networktasman
Your consumer-owned electricity distributor

PRICING METHODOLOGY DISCLOSURE

Effective 1 April 2024

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

networktasman
Your consumer owned eletricity distributor

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Director Certificate

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Clause 2.9.1

Schedule 17: Certification for Pricing Methodology Disclosure

We, Sarah Louise Smith and Anthony Page Reilly, 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: 29 February 2024

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1. Introduction

1.1. 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 more than 43,000 connections.

Total electricity distributed through the network is 694 GWh, with a peak load of 129 MW[1]. The area covered by the network is diverse, ranging from relatively dense urban areas to remote rural areas.

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 businesses while increasing consumer value.

This document sets out the framework of Network Tasman's pricing methodology and contains the information required for compliance with sections 2.4.1 to 2.4.5 of the Electricity Distribution Information Disclosure Determination 2012.

1.2. Overview of this report

This document is structured as follows:

- A description of our pricing for the year commencing 1 April 2024 is set out in Section 2;
- The methodology used to determine Network Tasman's total revenue requirement and its allocation by load group is discussed in Section 3;
- The approach used to derive Network Tasman's prices is set out in Section 4;
- A summary of Network Tasman's use of non-standard contracts is discussed in Section 5;
- Distributed generation pricing is discussed in Section 6;
- An assessment of Network Tasman's pricing methodology against the Electricity Authority's Pricing Principles is set out in Section 7; and
- Network Tasman's future pricing strategy is discussed in Section 8.

Network Tasman's prices are charged to the electricity retailers[2] trading on our network. Electricity retailers determine how to package these charges together with the energy, metering and other retail costs when setting the retail prices that appear on consumers' power accounts.

[1] Excluding bulk supply to Nelson Electricity.

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

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.

Network Tasman has introduced a number of changes to prices or pricing related matters for the coming year. Where appropriate, these are discussed in the body of the document. Changes of particular note include:

- Introduction of daily fixed and capacity charges for Group 3.
- The use of an LRMC model to inform price levels.
- Where RAB and depreciation figures are used to allocate costs to consumer groups, actual figures have been used rather than forecast figures.

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

2. Our pricing from 1 April 2024

2.1. Consumer load groups and price structures

Network Tasman primarily classifies connections into load groups according to capacity requirements. Connections are grouped in this way because network costs are largely driven by peak demand. 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 reasonable proxy for grouping connections that have similar peak demand and therefore impose similar costs on Network Tasman.

Group 0: Unmetered connections

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

- **Low capacity supplies (0UNM)** is for low capacity connections 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)** is used for general street-lighting and is also used for unmetered streetlights associated with a standard metered connection. The charge is based on the installed streetlight capacity (Watts) 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 is comprised of three price categories:

- **1GL (General)** is for non-residential connections such as businesses, shops, sports clubs, etc.
- **1RL (Residential – low use)** is designed for primary residences that use less than 8,000kWh per year. This price category is a low user tariff 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 residential connections that aren't a primary residence, such as a bach.

Fixed charges for Group 1 consumers are structured as a $/day charge. For price categories 1GL and 1RS the fixed charge is $1.12/day. The fixed charge for price category 1RL is regulated by the LFC regulations, which caps the fixed charge at $0.60/day.

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

Uncontrolled Prices

Network Tasman has three tariff options for uninterrupted supply. These are:

- Peak/Off-peak;

- Anytime; and
- Day/Night.

The Peak/Off-peak tariff was introduced in the 2023/24 pricing year and is the default uncontrolled supply tariff. All Group 1 connections with a communicating AMI meter are required to be on the Peak/Off-peak tariff.

Qualification for the Anytime tariff is limited to those connections with legacy (analogue) meters or a non-communicating AMI meter.

The Day/Night tariff is a legacy tariff that is no longer open to new connections.

Controlled Prices

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

- **Controlled water** – this tariff allows Network Tasman to control the consumer's load connected to this circuit, generally a hot water cylinder (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 for the standard tariff is less than half of the standard uncontrolled price. A further 3% 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.

Fixed charges are recovered from Group 2 connections via a capacity charge. The capacity charge is based on the capacity (in kVA) of a consumer's connection to the network. For Group 2 connections the available connection capacities range from 20kVA to 150kVA. The Group 2 fixed charge is capacity price is expressed as $/kVA.

Group 2 connections have the same tariff options described for Group 1 consumers above.

