

Northpower

# Electricity Pricing Policy

Effective 1 April 2021

## 1 Introduction

Northpower owns the electricity distribution network which delivers power to the Whangarei and Kaipara regions. This policy describes how we apply our Electricity Pricing Schedule.

## 2 Residential and General

Each connection to the Northpower electricity network is allocated to a price category code in one of the main pricing groups:

### Residential Price Categories

Residential price category codes can only be allocated to ICPs which are “domestic premises” as defined in Section 5 of the Electricity Industry Act 2010. This includes premises that are used or intended for occupation by a person principally as a place of residence, and does not include places such as hotels, motels, hostels, hospitals, and other places that provide temporary accommodation.

For the avoidance of doubt, we do not consider holiday homes which are rented through platforms such as AirBnB and Bookabach to meet the definition of “domestic premises” on the basis that they are used to provide temporary accommodation and are not intended for occupation by a person principally as a place of residence.

Residential sites must have non-half hour metering installed (i.e. metering that can measure real energy (kWh) but not reactive energy (kVARh) or apparent energy (kVAh). Consumption data must be submitted in an EIEP1 format.

Price Category Code	Description	Eligibility
<b>DM1</b> <b>DM1-TOU</b>	Low fixed price plan option for residential consumers who use less than 8,000kWh p.a.	• Domestic premises which are a principal place of residence.
<b>DM7</b> <b>DM7-TOU</b>	Standard fixed price plan option for residential consumers who use more than 8,000kWh p.a.	• Domestic premises which are a principal place of residence.
<b>DM3</b> <b>DM3-TOU</b>	Price plan for domestic premises which are <i>not</i> a principal place of residence.	• Domestic premises which are <i>not</i> a principal place of residence.

DM1 and DM7 are offered in order to comply with the Low Fixed Charge Regulations. As such, to opt into or retain allocation to these price category codes, demonstration of eligibility under those regulations may be required.

### General Price Categories

General price category codes apply to ICPs which do not meet the definition of “domestic premises”, including separately metered supplies at residential properties for loads such as pumps and sheds.

The sites covered by these codes include commercial and industrial premises, schools, farms, community facilities, pumps, sheds, telecommunication cabinets, and streetlights.

General sites must have non-half hour metering installed (i.e. metering that can measure real energy (kWh) but not reactive energy (kVARh) or apparent energy (kVAh). Consumption data must be submitted in an EIEP1 format.

Price Code Category	Description	Eligibility
<b>ND1</b> <b>ND1-TOU</b>	Connections up to and including 70kVA (100A)	<ul style="list-style-type: none"> <li>• Non-domestic premises up to and including 70kVA (100A).</li> <li>• Supply must be fused at 100A or less.</li> <li>• ICP must have whole-current metering.</li> </ul>
<b>ND2</b> <b>ND2-TOU</b>	Connections over 70kVA (100A)	<ul style="list-style-type: none"> <li>• Non-domestic premises over 70kVA (100A).</li> <li>• ICP must have CT metering.</li> </ul>
<b>ND5</b>	Irrigation & Pumps	<ul style="list-style-type: none"> <li>• ICP must only supply pumps or irrigation schemes.</li> <li>• This plan allows for supply on a day/night meter, where separate registers measure the electricity consumed between 0700-2300 and 2300-0700. A relay placed after the day/night meter allows Northpower to control the supply through this meter for up to 2 hours per day.</li> <li>• Uncontrolled and Controlled 22 hour supplies are also available on this plan, with flat rates which do not vary by time of day.</li> </ul>

Price Code Category	Description	Eligibility
ND6	Unmetered 24 Hour	<ul style="list-style-type: none"> <li>This plan is for unmetered uncontrolled load which has a flat load profile, for roadside telecommunication cabinets and similar installations.</li> <li>Connections are subject to the unmetered limitations in the Electricity Industry Participation Code.</li> </ul>
ND12	Builders Temporary Supply	<ul style="list-style-type: none"> <li>This plan is for temporary supplies whilst a premise is constructed.</li> <li>Once a permanent supply is commissioned, the ICP must be re-allocated to a different price category code.</li> <li>An ICP cannot be allocated to a normal price category code until the permanent supply is commissioned.</li> <li>Maximum duration for a builder's temporary supply is 24 months.</li> <li>Not to be used to supply a dwelling, shed, caravan, pump, electric fence, etc.</li> </ul>
ND13	Long Term Disconnected	<ul style="list-style-type: none"> <li>This plan is for ICPs where the meters have been removed and service line disconnected at the network connection point, but permission has not been provided by the owner to permanently decommission the supply.</li> <li>ICPs cannot be transferred from ND13 until a compliant service line has been installed and Certificate of Compliance sighted by Northpower.</li> </ul>

