

# Price schedule for residential customers

#### Effective 1 April 2013

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

#### **Residential customer definitions**

A residential customer is where the customer has a metered connection for the purposes 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 customers are supplied from is determined by UnitedNetworks from time to time based on the physical location of the connection of the customer's premise or property to UnitedNetworks' network. The approximate area covered by the Northern electricity distribution network is shown on the following map.



## **Selection of price plan**

Where more than one price plan is available, the retailer may select from the available price plans. In selecting a price plan the retailer must ensure the customer meets the requirements of that price plan as specified in this schedule. Customers may switch onto or from the low fixed charge price plans (WRUL and WRCL) no more than once in any 12 month period.

# Residential low user uncontrolled price plan WRUL

The WRUL price plan is available to residential customers who do not have an electrical hot water cylinder in excess of 50 litres connected to UnitedNetworks' load management system. This price plan is typically better for customers who use less than 8,000kWh per annum. As at 1 April 2013 Vector estimates there will be approximately 16,000 customers on this price plan.

Price plan WRUL			
Charge type	Code	Units	Rate
Fixed	WRUL-FIXD	\$/day	0.1500
Variable, uncontrolled	WRUL-24UC	\$/kWh	0.1004

- The fixed charge (code WRUL-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The uncontrolled charge (code WRUL-24UC) applies to all electricity distributed to each customer.

# Residential low user controlled price plan WRCL

The WRCL price plan is available to residential customers with an electrical hot water cylinder in excess of 50 litres<sup>1</sup> connected to UnitedNetworks' load management system. The WRCL price plan is not available in all areas, depending on the penetration of UnitedNetworks' load management system. This price plan is typically better for customers who use less than 8,000kWh per annum. As at 1 April 2013 Vector estimates there will be approximately 100,000 customers on this price plan.

Price plan WRCL			
Charge type	Code	Units	Rate
Fixed	WRCL-FIXD	\$/day	0.1500
Variable, controlled	WRCL-AICO	\$/kWh	0.0913

- The fixed charge (code WRCL-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The controlled charge (code WRCL-AICO) applies to all electricity distributed to each customer. UnitedNetworks may control load connected to its load management system at any time for a maximum of 5 hours in any 24 hour period.

# Residential standard user uncontrolled price plan WRUS

The WRUS price plan is available to residential customers who do not have an electrical hot water cylinder in excess of 50 litres connected to UnitedNetworks' load management system. This price plan is typically better for customers who use more than 8,000kWh per annum. As at 1 April 2013 Vector estimates there will be approximately 7,800 customers on this price plan.

Price Plan WRUS			
Charge type	Code	Units	Rate
Fixed	WRUS-FIXD	\$/day	0.8000
Variable, uncontrolled	WRUS-24UC	\$/kWh	0.0708

- The fixed charge (code WRUS-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The uncontrolled charge (code WRUS-24UC) applies to all electricity distributed to each customer.

# Residential standard user controlled price plan WRCS

The WRCS price plan is available to residential customers with an electrical hot water cylinder in excess of 50 litres<sup>1</sup> connected to UnitedNetworks' load management system. The WRCL price plan is not available in all areas, depending on the penetration of UnitedNetworks' load management system. This price plan is typically better for customers who use more than 8,000kWh per annum. As at 1 April 2013 Vector estimates there will be approximately 66,000 customers on this price plan.

Price plan WRCS			
Charge type	Code	Units	Rate
Fixed	WRCS-FIXD	\$/day	0.8000
Variable, controlled	WRCS-AICO	\$/kWh	0.0617

- The fixed charge (code WRCS-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The controlled charge (code WRCS-AICO) applies to all electricity distributed to each customer. UnitedNetworks may control load connected to its load management system at any time for a maximum of 5 hours in any 24 hour period.

## Residential uncontrolled smart price plan WRUH

The WRUH 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 UnitedNetworks' load management system. As at 1 April 2013 Vector estimates there will be 0 customers on this price plan.

