networktasman

Your consumer-owned electricity distributor

PRICING METHODOLOGY DISCLOSURE

Effective 1 April 2022

Pursuant to Electricity Distribution Information Disclosure Determination (Issued 1 October 2012).
For compliance with Part 2.4: Disclosure of Pricing and Related Information.

Network Tasman Limited

P O Box 3005

RICHMOND 7050

networktasman
Your consumer-owned electricity distributor

PRICING METHODOLOGY DISCLOSURE

Effective 1 April 2022

1. Directors Certificate

Commerce Act (Electricity Distribution Service Information Disclosure) Determination 2012
Schedule 17

Certification for Year-beginning Disclosures

We, Michael John McCliskie and Sarah-Jane Ellen Weir being directors of Network Tasman Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

a) the following attached information of Network Tasman Limited prepared for the purposes of clause 2.4.1 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination;
b) The prospective financial or non-financial information included in the attached information has been measured on a basis consistent with regulatory requirements or recognised industry standards.

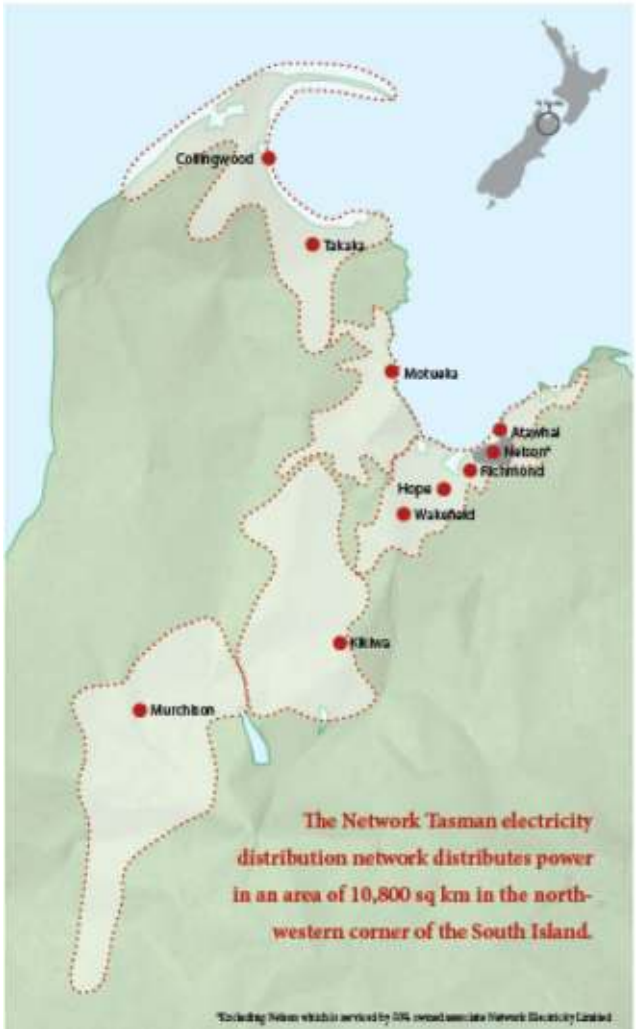
..... Date: 4 May 2022

..... Date: 4 May 2022

2. Introduction

2.1. About Network Tasman

Network Tasman Limited ("Network Tasman") owns and operates the electricity distribution network in the wider Nelson and Tasman areas, excluding Nelson Electricity's supply area in Nelson city. Network Tasman's electricity distribution network distributes power to approximately 42,332 connections.



Total electricity distributed through the network is 681 GWh, with a peak load of 130 MW.[1] The area covered by the network is diverse, ranging from high consumer density urban areas to remote rural areas with low consumer density.

Network Tasman distributes electricity to residential and commercial consumers within its area from Transpower grid exit points at Stoke, Kikiwa and Murchison.

Network Tasman is wholly owned by a consumer trust - the Network Tasman Trust.

The company's mission is to own and operate efficient, reliable and safe electricity networks and other complementary business while increasing consumer value. Network Tasman issues, after consultation with its shareholders, an annual statement of corporate intent, which outlines the overall intentions and objectives that the company will follow.

2.2. The purpose of this document

This document sets out the framework of Network Tasman's pricing methodology and contains the information required for compliance with Part 2.4 of the Electricity Distribution Information Disclosure Determination 2012. It also assesses Network Tasman's pricing methodology against the Distribution Pricing Principles and Information Disclosure Guidelines published by the Electricity Authority ("EA").

2.3. Overview of this report

This document is structured as follows:

- A description of our pricing for the year commencing 1 April 2022 is set out in Section 3;

[1] Excluding bulk supply to Nelson Electricity.

- The regulatory requirements that Network Tasman must comply with are set out in Section 4;
- Network Tasman's pricing principles are discussed in Section 5;
- The methodology used to determine Network Tasman's total revenue requirement and its allocation by load group is discussed in Section 6;
- The methodology used to derive Network Tasman's prices is set out in Section 7;
- A summary of Network Tasman's use of non-standard contracts is discussed in Section 8
- Distributed generation pricing is discussed in Section 9;
- An assessment of Network Tasman's pricing methodology against the Electricity Authority's Pricing Principles is set out in Section 10; and
- Network Tasman's forward pricing strategy is discussed in Section 11.

Network Tasman's prices are used to charge electricity retailers[2] in the wider Nelson and Tasman regions, excluding Nelson Electricity's supply area in Nelson City. Electricity retailers determine how to package these charges together with the energy, metering and other retail costs when setting the retail prices that appear in consumer's power accounts.

This document sets out Network Tasman's methodology for setting its price structure and prices for the 2022/23 pricing year.

Network Tasman's prices cover the cost of its local electricity distribution network, pass-through costs (such as industry levies) and the costs associated with the national transmission grid.

In determining our prices, Network Tasman has had regard to many factors, primary among those are the need to recover sufficient revenues to fund the businesses ongoing regulated activities whilst also managing the impact of price changes on consumers.

Network Tasman published a pricing methodology for the 2022/23 pricing year before the pricing year began on 1 April 2022. Subsequent to this, Network Tasman received communication from the Electricity Authority (Authority) stating that it did not consider Network Tasman's prices to be compliant with the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 (LFC Regulations).

Network Tasman has revised the prices for consumers on tariffs subject to the LFC Regulations (1RL, 2LLFC and 2HLFC) to comply with the Authority's interpretation of the Regulations. With retailer approval, these new prices have been backdated to be effective from the beginning of the pricing year, 1 April 2022.

Prices for all other tariffs remain unchanged.

These price changes have been designed to be revenue neutral for Network Tasman.

The primary change that has been made from the previous pricing methodology is to the relative weightings applied to the consumption prices for consumers on the 1RL, 2LLFC and 2HLFC price categories.

[2] There are also a small number of large customers that are direct billed by Network Tasman.

Historically, these relative weightings have been driven in part by legacy issues, but also took account of the relative costs of providing network services and peak and off-peak times and the benefits of having interruptible load.

The relative weightings between the consumption prices for LFC consumers still signal the relative costs of providing network services at peak and off-peak times and the benefits of having interruptible load. However, to ensure compliance with the LFC Regulations, the differential between peak and off-peak/controlled prices has been reduced.

3. Our pricing from 1 April 2022

3.1. Consumer load groups and price structures

Network Tasman classifies connections into load groups primarily according to capacity requirements. Connections are grouped in this way because network costs are largely driven by peak demand and capacity requirements represent the theoretical maximum load of each connection during network peak. Although few connections use the full capacity of their connection, capacity represents a good proxy for grouping connections that have similar peak demand and therefore impose similar costs on Network Tasman.

Network Tasman's prices don't differentiate between regional areas across the network.

Group 0: Unmetered connections

This load group category is for unmetered supplies such as electric fences, phone booths, street lights and other very low loads. There are two types of Group 0 connections. They are:

- **Low Capacity supplies (0UNM)** These are low capacity connections that are fitted with a small fuse where the consumption is very low. They are intended for connections such as phone boxes, roadside communication cabinets, electric fences etc. The price is a fixed charge per day.
- **Streetlights (0STL)** This price is used for general street-lighting and is also used for unmetered streetlights that are associated with a standard metered connection. The charge is based on the streetlight capacity (Watts) installed, and is charged on a $/W/day basis.

Group 1: Metered connections up to 15kVA

Most residential consumers and some small businesses (i.e., those who have supplies with a maximum delivery capacity of 15kVA) are Group 1 connections. Group 1 connections fall into three price categories:

- **1GL (General)** is for non-residential connections such as businesses, shops, sports clubs, etc.
- **1RL (Residential – low use)** is designed for connections that are primary residences and use less than 8,000kWh per year. This price category is a low user tariff as regulated by the *Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004* (LFC regulations).
- **1RS (Residential – standard use)** is designed for connections that are either primary residences that use more than 8,000kWh per year or a residential connection that isn't a primary residence, such as a bach.

All three Group 1 price categories have the same choice of price category codes, described below.

Uncontrolled Prices

The following uncontrolled prices provide uninterrupted supply for general supply requirements. A Group 1 connection generally uses either the Uncontrolled price or the Day/Night combination.

Uncontrolled - provides uninterrupted availability to users at a fixed price for each kWh consumed.

Day/Night – provides uninterrupted availability to users at two different per kWh prices. Day prices apply from 7am to 11pm and are higher than the Uncontrolled price. Night prices apply from 11pm to 7am and are significantly lower than the Uncontrolled price.

Controlled Prices

Network Tasman also offers controlled options that can be added to the base uncontrolled plans discussed above. These are:

- Controlled water – where Network Tasman may control the consumer's hot water supply (within specified service levels).
- Night only – supply under this option is limited to the period between 11pm and 7am. This price category code is typically used for night store heaters, underfloor heating and night only water supply.

More than 70% of Group 1 and 2 connections benefit from the controlled hot water price, which is generally less than half of the standard uncontrolled price. A further 8% of connections use the Night only option.

Group 2: Metered connections 20-150kVA

Group 2 consumers have a delivery capacity of between 20kVA and 150kVA.

The Group 2 capacity price is expressed as "dollars per kVA" and is based on the installed fuse capacities (between 20 and 150 kVA) limiting the maximum demands each consumer in this group can place on the network.

Around 46% of revenue in Group 2 is derived from capacity prices. Group 2 connections have the same price structures as Group 1 connections (the option of two uncontrolled supply options – Uncontrolled and day/night and the option to add controlled hot water and night only options).

Group 3: Metered connections of 150kVA or more

Group 3 consumers have capacity requirements of at least 150kVA. Group 3 contains larger business consumers. Revenue from Group 3 consumers is primarily derived from demand charges. Two different types of demand charges are used:

- Customer Demand: is measured in kVA based on the single highest half hour of Anytime Maximum Demand (AMD) during the previous 12 month calendar period;
- Regional Coincident Peak Demand (RCPD): is measured in kW using Transpower's interconnection pricing methodology. That is, the demand of the connection during the top 100 peaks of the Upper South Island (USI) transmission region.

Around 64% of revenue is derived from these demand based charges. The remaining revenue is collected through consumption (kWh) prices which vary according to season (Summer/Winter) and time-of-day (Day/Night).

Group 6: Individually priced customers with capacity > 3MVA

Group 6 consumers have capacity requirements in excess of 3MVA. Group 6 consumers have fully fixed charges that reflect high levels of asset dedication. These consumers pay an annual fixed rental irrespective of their load profiles.

Transmission charges are directly through to Group 6 consumers.

3.2. Network Tasman prices from 1 April 2022

Network Tasman generally reviews its line prices annually, with new pricing taking effect from 1 April each year. As noted above, an out of cycle review was conducted in early April 2022 following correspondence from the Electricity Authority querying the compliance of our prices with the LFC Regulations. New prices were introduced and backdated to become effective from 1 April 2022. Our price schedule for 2022/23 is set out in Appendix C. Charges for new loads can be found in our new load policy, available on our website.[3]

The methodology used to set charges for large embedded generation is set out in detail Section 9.

Price changes by component

Distribution price component

From 1 April 2022, Network Tasman has forecast an average increase in pre-discount distribution prices of 3.5%).

This increase is required to account for the effect inflation and a recently negotiated contract for maintenance services and undertake minor capital projects on our network have had on the cost of operating our network.

Pass-through price component

The portion of prices associated with pass-through costs has not changed materially and accounts for a very small percentage of prices.

Transmission price component

The transmission price component primarily recovers the cost of using the national transmission grid, which is owned and operated by Transpower.

Regulated charges

Network Tasman's overall regulated transmission costs have decreased by $900,000. This change is driven by a $105,000 increase the connection charge, an $8,000 increase in the HVDC charge, a $1,038,000 reduction in the interconnection charge and a $24,000 increase in avoided cost of transmission (ACOT) payments.

Regulated transmission charges are split into three categories:

- Connection charges
- Interconnection charges; and
- ACOT payments

[3] http://www.networktasman.co.nz/documents/services/Connection%20of%20New%20Loads%20Policy.pdf

Connection charges are the sum of the annual recovery, maintenance and operating costs for all dedicated transmission assets Network Tasman uses during the pricing year to connect to the transmission network. The primary driver of the increase in the connection charge is the connection of the Matiri hydro generation scheme, which has reversed the flow of electricity at the Murchison GXP from importing electricity onto local distribution network to injecting from our distribution network to the transmission grid. This change in electricity flow triggers an additional overhead injection charge at the Murchison GXP and increased Network Tasman's connection charge by $65,000.