Group 3: Metered connections of 150kVA+

Group 3 consumers have a connection capacity exceeding 150kVA. Group 3 contains larger business consumers. Revenues are recovered from Group 3 connections via four price components:

- **Fixed daily charge** - The fixed daily charge is set as a $/day charge.
- **Capacity charge** – As with Group 2 connections, the capacity charge is based on each connection's actual (or in certain circumstances nominated) connection capacity and is structured as a $/kVA charge.
- **Anytime maximum demand charge (AMD)** - The AMD charge is measured in kVA based on the single highest half hour of Anytime Maximum Demand (AMD) during the previous 12-month

calendar period. For some connections, the transmission AMD charge has been moderated to manage the bill impact of the move introduced in 2023/24 away from recovering transmission charges via an RCPD charge.

- **Seasonal time-of-use** – The seasonal time-of-use charge is a kWh charge which varies 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 of more than 3MVA and have high levels of asset dedication. Group 6 consumers have fixed charges that reflect high levels of asset dedication.

2.2. Network Tasman prices from 1 April 2024

Network Tasman generally reviews its line prices annually, with new prices taking effect from 1 April each year. Our price schedule for 2024/25 is set out in Appendix C.

Charges for new loads can be found in our new load policy, available on our website.

The methodology used to set charges for large distributed generation is detailed in Section 6.

Changes by price component

Distribution price component

From 1 April 2024, Network Tasman has forecast an average increase in pre-discount distribution revenue of approximately 6.6%.

This increase is primarily to account for two factors:

- Inflation and the increasing cost of investing in and operating our business; and
- Funding requirements for our forward looking capex programme.

Pass-through price component

The portion of revenues associated with pass-through costs has increased by 2.4%. These costs include industry levies (Electricity Authority, Commerce Commission and Utilities Disputes) and rates. This increase reflects the forecast change in these costs for Network Tasman. Pass-through costs account for a small percentage (≈1%) of overall lines charges.

Transmission price component

The transmission price component recovers the costs that Network Tasman incurs for using the national transmission grid, which is owned and operated by Transpower.

Network Tasman has forecast transmission costs to increase by approximately 5.9% for the 2024/25 year. This increase is due to a number of factors including increased transformer costs and a forecast upgrade at the Kikiwa GXP.

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.

Groups 0, 1 and 2

From 1 April 2024, groups 0, 1, 2 are forecast to experience the following changes:

- **Group 0** - overall prices for Group 0 increase on average by 5.1%
- **Group 1** - on average, prices for Group 1 increase by 6.9%.
- **Group 2** - prices for Group 2 are expected to increase by 4.9% on average.

Group 3

On average, Group 3 connections are forecast to experience an increase in their lines charges of less than 6%.

Group 6

On average, Group 6 connections will experience an overall price increase of 1.3%.

2.3. Consumer Impact

Prior to introducing a price change, Network Tasman analyses the effect of the change across the affected consumer groups. The impact of price changes on consumers is a key consideration when setting target revenue and prices for consumer groups.

For comparative purposes, this analysis assumes the hypothetical consumer uses the same volume of electricity in 2024/25 as they did in 2023/24. In practice, consumption varies from year-to-year so the actual effect on individual consumers will also be influenced by the year-on-year variation in consumption and the way electricity retailers elect to pass distribution costs on to their customers.

For standard residential connections, the largest increases occur for those using the least electricity. This primarily because the effect of the 15c/day increase in the fixed charge for consumers on the low fixed charge tariff (LFC tariff). The theoretical maximum 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 unit of electricity during the entire year.

For a consumer that uses no electricity at all throughout the year, this represents a 33% increase in their lines charges. In practice, most consumers use between 4,000kWh and 10,000kWh a year. For these consumers, the daily fixed charge represents a much smaller proportion of their overall lines charges. For more than 85% of our residential consumers, the increase is forecast to be less than $1/week.

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

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

Total kWh/pa	Change in total lines charges ($)	Change in total lines charges (%)
0	$54.75	33.3%
1,000	$52.95	22.7%
2,000	$51.14	16.9%
3,000	$49.34	13.3%
4,000	$47.53	10.8%
5,000	$45.73	9.0%
6,000	$43.93	7.6%
7,000	$42.12	6.5%
8,000	$40.32	5.6%
9,000	$43.83	5.8%
10,000	$46.22	5.8%
11,000	$48.62	5.8%
12,000	$51.02	5.8%
13,000	$53.41	5.8%

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 bill impact assessment presented in Table 2 below, is for consumers with a 40kVA connection, a common capacity for Group 2 connections.