<sup>1.</sup> 

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

Price plan WRUH			
Charge type	Code	Units	Rate
Fixed	WRUH-FIXD	\$/day	0.8000
Variable, off-peak	WRUH-OFPK	\$/kWh	0.0566
Variable, shoulder	WRUH-SHLD	\$/kWh	0.0708
Variable, peak	WRUH-PEAK	\$/kWh	0.0935

- The fixed charge (code WRUH-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The variable off-peak charge (code WRUH-OFPK) applies to electricity distributed to each customer 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 WRUH-SHLD) applies to electricity distributed to each customer 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 WRUH-PEAK) applies to electricity distributed to each customer 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.

## Residential controlled smart price plan WRCH

The WRCH 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>1</sup> connected to UnitedNetworks' load management system. As at 1 April 2013 Vector estimates there will be 0 customers on this price plan.

Price plan WRCH			
Charge type	Code	Units	Rate
Fixed	WRCH-FIXD	\$/day	0.8000
Variable, off-peak	WRCH-OFPK	\$/kWh	0.0494
Variable, shoulder	WRCH-SHLD	\$/kWh	0.0617
Variable, peak	WRCH-PEAK	\$/kWh	0.0815

• The fixed charge (code WRCH-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.

- The variable off-peak charge (code WRCH-OFPK) applies to electricity distributed to each customer 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 WRCH-SHLD) applies to electricity distributed to each customer 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 WRCH-PEAK) applies to electricity distributed to each customer 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.
- UnitedNetworks may control load connected to its load management system at any time for a maximum of 5 hours in any 24 hour period.

## Peak periods for smart price plans

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



UnitedNetworks' 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 customers use, metering charges, load management equipment located at the connection to the network, the cost of reading meters and the cost of customer fittings or appliances.

- In order for UnitedNetworks to supply any new or changed distribution service, 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, UnitedNetworks may apply non-standard charges other than those outlined in this schedule on a case by case basis.
- UnitedNetworks' 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 31% of the rates listed in this schedule.
- UnitedNetworks' 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 UnitedNetworks in their entirety with no mark-up directly to electricity retailers.
- All rates are exclusive of GST.

#### For further information



# **Price schedule for business customers**

#### Effective 1 April 2013

This document describes UnitedNetworks' standard electricity distribution charges for business customers on the Northern electricity distribution network. The charges cover the cost of transmitting electricity across Transpower's national grid and distributing electricity to customers across UnitedNetworks' local distribution network. UnitedNetworks offers two price plans for business customers depending on the customer's metering type.

#### **Business customer definitions**

A business customer is where the customer is not a residential customer (as outlined in UnitedNetworks' residential customer price schedule) and the customer's connection has a capacity less than or equal to 69kVA.

The network that customers are supplied from is determined by UnitedNetworks from time to time based on the physical location of the connection of the customer's premise or property to UnitedNetworks' network. The approximate area covered by the Northern electricity distribution network is shown on the following map.



## **Selection of price plan**

Where more than one price plan is available, the retailer may select from the available price plans. In selecting a price plan the retailer must ensure the customer meets the requirements of that price plan as specified in this schedule.

#### **Business unmetered price plan WBSU**

The WBSU 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 240 customers on this price plan.

Price plan WBSU			
Charge type	Code	Units	Rate
Fixed	WBSU-FIXD	\$/day	0.1300
Variable	WBSU-24UC	\$/kWh	0.0873

- The fixed charge (code WBSU-FIXD) is a daily charge applied to the number of days each unmetered fitting is connected to UnitedNetworks' network.
- The variable charge (code WBSU-24UC) applies to all electricity distributed to each unmetered fitting.
- Customer consumption is determined by UnitedNetworks based on load profile and appliance input wattages. A minimum load factor of 1.1 is applied to the input wattage for nonstreetlight 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 UnitedNetworks, 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 WBSN**

The WBSN price plan applies to business customers where the customer has a metered connection. As at 1 April 2013 Vector estimates there will be approximately 21,000 customers on this price plan.

