distribution charges is based on the nearest standard capacity of your connection as determined by Vector subject to the following conditions:

- Vector may require your demand not to exceed the capacity of your connection at any time;
- Changes to the capacity of your connection may be requested by you;
- Any change to your capacity requires the current limiting device (such as 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 you (including removal of stranded assets such as transformers); and
- Changes to your capacity are subject to the agreement of Vector and the availability of spare capacity on Vector's network.

### Extent of charges

Our distribution charges published in this schedule relate to the cost of owning, operating and maintaining the network as it currently exists but do not include amongst other things, energy charges for the electricity you use, metering charges, load management equipment located at your connection to the network, the cost of reading meters and the cost of your fittings or appliances.

- In order for us to supply any new or changed distribution service to you including but not limited to; changes to security or service levels, the connection to the network of additional connections and the modification, relocation or removal of current connections, we may apply non-standard charges other than those outlined in this schedule on a case by case basis.
- Our distribution charges incorporate pass through and recoverable costs from third parties including but not limited to: transmission (and avoided transmission) charges, council rates, Electricity Authority, Commerce Act and Electricity and Gas Complaints Commissioner levies. Transmission charges account for 30% of the rates listed in this schedule.
- Our distribution charges do not recover ancillary service charges and loss constraint excess

payments from the System Operator and Transpower respectively. These charges are passed through by Vector in their entirety with no mark-up directly to your electricity retailer.

- All rates are exclusive of GST and are eligible for a 10% discount if paid to your retailer by the due date.

#### **For further information**

Your electricity retailer bills you for our distribution charges on our behalf. This avoids the additional expense of both Vector and your retailer establishing a billing system, and the need for you to make two separate payments. If you would like to discuss how Vector's distribution charges are applied to your bill, please contact your electricity retailer.

## Price schedule for high voltage customers

Effective 1 April 2013

This document describes Vector's standard electricity distribution charges for high voltage customers on the Auckland electricity distribution network. Our charges cover the cost of transmitting electricity across Transpower's national grid and distributing electricity to you across Vector's local distribution network. Vector offers two price plans for high voltage customers depending on your metering type.

### High voltage customer definitions

You are classified as a high voltage customer when you are not a residential customer (as outlined in Vector's residential customer price schedule) and you have a metered connection greater than 69kVA supplied directly from Vector's high voltage (6.6kV or higher) network.

The network that you are supplied from is determined by Vector from time to time based on the physical location of the connection of your premise or property to our network. The approximate area covered by our Auckland electricity distribution network is shown on the following map.



### Selection of price plan

Where more than one price plan is available, then you (or your retailer acting on your behalf) may select from the available price plans. In selecting a price plan you must meet the requirements of that price plan as specified in this schedule.

### High voltage price plan AHVN

The AHVN price plan is available to high voltage customers. Metering capable of recording half hourly data is not required on this price plan. As at 1 April

2013 Vector estimates there will be approximately 10 customers on this price plan.

Price plan AHVN			
Charge type	Code	Units	Rate
Fixed	AHVN-FIXD	\$/day	1.5778
Variable	AHVN-24UC	\$/kWh	0.0666
Capacity	AHVN-CAPY	\$/kVA/day	0.0334

- The fixed charge (code AHVN-FIXD) is a daily charge applied to the number of days you are connected to Vector's network.
- The variable charge (code AHVN-24UC) applies to all electricity distributed to you.
- The capacity charge (code AHVN-CAPY) is a daily charge applied to the nominated capacity of your connection to Vector's network.

### High voltage price plan AHVH

The AHVH price plan is available to high voltage customers. Metering capable of recording half hourly data is required on this price plan. As at 1 April 2013 Vector estimates there will be approximately 110 customers on this price plan.

Price plan AHVH			
Charge type	Code	Units	Rate
Variable, summer day	AHVH-SMDY	\$/kWh	0.0154
Variable, summer night	AHVH-SMNT	\$/kWh	0.0023
Variable, winter day	AHVH-WNDY	\$/kWh	0.0423
Variable, winter night	AHVH-WNNT	\$/kWh	0.0023
Capacity	AHVH-CAPY	\$/kVA/day	0.0334
Demand	AHVH-DAMD	\$/kVA/day	0.2840
Excess demand	AHVH-DEXA	\$/kVA/day	0.7100

- The summer day variable charge (code AHVH-SMDY) applies to electricity distributed to you during the period of time from 07:00 to 22:00 (time periods 15 to 44) during the calendar period

between midnight on 30 September and midnight on 30 April the following year.