Consumers with relatively low consumption experience the largest increase in the lines charges for 2024/25. This is due to a rebalancing of the proportion of revenues recovered via fixed and variable charges. Compared to other consumer categories, Group 2 consumers have paid a lower proportion of their lines charges via fixed prices.

Higher fixed charges reflect the fact that the network assets used to supply a consumer (power poles, transformer, lines, etc) remain in place irrespective of how much electricity they use. For 2024/25, Group 2 prices have been rebalanced, so the proportion of revenues recovered via fixed and variable prices better align with those experienced by Group 1 and 3 consumers.

To achieve this, the fixed daily price has been increased and variable prices have, on average, decreased.

The effect of this is that those consumers who use (relatively) little electricity see their lines charges increase by the most. Those consumers who use relatively more electricity experience smaller increases in their lines charges (or even a reduction).

Table 2 – Annual effect of Network Tasman pre-discount price changes on Group 2 consumers (40kVA)

Total kWh/pa	Change in total lines charge ($)	Change in total lines charge (%)
0	$212	13.9%
5,000	$203	11.2%
10,000	$194	9.3%
15,000	$185	7.8%
20,000	$176	6.6%
25,000	$167	5.7%
30,000	$157	4.9%
35,000	$148	4.3%
40,000	$139	3.7%
45,000	$130	3.2%
50,000	$121	2.8%
55,000	$112	2.4%
60,000	$103	2.1%
65,000	$94	1.8%
70,000	$85	1.6%
75,000	$76	1.3%
80,000	$67	1.1%

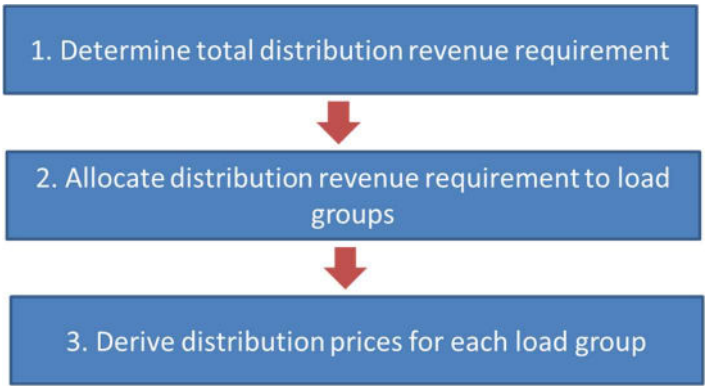
Lines charges for each of the 200+ Group 3 consumers are set using several ICP specific metrics, including kWh consumption, connection capacity and peak demand.

Much like Group 2 the specific characteristics for Group 3 consumers are varied and it is difficult to comment on bill impact in anything other than general terms.

However, on average a Group 3 consumer is forecast to experience a 5.7% increase in their lines charges, if their network use remains unchanged between 2023/24 and 2024/25.

3. 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 target revenue, bill impacts and regulatory obligations, there can be a feedback loop between the steps outlined above.

This section focuses on the first two steps outlined above.

Network Tasman is subject to the Commerce Commission's Default Price-Quality Path, which applies a revenue cap limiting the revenue that Network Tasman can recover through prices in each financial year. Network Tasman's forecast regulated allowable revenue for the 2024/25 year is $47m.

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 to achieve these outcomes. Accordingly, the target revenue is determined by the business's current and forward looking operational needs rather than the allowable revenue afforded under the Commerce Commission's Price-Quality regulation.

Network Tasman's total post-discount revenue requirement for 2024/25 is $43.2m. This compares with a total revenue requirement in 2023/24 of $40.2m.

3.1. 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, 2024/25

Cost component	Cost ($m)
Indirect Opex	$3.6
Direct Opex	$12.1
Depreciation	$6.9
Return on Capital	$6.9
Transmission and pass-through	$13.1
Total Revenue Requirement	**$43.2**

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.

3.2. 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 involve judgement and discretion and can evolve over time. 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 6.

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;
- Zone substations
- Sub-transmission lines; 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
Groups 0 & 1	General 230V/400V/11kV/33kV/66kV
Group 2	General 230V/400V/11kV/33kV/66kV
Group 3	Limited 400V and 11kV/33kV/66kV
Group 6	Dedicated & Semi dedicated network, 33kV & limited 11kV
Group CB	66kV lines
Group MAT	Substation switchgear

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 each load group's contribution 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 lesser reliance on these assets.