Price plan WBSN			
Charge type	Code	Units	Rate
Fixed	WBSN-FIXD	\$/day	0.8000
Variable	WBSN-24UC	\$/kWh	0.0708

- The fixed charge (code WBSN-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The variable charge (code WBSN-24UC) applies to all electricity distributed to each customer.

#### **Customer capacity**

The capacity used to allocate customers to a price plan is based on the nearest standard capacity of each customer's connection as determined by UnitedNetworks subject to the following conditions:

- UnitedNetworks may require the customer's demand not to exceed the capacity of their connection at any time;
- Changes to the capacity of the customer's connection may be requested by the retailer;
- Any change to the customer's capacity requires the current limiting device (such as a fuse or transformer) to be changed by UnitedNetworks to the nearest standard capacity;
- UnitedNetworks 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 customer's capacity are subject to the agreement of UnitedNetworks and the

availability of spare capacity on UnitedNetworks' network.

### **Extent of charges**

UnitedNetworks' 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 customers use, metering charges, load management equipment located at the connection to the network, the cost of reading meters and the cost of customer fittings or appliances.

- In order for UnitedNetworks to supply any new or changed distribution service, 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, UnitedNetworks may apply non-standard charges other than those outlined in this schedule on a case by case basis.
- UnitedNetworks' 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 31% of the rates listed in this schedule.
- UnitedNetworks' 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 UnitedNetworks in their entirety with no mark-up directly to electricity retailers.
- All rates are exclusive of GST.

#### For further information



# Price schedule for low voltage customers

#### Effective 1 April 2013

This document describes UnitedNetworks' standard electricity distribution charges for low voltage customers on the Northern electricity distribution network. The charges cover the cost of transmitting electricity across Transpower's national grid and distributing electricity to customers across UnitedNetworks' local distribution network. UnitedNetworks offers two price plans for low voltage customers depending on the customer's metering type, and has one additional closed price plan.

#### Low voltage customer definitions

A low voltage customer is where the customer is not a residential customer (as outlined in UnitedNetworks' residential customer price schedule) and the customer has a metered connection greater than 69kVA connected to UnitedNetworks' low voltage (400V three phase or 230V single phase) network.

The network that customers are supplied from is determined by UnitedNetworks from time to time based on the physical location of the connection of the customer's premise or property to UnitedNetworks' network. The approximate area covered by the Northern electricity distribution network is shown on the following map.



#### **Selection of price plan**

Where more than one price plan is available, the retailer may select from the available price plans. In selecting a price plan the retailer must ensure the customer meets the requirements of that price plan as specified in this schedule.

### Low voltage closed price plan WLVC

The WLVC price plan is closed to all new and existing customers, except those specified by UnitedNetworks as qualifying for this price plan. As at 1 April 2013 Vector estimates there will be approximately 160 customers on this price plan.

Price plan WLVC (CLOSED)			
Charge type	Code	Units	Rate
Fixed	WLVC-FIXD	\$/day	6.0000
Variable	WLVC-24UC	\$/kWh	0.0389
Capacity	WLVC-CAPY	\$/kVA/day	0.0183

- The fixed charge (code WLVC-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The variable charge (code WLVC-24UC) applies to all electricity distributed to each customer.
- The capacity charge (code WLVC-CAPY) is a daily charge applied to the capacity of each customer connected to UnitedNetworks' network.

#### Low voltage price plan WLVN

The WLVN 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 640 customers on this price plan.

Price plan WLVN			
Charge type	Code	Units	Rate
Fixed	WLVN-FIXD	\$/day	5.0000
Variable	WLVN-24UC	\$/kWh	0.0573
Capacity	WLVN-CAPY	\$/kVA/day	0.0183

 The fixed charge (code WLVN-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.

- The variable charge (code WLVN-24UC) applies to all electricity distributed to each customer.
- The capacity charge (code WLVN-CAPY) is a daily charge applied to the capacity of each customer connected to UnitedNetworks' network.