Our Interconnection Charge is derived by multiplying Transpower's Interconnection Rate ($/kW) by our contribution (kW) to the 100 highest half hour periods of regional coincident peak demand (RCPD) in the Upper South Island.

These RCPD periods have historically occurred in winter, when Network Tasman experiences its highest demand. For the 2022/23 pricing year, almost 20% of RCPD periods occurred in summer, when Network Tasman has relatively low demand. The inclusion of these periods of lower summer demand in the calculation of our Interconnection Charge contributed to the reduction in Network Tasman's interconnection charge for 2022/23.

Network Tasman makes avoided cost of transmission payments (ACOT) to a small number of distributed generators based on how much their generation activities reduce Network Tasman's interconnection charges. This charge is forecast to be $1,807,000 for 2022/23.

Unregulated charges

Network Tasman has a contract with Transpower to install a new transformer at the Stoke GXP. The cost of this contract costs Network Tasman $1,243,000 for the coming pricing year.

Price level changes for individual load groups

The following discussion summarises the impact of Network Tasman's price changes (pre-discount) on connections in each load group.

Group 0, 1 and 2

From 1 April 2022, groups 0, 1, 2 will experience the following changes:

- Group 0 - overall prices for Group 0 increase on average by 1.8%
- Group 1 - on average, prices for Group 1 fall by 1.1%. The average effect of the changes to Group 1 prices for each price category is:
    - -1.9% for 1GL connections
    - +0.7% for 1RL connections
    - -2.3% for 1RS connections
- Group 2 - prices for Group 2 will fall by 3.3% on average.

Group 3

The Group 3 connection on average will experience an overall price increase of 2.3%, on average.

Group 6

On average, Group 6 connections will experience an overall price increase of 0.1%.

3.3. Consumer Impact

Prior to introducing any price changes, be it a change to price levels or price structures, Network Tasman undertakes a comprehensive analysis of the bill impact of the change across the affected consumers groups. The impact of price changes on consumers is a key consideration when setting target revenue and prices.

For comparative purposes, this analysis assumes that the hypothetical consumer uses the same volume of electricity in 2022/23 as they do in 2021/22. In practice, consumption varies from year-to-year so the actual effect on individual consumers will be influenced by the year-on-year variation in consumption.

Residential consumers using less than 6,000kWh/year will experience an increase in their overall lines charges. This is because the effect of the 15c/day increase in the fixed charge for LFC consumers outweighs the benefit these consumers enjoy from lower consumption charges.

Of the consumers that experience higher lines charges, more than 80 percent of those consumers will see their lines charges increase by less than 65c/week. The theoretical maximum that a consumer's lines charges can increase is $1.05/week. However, this is for a consumer that maintains an active connection to our network, but does not consume a single kWh of electricity during the entire year.

Table 1, below, summarises the effect of Network Tasman's pre-discount price changes are expected to have on consumer lines charges.

Table 1 – Effect of Network Tasman pre-discount price changes on Group 1 residential consumers

Total kWh/pa	Change in annual lines charges ($)	Change in annual lines charges (%)
0	54.75	100.0%
1,000	45.08	32.2%
2,000	35.42	15.7%
3,000	25.75	8.3%
4,000	16.09	4.1%
5,000	6.42	1.3%
6,000	(3.25)	(0.6)%
7,000	(12.91)	(2.0)%
8,000	(22.58)	(3.1)%
9,000	(17.81)	(2.28)%
10,000	(19.79)	(2.39)%
11,000	(21.76)	(2.49)%
12,000	(23.74)	(2.59)%
13,000	(25.72)	(2.67)%

Group 2 charges vary by the capacity and consumption of each connection. As Group 2 covers a wide array of capacity bands (20kVA to 150kVA), there are many capacity/consumption

combinations across Group 2. For simplicity, the impact assessment is presented below in Table 2 for consumers with a 40kVA connection, a common capacity for Group 2 connections. As prices are the same for all Group 2 consumers, the table below can be considered indicative of the relative effects across Group 2 consumers.

Table 2 - Effect of Network Tasman price changes on Group 2 consumers (40kVA)

Total kWh/pa	Total change in lines charges ($)	Change in annual lines charges (%)
0	15	1.1%
5,000	(5)	-0.3%
10,000	(24)	-1.2%
15,000	(44)	-1.9%
20,000	(63)	-2.5%
25,000	(83)	-2.9%
30,000	(102)	-3.2%
35,000	(122)	-3.5%
40,000	(141)	-3.8%
45,000	(160)	-4.0%
50,000	(180)	-4.2%
55,000	(199)	-4.3%
60,000	(219)	-4.5%
65,000	(238)	-4.6%
70,000	(258)	-4.7%
75,000	(277)	-4.8%
80,000	(297)	-4.9%

For Group 3 connections, higher distribution charges have, been partially offset by a fall in transmission charges due to a slight reduction in the RCPD demand from Group 3 connections and reduction the Interconnection rate.

These charges are clearly outlined to all Group 3 consumers via annual letters to consumers. In addition to this, Network Tasman's Regulatory and Commercial Manager contacts the Group 3 connections with large increases in their overall lines charges directly. The primary purpose is to discuss the changes, the effect of the change on the business and improve general understanding of Group 3 pricing.

4. Regulatory requirements

This section briefly describes a number of key regulations relating to the Network Tasman's prices. Namely Information Disclosure requirements, Commerce Act price-quality controls and the Low Fixed Charge (LFC) Regulations.

4.1. Information Disclosure Determination

The Electricity Distribution Information Disclosure Determination 2012 (Part 2.4) requires electricity line businesses (EDBs) to annually disclose the following information in these pricing methodology documents:

- Sufficient information for interested parties to understand how prices are set for each consumer group.
- the EDB's pricing strategy, if any, including identification of any changes in strategy.
- the pricing methodology used to calculate line prices.
- key components of target revenue required to cover the costs and profits, (including cost of capital and transmission), of the line owner's business activities.
- consumer groups and consumer statistics used in the calculation of line prices and charges.
- the method of allocating costs and target revenues amongst consumer groups.
- the proportion of target revenue collected through each price component.
- any changes to prices or target revenues.
- the approach to setting prices for non-standard contracts and distributed generators.
- whether, and if so how, the EDB has sought the views of consumers including their expectation in terms of price and quality, and reflected those views in calculating the prices payable or to be payable.
- the extent to which the pricing methodology is consistent with the Electricity Authority's pricing principles.

4.2. Commerce Act Price Control

Network Tasman is a controlled entity under Part 4 of the Commerce Act and as such operates under the Commerce Commission's Default Price and Quality control.

Being a non-exempt distributor, Network Tasman is subject to a regulated revenue cap and must annually demonstrate compliance with its Default Price Path (DPP).

The Commerce Commission price control primarily operates to constrain EDB's overall target revenue requirement rather than the structure of the company's line prices.

Network Tasman's prices shown in this document are set to be compliant with Network Tasman's DPP revenue cap requirements.

4.3. Low Fixed Charge (LFC) Regulations

The Low Fixed Charge (LFC) regulations require distributors (and retailers) to offer a tariff that has a low fixed charge (LFC tariff). The LFC tariff must be available to all domestic connections that are a principal place of residence.

The regulated LFC tariff must be structured so that an average consumer using 8,000kWh per year would pay no more than they would if they were on an equivalent 'standard' tariff. This design creates a cross-over where the average consumer using less than 8,000kWh per year would be better off on LFC tariff and the average consumer using more than 8,000kWh per year would be better off on the 'standard' tariff. LFC tariffs must comply with this requirement before and after any discounts have been applied.

The regulations had set a cap on the fixed charge that could be charged to consumers on the LFC tariff at 15c/day for distributors and 30c/day for retailers. In September 2021, the Government announced the regulations would be phased-out, beginning 1 April 2022.

Phasing-out the regulations will see the maximum low fixed charge increase gradually over 5 years. Each year of the phase-out, distributors will be able to increase the fixed charge on their LFC tariff

by 15c/day. From 1 April 2022, the fixed charge distributors are able to charge consumers on the LFC tariff increases to 30c/day. At the end of the phase-out, the regulations will be removed.

Network Tasman's prices shown in this document are compliant with the LFC regulations.

5. Network Tasman's pricing principles

The following discussion sets out the principles that Network Tasman currently uses to guide its pricing decisions.

Network Tasman's pricing methodology reflects, to the extent possible: (1) the pricing principles stated in Network Tasman's Statement of Corporate Intent ("SCI"), as agreed between Network Tasman and its shareholder Network Tasman Trust; and (2) the Distribution Pricing Principles administered by the Electricity Authority.

The following pricing objectives are stated in Network Tasman's SCI (available on Network Tasman's website) and are incorporated in Use of Systems Agreements ("UoSA") with retailers. They provide a high level overview of Network Tasman's existing pricing approach which is that:

- A fair and reasonable rate of return for shareholders (equal to the cost of capital measured on a pre-tax, post-discount basis and based on the regulatory WACC) will be recovered
- The cost of capital will be reasonably allocated to, and recovered from, each consumer group based on their use of particular network assets
- Direct and indirect distribution costs and depreciation will be reasonably allocated to, and recovered from, each consumer group
- Transmission costs will be allocated and recovered in a manner that reasonably reflects how these costs are incurred by each consumer group
- Appropriate economic signals will be given to consumers concerning their use of the distribution and transmission systems
- Regulatory and public policy requirements imposed by Government, the Commerce Commission and the Electricity Authority will be accommodated within network pricing as required
- Pricing will retain a reasonable uniformity amongst like consumers and across all Network Tasman's regional areas
- Pricing will be simple to understand, implement and administer
- Pricing will provide certainty and medium term stability for consumers and retailers. The distribution component of pricing will be changed, at most, once in any 12 month period while the transmission component may change whenever Transpower alters its transmission charges.

Where pricing objectives or principles are in conflict, Network Tasman management and Directors exercise their discretion and judgement to set acceptable trade-offs between conflicting items.

The specific pricing principles published by the Electricity Authority are discussed in Section 10.

6. Core Methodology

The core methodology Network Tasman uses for setting prices for distribution services involves three stages:

As price setting is an iterative process that takes account of factors like bill impacts and regulatory obligations, there is a feedback loop that occurs between the steps outlined above.

This section focusses on the first two steps outlined above.

Under the Commerce Commission's Default Price-Quality Path, Distributors are subject to a revenue cap whereby there is a maximum revenue that Network Tasman can recover through prices in each financial year. Network Tasman's total regulated allowable revenue for the 2022/23 year is $43.2m.

As a consumer owned distributor, Network Tasman's focus is to be a successful business that operates a safe and reliable network at the lowest cost to consumers. Although Network Tasman is subject to revenue cap regulation, the business has not needed to recover the full value of the revenue cap in order to achieve these outcomes. Accordingly, the target revenue is determined by the current and forward looking operational needs of the business, rather than the allowable revenue afforded under the Commerce Commission's Price-Quality regulation.

The total post-discount revenue requirement for 2022/23 is $39.6m. This compares with a total revenue requirement in 2020/21 of $39.2m.

6.1. Network Tasman's Costs

Key components of Network Tasman's costs are outlined below along with the estimates used for these cost components when setting prices:

Table 3: Network Tasman's cost components, 2022/23

Cost component	Costs included	Cost ($m)
Indirect Opex	Indirect overheads and administration costs	$2.4
Direct Opex	Operations. maintenance and direct overheads	$11.1
Depreciation	Network and non-network assets	$7.3
Return on Capital	Revenue in excess of operating costs	$2.8
Regulatory Tax	Based on a deemed efficient capital structure	$2.1
Transmission and pass-through	Transpower, ACOT, industry levies, rates	$14.0
Total Revenue Requirement		**$39.6**

The information used to determine the value of these cost components is drawn from a range of sources, including internal estimates, Network Tasman's line business budget and financial forecasts.

6.2. Allocation by load group

A large portion of the costs associated with the electrical distribution network are shared across many consumers. Network Tasman uses a range of allocators to apportion costs across consumer groups. These allocators are chosen to select key underlying drivers of each cost component so they are allocated to the groups that most contributed to that driver. The application and choice of cost allocators inevitably involves judgement and discretion. The discussion below outlines the principles used to allocate specific costs.

Cost allocation allows Network Tasman to estimate the cost of supplying each consumer group, which is used to inform decisions around the target revenue required from each consumer group.

The methodology for allocating costs to new and recently connected large distributed generators is specified in section 9.

Direct opex and depreciation

Direct network opex and depreciation are assigned to the following network asset categories:

- General 400V lines;
- Distribution transformers;
- General 11 kV lines;
- Dedicated 11 kV lines;
- Sub-transmission lines and zone substations; and
- Dedicated networks.

The following table identifies which network segments are used by each load group.