## Component Codes

The following price component apply to Residential and General price category codes (noting not all price components apply to all price category codes):

Description	Applies to
Daily Price	The number of days the ICP's point of connection is energised.
Uncontrolled	The volume of electricity (kWh) distributed to the ICP where Northpower does not have the ability to load control.
Peak	The volume of electricity (kWh) distributed to the ICP during the relevant timeframe where the network does not have the ability to load control. See Time of Use section for more information.
Shoulder	
Off Peak	
Controlled 18	The volume of electricity (kWh) distributed to the ICP where the load is controlled by Northpower using our ripple controller, and we may control supply for up to 6 hours per calendar day (i.e. the supply is available for at least 18 hours). We may determine the times that we control the supply.
Controlled 22	The volume of electricity (kWh) distributed to the ICP where the load is controlled by Northpower using our ripple controller, and we may control supply for up to 2 hours per calendar day (i.e. the supply is available for at least 22 hours). We may determine the times that we control the supply.
Night	The volume of electricity (kWh) distributed to the ICP where the load is controlled by Northpower using our ripple controller, and we will only make the supply available 11pm and 7am.
Metered Lighting	The volume of electricity (kWh) distributed to the ICP where a separate register measures consumption relating to lighting which is switched on during non-daylight hours by a Northpower ripple controller.
Controlled Day	The volume of electricity (kWh) distributed to the ICP between 0700-2300, measured through a day/night meter and controllable by Northpower using our relay for up to 2 hours a day.
Controlled Night	The volume of electricity (kWh) distributed to the ICP between 2300-0700, measured through a day/night meter and controllable by Northpower using our relay for up to 2 hours a day.
Unmetered	The volume of electricity (kWh) distributed to the ICP, calculated based upon the estimated consumption by the connected equipment.

Description	Applies to
Export Generation	The volume of electricity (kWh) exported from the ICP back into Northpower's distribution network.

Please see below for additional information regarding Northpower's Residential and General Time of Use price category codes.

### Controlled Load

As outlined in the Component Codes section, our lines prices may vary based upon the hours that the supply is available, and whether we can control (i.e. disconnect) load at the ICP to manage demand on our network, by way of a Northpower owned and managed ripple controller.

Controlled loads must be separately metered and permanently wired (i.e. must not be able to unplug the device and plug it into a socket connected to the uncontrolled meter). For example on our network hot water cylinders are generally controlled by way of a Northpower ripple controller (a device which we can send signals to, to turn the power on and off remotely). They are hard wired to this device.

Not all types of load control are available on all price category codes. If there is not a price category code for the load control type on the relevant price category code, the consumption will be charged at the uncontrolled rate for default price category codes, or the peak rate for ToU price category codes.

In emergency conditions, Northpower may control load for longer than the 6 hours (for Controlled 18) or 2 hours (for Controlled 22) normally allowed.

If for any reason another party can control the load, the price component code for that supply will be reverted to the applicable uncontrolled price component code.

### Time of Use

Time of Use ("ToU") pricing is mandatory on our network for residential consumers and small to medium businesses where the customer has a communicating smart meter and the retailer does not have an exemption approved. This means for consumers on ToU pricing, our lines charges will vary based on the time of day that electricity is consumed:

Time Periods	Peak	Shoulder	Off-Peak
<b>Work days</b>	07:00 – 09:30	9:30 – 17:30	22:00 – 07:00
	17:30 – 20:00	20:00 – 22:00	
<b>Weekends and public holidays (incl. Northland regional holidays only)</b>	No peak period	07:00-22:00	

### Non-communicating meters

ToU Price Categories will apply to all Residential and General Consumers with a communicating AMI meter, as indicated by "Y" in the AMI Comm field of the Metering Attributes section in the EA registry except where a consumer has a legacy meter or a smart meter that does not communicate. These connections will be exempt from ToU pricing and will instead be charged a single default rate for uncontrolled usage.