#### Low voltage price plan WLVH

The WLVH 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 120 customers on this price plan.

Price plan WLVH				
Charge type	Code	Units	Rate	
Fixed	WLVH-FIXD	\$/day	10.0000	
Variable	WLVH-24UC	\$/kWh	0.0062	
Capacity	WLVH-CAPY	\$/kVA/day	0.0183	
Demand	WLVH-DAMD	\$/kVA/day	0.2716	

- The fixed charge (code WLVH-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The variable charge (code WLVH-24UC) applies to all electricity distributed to each customer.
- The capacity charge (code WLVH-CAPY) is a daily charge applied to the capacity of each customer connected to UnitedNetworks' network.
- The demand charge (code WLVH-DAMD) is a daily charge applied to 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.

#### **Power factor charges**

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

The power factor charge (codes WLVC-PWRF, WLVN-PWRF or WLVH-PWRF) is a daily charge applied where the customer's 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 WLVC, WLVN and WLVH

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Charge type	Code	Units	Rate
Power factor	WLVC-PWRF	\$/kVAr/day	0.0658
Power factor	WLVN-PWRF	\$/kVAr/day	0.0658
Power factor	WLVH-PWRF	\$/kVAr/day	0.0658

#### **Customer capacity**

The capacity used to allocate customers to a price plan and for calculating the customer's distribution charges is based on the nearest standard capacity of each customer's connection as determined by UnitedNetworks subject to the following conditions:

- UnitedNetworks may require the customer's demand not to exceed the capacity of their connection at any time;
- Changes to the capacity of the customer's connection may be requested by the retailer;
- Any change to the customer's capacity requires the current limiting device (such as a fuse or transformer) to be changed by UnitedNetworks to the nearest standard capacity;
- UnitedNetworks 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 customer's capacity are subject to the agreement of UnitedNetworks and the availability of spare capacity on UnitedNetworks' network.

#### **Extent of charges**

UnitedNetworks' 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 customers use, metering charges, load management equipment located at the connection to the network, the cost of reading meters and the cost of customer fittings or appliances.

 In order for UnitedNetworks to supply any new or changed distribution service, 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, UnitedNetworks may apply non-standard charges other than those outlined in this schedule on a case by case basis.

- UnitedNetworks' 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 31% of the rates listed in this schedule.
- UnitedNetworks' 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 UnitedNetworks in their entirety with no mark-up directly to electricity retailers.
- All rates are exclusive of GST.

#### For further information



# Price schedule for transformer customers

#### Effective 1 April 2013

This document describes UnitedNetworks' standard electricity distribution charges for transformer customers on the Northern electricity distribution network. The charges cover the cost of transmitting electricity across Transpower's national grid and distributing electricity to customers across UnitedNetworks' local distribution network. UnitedNetworks offers two price plans for transformer customers depending on the customer's metering type, and has one additional closed price plan.

### **Transformer customer definitions**

A transformer customer is where; the customer is not a residential customer (as outlined in UnitedNetworks' residential customer price schedule), has a metered connection greater than 69kVA and the customer's low voltage (400V three phase or 230V single phase) network is supplied directly from transformers owned by UnitedNetworks.

The network that customers are supplied from is determined by UnitedNetworks from time to time based on the physical location of the connection of the customer's premise or property to UnitedNetworks' network. The approximate area covered by the Northern electricity distribution network is shown on the following map.



## **Selection of price plan**

Where more than one price plan is available, the retailer may select from the available price plans. In selecting a price plan the retailer must ensure the customer meets the requirements of that price plan as specified in this schedule.

## **Transformer price plan WTXC**

The WTXC price plan is closed to all new and existing customers, except those specified by UnitedNetworks as qualifying for this price plan. As at 1 April 2013 Vector estimates there will be approximately 140 customers on this price plan.