- The summer night variable charge (code AHVH-SMNT) applies to electricity distributed to you during the period of time from 22:00 to 07:00 (time periods 45 to 14) the following day during the calendar period between midnight on 30 September and midnight on 30 April the following year.
- The winter day variable charge (code AHVH-WNDY) applies to electricity distributed to you during the period of time from 07:00 to 22:00 (time periods 15 to 44) during the calendar period between midnight on 30 April and midnight on 30 September.
- The winter night variable charge (code AHVH-WNNT) applies to electricity distributed to you during the period of time from 22:00 to 07:00 (time periods 45 to 14) the following day during the calendar period between midnight on 30 April and midnight on 30 September.
- The capacity charge (code AHVH-CAPY) is a daily charge applied to the nominated capacity of your connection to Vector's network.
- The demand charge (code AHVH-DAMD) is a daily charge applied to the average of your 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 excess demand charge (code AHVH-DEXA) is a daily charge applied to the difference between your anytime maximum kVA demand (twice the maximum kVAh half hourly reading) and your nominated capacity in any one month, where your anytime maximum demand is greater than your nominated capacity.

### Power factor charges

Vector's distribution code requires you to maintain a power factor of greater than 0.95 lagging. Where your metering equipment does not record power factor, Vector may install power factor monitoring equipment and monitor your power factor. If your power factor is below 0.95 lagging Vector may apply additional power factor charges as outlined below.

The power factor charge (code AHVN-PWRF or AHVH-PWRF) is a daily charge applied where your power factor is less than 0.95 lagging. This charge is applied to the kVAh amount represented by twice the largest difference between the kVAh amount recorded in any one half-hour period and one third (to two decimal places) of the kWh demand recorded in the same half-

hour period during each month with a power factor less than 0.95 lagging. The charge is applicable to the kVAh determined between 08:00 and 20:00 (time periods 17 to 40) on weekdays including public holidays.

Price plans AHVN and AHVH			
Charge type	Code	Units	Rate
Power factor	AHVN-PWRF	\$/kVAh/day	0.0731
Power factor	AHVH-PWRF	\$/kVAh/day	0.0731

### Customer capacity

For high voltage customers, the capacity used for calculating your distribution charges cannot always be determined based on physical capacity limiting devices. For this reason Vector has a process for high voltage customers to nominate the capacity of their connection subject to the following conditions:

- Vector may require your demand not to exceed the nominated capacity of your connection at any time;
- Changes to your nominated capacity may be requested by you;
- The nominated capacity may only be changed once in each 12 month period ending on 31 March each year;
- Nominated capacities must reasonably estimate your capacity requirement;
- Changes to your nominated capacity are subject to the agreement of Vector and the availability of spare capacity on Vector's network;
- Vector may pass some, or all of the costs associated with the change in nominated capacity on to you;
- Vector does not guarantee the availability of increased nominated capacity at any time; and
- The application of excess demand charges does not imply or guarantee the availability of increased nominated capacity above your existing nominated capacity.

### Extent of charges

Our distribution charges published in this schedule relate to the cost of owning, operating and maintaining the network as it currently exists but do not include amongst other things, energy charges for the electricity you use, metering charges, load management equipment located at your connection to the network, the cost of reading meters and the cost of your fittings or appliances.

- In order for us to supply any new or changed distribution service to you including but not limited to; changes to security or service levels, the connection to the network of additional

connections and the modification, relocation or removal of current connections, we may apply non-standard charges other than those outlined in this schedule on a case by case basis.

- Our distribution charges incorporate pass through and recoverable costs from third parties including but not limited to: transmission (and avoided transmission) charges, council rates, Electricity Authority, Commerce Act and Electricity and Gas Complaints Commissioner levies. Transmission charges account for 30% of the rates listed in this schedule.
- Our distribution charges do not recover ancillary service charges and loss constraint excess payments from the System Operator and Transpower respectively. These charges are passed through by Vector in their entirety with no mark-up directly to your electricity retailer.
- All rates are exclusive of GST and are eligible for a 10% discount if paid to your retailer by the due date.

### **For further information**

Your electricity retailer bills you for our distribution charges on our behalf. This avoids the additional expense of both Vector and your retailer establishing a billing system, and the need for you to make two separate payments. If you would like to discuss how Vector's distribution charges are applied to your bill, please contact your electricity retailer.

**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 key account manager:

Business name: \_\_\_\_\_

Contact person: \_\_\_\_\_

Connection address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Postal address (if different from connection address): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Email address: \_\_\_\_\_

Fax number: \_\_\_\_\_

Phone number: \_\_\_\_\_

ICP number: \_\_\_\_\_

Installed capacity (kVA): \_\_\_\_\_

Nominated capacity request (kVA): \_\_\_\_\_

Energy retailer (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: \_\_\_\_\_