### Retailers unable to provide billing data

In the event that a retailer is unable to provide time-sliced data in an EIEP1 format (i.e. consumption summarised and reported against the peak, shoulder, and off-peak price component codes) due to system constraints, MEP contractual issues, or any other valid reason, they may apply for an exemption.

To apply for an exemption a retailer will need to complete the application form, including details of the reasons that they are unable to provide the data, actions being taken to address this, and expected resolution date.

Exemptions will be approved by Northpower and will relate to a pricing year. If an exemption is required for a subsequent pricing year, a separate application would need to be made. We note information relating to applications for, and exemptions granted, may be made available to regulators.

### ToU Price Plans

We have established price plans for our ToU pricing structures. Default plans exist for the consumers who qualify for default pricing, either by way of an approved exemption or because their meter is non-communicating.

Please see below for the ToU price categories and their default equivalents:

Customer Group	Pricing Structure	Price Category Code
Residential LFC	Default	DM1
	ToU	DM1-ToU
Residential Standard	Default	DM7
	ToU	DM7-ToU
Non-Principal Residence	Default	DM3
	ToU	DM3-ToU
General < 100A	Default	ND1
	ToU	ND1-ToU
General > 100A	Default	ND2
	ToU	ND2-ToU

If a consumer belongs to one of the above consumer groups, it will be assigned to the relevant ToU price category code unless:

- The ICP has a legacy meter, or a smart meter that doesn't communicate; or
- The retailer supplying the ICP has an exemption approved by Northpower for a group or type of consumers that includes that ICP.

Consumers will need to be switched between the Default and ToU pricing category codes by retailers for a number of reasons, including:

- 1) Consumer has changed retailer, and their new retailer has a different exemption status to their previous retailer.
- 2) The communication status of the meter changes.

Retailers are responsible for advising us of changes required to switch consumers both from ToU to Default price category codes and vice versa, based on the communication status of the meter and whether they have a valid exemption covering the ICP.

These requests must be made in a timely manner, as the Electricity Code currently prohibits backdating of price plan changes beyond 3 business days, and retailers must submit time-sliced EIEP1 data for any period of time that an ICP is on a ToU price category code.

We may periodically review the Price Categories by ICP and notify Retailers of where customers are on the incorrect price category code.

### Estimates and Incorrect data

In the event that a MEP is unable to provide data for a period of time to enable the retailer to provide volumes against the ToU price component codes in the EIEP1 file, the retailer is responsible for estimating the readings as per current industry process. The wash-up process can be used to correct the difference when an actual read is subsequently obtained.

Where non-time sliced data (e.g. Uncontrolled) is provided for an ICP on a ToU price category codes (e.g. we should have been supplied Peak/Shoulder/Off peak) our billing system will default the consumption to peak, as an Uncontrolled rate does not exist on the ToU price category codes. Retailers may use the wash-up process to provide corrected data.

## 3 Streetlights

The ND7 price category code is for unmetered streetlights owned by a public or private entity (i.e. local council, NZTA, or gated community). These are operated from "dusk to dawn" using a Northpower ripple relay.

Streetlights are billed using Northpower's records of fixtures connected to the network. Lamp-owners must promptly communicate to Northpower the details of lamp/fixture changes and/or alterations to the number of fixtures, as prior billed distribution charges will not be credited.

Streetlights are charged based on a:

- Daily price per fixture
- Lamp size/type banded daily charge per fixture

The lamp size/type are allocated to the following bands:

Price Component Code	Description	LED or INC fixture wattage	FL, MV or SV lamp wattage
26-1	Demand band 1	0 to 25	0 to 21
26-2	Demand band 2	26 to 50	22 to 42
26-3	Demand band 3	51 to 100	43 to 83
26-4	Demand band 4	101 to 150	84 to 125
26-5	Demand band 5	Above 150	Above 125

The LED or INC group covers LED fixtures and incandescent lamps. For LED fixtures, the wattage is for the fixture, not the individual LED's that comprise the fixture. The FL, MV or SV group is for florescent lamps, mercury vapour lamps and sodium vapour lamps (high pressure or low pressure) and all other types, excluding LED and incandescent lamps. The wattage for the FL, MV or SV group is assessed on the lamp wattage, excluding the ballast. The lower wattages in the bands allow for the losses in the ballasts. For the purpose of the Registry, the Register Content Code and Available Hours is SL9.