Price plan WTXC (CLOSED)			
Charge type	Code	Units	Rate
Fixed	WTXC-FIXD	\$/day	5.4000
Variable	WTXC-24UC	\$/kWh	0.0350
Capacity	WTXC-CAPY	\$/kVA/day	0.0165

- The fixed charge (code WTXC-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The variable charge (code WTXC-24UC) applies to all electricity distributed to each customer.
- The capacity charge (code WTXC-CAPY) is a daily charge applied to the capacity of each customer connected to UnitedNetworks' network.

## **Transformer price plan WTXN**

The WTXN 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 30 customers on this price plan.

Price plan WTXN			
Charge type	Code	Units	Rate
Fixed	WTXN-FIXD	\$/day	4.5000
Variable	WTXN-24UC	\$/kWh	0.0516
Capacity	WTXN-CAPY	\$/kVA/day	0.0165

 The fixed charge (code WTXN-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.

- The variable charge (code WTXN-24UC) applies to all electricity distributed to each customer.
- The capacity charge (code WTXN-CAPY) is a daily charge applied to the capacity of each customer connected to UnitedNetworks' network.

#### **Transformer price plan WTXH**

The WTXH 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 200 customers on this price plan.

Price plan WTXH			
Charge type	Code	Units	Rate
Fixed	WTXH-FIXD	\$/day	9.0000
Variable	WTXH-24UC	\$/kWh	0.0056
Capacity	WTXH-CAPY	\$/kVA/day	0.0165
Demand	WTXH-DAMD	\$/kVA/day	0.2635

- The fixed charge (code WTXH-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The variable charge (code WTXH-24UC) applies to all electricity distributed to each customer.
- The capacity charge (code WTXH-CAPY) is a daily charge applied to the capacity of each customer connected to UnitedNetworks' network.
- The demand charge (code WTXH-DAMD) is a daily charge applied to 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.

#### **Power factor charges**

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

The power factor charge (code WTXC-PWRF, WTXN-PWRF or WTXH-PWRF) is a daily charge applied where the customer's 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 WTXC, WTXN and WTXH

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Charge type	Code	Units	Rate
Power factor	WTXC-PWRF	\$/kVAr/day	0.0658
Power factor	WTXN-PWRF	\$/kVAr/day	0.0658
Power factor	WTXH-PWRF	\$/kVAr/day	0.0658

#### **Customer capacity**

The capacity used to allocate customers to a price plan and for calculating the customer's distribution charges is based on the capacity of each customer's connection as determined by UnitedNetworks subject to the following conditions:

- UnitedNetworks may require the customer's demand not to exceed the capacity of their connection at any time;
- Changes to the capacity of the customer's connection may be requested by the retailer;
- Any change to the customer's capacity requires the current limiting device (such as a fuse or transformer) to be changed by UnitedNetworks to the nearest standard capacity;
- UnitedNetworks 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 customer's capacity are subject to the agreement of UnitedNetworks and the availability of spare capacity on UnitedNetworks' network.

#### **Extent of charges**

UnitedNetworks' 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 customers use, metering charges, load management equipment located at the connection to the network, the cost of reading meters and the cost of customer fittings or appliances.

 In order for UnitedNetworks to supply any new or changed distribution service, 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, UnitedNetworks may apply non-standard charges other than those outlined in this schedule on a case by case basis.

- UnitedNetworks' 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 31% of the rates listed in this schedule.
- UnitedNetworks' 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 UnitedNetworks in their entirety with no mark-up directly to electricity retailers.
- All rates are exclusive of GST.

#### For further information



# Price schedule for high voltage customers

#### Effective 1 April 2013

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

## **High voltage customer definitions**

A high voltage customer is where the customer is not a residential customer (as outlined in UnitedNetworks' residential customer price schedule) and has a metered connection greater than 69kVA supplied directly from UnitedNetworks' high voltage (6.6kV or higher) network.

The network that customers are supplied from is determined by UnitedNetworks from time to time based on the physical location of the connection of the customer's premise or property to UnitedNetworks' network. The approximate area covered by the Northern electricity distribution network is shown on the following map.