Table 4: Network segments used by load group

Consumer Group	Network Segment Used	Maximum capacity requirement
Groups 0 & 1	General 230/400V/11/33kV/66kV	Fused <= 15 kVA
Group 2	General 400V/11/33kV/66kV	Fused > 15 & < 150 kVA
Group 3	Limited 400V and 11/33kV/66kV	AMD>150kVA+hhr metering
Group 6	Dedicated & Semi dedicated network, 33 kV & limited 11kV	>= 3,000 kVA + 11kV hhr metering
Group CB	66 kV lines	Approx 32MW
Group MAT	Substation switchgear	Approx 6MW

Notes: (1) 400V/11/33kV indicates the voltage level at which the consumers in this Group take supply and the components of the network they use; (2) The kVA indicates the consumer's potential anytime maximum demand (AMD) as measured by the size of the ICP fuse installed or the AMD obtained from half hourly (hhr) data available from consumer TOU meters; (3) Dedicated consumers are those using dedicated or semi dedicated feeders, substations and network assets at voltages of at least 11kV or 33kV and have 11kV metering.

A measure of cumulative capacity is used to allocate the costs associated with distribution transformers across load groups. The allocation of other network costs to each load group is informed by estimates of the contribution of each load group to coincident maximum demand (CMD). CMD is used because network direct investment and costs are largely a function of peak period demand.

No lower network costs are attributed to load Group 6, CB or MAT, as these groups rely solely on upper network assets for their supply. Allocations for the 400V cost components are modified to reflect Group 3's minimal reliance on these assets.

Indirect opex

Indirect network costs include general administration and overhead costs and depreciation on non-systems fixed assets. Management estimates are used to allocate indirect network costs to Group 6, bulk supply and large generator connections. The remaining indirect network costs are allocated to load Groups 1, 2 & 3 in proportion to their relative shares of installed capacity (measured by fuse size or dedicated transformer capacity). Allocation of indirect costs is somewhat more arbitrary than for direct costs. However, an allocator based on installed fuse capacity provides a reasonable balance between allocating by customer numbers and allocating by some measure of demand.

Regulatory tax

Regulatory Tax is allocated to load groups on a residual basis in the same proportion as return on capital.

Return on capital

Return on capital is allocated to load groups on a residual basis. When allocating return on capital to load groups consideration is given to a number of factors including the relative allocations between load groups and the effect of changes to the allocations on consumers.

Transmission costs

Connection costs and new investment charges are levied at each Transpower grid exit point (GXP) for highly dedicated assets used to connect Network Tasman to the grid. Connection costs are allocated to load groups on the basis of each group's estimated demand contribution coincident with the Anytime Maximum Demand (AMD) for each GXP.

Interconnection charges are allocated based on each Group's demand level measured coincident with Transpower's Upper South Island 100 peak chargeable RCPD half hours recorded over the previous year.

The connection, new investment and interconnection costs allocated to each group are summed to obtain the gross transmission costs (revenue) to be recovered from that group.

For large embedded generators, connection costs are allocated using the same allocations previously used by Transpower or by assets directly employed for their connection.

Revenue requirement by load group

A number of factors are considered when setting revenue requirements for each consumer group, including cost allocations, the effect of price changes on consumers and relativities between load groups.

As a consumer owned network, the impact on our consumers of changes to our lines charges is a key consideration when setting the revenue requirements outlined in Table 5 below.

Table 5: Revenue requirement by load group ($m)[4]

Group	Revenue requirement
Group 0	0.2
Group 1	17.6
Group 2	7.9
Group 3	7.7
Group 6	2.1
CB	1.7
MAT	0.1
NEL	1.7
Sundry	0.5
Total	**39.6**

7. Determining prices

This section explains the approach taken by Network Tasman to determining the prices for each load group.

7.1. Price setting for each consumer group

Revenue is recovered using a range of price components. These include:

[4] Some of the Total values may not match the sum of the figures presented in the table due to rounding.

- fixed daily prices (expressed as $/connection/day);
- capacity or demand based prices (e.g. expressed as $/kVA or kW/day); and
- consumption prices (expressed as $/kWh).

Consumption prices apply to all consumer groups, except Group 6. Consumption charges vary across differing price types, depending on the time of use profile where known or the level and type of load interruptability/restrictions the consumer commits to in advance.

In determining the proportions of revenue to be recovered from by each price component Network Tasman uses judgement to balance the conflicting demands that include:

- impact on consumers
- economic rationale
- government policy and regulatory requirements
- the expectations of different electricity consumers
- the goal to recover at least half of revenues from fixed charges

The sections below summarise how Network Tasman has structured its prices.

Groups 1 and 2

Consumers in Groups 1 and 2 are subject to the same tariff options, accordingly prices across the two groups are set in a similar manner.

Network Tasman has an objective to recover at least half of the revenue from both consumer groups via fixed charges. This objective is the primary driver of the fixed charge that is set across both Groups, with the exception of the LFC price categories, which are subject to a fixed charge cap of 30c/day as required by the LFC Regulations.

Group 1 has three price categories: one for non-residential connections (1GL – General) and two for residential connections (1RL – Residential low use and 1RS – Residential standard use). Fixed charges are set at 30 cents per day for price category 1RL – Residential low use to meet government regulatory requirements. The two remaining price categories have a fixed charge of $1.00 per day.

Thirty nine percent of the total revenue collected from Group 1 connections for the 2022/23 pricing year is forecast to be recovered via fixed daily charges, excluding the 1RL price category this figure increases to 49%.

For the Group 2 fixed charges were raised slightly to increase the forecast revenue from fixed charges from 44% to 46%.

The residual revenues required from each group after fixed charges have been accounted for are recovered via consumption prices.

A set of relative weightings is applied to the consumption prices on offer. The relative weights have been in part driven by legacy issues but also take account of the relative costs of providing network services at *peak* versus *off peak* times and the benefits to the network of having interruptible loads.

The weightings provide a signal for consumers to:

- shift consumption from *peak* to night periods and

- permit components of their supply to be interrupted by Network Tasman load control devices.

To provide a material difference between kWh prices for price categories 1RS, 1GL and 2, controlled and night rates are generally set to be less than half the standard uncontrolled rate. The compliance obligations of the LFC Regulations means that price categories 1RL, 2LLFC and 2HLFC have less a pronounced differential between *peak* and *off-peak/controlled*.

Group 3

Group 3 contains larger, higher load factor business consumers so primary reliance is placed on demand based fixed charges based on Anytime Maximum Demands (AMD) and contributions to Regional Coincident Peak Demands obtained from TOU metering.

This provides strong signals to minimise anytime and winter peak demand levels and rewards good load factor much more than is the case in Groups 1 & 2.

Fixed distribution charges are primarily recovered via AMDs and transmission charges are primarily recovered via the RCPD charge. For Group 3 all allocated transmission costs are recovered via the demand charges.

The combined demand charges are forecast to account for 64% of Group 3 revenues.

The remaining 36% of revenues are derived from seasonal day/night consumption prices. A relative weighting is established between the prices for summer day, summer night, winter day and winter night. This weighting process uses a similar rationale outlined for Groups 1 & 2. Night rates and Summer Day rates are heavily discounted in comparison to Winter Day rates reflecting the off-peak use of the network during these time periods. Consumption charges are not used to recover any transmission costs associated with Group 3

Group 6

There are only two consumers in Group 6 and both have sought direct service and billing arrangements with Network Tasman rather than choosing to operate through normal interposed arrangements with electricity retailers.

Group 6 consumers have fully fixed charges and pay an annual fixed rental for their supply irrespective of their load profiles.

Both Group 6 consumers have chosen to operate with Network Tasman without formal written distribution supply contracts. However, Network Tasman applies its standard terms of service and distribution code requirements to these consumers.

Large generators

Network Tasman has two large embedded generators. One generator connected in 2021, the other was acquired as an embedded generator when Network Tasman purchased Transpower's 66kV assets between Stoke and Golden Bay. The distribution charges applicable to the acquired embedded generator are set contractually and are based on the methodology used by Transpower to set connection charges for the generator when it was connected to the transmission network.

Charges for the new generator are set using the methodology specified in Section 9.

8. Non-standard contracts

Network Tasman has non-standard contracts with eight consumers (9 ICPs). The target revenue expected to be collected from these consumers is $5.7m

Network Tasman does not have set criteria for when a non-standard contract should be used or how prices should be set in the event a non-standard contract is used.

Non-standard contracts are typically used in circumstances where a consumer requires a connection with a high level of asset dedication and/or a service that is not available under the standard price categories.

Non-standard contracts and prices are typically applied to and based on large connections with high levels of asset dedication. Prices for connections with a non-standard contract are set after giving consideration to the assets involved and any additional charges from Transpower.

Distribution charges for non-standard contracts are typically fixed as they are based on the cost of providing high levels of asset dedication. Transmission and other pass-through costs are generally passed through to the consumer on the same basis as it is charged to Network Tasman.

In the event of a loss of supply, Network Tasman obligations and responsibilities to consumers with non-standard contracts is no different to those for consumers with standard contracts.

9. Distributed generation

Network Tasman has two large and four small hydro generators connected to and embedded within its network. Network Tasman also has more than 1,500 ICPs with small scale distributed generation (SSDG) connected and injecting into the network – generally rooftop solar – which equates to approximately 3.6% of all connections.

Network Tasman requires new generators to pay for the cost of connecting to the existing network in the same manner any new off-take connections must pay for their own dedicated costs of connection. For generation plant connected to the network to date, all connection costs have been borne by the connecting parties and no upper network reinforcement has been necessary.

Where import and export can occur at the ICP, Network Tasman requires separate metering for both imported and exported kWh volumes.

The Electricity Authority has published a list of DG that qualify for ACOT payments under Schedule 6.4 of the Code (Qualifying DG).

The Authority is clear that to receive ACOT payments, DG must be a Qualifying DG and also meet its distributor's specified eligibility criteria. To satisfy Network Tasman's eligibility criteria, DG must:

- be classified as a Qualifying DG by the Electricity Authority
- have connected to our network prior to 6 December 2016; and
- be greater than 200kW in nameplate capacity[5].

Network Tasman will only make ACOT payments to DG that satisfies this eligibility criteria.

[5] All references to *nameplate capacity* in this section refers to the term as defined in the Electricity Industry Participation Code 2010.

Network Tasman's ACOT payments are forecast to be $1.8m for 2022/23.

9.1. Pricing for Distributed Generation

Network Tasman uses regulated terms as set out in Schedule 6.2 of Part 6 of the Electricity Industry Participation Code 2010 (Part 6) as a default contract with SSDG, but has more formal connection agreements with six hydro plants connected to the HV network.

Pricing for five of the hydro plants connected to the HV network is specified in the individual connection agreement with each of these distributed generators. The connection agreement with the sixth generator states prices must be set with reference to the pricing principles specified in Schedule 6.4 of Part 6. The methodology used to set the prices in accordance with Schedule 6.4 is outlined below.

Network Tasman's desire is for all HV connected DG to be subject to similar terms of connection. Terms of existing contracts limit the degree to which Network Tasman can achieve complete alignment.

General

This section sets out the methodology Network Tasman uses to derive the incremental cost of connecting DG to our network and how it will recover those costs from the DG owner.

For DG connecting to the HV network, the charges outlined below are calculated on an annual basis and invoiced in arrears in equal monthly instalments across the pricing year (April-March). For DG connecting to the LV network, the charges will generally be recovered as an upfront lump-sum prior to connection.

There are three types of costs that Network Tasman may incur when connecting DG to the network. The costs are:

- Distribution costs – The cost of deploying new distribution assets in order to connect the DG to the distribution network, including business support costs incurred by Network Tasman as a result of the connection and operation of the DG in the distribution network;
- Transmission costs – The incremental transmission costs incurred as a result of the connection and operation of the DG on the distribution network;
- Other costs – Other incremental costs incurred by Network Tasman as a result of DG connecting to our network, including regulatory charges such as Electricity Authority Levies.

Network Tasman's policy is to recover the asset-specific costs via a monthly lines charge according to the methodology in 0 below. The cost of installing individual assets is included in their value. However, some costs incurred when installing assets cannot be allocated to a specific asset. Where this occurs, these costs will be recovered directly from the DG owner upfront.

The costs below will be discussed with DG owners prior to entering into a connection agreement.

Distributed Generation Lines Charge

The DG lines charge recovers costs associated with line function services provided by Network Tasman in the following situations:

- incremental assets provided for the connection of the DG to the distribution network; and

- use of shared incremental assets that are installed or upgraded to the capacity required by the DG and exceed the capacity required for the local network.

The charge comprises three components:

- a return on investment;
- depreciation; and
- maintenance and operation/business support costs.

Return on Investment (ROI)

Network Tasman will value the assets used for conveying electricity produced by DG at the regulatory asset base (RAB) value of the assets or equivalent and apply the Weighted Average Cost of Capital (WACC) applied by the Commerce Commission to set Network Tasman's revenue cap (currently 4.57%)[6]. Accordingly, the calculation will be:

$$Return\ on\ investment = \sum_{asset} Regulated\ WACC \times RAB\ Value_{asset}$$

$$\text{Returnoninvestment} = \text{RegulatedWACC} \times \sum \text{RABValue}_{\text{asset}}$$

Where:

Regulated WACC = The WACC estimated by the Commerce Commission for the purposes of default price-quality path regulation.

RAB $value_{asset}$ = The current RAB value or equivalent, in dollars, of each incremental asset used to connect the DG to Network Tasman.

In circumstances where multiple DG share assets that Network Tasman has provided exclusively for conveying electricity produced by DG, the return on investment component will be apportioned according to the ratio of the nameplate capacity of the DG owner's plant to the sum of the total nameplate capacity of all DG owners' plant using those shared assets. Network Tasman will provide an asset valuation table and, where multiple DG is involved, apportionment calculations as part of the contract with the DG owner.

Depreciation

Network Tasman will value the assets used exclusively for conveying electricity produced by DG at the value of those assets as they are recorded in Network Tasman's RAB or equivalent. An annual depreciation charge will be calculated based on the standard physical asset lives for each appropriate asset class. Accordingly, the calculation will be:

$$Depreciation\ charge = \sum_{asset} (RAB\ Value_{asset} \times \frac{1}{Remaining\ Life_{asset}})$$

Where:

[6] The Commerce Commission updates the WACC every five years, as part of its default price/quality regulation reset. Network Tasman will update the WACC used to set DG lines charges to align with any changes made by the Commerce Commission to its WACC.

RAB Value$_{asset}$ = As defined above

Remaining Life$_{asset}$ = The remaining life, in years, of each incremental asset used to connect the DG to Network Tasman. Where applicable, asset lives will be set according to the standard physical asset lives as defined in the Commerce Commission's Electricity Distribution Services Input Methodologies Determination 2012.

$$\text{Depreciationcharge}(\$) = \sum(\text{RABvalue}_{\text{asset}}(\$) \times \frac{1}{\text{RemainingLife}_{\text{asset}}(\text{years})})$$

Where multiple DG share assets that Network Tasman has provided exclusively for conveying electricity produced by DG, the depreciation component will be apportioned according to the ratio of the nameplate capacity of the DG owner's plant to the sum of the total nameplate capacity of all DG owners' plant using those shared assets.

Network Tasman will provide an asset valuation table, table of depreciation charges and, where multiple DG owners are involved, apportionment calculations, as part of its contract with the DG owner.

Maintenance and operations

The cost to Network Tasman of maintaining assets used by DG will vary according to a range of factors, including the:

- specific assets used to connect the DG;
- topography over which the assets are located;
- climate where the assets are located; and
- accessibility of the assets.

Accordingly, maintenance costs can vary significantly, making it difficult to prescribe a precise methodology for allocating maintenance costs. Rather, the methodology for recovering maintenance costs will be set on a case-by-case basis.

Similarly, where the connection of DG imposes incremental administration costs on Network Tasman, these costs will be directly passed on to the DG responsible.

New generation

Where new DG proposes to connect to shared assets that Network Tasman has provided exclusively for conveying electricity produced by other DG owners, or an existing DG owner proposes to increase the amount of generation injected into the Network Tasman network, additional assets or network reinforcement may be required to accommodate transmission of the new or increased generation and maintain the transmission capability allocated to existing DG. In such circumstances, ROI, depreciation and maintenance charges associated with the additional assets or network reinforcement, as calculated above, shall be attributed to the DG owner requiring the additional investment.

Valuation Review

DG connection charges will be periodically adjusted for any change in the asset values that underpin the connection charge, which may have occurred as a result of asset renewals, revaluations and replacements.

Transmission Related Transactions

Network Tasman will directly pass through the cost of any incremental cost it incurs from Transpower as result of connecting DG to its network. The following section describes the most common incremental cost components Network Tasman incurs as a result of DG connecting to its network.

Recovery of Connection Charges

The incremental cost of any connection assets commissioned as a result of DG connecting to our network will be passed directly through to the DG owner.

These costs generally arise via a direct increase in connection charges due to the installation of new assets, an increase in Network Tasman's allocation of existing assets (generally the substation) or addition of an Injection Overhead Component.

Where the presence of DG causes Network Tasman to become both an offtake customer and an injection customer at a GXP (or just an injection customer), Network Tasman's connection charge from Transpower will include an additional Injection Overhead Component. Network Tasman will pass the value of this component on to the owner of the DG responsible.

Avoided Cost of Transmission (Interconnection) Payments

Network Tasman does not make any ACOT payments to DG connected to Network Tasman after 6 December 2016. For DG connected on or prior to 6 December 2016, Network Tasman will make ACOT payments only if they meet the eligibility criteria specified at the beginning of this section.

Network Investment and Transpower Works Agreements

The cost of any bilateral contract between Transpower and Network Tasman for works or new/upgraded assets that is entered into to accommodate the connection of DG will be passed directly through to the DG owner.

Where applicable, the associated maintenance costs for any new assets installed as a result of a bilateral agreement between Network Tasman and Transpower will be passed directly through to the DG owner as levied by Transpower.

Recovery of HVDC Charges

Where net injection to the Grid occurs at a GXP serving Network Tasman, Network Tasman will incur HVDC Charges from Transpower. These charges are designed to recover Transpower's revenue requirements for operating the HVDC link between Benmore in the South Island, and Haywards in the North Island. Network Tasman will recover the HVDC Charges from the DG owners that cause the charges to occur.

Transpower sets the HVDC Charges, by multiplying its SIMI Rate ($/MWh) by the SIMI recorded at the GXP.

Network Tasman will pass on HVDC charges to DG owners based on the prevailing SIMI rate and its relevant MWh recorded.

Other Costs

EA Levy

As an industry participant, Network Tasman is required to pay the Electricity Authority's annual levy (EA Levy). Each monthly instalment of the EA Levy is recovered from generators based on:

- the total quantity of electricity conveyed by the distributor during the month; and
- one-twelfth of the total number of ICPs Network Tasman is responsible for at the end of the month

Where the connection or operation of DG results in the total quantity of electricity conveyed by Network Tasman changing (as assessed by the Electricity Authority),[7] the incremental effect of this change will be passed through to the DG owner.

Commerce Commission Regulation

As a price/quality regulated distributor, Network Tasman is subject to the Commerce Commission's regulated quality standard. Should Network Tasman breach any of its regulated quality standards and it can be demonstrated that Network Tasman would not have breached the regulated quality standard/s had one or more DG not been connected to our network, Network Tasman will recover the incremental costs that it incurs in responding any subsequent breach investigation from the relevant DG owner/s.

Price notification

All DG subject to the methodology described above receive a summary of these charges 20 working days prior to the beginning of each pricing year on 1 April.

10. Distribution pricing principles

The Electricity Authority published a decision paper titled "More efficient distribution network pricing – principles and practice" dated 4 June 2019.

In the paper the Authority published a new set of Distribution Pricing Principles and the Authority's approach to monitoring and promoting progress on distribution pricing reform.

In what follows each Distribution Pricing Principle is identified and Network Tasman's general compliance with the principle is discussed.

Pricing Principles (a) **Prices are to signal the economic costs of service provision, including by:**
being subsidy free (equal to or greater than avoidable costs, and less than or equal to standalone costs);
The subsidy free test is a theoretical notion which at its limit requires a separate test for each of Network Tasman's ICPs. To accurately estimate both incremental costs and standalone costs for particular customers or groups of customers is difficult and resource intensive and so the matter is addressed in general terms below.

[7] Relative to the quantity of electricity that would have been conveyed in the absence of the distributed generator.

As a general principle, if line prices are cost reflective and costs are below bypass levels the subsidy free test will be met.

Allocation of consumers and costs to load groups and the development of prices for those load groups necessarily involves averaging and a number of assumptions. The resulting price is at best reasonably cost-reflective for broad groups of consumers.

However, the subsidy free range for line services for mass market consumers is also likely to be broad because incremental costs for the additional consumer/kVA/kWh are low while their standalone costs of supply are very high. This broad range means the pricing methodology described in this document will results in prices within the subsidy free range.

Network Tasman does not make up under-recovery of distribution costs from one particular customer group by over recovery from any of the other groups. As a result there are no cross subsidies between customer load groups.

Standalone Test

Distribution networks are natural monopolies and by definition deliver significant and long-term economies of scale to an extent that tests for standalone costs of alternative lines supply (overbuild) against existing cost reflective prices for mass market consumers should be largely redundant.

It is likely that Network Tasman's line prices for Group 1 & 2 consumers are materially lower than the standalone economic costs associated with alternative lines supply. This contention is supported by the fact that:

- Network Tasman's pricing methodology is cost reflective by Load Group
- Transpower directly charges distributors for their connection assets at GXPs. There are very strong economies of scale with respect to grid connection.
- New overbuild costs combined with Network Tasman's line business economies of scale means any replication of Network Tasman distribution assets would be uneconomic when assessed against Network Tasman's current mass market line charges and highly shared Transpower connection costs, either for individual consumers or for larger groups of consumers.

An alternative standalone test for small and medium sized consumers is to compare the cost of line supply against the costs of alternative standalone energy supply using on site micro generation plant. At the present time the cost of standalone reliance on micro generation remains higher than industry average and incremental supply costs, although this test is more about cost of delivered energy than a disaggregated test focused just on the transport component of electricity costs. With consumers primarily interested only in the overall delivered cost of energy, the standalone subsidy free test for line charges is problematic given the need to split out line and energy costs.

Standalone cost tests have more relevance for the small number of larger consumers at specific locations on Network Tasman's network. Network Tasman's pricing methodology for Group 3 & 6 consumers is cost reflective and uses asset based economic costs

attributable to these customers. Additionally these consumers share in the economies of scale arising from high levels of sharing of:

- grid exit point costs
- upper network distribution assets
- indirect distribution costs.

Alternative supply via overbuild to these consumers would require economic costs to reflect full asset replacement costs plus the loss of key scale economies. These standalone costs will therefore be well in excess of Network Tasman's current line charges which is not supportive of an overbuild business case.

Network Tasman has previously commissioned bypass costings for major customer sites to identify standalone costs and to assess the reasonableness of existing line charge levels. No adjustment to line prices for major customers resulted.

Avoidable Cost Test

Avoidable costs are those costs that can be avoided from supplying one less unit of service.[8]

Examples of avoidable costs could include:

- disconnection of an existing consumer or consumer group (ICP, ICPs);
- supply of one less unit of capacity (kVA, mVA);
- transportation of one less unit of electricity (kWh, MWh);
- billing and customer service costs; and
- additional maintenance costs;

The Authority states that "(d)istributors run primarily fixed-cost businesses"[9]. The implication of running a primarily fixed cost business is that in most instances incremental changes in the provision of a unit of service (ICP(s)/capacity/consumption) will have a negligible effect on the business's costs.

Incremental cost savings due to a reduction in a unit of capacity, consumption or connections are generally very low for areas where the network has spare capacity. In areas where spare capacity is scarce and new investment is imminent, a reduction in a unit of service may result in a material reduction in costs. However, it is difficult to assign or attribute step changes in core network investment costs to specific units of service unless the change in load (service) is highly customer specific and is large relative to the network segment supporting it.

At a connection level, Network Tasman's new load policy requires developers and consumers to fund the incremental costs of any network extension necessary to support new connections. Network Tasman is generally left with funding new transformer capacity and any augmentation of core network capacity. The result of this is that the combination

[8] A unit of service could be measured in kWhs, kVA or ICPs.

[9] Electricity Authority, *More efficient distribution network pricing – principles and practice: Decision Paper*, 4 June 2019, p.ii

of capital contributions and line charges are normally sufficient to service Network Tasman's incremental costs for new connections plus provide a proportionate contribution to service and reinforce the core network.

Network Tasman's new load policy also seeks network development levies based on distance and kVA for new loads in uneconomic areas of the network.[10] This helps recover the shortfall in revenue in areas where connection costs tend to be highest. The policy also enables Network Tasman to reserve the right to seek capital contributions from any new load that is large relative to the capacity of the network segment it will rely on. This gives Network Tasman the opportunity to undertake an economic assessment to ensure costs are properly supported by expected future line charge revenues from the large new load. Where there is a shortfall Network Tasman may seek a capital contribution to support the incremental costs.

The implication of Network Tasman's new load policy is that many of the costs derived from incremental changes in supply sit with the party/ies responsible for the change. Regulatory requirements to offer a low user tariff option to qualifying consumers and to maintain urban and rural line tariffs at similar levels tend to compromise incremental cost recovery and create subsidisation of some loads. Network costs for domestic customers do not vary materially with consumption (kWh) levels but the low fixed charge tariff requirements compromises revenue earning ability from low users relative to their incremental costs of supply. This is a material issue as the majority of Network Tasman's domestic customers use less than < 8000 kWh pa.

Similarly, incremental costs in rural segments of the network tend to be higher than in more dense urban areas but restrictions on the level of differentiation between rural and urban tariffs leads to under recovery of incremental costs in these higher cost geographical segments.

Reflecting the impacts of network use of economic costs;

Developing price components that reflect the economic costs of use with any precision requires, in theory, locational marginal prices, but in practice this most likely means kVA-based charges that have locational and timing components associated with them. Alternative tightly time bound (TOU) kWh based tariffs could also provide useful but less accurate signalling.

Within an ICP based pricing regime, the ability to provide signals for the effect additional use has on future investment has been problematic because there has been a desire by consumers, retailers and Network Tasman's trustee owners to avoid differentiated prices across geographical segments of the distribution network for mass market consumers. Many consumers also have an aversion to high capacity and demand based charges, particularly if it results in significantly higher prices at the times when people most want to use electricity.

[10] An uneconomic area of the network is defined as areas where Network Tasman's standard line charges do not recover all costs attributable to the delivery services supplied and consequently replacement and renewal of the network.

The alternative for mass market consumers is a set of relatively blunt pricing instruments focused on capacity measured by installed fuse sizes combined with time of use kWh tariffs. Network Tasman uses both these tools in its mass market prices.

Group 1 capacity/service level signals are relatively muted, however, every Group 1 ICP is restricted to a maximum demand capacity of 15 kVA via connection point fuses. Under the low user regulations a tariff option must be made available to all residential consumers with a fixed / capacity component of no more than $0.30 per day.

Historically, Network Tasman applied the low user rate across all Group 1 ICP's in order avoid excessive transaction costs. For the 2019/20 regulatory period, Network Tasman introduced new prices for connections up to 15kVA that are (1) secondary residences (e.g. baches) and primary residences that consume more than 8,000kWh per year, or (2) non-residential consumers.

This change improved the extent to which Network Tasman's prices for 15kVA connections will reflect the available capacity service levels to these consumers, as will the phased removal of the LFC regulations. However, this is limited by the fact that the majority of Network Tasman's residential 15kVA connections use less than 8,000kWh per year and therefore qualify for the LFC tariff. While the LFC remains in place, low use/low load factor consumers under-pay for their available service capacity while high use/high load factor consumers over-pay for the same capacity. This inefficiency is an inevitable consequence of the LFC Regulations.

Network Tasman's Group 2 & 3 line prices feature components directly related to the capacity demand consumers in these groups can make on the distribution network and the transmission grid.

Group 3 consumers face an anytime maximum demand charge which in part reflects the current and future cost of delivering capacity on the distribution network. This signals consumers to minimise peak demand.

We use kW or kVA price components as a signal of the economic costs of network use because network direct investment and costs are largely a function of peak period demand levels.

The distribution component of Group 6 network charges entirely fixed. This fixed charge recognises the highly dedicated supply used by these consumers. Any "additional usage" beyond the capacity of the existing dedicated assets will result in additional investment and the costs will be directly reflected back through to these consumers.

Network Tasman's service level (kVA) signals are moderate for Group 2 consumers but are stronger for Group 3 consumers.

Similarly within both Groups 3 & 6, Transpower's Interconnection Charge (a grid service capacity charge) is reflected directly through to each consumer on the basis of their capacity demands coincident with the grid's USI regional peak demand (RCPD).

Accordingly, Group 6 customers face the direct costs of congestion, should it occur, be it by curtailing load (and incurring the costs of lower production) or the investment cost of upgrading their dedicated assets.

Where any consumer uses available network and grid capacity inefficiently Network Tasman reserves the right to apply a kVA based power factor correction charge on sites with non-compliant power factor (PF<0.95). In practice this has been applied to TOU metered sites to good effect with only three sites incurring the power factor charge.

Network Tasman also applies a kVA per kilometre network development levy regime for new loads locating on high cost, uneconomic segments of the network. The levy recognises demands for service capacity both in terms of network distance (km) and capacity level (kVA). The network development levy is an up-front charge that recovers incremental costs of network connection (the economic costs) directly from those responsible for the cost.

Network Tasman does not currently offer any formal arrangements to share any deferral of investment in distribution and transmission assets. However, there are a number of useful indirect incentives within Network Tasman's line price structure and contractual agreements that reward any customer behaviour limiting peak demand by lowering their own and Network Tasman costs.

- Some distributed generators are directly rewarded via pass through agreed savings they cause with respect to Network Tasman's Interconnection Charges. Any potential for deferral of distribution investment will be site and plant specific and so will be assessed on a case by case basis.
- Group 6 consumers obtain the full benefit from any reduction in RCPD coincident demands with respect to Interconnection Charges directly passed through by Network Tasman.
- Group 3 AMD and RCPD demand charges generally reward any load reductions at critical times, whatever their cause, on Network Tasman's distribution network and the Upper South Island grid respectively.
- Group 2 capacity charges provide moderate rewards and incentives for constraining consumer's peak loads. Lower investment in LV assets such as conductor, transformers and fusing is thereby encouraged.
- Controlled and Night kWh prices incentivise and reward mass market consumers for shifting load to off peak times or enabling their load to be interrupted. Network Tasman's peak network and grid loads have been estimated to be 10-12% lower than they would have otherwise been as a result of historical uptake of controlled tariff options and use of centralized load control plant.

(iii) reflecting differences in network service provided to (or by) consumers; and

Network Tasman's primarily differentiates its services by connection capacity and firmness of supply.

Network Tasman offers five separate price groups, each covering a set connection capacity range. Price Groups are summarised below:

- Group 0 – Low capacity unmetered connections, such as street lights, phone boxes and roadside communication cabinets
- Group 1 – Metered connections of capacity up to 15kVA. This price group accounts for the majority of residential consumers and some small businesses.
- Group 2 – Metered connections of capacity between 20kVA to 150kVA. This group tends to consist of most businesses and some large residential households.
- Group 3 – Metered connections of capacity exceeding 150kVA. This group consists of large businesses.
- Group 6 – Individually priced connections with capacity exceeding 3MVA.

These price categories act to differentiate connections based on the capacity of each connection on our network and reflect the differences in the service provided to our consumers.

Group 1 and 2 connections also have the option of a less 'firm' electricity supply by opting to have their hot water controlled via ripple control or their use of specific appliances limited to specific times.

The ability to control hot water charging provides Network Tasman better tools to manage network load at peak times and defer network investment. From the consumer-side, having their hot water controlled may affect the supply of hot water at their premises, although this is mitigated by the service standards that dictate the maximum length of time hot water can be disconnected. Anecdotal evidence indicates that consumers observe little effect from having their hot water controlled.

Network Tasman also offers a 'night only' tariff where use of specific appliances is be limited to operating overnight only (11pm to 7am). This tariff is typically used for night store heaters, underfloor heating and night only water supply. Anecdotal evidence suggests this tariff is popular for electric vehicle charging.

(iv) encouraging efficient network alternatives.

Network Tasman's line prices directly or indirectly encourage consideration of network alternatives and innovation in the following ways:

- Network Tasman only charges new embedded generators for their incremental costs of connecting to the network. Where warranted, Network Tasman will also consider passing through any avoided distribution costs directly attributable to new embedded generation plant.
- Network Tasman passes Transpower's interconnection charges directly through to Group 3 & 6 consumers, based on time of use data. They thereby gain full value from any means they may have of reducing or avoiding demand coincident with USI peak grid loads.
- Group 3 capacity based AMD prices encourage consumers to minimise their peak loads on the distribution network. Demand reduction such as on site power factor correction or any other means of limiting peak load is rewarded by way of materially lower network charges.
- Group 3 prices include a power factor charge for consumer sites where power factor is non-compliant (worse than 0.95). This combined with AMD and RCPD

capacity charges strongly encourage consumers to install technology that enables scarce grid and distribution capacity to be used efficiently.

- Group 2 prices include capacity charges based on installed fused sizes. This provides moderate incentives for consumers to minimise their ICP fusing requirements and to find ways of avoiding increasing peak demands on the network. It also acts as a disincentive for consumers to move up to Group 2 from Group 1, where fixed charges for some consumers are artificially low.
- Network Tasman pricing has, for all consumers, considerably higher kWh rates on tariffs chargeable on "peak" consumption than for "off peak" or "controlled" consumption. For standard users, the "on peak" tariff rates are, in general, more than double the "off peak" and "controlled" rates. These differentials provide consumers with incentives to move consumption away from peak.
- Network Tasman requires an upfront network development levy, reflecting both kVA and distance, for new loads seeking new capacity in uneconomic areas of the network. The development levy signal is stronger the larger the load and the further it is away from Network Tasman GXPs or zone substations. This progressively encourages all remote new loads to minimise their new capacity demands on segments of distribution network that are uneconomic to reinforce and to explore alternative and more efficient ways of supplying their new capacity requirements. It also encourages new load to locate in lower cost areas of the network.
- Large new loads are subject to an economic test that assesses incremental cost against expected future revenue streams. Where there is a shortfall a network development levy can be sought. This incentivises minimisation of capacity use and consideration of alternatives. It also encourages new large load to locate in lower cost areas of the network.

New connections/loads on Network Tasman's distribution network are required to fund any new network extension assets (excluding transformers) necessary to connect their new ICP to the existing distribution network. This policy helps Network Tasman avoid funding uneconomic and undesirable network extensions and incentivises new connections to consider the most economic means of getting power to their particular chosen localities.

(b) Where prices that signal economic costs would under-recover target revenues, the shortfall should be made up by prices that least distort network use.

This test of efficient pricing focuses on Ramsey concepts of loading any revenue shortfalls after signalling economic costs onto consumers, products and services that are the least responsive to price changes.

Network Tasman's line charges typically make up 30-35% of most consumers power bills while the generation and retail component makes up the remaining 65-70%. As part of the overall price signal consumers are likely to receive, line price signals provide muted consumption signals. Sensitivity to choices concerning shortfall recovery is therefore also likely to be muted. Therefore the means used to spread and collect any under recovered

costs is only of modest importance especially given distribution charges tend to be a declining proportion of consumers' power bills.

Demand elasticity is largely a function of the availability of substitutes. In terms of electricity delivered through traditional centralised generation plant, power grids and distribution networks the alternatives that drive demand elasticity are primarily gas, coal, wood, distributed generation, solar water heating and energy efficiency substitutes.

For virtually all Network Tasman consumers:

- Coal and gas (other than gas for cooking) are not particularly viable substitutes in this region, and commodity prices and the current ban on offshore gas exploration are likely to make them less so in the future.
- Incremental use of wood or coal is increasingly being marginalised as a heat source by clean air regulations in Network Tasman's major urban areas.
- Energy efficiency initiatives (insulation, better lighting & appliances etc.) tend to present one off opportunities at discrete points of time for consumers to lower part of their consumption for the long term.
- Solar water heating is understood to now be a reasonably viable option compared to electrically heated water for those installing a new hot water system. Despite this, anecdotal evidence suggests that adoption has been muted. This is presumably because most consumers only replace their hot water system when the existing system has failed. Additionally, urgency to restore hot water service following a system failure limits consumers' ability to research alternatives and is likely to result in incumbency bias, even in the event of more economic options being available.

Most electrical consumption remains relatively inelastic in the short to medium term. Network Tasman also needs to retain off peak, controlled, night and summer kWh tariff rates at substantial discounts to peak and uncontrolled rates for network and demand efficiency reasons.

Use of fixed capacity or daily charges provide the best means of making up for under-recoveries as these cause minimal distortion to consumption patterns at the mass market level. Network Tasman has an ongoing policy of incrementally increasing the proportion revenue recovered from fixed charges over time. However, until the low user fixed charge regulations have been fully removed, there limit on what can be achieved with respect domestic customers, which forces loadings on variable tariffs.

(c) Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to:

(i) reflect the economic value of services; and

This principle supports end users negotiating a lower price where they would otherwise inefficiently curtail demand (or disconnect or not connect in the first place) if faced with standard prices.

The Authority notes in its pricing principles practice note that this principle is often given effect through a prudent discount policy.

Network Tasman doesn't have an explicit prudent discount policy. The TPM (that applies at the time of writing) has an explicit and well publicised prudent policy. However, unlike transmission customers who are large and whose electricity costs constitutes a relatively significant proportion of their operating costs, most distribution consumers do not fit these characteristics.

Most commercial connections operate in a competitive markets characterised by regular entry and exit. Given the regularity at which businesses enter and exit their respective markets, it would be administratively unworkable for Network Tasman to employ a prudent discount policy for any but its largest connections. Similarly, few connections on our network incur charges of sufficient size to have a material effect on overall lines charges and therefore justify the application of a prudent discount.

The presence of a formal prudent discount policy may also give rise to opportunistic attempts at using the prudent discount policy to gain lower lines charges.

Network Tasman maintains dialogue with consumers that are of sufficient size to justify the application of a prudent discount and the possibility of a discount remains on the table for these consumers if appropriate.

enable price/quality trade-offs

Network Tasman considers that for mass market consumers (99% of Network Tasman's ICPs) the electrical network is a "general commons" and the notion of offering price quality/trade-offs for a specific mass market consumer(s) has considerable challenges.

Primarily, the challenge relates to the practicality of administering a bespoke set of services for each individual ICP. In practice the transaction/administrative cost of allowing each mass-market ICP to negotiate a bespoke lines service would be prohibitive. Other than offering a choice of differing capacity levels and adopting peak/off-peak and controlled tariff options to mass market consumers, Network Tasman is generally unable to offer other differentiated lines services to one consumer without at the same time providing it to all other adjacent consumers sharing the same network assets, whether they want, or are prepared to pay for the service, or not.

However larger customers are more able to contract for different levels of service where they have high levels of asset dedication. Network Tasman's Group 6 consumers have specific and dedicated network requirements and these requirements are reflected in the assets provided and the service terms Network Tasman has in place with these consumers.

Network Tasman has surveyed and consulted with Group 3 & 6 and larger Group 2 consumers about price quality/trade-offs in the past as part of the thresholds price control regime. Consultation with consumers is now undertaken as part of the AMP process. The consultations generally show these consumers have primary concerns over continuity of supply. There appears to be little appetite for any degradation in service quality.

Network Tasman has also canvased electricity retailer views (as representatives of their customers) over line pricing and their primary concerns focus on simplicity and pass through risk rather than with price/quality trade-offs.

Network Tasman, as a consumer trust owned distributor, must agree on its Statement of Corporate Intent (SCI) each year with Trustees (who are elected by and represent consumers interests). The SCI considers company pricing, revenue and cost targets as well as quality and reliability targets. Performance is regularly reported against these targets to the Trust. The Trustees hold the power to appoint Network Tasman's Directors and be consulted over any major transactions proposed by the company. This structure puts in place a viable feedback loop to the company from consumers and stakeholders.
(d) Development of prices should be transparent and have regard to transaction costs, consumer impacts, and uptake incentives.

Network Tasman supports price transparency in the following ways:
▪ Network Tasman makes commitments to maintain stability and certainty for line prices in its SCI with the Network Tasman Trust
▪ This pricing methodology document offers a detailed account of how Network Tasman sets it prices and the different drivers that affect our prices. The future pricing strategy section of the methodology also provides readers with a signal of how future prices are expected to evolve in the future. The pricing methodology is updated annually.
▪ Network Tasman is required to publish changes in prices and pricing methodology.
▪ Network Tasman annually makes available in the public domain (on its website or makes publicly available) its:
  ▪ SCI (agreed with Trustee owners)
  ▪ Annual Financial Statements (audited)
  ▪ Pricing Methodology
  ▪ Line prices split into distribution and transmission components
  ▪ Use of systems agreements
  ▪ AMP
  ▪ Default Price Path Compliance Statements (audited)
  ▪ Information Disclosures (audited)
  ▪ New connections and contributions policy
These documents directly or indirectly provide pricing and cost information and offer a high level of transparency to stakeholders.

11. Future pricing strategy

The way electricity is used and generated is continuing to evolve. In this context, Network Tasman considers it important to assess whether there are improvements that can be made to price structures to enable and support consumer choice, while at the same time continuing to provide a sustainable electricity network.

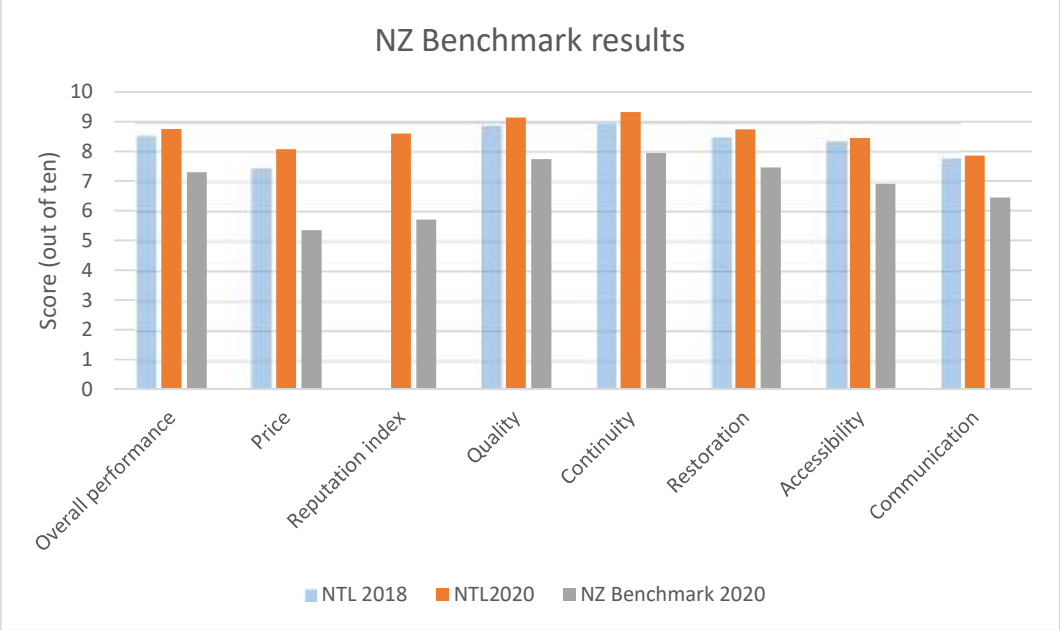
In the context of developing a forward strategy for pricing, Network Tasman has conducted initial consumer research on price structures and their interest in using emerging technologies such as solar panels, battery storage and electric vehicles. The results of that research as well as an overview of Network Tasman's next steps towards assessing possible price structure enhancements or alternatives are set out below.

Network Tasman does not have a formal pricing strategy as defined in the Information Disclosure Determination. However, the following summarises Network Tasman's current perspectives on future pricing.

11.1. Consumer perspectives on pricing

Network Tasman conducted a consumer survey in December 2020 which examined a range of issues including overall satisfaction with our service, willingness to pay for quality improvements and views on price structures. The survey results showed a high awareness of Network Tasman and a high level of satisfaction with the company's performance with regard to quality of service, continuity and restoration, with overall performance satisfaction being rated at 8.74/10.

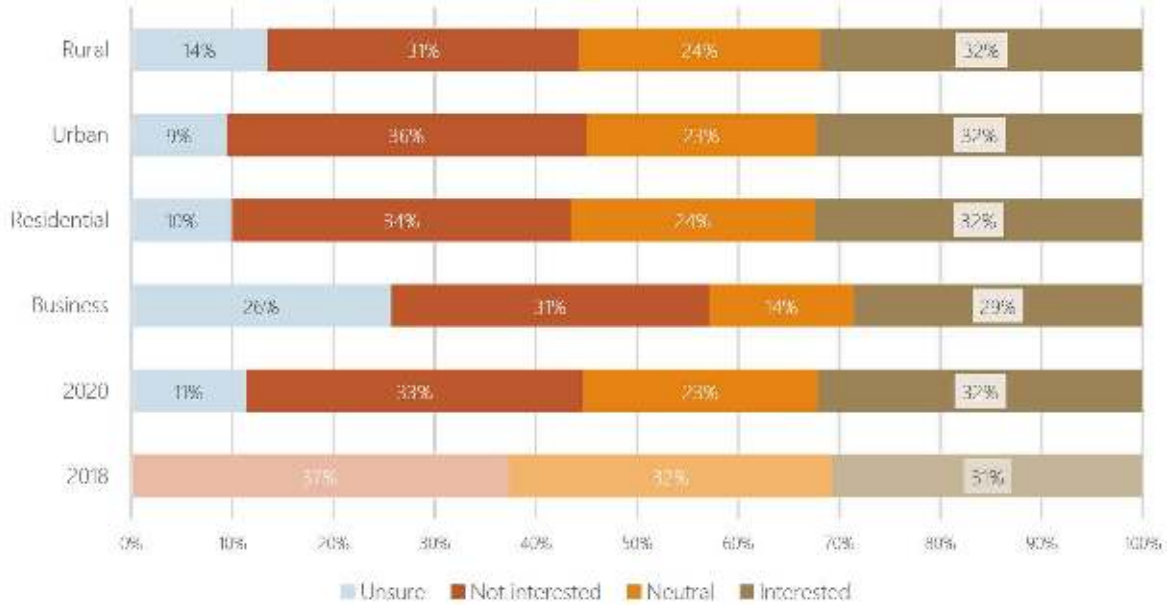
The survey report compares Network Tasman's results against a national benchmark across a range of categories. Network Tasman not only exceeded the national benchmark across all eight categories, it also improved its performance against all of the categories measured in the 2018 survey.[11]



Customers were surveyed on the structure of prices. Almost one third of consumers indicated that they would be interested in a peak/off-peak plan where prices are higher during network peak periods such as morning and evening and less during off-peak periods. As discussed earlier, Network Tasman currently offers a day/night price option. There is currently little demand for this tariff, with approximately 2% of mass market connections using the day/night price option with a further 10% using the night only rate.

[11] The 2018 survey only provided results against seven of the eight categories included in the 2020 report.

Figure 1: Interest in peak vs off-peak plan (December 2020)



Network Tasman has previously surveyed consumer perspectives on price/quality trade-offs. That is whether they are willing to pay more (or less) in return for higher (or lower) quality lines services, be it faster restoration times or fewer outages. In practice, Network Tasman is unable to realistically offer services of this nature to the vast majority of its consumers because we are unable to meaningfully differentiate the quality of the service we provide to consumers on an ICP-by-ICP basis. For example, the vast majority of our assets are shared across multiple ICPs, making it difficult to meaningfully differentiate service standards across individual ICPs. We continue to discuss price/quality trade-offs with ICPs that use a large proportion of dedicated assets on our network.

The deployment of advanced meters for Group 1 and 2 consumers could facilitate further uptake of these price options and/or development of other time-of-use price options. Network Tasman has conducted analysis of TOU options previously, but concluded that further analysis of retail impacts and the inter-play with load control is required. Network Tasman is considering time-of-use prices as part its current pricing review.

More generally, Network Tasman considers that it is important to continue improving our engagement with consumers about prices.

11.2. Future Pricing Strategy

Existing prices for Group 1 customers have a large consumption-based component. This does not accurately reflect the service provided to customers nor does it reflect Network Tasman's underlying cost structure. Looking to the future, technological change indicates that the way consumers use electricity may change significantly. Solar panels, battery storage and electric vehicles are forecast become commonplace over time, as technological improvements and scale economies result in reduced costs. Simplistic consumption-based prices are unlikely to promote efficient investment in and use of emerging technologies.

Although there is significant uncertainty over how popular these technologies will be and how quickly adoption would occur, only a small but growing number of consumers have taken an interest in the options becoming available to them.

The commercial implications of electric vehicles and solar panels under existing price structures are countervailing, to a degree. As more consumers on our network purchase electric vehicles, their use of the network will increase along with their lines charges. Similarly, as more consumers install solar panels, their electricity consumption and lines charges are expected to fall.

Network Tasman has the second highest rooftop solar PV penetration of all distributors in New Zealand. Approximately 3.6% of connections on Network Tasman's network have solar generation and about 2% of connections in the combined Network Tasman and Nelson Electricity network areas[12] have an electric vehicle, up from 3% and 1.4% twelve months ago respectively.

To inform our future asset management plans, Network Tasman commissioned a detailed study into the network's ability to host a range of electric vehicle penetration levels. Our ability to host EVs depends on a range of factors including network age, network design/configuration and where electric vehicles cluster. The broad conclusions of the study are that Network Tasman is well placed to manage expected electric vehicle growth over the short to medium term without requiring significant changes to our existing asset management plans.

Although the Authority is pushing for urgent distribution price reform, Network Tasman has not yet observed changes of sufficient magnitude to justify deviating from its current considered approach to price reform. For example, solar PV penetration increased from 3% in February 2021 to 3.6% in February 2022. Similarly, EV penetration[13] is estimated to have increased from 1.4% in February 2021 to 2% in February 2022. There is also uncertainty about a number of significant factors that influence the costs distributors incur and how distributors can set their prices. These include:

- how emerging technologies will connect to and operate on distribution networks in the future;
- the Electricity Authority's project reviewing the future regulation of the distribution sector;

The relatively small commercial and network management implications of evolving technologies in the near-term and the regulatory uncertainty outlined above does not detract from the fact that it will become increasingly important that Network Tasman's prices better reflect the underlying cost of providing distribution services, but it does influence the speed at which reform is needed.

Under existing prices for Group 1 (and to a lesser extent Group 2 prices) consumers without solar panels will disproportionately bear the burden of funding network costs. In addition, in the current scenario where most customers do not face a time-of-use price, there is little incentive for consumers to shift peak consumption to off-peak periods (for example, through the use of storage batteries or shifting EV charging from peak to off-peak periods) which would ultimately result in a lower total cost of service in the longer term.

At its simplest, improved price signals can be conveyed by setting lower prices during off-peak periods where there is substantial excess capacity on the network and higher prices during periods when the network is busy. Consumers are able to make choices according to the value they place on consumption at different times of day. For example, a consumer may choose to take advantage of a low off-peak rate and plug-in their electric vehicle primarily during off-peak times. Network

[12] It is not possible to accurately disaggregate the two networks from the reported EV registration data.

[13] Across the combined area of Network Tasman and Nelson Electricity.

Tasman's existing day/night prices are one example of these types of price signals, however the use of advanced meters allow more sophisticated time-of-use prices, should they be more appropriate. Notwithstanding this, Network Tasman's post-discount night price of 0.42c/kWh for the 1RS price category already offer EV owners very compelling reasons to charge their EV overnight.

Other options include prices that are based on the amount of capacity that a consumer requires, either reflecting their total capacity requirement or their capacity requirements during peak network times. These types of prices better reflect that the cost of providing distribution network services is driven by capacity requirements and demand at peak times rather than consumption volumes.

Network Tasman has a project underway to investigate price reform with the expectation of introducing new price structures for Group 1 and 2 consumers from 1 April 2023.

Ultimately the choice of price structure will need to take into account a range of factors and there will be trade-offs to be considered between economically efficient prices, what is practicable and what retailers and consumers want.

12. Appendix A: Glossary

Coincident maximum demand (CMD): Demand measure during the system peak.

Distributed Generator (DG): A party with plant or equipment capable of injecting electricity into Network Tasman's distribution network.

Grid Exit Point (GXP): A point of connection between Transpower's transmission system and the distributor's network.

EDB: Electricity Distribution Business

High-Voltage (HV): Voltage above 1,000 volts.

ICP: Installation Control Point, which is a physical point of connection on a local network which a Distributor nominates as the point at which a retailer will be deemed to supply electricity to a consumer.

Kilovolt-ampere (kVA): A measure of apparent power being the product of volts and amps. Used for the measurement of capacity and demand.

kilowatt (kW): A measure of electrical power. Used for the measurement of demand during peak periods for the allocation of transmission charges.

kilowatt-hour (kWh): A unit of energy being the product of power in watts and time in hours. Used for the measurement of electricity consumption.

Low-Voltage (LV): Voltage of up to 1,000 volts. Generally 230 or 400 volts for supply to consumers.

Regional Coincident Peak Demand (RCPD): The measure of demand used by Transpower for its transmission grid charges. It is measured as the 100 highest half-hour periods of Upper South Island regional demand (measured in kW) during the period 1 September to 30 August.

Regulatory Asset Base (RAB): The amount that Network Tasman has invested in its regulated network indexed to inflation and adjusted for depreciation.

13. Appendix B: Cost allocators by load group

Customer Group	Number of ICP's	Coincident Maximum Demand	Capacity	Winter Maximum RCPD	Total Consumption	RAB Value Allocated
	#	kW	kVA	kW	kWh	$'000m
Group 1	39,138	66,285	587,074	53,742	266,961,191	$99.60
Group 2	2,909	25,699	131,773	15,384	105,212,556	$46.81
Group 3	188	26,009	55,520	24,366	152,245,731	$39.91
Group 6	2	16,596	23,672	15,752	107,290,669	$2.84
Bulk supply	1	N/A	27,696	16,393	N/A	$3.91
Total	**42,238**	**134,589**	**825,735**	**125,636**	**631,710,146**	**$ 192.63**

14.Appendix C: Network Tasman prices effective from 01 April 2022

Price description	Price Code	Approx Connections with this price	Unit of measure	2021-22 Distribution price	2021-22 Transmission price	2021-22 Pass through price	2021-22 Delivery price	2021-22 Discount	2022-23 Distribution price	2022-23 Transmission price	2022-23 Pass through price	2022-23 Delivery price	2022-23 Discount
Metered connections 15-150 kVA capacity													
Low-Use Residential (<8,000 kWh pa) 15 kVA connections. Price Category 1RL													
Daily fixed price	1RL	18,773	$/day	0.1185	0.0300	0.0015	**0.1500**	**0.0000**	0.2382	0.0603	0.0015	**0.3000**	**0.0000**
Uncontrolled	1RLANY	18,290	$/kWh	0.0751	0.0220	0.0008	**0.1040**	**0.0306**	0.0637	0.0202	0.0008	**0.0847**	**0.0313**
Day (of day/night)	1RLDAY	501	$/kWh	0.0851	0.0224	0.0010	**0.1148**	**0.0344**	0.0719	0.0205	0.0010	**0.0934**	**0.0350**
Night	1RLNIT	2,086	$/kWh	0.0146	0.0069	0.0002	**0.0231**	**0.0102**	0.0402	0.0063	0.0002	**0.0467**	**0.0106**
Controlled water	1RLWSR	15,122	$/kWh	0.0221	0.0093	0.0004	**0.0336**	**0.0140**	0.0413	0.0085	0.0004	**0.0502**	**0.0144**
Generation Export	1RLGEN	855	$/kWh	0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
Standard use Residential (>8,000 kWh pa) 15kVA connections. Price Category 1RS													
Daily fixed price	1RS	16,347	$/day	0.6700	0.1770	0.0030	**1.0000**	**0.0000**	0.7888	0.2082	0.0030	**1.0000**	**0.0000**
Uncontrolled	1RSANY	15,934	$/kWh	0.0429	0.0139	0.0008	**0.0551**	**0.0306**	0.0397	0.0123	0.0008	**0.0528**	**0.0313**
Day (of day/night)	1RSDAY	426	$/kWh	0.0494	0.0166	0.0010	**0.0643**	**0.0342**	0.0454	0.0151	0.0010	**0.0615**	**0.0350**
Night	1RSNIT	1,857	$/kWh	0.0107	0.0051	0.0002	**0.0157**	**0.0104**	0.0115	0.0031	0.0002	**0.0148**	**0.0106**
Controlled water	1RSWSR	13,125	$/kWh	0.0147	0.0069	0.0004	**0.0216**	**0.0141**	0.0151	0.0050	0.0004	**0.0205**	**0.0144**
Generation Export	1RSGEN	562	$/kWh	0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
Non-Residential 15kVA connections. Price Category 1GL													
Daily fixed price	1GL	3,710	$/day	0.6700	0.1770	0.0030	**1.0000**	**0.0000**	0.7888	0.2082	0.0030	**1.0000**	**0.0000**
Uncontrolled	1GLANY	3,554	$/kWh	0.0429	0.0139	0.0008	**0.0551**	**0.0306**	0.0397	0.0123	0.0008	**0.0528**	**0.0313**
Day (of day/night)	1GLDAY	155	$/kWh	0.0494	0.0166	0.0010	**0.0643**	**0.0342**	0.0454	0.0151	0.0010	**0.0615**	**0.0350**
Night	1GLNIT	231	$/kWh	0.0107	0.0051	0.0002	**0.0157**	**0.0104**	0.0115	0.0031	0.0002	**0.0148**	**0.0106**
Controlled water	1GLWSR	938	$/kWh	0.0147	0.0069	0.0004	**0.0216**	**0.0141**	0.0151	0.0050	0.0004	**0.0205**	**0.0144**
Generation Export	1GLGEN	33	$/kWh	0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
General (20-150 kVA) connections. Price Category 2													
Daily capacity price	2	2,790	$/kVA/day	0.0630	0.0164	0.0006	**0.0940**	**0.0000**	0.0751	0.0193	0.0006	**0.0950**	**0.0000**
Uncontrolled	2ANY	2,355	$/kWh	0.0534	0.0143	0.0008	**0.0625**	**0.0284**	0.0505	0.0068	0.0008	**0.0581**	**0.0287**
Day (of day/night)	2DAY	505	$/kWh	0.0611	0.0159	0.0008	**0.0710**	**0.0319**	0.0578	0.0076	0.0008	**0.0662**	**0.0322**
Night	2NIT	608	$/kWh	0.0215	0.0000	0.0000	**0.0198**	**0.0083**	0.0203	0.0000	0.0000	**0.0203**	**0.0084**
Controlled water	2WSR	705	$/kWh	0.0298	0.0000	0.0004	**0.0279**	**0.0124**	0.0282	0.0000	0.0004	**0.0286**	**0.0125**
Generation Export	2GEN	119	$/kWh	0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
Residential Low Fixed (20 and 30 kVA capacity)		0											
Daily capacity price	2LLFC	56	$/day	0.1281	0.0203	0.0016	**0.1500**	**0.0000**	0.2745	0.0239	0.0016	**0.3000**	**0.0000**
Uncontrolled	2LANY	50	$/kWh	0.1266	0.0216	0.0008	**0.1600**	**0.0284**	0.1089	0.0213	0.0008	**0.1310**	**0.0287**
Day (of day/night)	2LDAY	7	$/kWh	0.1508	0.0232	0.0010	**0.1821**	**0.0323**	0.1146	0.0236	0.0010	**0.1392**	**0.0322**
Night	2LNIT	11	$/kWh	0.0461	0.0122	0.0002	**0.0616**	**0.0109**	0.0833	0.0098	0.0002	**0.0933**	**0.0084**
Controlled water	2LWSR	27	$/kWh	0.0479	0.0139	0.0002	**0.0695**	**0.0123**	0.0858	0.0156	0.0002	**0.1016**	**0.0125**
Generation Export	2LGEN	1		0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
Residential Low Fixed (40 to 150 kVA capacity) connections. Price Category 2HLFC													
Daily capacity price	2HLFC	5	$/day	0.1281	0.0203	0.0016	**0.1500**	**0.0000**	0.2745	0.0239	0.0016	**0.3000**	**0.0000**
Uncontrolled	2HANY	5	$/kWh	0.2218	0.0302	0.0010	**0.2860**	**0.0240**	0.1833	0.0333	0.0011	**0.2177**	**0.0287**
Day (of day/night)	2HDAY	0	$/kWh	0.2220	0.0318	0.0012	**0.3144**	**0.0300**	0.2024	0.0232	0.0002	**0.2258**	**0.0322**
Night	2HNIT	0	$/kWh	0.1265	0.0209	0.0002	**0.1538**	**0.0110**	0.1799	0.0000	0.0000	**0.1799**	**0.0084**
Controlled water	2HWSR	3	$/kWh	0.1574	0.0224	0.0002	**0.1871**	**0.0170**	0.1882	0.0000	0.0000	**0.1882**	**0.0125**
Generation Export	2HGEN	0		0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
High Load Factor (Up to 150 kVA) connections. Price Category HLF													
Daily capacity price	HLF	42	$/kVA/day	0.3760	0.0553	0.0042	**0.5000**	**0.0968**	0.4323	0.0635	0.0042	**0.5000**	**0.0978**
Uncontrolled	HLFANY	29	$/kWh	0.0183	0.0039	0.0002	**0.0154**	**0.0075**	0.0123	0.0018	0.0002	**0.0143**	**0.0076**
Day (of day/night)	HLFDAY	13	$/kWh	0.0199	0.0043	0.0002	**0.0168**	**0.0078**	0.0134	0.0020	0.0002	**0.0156**	**0.0079**
Night	HLFNIT	14	$/kWh	0.0057	0.0012	0.0002	**0.0049**	**0.0030**	0.0038	0.0006	0.0002	**0.0046**	**0.0030**
Controlled water	HLFWSR	7	$/kWh	0.0083	0.0017	0.0002	**0.0070**	**0.0053**	0.0056	0.0008	0.0002	**0.0066**	**0.0054**
Generation Export	HLFGEN	1	$/kWh	0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**

Large Commercial ≥150 kVA capacity, TOU metered (Group 3)													
Category 3.1													
Anytime kVA demand	AnyDem31	4	$/kVA/day	0.1083	0.0264	0.0048	**0.1401**	**0.0119**	0.1128	0.0256	0.0048	**0.1432**	**0.0126**
RCPD kW demand	WinDem	4	$/kW/day	0.0356	0.2558	0.0012	**0.2810**	**0.0000**	0.0371	0.2378	0.0012	**0.2761**	**0.0000**
Summer day	SD31	4	$/kWh	0.0050	0.0000	0.0000	**0.0051**	**0.0019**	0.0054	0.0000	0.0000	**0.0054**	**0.0020**
Summer night	SN31	4	$/kWh	0.0026	0.0000	0.0000	**0.0026**	**0.0010**	0.0027	0.0000	0.0000	**0.0027**	**0.0011**
Winter day	WD31	4	$/kWh	0.0089	0.0000	0.0000	**0.0090**	**0.0032**	0.0095	0.0000	0.0000	**0.0095**	**0.0034**
Winter night	WN31	4	$/kWh	0.0026	0.0000	0.0000	**0.0026**	**0.0010**	0.0027	0.0000	0.0000	**0.0027**	**0.0011**
Generation	3.1GEN	4	$/kWh	0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
Category 3.3													
Anytime kVA demand	AnyDem33	6	$/kVA/day	0.1301	0.0264	0.0048	**0.1623**	**0.0153**	0.1355	0.0256	0.0048	**0.1659**	**0.0163**
RCPD kW demand	WinDem	6	$/kW/day	0.0356	0.2558	0.0012	**0.2810**	**0.0000**	0.0371	0.2378	0.0012	**0.2761**	**0.0000**
Summer day	SD33	6	$/kWh	0.0150	0.0000	0.0000	**0.0152**	**0.0055**	0.0161	0.0000	0.0000	**0.0161**	**0.0059**
Summer night	SN33	6	$/kWh	0.0080	0.0000	0.0000	**0.0081**	**0.0029**	0.0086	0.0000	0.0000	**0.0086**	**0.0030**
Winter day	WD33	6	$/kWh	0.0386	0.0000	0.0000	**0.0390**	**0.0141**	0.0412	0.0000	0.0000	**0.0412**	**0.0149**
Winter night	WN33	6	$/kWh	0.0080	0.0000	0.0000	**0.0081**	**0.0029**	0.0086	0.0000	0.0000	**0.0086**	**0.0030**
Generation	3.3GEN	6	$/kWh	0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
Category 3.4													
Anytime kVA demand	AnyDem34	177	$/kVA/day	0.1389	0.0264	0.0048	**0.1712**	**0.0164**	0.1446	0.0256	0.0048	**0.1750**	**0.0174**
RCPD kW demand	WinDem	177	$/kW/day	0.0356	0.2558	0.0012	**0.2810**	**0.0000**	0.0371	0.2378	0.0012	**0.2761**	**0.0000**
Summer day	SD34	177	$/kWh	0.0150	0.0000	0.0000	**0.0152**	**0.0055**	0.0161	0.0000	0.0000	**0.0161**	**0.0059**
Summer night	SN34	177	$/kWh	0.0080	0.0000	0.0000	**0.0081**	**0.0029**	0.0086	0.0000	0.0000	**0.0086**	**0.0030**
Winter day	WD34	177	$/kWh	0.0386	0.0000	0.0000	**0.0390**	**0.0141**	0.0412	0.0000	0.0000	**0.0412**	**0.0149**
Winter night	WN34	177	$/kWh	0.0080	0.0000	0.0000	**0.0081**	**0.0029**	0.0086	0.0000	0.0000	**0.0086**	**0.0030**
Generation	3.4GEN	177	$/kWh	0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
Category 3.5													
Anytime kVA demand	AnyDem35	2	$/kVA/day	0.1301	0.0264	0.0048	**0.1613**	**0.0153**	0.1355	0.0256	0.0048	**0.1659**	**0.0163**
RCPD kW demand	WinDem	2	$/kW/day	0.0356	0.2558	0.0012	**0.2926**	**0.0000**	0.0371	0.2378	0.0012	**0.2761**	**0.0000**
Summer day	SD35	2	$/kWh	0.0102	0.0000	0.0000	**0.0102**	**0.0037**	0.0109	0.0000	0.0000	**0.0109**	**0.0039**
Summer night	SN35	2	$/kWh	0.0063	0.0000	0.0000	**0.0063**	**0.0024**	0.0068	0.0000	0.0000	**0.0068**	**0.0025**
Winter day	WD35	2	$/kWh	0.0329	0.0000	0.0000	**0.0329**	**0.0121**	0.0352	0.0000	0.0000	**0.0352**	**0.0128**
Winter night	WN35	2	$/kWh	0.0063	0.0000	0.0000	**0.0063**	**0.0024**	0.0068	0.0000	0.0000	**0.0068**	**0.0025**
Generation	3.5GEN	2	$/kWh	0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
Power factor charge (where applies)													
All group 3 categories	kVAr	3	$/kVAr/day	0.2845	0.0000	0.0000	**0.2845**	**0.0000**	0.2963	0.0000	0.0000	**0.2963**	**0.0000**
Individually priced categories													
Cat 6.1 - Annual charge	6.1	1	$ per annum	226,727	1,249,340	1,023	**1,477,091**	**26,645**	234,732	1,362,685	832	**1,598,247**	**27,280**
Cat 6.2 - Annual charge	6.2	1	$ per annum	242,998	265,217	1,023	**509,239**	**39,432**	251,573	299,594	832	**551,997**	**40,552**
Cat CB - Annual charge	CobbLine	1	$ per annum	1,398,680	284,049	0	**1,682,729**	**0**	1,494,124	217,444	0	**1,711,569**	**0**
Cat MAT - Annual charge	MAT	1	$ per annum	3,913	2,134	0	**6,047**	**0**	20,042	67,777	0	**87,819**	**0**
Embedded Network	NEL	1	$ per annum	0	1,831,113	0	**1,831,113**	**0**	0	1,731,703	0	**1,731,703**	**0**
Individual categories	EAL[1]	4	$/MWh [1]	0.0000	0.0000	0.1376	**0.1376**	**0.0000**	0.0000	0.0000	0.1413	**0.1413**	**0.0000**
Unmetered connections (Group 0):Low capacity: Electric fences, communications etc													
Daily fixed price	0UNM	76	$/day	0.3996	0.1177	0.0050	**0.5223**	**0.0000**	0.4216	0.1234	0.0050	**0.5500**	**0.0000**
Unmetered connections (Group 0): Streetlighting - General													
Streetlight only connection	0S	Total	$/day	0.0000	0.0000	0.0000	**0.0000**	**0.0000**	0.0000	0.0000	0.0000	**0.0000**	**0.0000**
Capacity price for streetlights	0STL	0	$/W/day	0.00090	0.00025	0.00001	**0.00116**	**0.0000**	0.00094	0.00026	0.00001	**0.00121**	**0.0000**

Network Tasman distributes electricity to connections in the Nelson-Tasman region, excluding central Nelson. The delivery prices in the table below cover the cost of our local distribution network and the cost of national transmission of electricity. These prices are used to charge electricity

retailers. Electricity retailers determine how to package our charges together with the energy, metering and other retail costs when setting the retail prices that appear in your power account.

Discounts are credited to consumers' power accounts via retailers for eligible connections twice per year. The first discount will be calculated based on bill quantities from 1 April 2022 to 31 August 2022. The second discount will be calculated based on bill quantities from 1 September 2022 to 31 March 2023.

Understanding the table below:

Most residential consumers and some small businesses (those who have supplies with a maximum delivery capacity of 15kVA) are Group 1 consumers (comprising 4 Price Categories). Group 2 consumers (also comprising 4 Price Categories) have a delivery capacity of between 20kVA and 150kVA.

15. Appendix D: Proportion of Target Revenue collected via each price component

Price description	Price Code	Connections with this price	Unit of measure	Distribution	Transmission	Pass through & recoverable	Total
Metered connections 15-150 kVA capacity							
Low-Use Residential (<8,000 kWh pa) 15 kVA connections. Price Category 1RL							
Daily fixed price	1RL	18,971	$/day	3.3%	0.8%	0.0%	4.1%
Uncontrolled	1RLANY	75,234,110	$/kWh	9.4%	3.0%	0.1%	12.5%
Day (of day/night)	1RLDAY	235	$/kWh	0.2%	0.1%	0.0%	0.3%
Night	1RLNIT	1,938	$/kWh	0.1%	0.0%	0.0%	0.2%
Controlled water	1RLWSR	15,132	$/kWh	2.3%	0.5%	0.0%	2.8%
Generation Export	1RLGEN	529	$/kWh	0.0%	0.0%	0.0%	0.0%
Standard use Residential (>8,000 kWh pa) 15kVA connections. Price Category 1RS							
Daily fixed price	1RS	15,619	$/day	9.3%	2.4%	0.0%	11.73%
Uncontrolled	1RSANY	15,325	$/kWh	8.3%	2.6%	0.2%	11.09%
Day (of day/night)	1RSDAY	238	$/kWh	0.2%	0.1%	0.0%	0.27%
Night	1RSNIT	1,782	$/kWh	0.1%	0.0%	0.0%	0.07%
Controlled water	1RSWSR	12,614	$/kWh	1.0%	0.3%	0.0%	1.40%
Generation Export	1RSGEN	362	$/kWh	0.0%	0.0%	0.0%	0.00%
Non-Residential 15kVA connections. Price Category 1GL							
Daily fixed price	1GL	3,458	$/day	2.1%	0.6%	0.0%	2.6%
Uncontrolled	1GLANY	3,372	$/kWh	1.4%	0.4%	0.0%	1.9%
Day (of day/night)	1GLDAY	94	$/kWh	0.1%	0.0%	0.0%	0.1%
Night	1GLNIT	178	$/kWh	0.0%	0.0%	0.0%	0.0%
Controlled water	1GLWSR	842	$/kWh	0.0%	0.0%	0.0%	0.1%
Generation Export	1GLGEN	20	$/kWh	0.0%	0.0%	0.0%	0.0%
General (20-150 kVA) connections. Price Category 2							
Daily capacity price	2	2,692	$/kVA/day	6.9%	1.8%	0.1%	8.7%
Uncontrolled	2ANY	2,334	$/kWh	7.0%	0.9%	0.1%	8.0%
Day (of day/night)	2DAY	438	$/kWh	2.1%	0.3%	0.0%	2.5%
Night	2NIT	547	$/kWh	0.3%	0.0%	0.0%	0.3%
Controlled water	2WSR	705	$/kWh	0.2%	0.0%	0.0%	0.2%
Generation Export	2GEN	74	$/kWh	0.0%	0.0%	0.0%	0.0%
Residential Low Fixed (20 and 30 kVA capaci		0					
Daily capacity price	2LLFC	48	$/day	0.0%	0.0%	0.0%	0.0%
Uncontrolled	2LANY	42	$/kWh	0.1%	0.0%	0.0%	0.1%
Day (of day/night)	2LDAY	7	$/kWh	0.0%	0.0%	0.0%	0.0%
Night	2LNIT	11	$/kWh	0.0%	0.0%	0.0%	0.0%
Controlled water	2LWSR	23	$/kWh	0.0%	0.0%	0.0%	0.0%
Generation Export	2LGEN	4		0.0%	0.0%	0.0%	0.0%
Residential Low Fixed (40 to 150 kVA capacity) connections. Price Category 2HLFC							
Daily capacity price	2HLFC	5	$/day	0.0%	0.0%	0.0%	0.0%
Uncontrolled	2HANY	5	$/kWh	0.0%	0.0%	0.0%	0.0%
Day (of day/night)	2HDAY	0	$/kWh	0.0%	0.0%	0.0%	0.0%
Night	2HNIT	0	$/kWh	0.0%	0.0%	0.0%	0.0%
Controlled water	2HWSR	3	$/kWh	0.0%	0.0%	0.0%	0.0%
Generation Export	2HGEN	0		0.0%	0.0%	0.0%	0.0%
High Load Factor (Up to 150 kVA) connections. Price Category HLF							
Daily capacity price	HLF	46	$/kVA/day	1.0%	0.1%	0.0%	1.11%
Uncontrolled	HLFANY	32	$/kWh	0.1%	0.0%	0.0%	0.12%
Day (of day/night)	HLFDAY	15	$/kWh	0.1%	0.0%	0.0%	0.11%
Night	HLFNIT	16	$/kWh	0.0%	0.0%	0.0%	0.01%
Controlled water	HLFWSR	9	$/kWh	0.0%	0.0%	0.0%	0.00%
Generation Export	HLFGEN	1	$/kWh	0.0%	0.0%	0.0%	0.00%

Price description	Price Code	Connections with this price	Unit of measure	Distribution	Transmission	Pass through & recoverable	Total
Large Commercial ≥150 kVA capacity, TOU metered (Group 3)							
Category 3.1							
Anytime kVA demand	AnyDem31	0	$/kVA/day	0.2%	0.0%	0.0%	0.2%
RCPD kW demand	WinDem	0	$/kW/day	0.0%	0.2%	0.0%	0.3%
Summer day	SD31	0	$/kWh	0.0%	0.0%	0.0%	0.0%
Summer night	SN31	0	$/kWh	0.0%	0.0%	0.0%	0.0%
Winter day	WD31	0	$/kWh	0.1%	0.0%	0.0%	0.1%
Winter night	WN31	0	$/kWh	0.0%	0.0%	0.0%	0.0%
Category 3.3							
Anytime kVA demand	AnyDem33	0	$/kVA/day	0.2%	0.0%	0.0%	0.3%
RCPD kW demand	WinDem	0	$/kW/day	0.0%	0.2%	0.0%	0.2%
Summer day	SD33	4	$/kWh	0.1%	0.0%	0.0%	0.1%
Summer night	SN33	4	$/kWh	0.0%	0.0%	0.0%	0.0%
Winter day	WD33	4	$/kWh	0.2%	0.0%	0.0%	0.2%
Winter night	WN33	4	$/kWh	0.0%	0.0%	0.0%	0.0%
Category 3.4							
Anytime kVA demand	AnyDem34	166	$/kVA/day	4.9%	0.9%	0.2%	6.0%
RCPD kW demand	WinDem	166	$/kW/day	0.5%	3.5%	0.0%	4.0%
Summer day	SD34	166	$/kWh	1.6%	0.0%	0.0%	1.6%
Summer night	SN34	166	$/kWh	0.3%	0.0%	0.0%	0.3%
Winter day	WD34	166	$/kWh	3.3%	0.0%	0.0%	3.3%
Winter night	WN34	166	$/kWh	0.3%	0.0%	0.0%	0.3%
Category 3.5							
Anytime kVA demand	AnyDem35	0	$/kVA/day	0.3%	0.1%	0.0%	0.4%
RCPD kW demand	WinDem	0	$/kW/day	0.0%	0.2%	0.0%	0.2%
Summer day	SD35	2	$/kWh	0.1%	0.0%	0.0%	0.1%
Summer night	SN35	2	$/kWh	0.0%	0.0%	0.0%	0.0%
Winter day	WD35	2	$/kWh	0.3%	0.0%	0.0%	0.3%
Winter night	WN35	2	$/kWh	0.0%	0.0%	0.0%	0.0%
Power factor charge (where applies)							
All group 3 categories	kVAr	3	$/kVAr/day	0.0%	0.0%	0.0%	0.0%
Individually priced category (Group 6)2							
Cat 6.1 - Annual charge	6.1	1	$ per annum	0.5%	2.7%	0.0%	3.1%
Cat 6.2 - Annual charge	6.2	1	$ per annum	0.5%	0.6%	0.0%	1.1%
Cat CB - Annual charge	CB	1	$ per annum	2.9%	0.4%	0.0%	3.3%
Cat MAT - Annual charge	MAT	1	$ per annum	0.0%	0.1%	0.0%	0.2%
Cat NEL - Annual charge	NEL	1	$ per annum	0.0%	3.4%	0.0%	3.4%
EAL Levy	EAL1		$/MWh 1	0.0%	0.0%	0.1%	0.1%
Unmetered connections (Group 0):Low capacity: Electric fences, communications etc							
Daily fixed price	0UNM	76	$/day	0.0%	0.0%	0.0%	0.0%
Unmetered connections (Group 0): Streetlighting - General							
Streetlight only connection	0S	24	$/day	0.0%	0.0%	0.0%	0.0%
Capacity price for streetlights	0STL	0	$/W/day	0.3%	0.1%	0.0%	0.4%