Network Tasman has changed from using a forecast depreciation figures to using the most recently available actual depreciation data. This change has been made to reduce the administrative burden of the price-setting process and has no impact on Network Tasman's total revenue requirement.

Indirect opex

Indirect network costs include general administration, overhead costs and depreciation on non-system 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.

Return on capital

Return on capital is allocated to load groups on a residual basis. As Network Tasman does not price to the Commerce Commission's revenue cap, revenue requirements are set on the basis of the business's current and forward looking operational needs. Judgement is used when allocating return on capital to load groups and consideration is given to several factors including the relative allocations between load groups and the effect of allocation changes on consumers. Where material changes have occurred, the effect of these changes may be introduced over multiple periods to smooth the effect of the change on consumer groups.

Transmission charges

Network Tasman's transmission charges are primarily comprised of four primary components:

- Connection charge
- Benefits-based charge
- Residual charge
- Transpower Works Agreements

The costs of the first three components are derived according to the Transmission Pricing Methodology (TPM) regulated by the Electricity Authority. Transpower Works Agreements are bilateral agreements with Transpower for the provision of dedicated connection assets.

Connection costs and Transpower Works Agreements 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 based on each group's estimated demand contribution coincident with the Anytime Maximum Demand (AMD) for each GXP.

Benefits-based charges and residual charges are allocated to consumer groups using a methodology that replicates, as closely as practicable, how these costs are allocated to Network Tasman under the TPM.

The TPM allocates benefits-based charges to transmission customers using three different methodologies:

- Appendix A – allocates the costs of seven pre-July 2019 interconnection investments
- Simple – allocates the costs of post-2019 low value investments (investments valued at $20m or less)
- Standard - allocates the costs of post-2019 high value investments (investments valued at more than $20m)

We have sought to allocate each of these charges between our consumer groups in a manner that replicates how Transpower allocates each charge to its customers.

Appendix A

Under the TPM, Appendix A benefits-based charges are allocated to transmission customers in proportion to their modelled net private benefits. For load customers net private benefits are effectively calculated for each trading period during the relevant assessment period by multiplying the difference between the actual spot price during each trading period and the estimated equivalent spot prices had the investment in question not been made, by each transmission customer's load during each trading period.

Network Tasman has used each consumer group's relative aggregate load figures (MWh) for the four-year assessment period to allocate Appendix A charges.

Simple Method

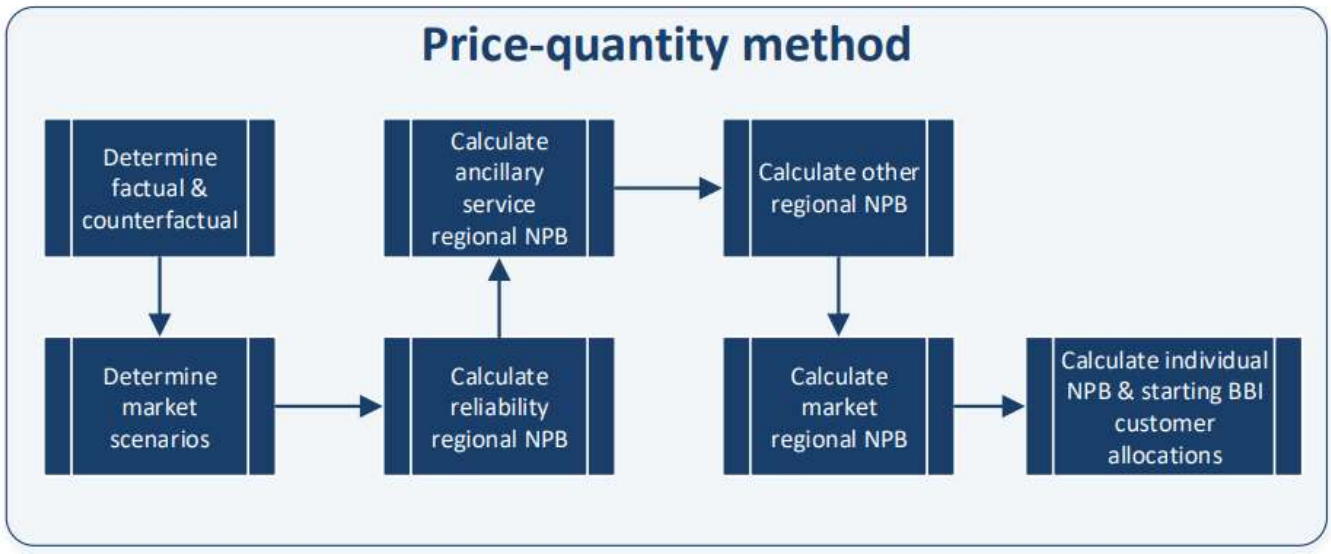
For the Simple method, Transpower derives regional net private benefits for each modelled region, then calculates a simple method factor for each member of a regional customer group. Starting allocations are based on the product of a customer's simple method factor and the net private benefit for their region.