## 4 Large Commercial & Industrial

These price plans are designed for large commercial and industrial sites with significant electricity requirements, and in most cases either have a dedicated transformer or connect to the Northpower network at high voltage. Examples include supermarkets, sawmills, large office blocks, and other high consumption sites.

These sites must have half hour metering installed which read real energy (kWh) together with either or both reactive energy (kVARh) or apparent energy (kVAh) and consumption data must be submitted in an EIEP3 file. They must also not be a domestic premise.

Price Category Code	Description	Eligibility
LC1	Low Voltage - kWh Based	ICP is supplied from Northpower's low voltage network via a transformer which is owned by Northpower and shared with other ICPs.
LC2	Low Voltage - Capacity Based	
LC3	Dedicated Transformer	ICP is supplied from a transformer which is owned by Northpower and dedicated to the supply of the ICP.
LC4	High Voltage	ICP is supplied from Northpower's high voltage (11kV or higher) network.

### Price Component Codes

The price component codes that apply these plans are:

Description	Applies to
Daily	The number of days the ICP's point of connection is energised.
Peak	Volume of electricity (kWh) distributed to the ICP during peak periods.
Shoulder	Volume of electricity (kWh) distributed to the ICP during shoulder periods.
Off Peak	Volume of electricity (kWh) distributed to the ICP during off-peak periods.
Capacity	The capacity of the ICP's connection to the Northpower network as at the last day of the month, as determined by Northpower. In determining the capacity, Northpower will take into account the below factors, in addition to any other factors which it considers relevant to the ICP:  Low Voltage: Fuse Capacity Transformer: Transformer Capacity High Voltage: Customer's Transformer Capacity
Demand	The average of the ICP's 10 highest half hour kVA demands between 7am and 10pm (including weekends and public holidays) calculated across the month.
Excess demand	The difference between the anytime maximum demand (i.e. single highest half hour kVA demand) and the ICP's capacity, where the consumer's anytime maximum demand is greater than the capacity. Charge is calculated as the (highest half hour period demand (in kVA) during the month less capacity) x rate x days in month.
Power factor	The power factor amount.

The peak, shoulder, and off-peak time periods for LC1 are as below:

Time Periods	Peak	Shoulder	Off-Peak
All days	07:00 – 09:30 17:30 – 20:00	9:30 – 17:30 20:00 – 22:00	22:00 – 07:00

Note there are no variation to rates for weekends or public holidays.

## Capacity

The following applies to all Large Commercial & Industrial sites:

- Northpower may require the consumer's demand not to exceed the capacity of their connection at any time.
- Changes to the capacity of the consumer's point of connection may be requested by the customer or their retailer.
- Northpower may pass some or all of the costs associated with the change in capacity on to the customer or their retailer (depending who requests the change) including removal of stranded assets such as transformers. This includes charging for removal of assets dedicated to either a site or an ICP where the ICP is decommissioned.
- Changes to the consumer's capacity are subject to the agreement of Northpower and the availability of capacity on Northpower's network, and may be subject to additional charges including capital contributions.

The following applies to low voltage sites and transformer sites:

- Any change to the consumer's capacity may require the current limiting device (such as a fuse or transformer) to be changed to the nearest standard capacity, at the customer's cost.
- The consumer may only select capacities which may be practically implemented by a current limiting device (e.g. standard fuse sizes, transformer sizes, etc).

The following applies to high voltage sites:

- The capacity of the site is usually based on the transformer capacity that the customer has installed.
- The customer and retailer is responsible for advising of and requesting approval for any changes to the transformer capacity at their site.
- Minimum chargeable capacity is 500kVA.

The application of excess demand prices does not imply or guarantee the availability of any additional capacity over and above the ICP's chargeable capacity.

We encourage consumers and retailers to check the capacity determined by Northpower prior to commencement of the pricing year, and engage us if they believe it does not accurately reflect the capacity of their connection to the network. Northpower will not backdate changes to any capacity charges, whether they reflect a change in asset configuration or a change in Northpower's assessment and determination of the capacity of a connection.

## Power Factor

Northpower requires consumers to maintain a power factor of greater than 0.95 lagging. If the consumer's power factor is below 0.95 lagging, Northpower may apply power factor prices. Where the consumer's metering equipment does not record power factor, Northpower may install power factor monitoring equipment and monitor the consumer's power factor, and may charge the consumer or its retailer for this equipment and monitoring.

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

## Capital Contribution

New customers on capacity based plans (historically ND9) are not currently charged a capital contribution by Northpower, whereas kWh based plans (historically ND10) are. As such, if a customer wishes to switch from a capacity to a kWh based plan, a capital contribution will be payable.

## 5 Very Large Industrial

The IND price category code is used for Very Large Industrial consumers with individual pricing. These sites are generally supplied at HV and have assets which are dedicated to their supply. Some of the sites are invoiced directly by Northpower whilst others are charged via a retailer. This price category will from 2021/2022 include all distributed generation sites with capacity of 1MW+.

We assess charges for these consumers on an individual basis, in line with our Pricing Methodology and Cost of Supply model where possible.

Loss and constraint excesses have historically been passed through to these consumers on a monthly basis. From the 2021/2022 pricing year these will no longer be passed through, consistent with the treatment for other consumers. The benefits will still flow back to consumers, either through reduced lines charges or increased discounts or distributions.

## 6 Process for assigning Price Category Codes

We are responsible for assigning a price category code to each ICP supplied from our network, and use information from retailers and consumers to make these decisions. As such, where the use of a premise changes, we require that retailers communicate the changes to Northpower so that we can update the price category code if required. Changes to price category codes are applied from the date that we become aware of new information or receive a request (which we accept) from a retailer.

Retailer initiated price category code changes between Residential Low User and Residential Standard will be limited to one per ICP in a rolling 12 month period, unless the account holder changes. This excludes changes between the default and ToU price category codes when the underlying price code category doesn't change.

If a customer wishes to switch to or retain the lower fixed pricing available under the Low Fixed Charge regulations they may need to demonstrate their eligibility for the pricing available under this regulation. Northpower is not required to provide these price category codes to consumers who are not eligible under the Low Fixed Charge regulations, and thus the onus falls on the consumer to demonstrate their eligibility in order to assert their rights under that regulation. Northpower will not backdate plan changes to any date earlier than the date that evidence of eligibility is supplied.

## 7 Data Requirements

Traders must provide all information that Northpower reasonably requires to enable it to calculate the Distribution Services charges payable by the Trader to Northpower. Traders are required to provide Northpower with consumption data files in the following industry file formats:

Price category	Price Category Code	Description	Metering Type	Data format
<b>Residential</b>	DM1 DM1-TOU	Principal Place of Residence – Low User	Non Half Hour	EIEP1 Replacement Normalised
	DM3 DM3-TOU	Non-Principal Place of Residence		
	DM7 DM7-TOU	Principal Place of Residence – Standard User		
<b>General</b>	ND1 ND1-TOU	Up to 70kVA		
	ND2 ND2-TOU	Over 70kVa		
	ND5	Irrigation and Pumps		
	ND6	Unmetered 24 Hour		
	ND12	Builders Temporary Supply		
	ND7	Unmetered Public Lighting		
<b>Large Commercial &amp; Industrial</b>	ND9	Demand Based Pricing	Half Hour	EIEP3
	ND10	Volume Based Pricing		
<b>Very Large Industrial</b>	IND	Very large Industrial		

If a trader provides EIEP3 format consumption data (instead of EIEP1) to Northpower for any ICP, Northpower will transfer that ICP to the applicable half-hour metered price category code.



Northpower requires traders to provide wash-up EIEP1 format replacement normalised files for months 3, 7, and 14, in addition to the month 0 initial file.

Where traders provide information under an EIEP format, they must comply with the relevant EIEP. Traders must provide the information by the dates and times specified in the relevant EIEP.

## **8 Late, incorrect, or incomplete consumption data.**

Where EIEP files, data, or information is provided late, contains errors, or is incomplete, we reserve the right to charge on the basis of actual time spent by a billing analyst to review, correct, validate, and reconcile the information, at the rate of \$100 per hour plus GST.

Northpower