## Selection of price plan

Where more than one price plan is available, the retailer may select from the available price plans. In selecting a price plan the retailer must ensure the customer meets the requirements of that price plan as specified in this schedule.

## High voltage price plan WHVN

The WHVN 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 0 customers on this price plan.

Price plan WHVN			
Charge type	Code	Units	Rate
Fixed	WHVN-FIXD	\$/day	4.3700
Variable	WHVN-24UC	\$/kWh	0.0501
Capacity	WHVN-CAPY	\$/kVA/day	0.0160

- The fixed charge (code WHVN-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.
- The variable charge (code WHVN-24UC) applies to all electricity distributed to each customer.
- The capacity charge (code WHVN-CAPY) is a daily charge applied to the nominated capacity of each customer connected to UnitedNetworks' network.

## High voltage price plan WHVH

The WHVH 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 20 customers on this price plan.

Price plan WHVH			
Charge type	Code	Units	Rate
Fixed	WHVH-FIXD	\$/day	8.7300
Variable	WHVH-24UC	\$/kWh	0.0054
Capacity	WHVH-CAPY	\$/kVA/day	0.0160
Demand	WHVH-DAMD	\$/kVA/day	0.2556
Excess demand	WHVH-DEXA	\$/kVA/day	0.6390

 The fixed charge (code WHVH-FIXD) is a daily charge applied to the number of days each customer is connected to UnitedNetworks' network.

- The variable charge (code WHVH-24UC) applies to all electricity distributed to each customer.
- The capacity charge (code WHVH-CAPY) is a daily charge applied to the nominated capacity of each customer connected to UnitedNetworks' network.
- The demand charge (code WHVH-DAMD) is a daily charge applied to 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.
- The excess demand charge (code WHVH-DEXA) is a daily charge applied to 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 charges**

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

The power factor charge (code WHVN-PWRF or WHVH-PWRF) is a daily charge applied where the customer's 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 WHVN and WHVH			
Charge type	Code	Units	Rate
Power factor	WHVN-PWRF	\$/kVAr/day	0.0658
Power factor	WHVH-PWRF	\$/kVAr/day	0.0658

#### **Customer capacity**

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

- UnitedNetworks may require the customer's demand not to exceed the nominated capacity of their connection at any time;
- Changes to the customer's nominated capacity may be requested by the retailer;
- 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 UnitedNetworks' network;
- Changes to the nominated capacity are subject to the agreement of UnitedNetworks and the availability of spare capacity on UnitedNetworks' network;
- UnitedNetworks may pass some, or all of the costs associated with the change in nominated capacity on to the retailer;
- UnitedNetworks 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 the customer's existing nominated capacity.

#### **Extent of charges**

UnitedNetworks' 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 customers use, metering charges, load management equipment located at the connection to the network, the cost of reading meters and the cost of customer fittings or appliances.

- In order for UnitedNetworks to supply any new or changed distribution service, 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, UnitedNetworks may apply non-standard charges other than those outlined in this schedule on a case by case basis.
- UnitedNetworks' 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 31% of the rates listed in this schedule.

- UnitedNetworks' 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 UnitedNetworks in their entirety with no mark-up directly to electricity retailers.
- All rates are exclusive of GST.

#### For further information



# High voltage nominated capacity request form

Please provide the following information and send to <u>vector.billing@vector.co.nz</u> or directly to the customer's UnitedNetworks 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):	
Nervineted consein (regulate (1) (A))	
Energy retailer (at time of application):	
Energy retailer (at time of application):	
Energy retailer (at time of application):	
Energy retailer (at time of application): Request date from which nominated capacity is to apply:	
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Energy retailer (at time of application): <u>Request date from which nominated capacity is to apply:</u> <u>Signed on behalf of:</u>	
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Energy retailer (at time of application): <u>Request date from which nominated capacity is to apply:</u> <u>Signed on behalf of:</u>	
Energy retailer (at time of application): <u>Request date from which nominated capacity is to apply:</u> <u>Signed on behalf of:</u>	

Signature of Retailer:

Name of Signatory:

Date: