
Nelson Electricity Limited – 2022 Pricing Guide

This document is to provide Electricity Retailers and other Interested Parties assistance in the application of the charges for delivery of line function services on the Nelson Electricity Network. The information will also assist to interpret the Nelson Electricity ICP information contained on the Electricity Registry (Registry).

The information contained within this document is for the term 1 April 2022 to 31 March 2023 unless a re-evaluation loss factors prior to the end of term in which all affected parties will be notified of any changes.

1.0 Overview of Changes for 1 April 2022

There has not been any structural change in pricing for this pricing year.

The only significant change is the increase of the Low Fixed Charge Tariff Option for Residential Consumers as per the changes in the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 from 1 April 2022. The increase is from 1 cent/kVA/day of connected capacity to 2 cents/kVA/day of connected capacity (all residential consumers have an assumed connected capacity of 15kVA). This increases the fixed charge from 15 cents/day up to 30 cents/day.

On a minor level, Nelson Electricity accepts the temporary approach for Day/Night pricing for Groups 1 and 2 until a separate pricing category is formed in 2023-2024 as part of the “Future Pricing” changes. The Day component is 7am to 11pm, and Night component 11pm to 7am. The EIEP files must show the Register Content Code “D” for Day and Period of Availability of 16 hours with Register Content Code “N” for Night Code and Period of Availability of 8 hours.

Low Fixed Charge Regulation Compliance

The Electricity Authority advised Nelson Electricity in early April 2022 that delivered prices do not comply with their interpretation of Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004. Nelson Electricity has undergone a pricing review which has resulted in adjusting the Load Group 1 variable prices. The issue revolved around the Nelson Electricity prices for an uncontrolled only residential consumer would be disadvantaged on the Low Fixed charge option.

The new line prices provide a pricing solution for Load Group 1 consumers that is compliant with the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 with any possible combination of pricing options.

2.0 Load Groups

NEL has split its consumers into five distinct consumer Load Groups to assist in the fair allocation of costs and setting line price levels. The Groups are based on the type of connection which considers typical load patterns, fuse size and annual kWh consumption. The number of groups is set at five as a balance between minimising complexity and ensuring costs are appropriately apportioned between consumers. The groupings are relatively in line with other electricity networks in New Zealand.

- **Load Group 0**

Unmetered Load or Metered Builders Temporaries - this group is for the smaller/lower sized fused connections (under 15kVA) either metered or unmetered that do not fall into the other groups as listed below. Most of the connections are:

- metered builders temporary supplies
- small unmetered supplies to telephone boxes
- streetlights

Builders Temporary supplies are to be fused at no greater than single phase 30amps (7kVA) otherwise they will have to be Load Group 2.

- **Load Group 1**

Residential Consumers Low Fixed Charge Option – connections that are a residential home that exhibit a typical residential load profile using less than 8,000kWh per year. A residential connection is where electricity is supplied to a premise that is used or intended for occupation by a person principally as a place of residence. It does not include premises that constitute any part of premises described in Section 5(c) to (k) of the Residential Tenancies Act 1986 (which refers to places such as jails, hospitals, hostels, hotels, and other places providing temporary accommodation). The connection size is set at 15kVA. The Nelson Electricity Limited (NEL) Network Code allows for single phase 60amp, two phase 40 amp or three phase 30amp supplies to be classed as a residential connection. A residential type load profile not on the Low Fixed Charge option is typically categorised as Load Group 2.

- **Load Group 2**

Residential and Small Commercial Consumers – connections that are 15kVA up to 150kVA. Residential consumers not on Low User Option are also in this group. The residential and commercial consumers are grouped together as much as Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 allow. While there is a difference in load profile from a typical commercial and a residential connection it is proving more difficult as time goes on to differentiate between the two as many connections are a mixture of the two. To avoid complications in grouping allocations and number of tariffs, Load Group 2 joins the two consumer types together. By doing this it has removed any price discrimination which existed when commercial and residential were grouped separately.

- **Load Group 3**

Large Commercial Consumers with supply up to 2400kVA - this group is for any commercial connection with a supply up to 2400kVA. There is a mandatory requirement of connections with a capacity of greater than 150kVA to be Load Group 3 and have

Time of Use metering installed. Those below that limit can opt to be on Load Group 2 or Load Group 3. This group is ideal for consumers that have the ability to manage their peak demand to minimise line charges as the line charge regime for this group more accurately reflects the consumer’s fair allocation of costs.

- **Load Group 4**

This group is for the largest commercial consumers on the network. Consumers with capacity supplied of greater than 3000kVA with supply from dedicated 11kV/400V substations.

3.0 Registry Pricing Codes, 1 April 2022 - 31 March 2023

This section provides the detail necessary to interpret the pricing information of the Registry so to ensure all ICP’s are billed accurately.

3.1 Distributor Price Category Code

This section describes what code should be input into the Registry – “*Distributor Price Category Code*” field.

Distributor Price Category Summary

Category Code	Description
0-BT	Group 0 Metered Builders Temporary
0-SL	Group 0 (Unmetered) Streetlight
0-UM	Group 0 (Unmetered) General Unmetered
1	Group 1 Residential (Low Fixed Charge Option)
2	Group 2 General - Residential and Commercial (15 - 150kVA)
T-03	Group 3 Large Commercial 16kVA – 42kVA
T-04	Group 3 Large Commercial 43kVA – 69kVA
T-05	Group 3 Large Commercial 70kVA – 110kVA
T-06	Group 3 Large Commercial 111kVA – 138kVA
T-07	Group 3 Large Commercial 139kVA – 218kVA
T-08	Group 3 Large Commercial 219kVA – 300kVA
T-09	Group 3 Large Commercial 301kVA – 500kVA
T-10	Group 3 Large Commercial 501kVA – 750kVA
T-11	Group 3 Large Commercial 751kVA – 1,000kVA
T-12	Group 3 Large Commercial 1,001kVA – 1,500kVA
T-13	Group 3 Large Commercial 1,501kVA – 2,000kVA
T-14	Group 4 Large Commercial = 6,300kVA – 11kV Metered
T-15	Group 3 Large Commercial = 2,400kVA – 11kV Metered

3.2 Distributor Loss Category Codes

This section describes what code should be input into the Registry – “**Distributor Loss Category Code**” field.

The table below outlines the Loss Codes and which Load Groups they are allocated to. Load Group 2 can have either L1 loss code for Residential connections and L2 for Commercial connections.

Distributor Loss Category

Loss Code	Description	Loss Factor Consumption	Loss Factor Generation
L0	Group 0 Unmetered and Builders Temporary Supply	1.044	1.019
L1	Group 1 or 2 Residential Connections	1.044	1.019
L2	Group 2 Commercial Connections	1.044	1.019
L3	Group 3 Large Commercial - Supplied from 400V Network	1.033	1.022
L4	Group 3 Large Commercial - Direct 400V feed from transformer	1.033	1.022
L5	Group 3 Large Commercial - Dedicated Transformer 400V Metering	1.033	1.022
L6	Group 3 or 4 Large Commercial - Dedicated Transformer 11kV Metering	1.027	1.017

Table 1. Loss Category and Loss Factors

3.3 Distributor Installation Details

Group 0 - This field will be populated with miscellaneous site description details for the ICP.

Groups 1 and 2 - This field will be populated with miscellaneous site description details for the ICP.

Group 3 - This field will be populated with the Winter Demand value (in kVA). Note that this is a change that applied from 1 April 2018. Previously the Winter Demand was input in the “Chargeable Capacity” field.

The **Winter Demand** charge is the single highest half hour kVA demand recorded in the months of June, July, and August between 8.30am-11.30am and 5pm-6pm. The winter demand assessment period excludes weekends and public holidays. The winter demand value is used for billing purposes from the October month for the following 12 months until reset again the after the following winter. New consumer connections will have an assessed winter demand until the end of the first winter period.

3.4 Distributor Chargeable Capacity

The “Chargeable Capacity” field is populated for Groups 1, 2, 3 and 4 as the connected chargeable capacity.

Group 0 - The “Chargeable Capacity” field will have the chargeable capacity, where appropriate.

0-SL – Does not have any capacity assigned as there is only one ICP and the charges are based on a fixed daily price.

0-BT – Does not have capacity assigned as there is a fixed daily price not based on capacity

0-UM – Will have Chargeable Capacity field populated based on the capacity of the connection. The value is in kW and rounded to 2 decimal places.

Group 1 and 2 – The “Chargeable Capacity” field will be populated with fused capacity in kVA as per the Table 2. Given there are existing business and residential connections with two or three phases that could have a single phase 60 amp connection, a dispensation has been granted allowing for two phase 40 amp and three phase 30 amp supplies to be assessed at the minimum capacity of 15kVA.

Group 3 and 4 -The “Chargeable Capacity” field will be populated in kVA. It will be the maximum capacity of the Pricing Category Code assigned to the ICP (e.g. T-08 = 300kVA, T-09 = 500kVA).

Note: Up until 31 March 2017, the “Chargeable Capacity” field for Group 3 used to have the Winter Demand values. From 1st April 2019, these values are now input in the “Distributor Installation Details” field.

Fuse Rating Table

No. of Phases	Fuse size (Amps)	kVA Rating
3	30	15
2	40	15
3	40	28
1	60	15
2	60	30
3	60	45
1	80	20
2	80	40
3	80	60
1	100	23
2	100	46
3	100	69
3	125	87
3	150	105
3	160	110
3	200	138

Table 2. Fuse Rating Table

Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004

One complication with the capacity based fixed delivery price is the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 which means that a residential consumer using less than 8,000kWh must have access to a fixed delivery price of at most 15 cents per day. To comply with this regulation and to minimise delivery price options, NEL has assessed all residential consumers fuse capacity at 15kVA. Currently a residential consumer with a larger fuse size is only paying the standard price of the typical 15kVA connection.

4.0 Retailer Billing and EIEP1 File Format

4.1 Price Codes

This section provides some guidance around the application of the Pricing Codes for Electricity Retailer billing of its customers and also the format of the EIEP Files being provided to Nelson Electricity. The aim (over time) is to ensure there is a consistent approach.

There is an expectation that all Retailers will use the same Price Codes as is outlined below.

Load Group 0

Builders Temporary (7kVA)

Any builders temporary supplies with a connection of no greater than 7kVA or single phase 30 amps can be allocated these price codes. All connections greater than 7kVA must be placed in Load Group 2.

Price Codes

0-BT-Fixed (\$/day)	- Mandatory
0-BT-24hr (\$/kWh)	- Mandatory

Unmetered Connection

These price codes are used for small unmetered supplies e.g. telephone boxes and private streetlights.

Price Codes

0-UM-Fixed (\$/day)	- Mandatory
0-UM-kW (\$/kW/day)	- Mandatory

Streetlighting (Council)

This Price Code is only used for one ICP which represents all public street lighting on the Nelson Electricity network.

Price Code

0-SL (\$/day)	- Mandatory
---------------	-------------

Load Group 1

Residential Low Fixed Charge

*Load Group 1 ICP's **must** use the 1-Fixed and 1-24hr codes. The fixed charge is based on the connected capacity which is input in the "Chargeable Capacity" Field in the Registry. The 1-Water and 1-Night are optional depending on whether there are controllable loads and type. It is mandatory to include 1-DG if there is Distributed Generation installed on site. It is possible to use all codes for one connection.*

Load Group 1 prices are set on the premise that any electrical hot water load is controllable on either 1-Water or 1-Night. The 1-24hr price was not designed as an all-inclusive pricing option.

Price Codes

1-Fixed (\$/kVA/day)	- Fixed charge	- Mandatory
1-24hr (\$/kWh)	- Anytime (No control)	- Mandatory
1-Water (\$/kWh)	- Controlled (Hot water)	- Optional
1-Night (\$/kWh)	- Night Rate (11pm – 7am)	- Optional
1-DG (\$/kWh)	- Distributed Generation (Export)	- Mandatory if DG installed

Application of a Day/Night Option (applying to 31 March 2023)

1-Fixed (\$/kVA/day)	- Fixed charge	- Mandatory
1-24hr (\$/kWh)	- Day Rate (7am – 11pm)	- Mandatory
1-Night (\$/kWh)	- Night Rate (11pm – 7am)	- Mandatory
1-DG (\$/kWh)	- Distributed Generation (Export)	- Mandatory if DG installed

Load Group 2

General - Residential and Commercial

*Load Group 2 ICP's **must** use the 2-Fixed and 2-24hr codes. The fixed charge is based on the connected capacity which is input in the "Chargeable Capacity" Field in the Registry. The 2-Water and 2-Night are optional depending on whether there are controllable loads and type. It is mandatory to include 2-DG if there is Distributed Generation installed on site. It is possible to use all codes for one connection.*

Load Group 2 prices are set on the premise that any electrical hot water load is controllable on either 2-Water or 2-Night. The 2-24hr price was not designed as an all-inclusive pricing option.

Price Codes

2-Fixed (\$/kVA/day)	- Fixed charge	- Mandatory
2-24hr (\$/kWh)	- Anytime (No control)	- Mandatory
2-Water (\$/kWh)	- Controlled (Hot water)	- Optional
2-Night (\$/kWh)	- Night Rate (11pm – 7am)	- Optional
2-DG (\$/kWh)	- Distributed Generation (Export)	- Mandatory if DG installed

Application of a Day/Night Option (applying to 31 March 2023)

2-Fixed (\$/kVA/day)	- Fixed charge	- Mandatory
2-24hr (\$/kWh)	- Day Rate (7am – 11pm)	- Mandatory
2-Night (\$/kWh)	- Night Rate (11pm – 7am)	- Mandatory
2-DG (\$/kWh)	- Distributed Generation (Export)	- Mandatory if DG installed

Load Group 3

Large Commercial

Load Group 3 is for any Commercial connection up to 2400kVA, optional from 42kVA up to 150kVA. There are six separate pricing codes to be used for each ICP.

1. The Codes starting with "T" represent the capacity of the connection so only one is used per ICP (the same is used in the Distributor Price Category Code field in the Registry). The billed capacity of the installation is input in the "Chargeable Capacity" field on the Registry (although not used for billing as there is a price per day for each capacity band).
2. The 3-Fixed is a fixed daily charge
3. The 3-WD Winter Demand is reset each winter and applied from 1 October to 30 September the following year is input in the "Distributor Installation Details" field on the Registry.
4. The 3-24hr is a standard variable consumption charge.
5. The 3-PF Power Factor is the kVA_r required to bring the highest kW half hour of the month up to 0.95 Power Factor. (see calculation in Appendix A).
6. The 3-DG Distributed Generation charge is a new price for Group 3. This is a charge for the kWh exported onto the Nelson Electricity network from an ICP with distributed generation installed.

Pricing Codes

Capacity Charges

T-03 (\$/day)	16kVA – 42kVA	- Select one
T-04 (\$/day)	43kVA – 69kVA	- Select one
T-05 (\$/day)	70kVA – 110kVA	- Select one
T-06 (\$/day)	111kVA – 138kVA	- Select one
T-07 (\$/day)	139kVA – 218kVA	- Select one
T-08 (\$/day)	219kVA – 300kVA	- Select one
T-09 (\$/day)	301kVA – 500kVA	- Select one
T-10 (\$/day)	501kVA – 750kVA	- Select one
T-11 (\$/day)	751kVA – 1000kVA	- Select one
T-12 (\$/day)	1001kVA – 1500kVA	- Select one
T-13 (\$/day)	1501kVA – 2000kVA	- Select one
T-15 (\$/day)	2400kVA	- Select one

Other Charges

3-Fixed (\$/day)	- Fixed Daily Charge	- Mandatory
3-WD (\$/kVA/day)	- Winter Demand (kVA)	- Mandatory
3-24hr (\$/kWh)	- Anytime (no Control)	- Mandatory
3-PF (\$/kVA _r /month)	- Power Factor Charge (kVA _r)	- Mandatory
3-DG (\$/kWh)	- Distributed Generation	- Mandatory if DG installed

4.2 EIEP1 File Format

This section is to provide some guidance around the preferred EIEP1 reporting format for the Mass Market ICP's.

The aim is for all Retailers to use the same Pricing Codes and apply the same calculation methodology.

A dummy EIEP1 file is attached below to demonstrate the format to be used.

HDR	ICPMMRM	11.1	NELS	NELS	XXXX	10/05/2022	12:00:00	123	23	1/04/2022	30/04/2022	202204	E	I	Notes	
DET	000044444CTDD4	1/04/2022	30/04/2022	kVA	15 RD	STK0331	NELS	1-Fixed	0.0200	F	30	9.00			202204	Group 1 Customer (LFC) - Residential 15kVA
DET	000044444CTDD4	1/04/2022	30/04/2022	kWh	934 RD	STK0331	NELS	1-24hr	0.0675	V	30	63.05	UN	24	202204	X Anytime
DET	000044444CTDD4	1/04/2022	30/04/2022	kWh	337 RD	STK0331	NELS	1-Water	0.0425	V	30	14.32	CN	18	202204	X Hot Water
DET	000055555CTBB9	1/04/2022	30/04/2022	kVA	15 RD	STK0331	NELS	1-Fixed	0.0200	F	30	9.00			202204	Group 1 Customer (LFC) - Residential 15kVA
DET	000055555CTBB9	1/04/2022	30/04/2022	kWh	610 RD	STK0331	NELS	1-24hr	0.0675	V	30	41.18	UN	24	202204	X Anytime
DET	000055555CTBB9	1/04/2022	30/04/2022	kWh	554 RD	STK0331	NELS	1-Night	0.0365	V	30	20.22	N	8	202204	X NIGHT - Hot Water Controlled on 11pm - 7am
DET	000022222CT7EB	1/04/2022	30/04/2022	kVA	15 RD	STK0331	NELS	1-Fixed	0.0200	F	30	9.00			202204	Group 1 Customer (LFC Option) - Residential 15kVA
DET	000022222CT7EB	1/04/2022	30/04/2022	kWh	500 RD	STK0331	NELS	1-24hr	0.0675	V	30	20.36	UN	24	202204	X Anytime
DET	000022222CT7EB	1/04/2022	30/04/2022	kWh	200 RD	STK0331	NELS	1-Water	0.0425	V	30	20.36	CN	18	202204	X Hot Water
DET	000022222CT7EB	1/04/2022	30/04/2022	kWh	20 RD	STK0331	NELS	1-DG	0.0050	V	30	20.36	UN	24	202204	I Distributed Generation Charge
DET	000011111CTF48	1/04/2022	30/04/2022	kVA	15 RD	STK0331	NELS	2-Fixed	0.0658	F	30	30.03			202204	Group 2 Customer - Residential 15kVA
DET	000011111CTF48	1/04/2022	30/04/2022	kWh	786 RD	STK0331	NELS	2-24hr	0.0354	V	30	27.82	UN	24	202204	X Anytime
DET	000011111CTF48	1/04/2022	30/04/2022	kWh	354 RD	STK0331	NELS	2-Water	0.0202	V	30	7.15	CN	18	202204	X Hot Water
DET	000033333CTC5B	1/04/2022	30/04/2022	kVA	15 RD	STK0331	NELS	2-Fixed	0.0658	F	30	30.03			202204	Group 2 Customer - Residential 15kVA
DET	000033333CTC5B	1/04/2022	30/04/2022	kWh	700 RD	STK0331	NELS	2-24hr	0.0354	V	30	24.78	UN	24	202204	X Anytime
DET	000033333CTC5B	1/04/2022	30/04/2022	kWh	300 RD	STK0331	NELS	2-Water	0.0202	V	30	6.06	CN	18	202204	X Hot Water
DET	000033333CTC5B	1/04/2022	30/04/2022	kWh	30 RD	STK0331	NELS	2-DG	0.0050	V	30	0.15	UN	24	202204	I Distributed Generation Charge
DET	000055555CTBB9	1/04/2022	30/04/2022	kVA	15 RD	STK0331	NELS	2-Fixed	0.0658	F	30	30.03			202204	Group 2 Customer - Residential 15kVA
DET	000055555CTBB9	1/04/2022	30/04/2022	kWh	610 RD	STK0331	NELS	2-24hr	0.0354	V	30	21.59	UN	24	202204	X Anytime
DET	000055555CTBB9	1/04/2022	30/04/2022	kWh	554 RD	STK0331	NELS	2-Night	0.0142	V	30	7.87	N	8	202204	X NIGHT - Hot Water Controlled on 11pm - 7am
DET	000077777CT0A4	1/04/2022	30/04/2022	kVA	45 RD	STK0331	NELS	2-Fixed	0.0658	F	30	88.83			202204	Group 2 Customer - Business with 3 phase 60 amp supply (45kVA)
DET	000077777CT0A4	1/04/2022	30/04/2022	kWh	575 RD	STK0331	NELS	2-24hr	0.0354	V	30	20.36	UN	24	202204	X Anytime
DET	000077777CT0A4	1/04/2022	30/04/2022	kWh	193 RD	STK0331	NELS	2-Water	0.0202	V	30	3.90	CN	18	202204	X Hot Water
Temp - Day/Night Options (applies to 31 March 2023)																
DET	0000123456CTBB9	1/04/2022	30/04/2022	kVA	15 RD	STK0331	NELS	1-Fixed	0.0200	F	30	9.00			202204	Group 1 Customer (LFC) - Residential 15kVA
DET	0000123456CTBB9	1/04/2022	30/04/2022	kWh	610 RD	STK0331	NELS	1-24hr	0.0675	V	30	41.18	D	16	202204	X DAY - 7am - 11pm
DET	0000123456CTBB9	1/04/2022	30/04/2022	kWh	554 RD	STK0331	NELS	1-Night	0.0365	V	30	20.22	N	8	202204	X NIGHT - 11pm - 7am
DET	0000654321CTF48	1/04/2022	30/04/2022	kVA	15 RD	STK0331	NELS	2-Fixed	0.0658	F	30	30.03			202204	Group 2 Customer - Residential 15kVA
DET	0000654321CTF48	1/04/2022	30/04/2022	kWh	786 RD	STK0331	NELS	2-24hr	0.0354	V	30	27.82	D	16	202204	X DAY - 7am - 11pm
DET	0000654321CTF48	1/04/2022	30/04/2022	kWh	354 RD	STK0331	NELS	2-Night	0.0142	V	30	5.03	N	8	202204	X NIGHT - 11pm - 7am

EIEP1 Dummy File

For Groups 1 and 2 - The fixed price is based on Capacity (fuse size) so must be shown as a capacity charge. This file below shows the Fixed components which are capacity based are calculated as kVA * Price * Days. Each element is included in the file. The kVA value is as per the "Distributor Chargeable Capacity" field on the Registry. This method of reporting the Capacity charge is in preference to reporting on the number of day's times by a price that has pre calculated the KVA * Price.

Nelson Electricity will be using the "Distributor Chargeable Capacity" field information on the Registry as the basis for the billing of capacity charges from 1 April 2021.

The variable charges are relatively self-explanatory Price * kWh. The key here is using the same Pricing Codes as the Nelson Electricity Pricing Schedule and EIEP12 file.

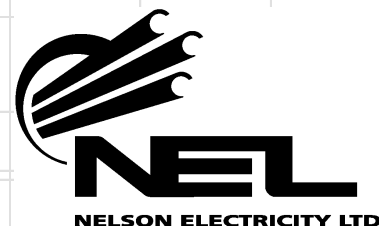
The temporary inclusion of a Day/Night option is included. This applies til 31 March 2023 when a separate pricing category will be created.

HDR	PRICE	11 NELS	XXXX	27/04/2022	12:00:00	1	91				
DET	NELS	1/04/2022		1 F				1-Fixed	\$/kVA/Day	0.02	ICP
DET	NELS	1/04/2022		1 V	I	UN	24	1-24hr	\$/kWh	0.0675	ICP
DET	NELS	1/04/2022		1 V	I	D	16	1-24hr	\$/kWh	0.0675	ICP
DET	NELS	1/04/2022		1 V	I	CN	18	1-Water	\$/kWh	0.0425	ICP
DET	NELS	1/04/2022		1 V	I	N	8	1-Night	\$/kWh	0.0365	ICP
DET	NELS	1/04/2022		1 V	X	UN	24	1-DG	\$/kWh	0.005	ICP
DET	NELS	1/04/2022		2 F				2-Fixed	\$/kVA/Day	0.071	ICP
DET	NELS	1/04/2022		2 V	I	UN	24	2-24hr	\$/kWh	0.033	ICP
DET	NELS	1/04/2022		2 V	I	D	16	2-24hr	\$/kWh	0.033	ICP
DET	NELS	1/04/2022		2 V	I	CN	18	2-Water	\$/kWh	0.008	ICP
DET	NELS	1/04/2022		2 V	I	N	8	2-Night	\$/kWh	0.002	ICP
DET	NELS	1/04/2022		2 V	X	UN	24	2-DG	\$/kWh	0.005	ICP
DET	NELS	1/04/2022	0-BT	F				0-BT-Fixed	\$/Day	0.8	ICP
DET	NELS	1/04/2022	0-BT	V	I	UN	24	0-BT-24hr	\$/kWh	0.081	ICP
DET	NELS	1/04/2022	0-UM	F				0-UM-Fixed	\$/Day	0.15	ICP
DET	NELS	1/04/2022	0-UM	F				0-UM-kW	\$/kW/Day	0.97	ICP
DET	NELS	1/04/2022	0-SL	F				0-SL	\$/Day	219	ICP

EIEP12 Price Change File (showing mass market tariffs only)

6.0 Pricing Schedule

Nelson Electricity Ltd Delivery Price Schedule From 1 April 2022



Nelson Electricity Ltd is adjusting delivery prices effective 1 April 2022.

The prices in this schedule are used to charge electricity retailers for the delivery of electricity over the Nelson Electricity electricity network. Electricity retailers determine how to allocate this cost together with energy, metering and other retail costs when setting the retail prices that appear on a customer's power account.

Nelson Electricity distributes electricity to connections in the central Nelson city including most of the Port, Port Hills, Nelson South, Toi Toi, Brook, Wood, Nelson East and CBD areas.

Price Code	Description	Consumer Numbers	Units	New Delivery Prices from 1 April 2022			Existing Delivery Prices		
				Distribution Price	Transmission Price	Delivery Price	Distribution Price	Transmission Price	Delivery Price
Load Group 0									
Builders Temporary (7kVA)									
0-BT	Builders Temp - Fixed	11	\$/day	0.8000	0.0000	0.8000	0.6000	0.0000	0.6000
0-BT	Builders Temp - Anytime		\$/kWh	0.0550	0.0260	0.0810	0.0536	0.0274	0.0810
Unmetered Connection (< 1 kW)									
0-UM	Unmetered - Fixed	37	\$/day	0.1500	0.0000	0.1500	0.1000	0.0000	0.1000
0-UM	Maximum Demand		\$/kWh/day	0.5700	0.4000	0.9700	0.5600	0.4200	0.9800
Streetlighting									
0-SL	Streetlight	1	\$/day	190.70	28.30	219.00	191.00	30.00	221.00
Load Group 1									
Residential Low Fixed Charge (15kVA)									
1-Fixed	Fixed	4360	\$/kVA/day	0.0200	0.0000	0.0200	0.0100	0.0000	0.0100
1-24hr	Anytime		\$/kWh	0.0415	0.0260	0.0675	0.0536	0.0274	0.0810
1-Water	Controlled (Hot Water)		\$/kWh	0.0390	0.0035	0.0425	0.0335	0.0137	0.0472
1-Night	Night Rate (11pm-7am)		\$/kWh	0.0365	0.0000	0.0365	0.0209	0.0000	0.0209
1-DG	Distributed Generation		\$/kWh	0.0050	0.0000	0.0050	0.0050	0.0000	0.0050
Load Group 2 (from 15kVA to 150kVA)									
General - Residential and Commercial									
2-Fixed	Fixed	4825	\$/kVA/day	0.0710	0.0000	0.0710	0.0658	0.0000	0.0658
2-24hr	Anytime		\$/kWh	0.0070	0.0260	0.0330	0.0080	0.0274	0.0354
2-Water	Controlled (Hot Water)		\$/kWh	0.0045	0.0035	0.0080	0.0065	0.0137	0.0202
2-Night	Night Rate (11pm-7am)		\$/kWh	0.0020	0.0000	0.0020	0.0051	0.0000	0.0051
2-DG	Distributed Generation		\$/kWh	0.0050	0.0000	0.0050	0.0050	0.0000	0.0050
Load Group 3 LARGE COMMERCIAL (up to 2400kVA)									
TIME OF USE									
3-Fixed	Metered Installation	91	\$/day	1.0000	0.0000	1.0000	1.1700	0.0000	1.1700
3-WD	Winter Demand (kVA)		\$/kVA/day	0.1030	0.0650	0.1680	0.1020	0.0640	0.1660
3-24hr	Energy		\$/kWh	0.0020	0.0100	0.0120	0.0020	0.0090	0.0110
Capacity Supplied (one of)									
T-03	T-03	16kVA – 42kVA	\$/day	2.06	0.00	2.06	1.88	0.00	1.88
T-04	T-04	43kVA – 69kVA	\$/day	3.39	0.00	3.39	3.08	0.00	3.08
T-05	T-05	70kVA – 110kVA	\$/day	5.40	0.00	5.40	4.92	0.00	4.92
T-06	T-06	111kVA – 138kVA	\$/day	6.78	0.00	6.78	6.17	0.00	6.17
T-07	T-07	139kVA – 218kVA	\$/day	10.70	0.00	10.70	9.74	0.00	9.74
T-08	T-08	219kVA – 300kVA	\$/day	14.73	0.00	14.73	13.41	0.00	13.41
T-09	T-09	301kVA – 500kVA	\$/day	24.55	0.00	24.55	22.35	0.00	22.35
T-10	T-10	501kVA – 750kVA	\$/day	36.83	0.00	36.83	33.53	0.00	33.53
T-11	T-11	751kVA – 1000kVA	\$/day	49.10	0.00	49.10	44.70	0.00	44.70
T-12	T-12	1001kVA – 1500kVA	\$/day	73.65	0.00	73.65	67.05	0.00	67.05
T-13	T-13	1501kVA – 2000kVA	\$/day	98.20	0.00	98.20	89.40	0.00	89.40
T-15	T-15	2400kVA	\$/day	117.84	0.00	117.84	107.28	0.00	107.28
3-DG	Distributed Generation		\$/kWh	0.0050	0.0000	0.0050	0.0050	0.0000	0.0050
3-PF	Power Factor <0.95		\$/kVA/mth	6.5000	0.0000	6.5000	6.5000	0.0000	6.5000

All prices exclude GST. All prices as shown above are also available from our website www.nel.co.nz

Pricing Guide - Details on how these delivered prices are applied are included in our Pricing Guide which is available on our website.

Load Group 0 - Unmetered loads that meet Electricity Authority Unmetered Load Guidelines and Metered Builders Temporary Supplies (Builders Temp > 7kVA use Load Group 2).

Load Group 1 - Residential households (principal place of residence only) with connection capacity of 15kVA using less than 8,000kWh per year as required to comply with the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004.

Load Group 2 - Available to all residential and commercial connections with capacity from 15kVA to 150kVA.

Load Group 1 & 2 - All existing residential households have an assessed connection capacity of 15kVA.

Load Group 3 - Available to any large commercial connections up to 2400kVA with Time of Use metering.

Load Group 1, 2 and 3 - Distributed Generation charge is for electricity exported into the Nelson Electricity network.

Any questions about the line charges, please email us at enquiry@nel.co.nz, or phone (03) 546-0486.

Checks and Verification

The information contained above has been checked and verified as being correct by:-



Phil Goodall
General Manager

Date: 27th April 2022

Appendix A: TOU Power Factor Calculation

Power Factor is the kVAr required to bring the highest kW half hour of the month up to 0.95 Power Factor. This applies to Load Groups 3 and 4 only.

Nelson Electricity Power Factor Charge Assessment									
Example from Half Hour Data			kWh	kVarh	kVAh				
DET 0000123456CTEDC	F	28/07/2010	11	2.54	0.58	2.61			
DET 0000123456CTEDC	F	28/07/2010	12	2.54	0.62	2.61			
DET 0000123456CTEDC	F	28/07/2010	13	2.4	0.67	2.49			
DET 0000123456CTEDC	F	28/07/2010	14	3.02	0.67	3.09			
DET 0000123456CTEDC	F	28/07/2010	15	5.76	2.47	6.27			
DET 0000123456CTEDC	F	28/07/2010	16	39.48	21.36	44.89	78.96	42.72	89.78
DET 0000123456CTEDC	F	28/07/2010	17	29.4	18.41	34.69			
DET 0000123456CTEDC	F	28/07/2010	18	5.9	3.5	6.86			
DET 0000123456CTEDC	F	28/07/2010	19	3	0.65	3.07			
DET 0000123456CTEDC	F	28/07/2010	20	2.9	0.67	2.98			
DET 0000123456CTEDC	F	28/07/2010	21	3.17	0.7	3.25			
DET 0000123456CTEDC	F	28/07/2010	22	3.07	0.58	3.12			
DET 0000123456CTEDC	F	28/07/2010	23	2.38	0.5	2.43			
DET 0000123456CTEDC	F	28/07/2010	24	2.54	0.6	2.61			
DET 0000123456CTEDC	F	28/07/2010	25	3.58	0.89	3.69			

Chargeable kVAr	kVA at 0.95 Pf	kVAr at 0.95 Pf	kVA at 0.95 Pf	kVAr at 0.95 Pf
16.77	83.12	25.95	89.78	42.72

Highest half hour kWh for the month

Excel Formula

$$=IF(Pf < 0.95, kVAR - SQRT(SUMSQ(1/0.95 * kW) - SUMSQ(kW)), 0)$$

kVAr Assessment at Pf 0.95

If Power Factor was 0.95 then 1kW would equal 1/0.95 kVA = 1.052632 kVA
kVAr would equate to square root of (kVA² - kW²) = 0.328684
You can multiply 0.32864 by kW to get kVAr at Pf 0.95 instead of using the formula.