Network Tasman has taken the regional net private benefit as given and allocated simple method benefits based charges for each investment region to consumer groups on the basis of their contribution to Network Tasman's simple method factor.

Standard Method

The Standard Method is an umbrella term covering several different methodologies. To date, only the Price-Quality Methodology has been used to allocate costs under the Standard Method.

The methodologies used to allocate the Standard method benefits-based charges are more detailed and complex than the Appendix A and Simple methods. Transpower summarises the Price-Quality methodology with the diagram below.



It is neither possible nor proportionate for Network Tasman to replicate most of the steps in this methodology. Many of the calculations are made by Transpower using proprietary software that transmission customers are unable to view.

In practice, Network Tasman can only replicate the final step of the process, in which Transpower allocates the regional net private benefit (NPB) to customers in that regional group in proportion to their intra-regional allocators.

Intra-regional allocators are derived according to each customer's offtake or injection (kWh) for the relevant assessment period.

Accordingly, Network Tasman allocates Standard method benefits-based charges to consumer groups in proportion to their relative kWh load during the relevant assessment period.

Residual charges are allocated to Transmission customers based on their historic maximum gross demand (kW) and lagged average total gross energy (kWh). For kWh data, Network Tasman's database has recorded the equivalent kWh data for each consumer group for the relevant periods. For kW data, Network Tasman's databases only have equivalent internally recorded data for Groups 3, 6 and bulk supply consumers. Network Tasman does not routinely record half hourly demand data for Groups 0, 1 or 2. For Groups 0, 1 and 2, data from the half hourly wholesale market submissions (GR250 report) have been used to calculate the kW demands for each consumer group during the relevant periods.

Accordingly, Network Tasman has allocated residual charges to consumer groups using the same parameters Transpower has used to allocate the charges to its customers.

The transitional charge is allocated to consumer groups on the same basis as residual charges.

For large embedded generators, connection costs are allocated using a contractually agreed methodology or according to the incremental costs associated with their connection.

Revenue requirement by load group

A range 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 of changes to our lines charges on our consumers is a key consideration when setting the revenue requirements outlined in Table 5 below.

Table 5: Revenue requirement by load group ($m)[3]

Consumer Group	Revenue requirement
Group 0	0.2
Group 1	19.6
Group 2	9.1
Group 3	8.5
Group 6	1.8
CB	1.9
MAT	0.0
NEL	1.6
Sundry	0.5
Total	**43.2**

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

4. Determining prices

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

4.1. Price setting for each consumer group

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

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

Consumption prices apply to all consumer groups, except Group 6. Consumption charges vary across price types and can depend on the time of use 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, including:

- impact on consumers
- economic rationale
- government policy and regulatory requirements
- consumer expectations

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

For the 2024/25 year, Network Tasman has used an LRMC model to guide the appropriate proportion of revenue to be recovered via fixed and variable charges and inform the economically efficient level of peak period prices.

As this model is sensitive to some key input parameters, it has been used inform rather than set price levels.

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.

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). The fixed charge for price category 1RL is set at 60c/day to comply with the LFC regulations. The two remaining price categories have a fixed charge of $1.12/day.

Sixty-five per cent of the total revenue collected from Group 1 connections for the 2024/25 pricing year is forecast to be recovered via fixed daily charges. If the 1RL price category is excluded, this figure increases to 75%.

In response to the EA's expectation that distributors increase the proportion of transmission revenues recovered via fixed charges, Network Tasman has rebalanced all prices such that all transmission costs are recovered from Network Tasman consumers via fixed charges, with the exception of tariffs regulated by the *Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004* (LFC Regulations). The LFC Regulations limit the extent to which transmission charges can be recovered via fixed charges by placing a ceiling on the fixed charge that can be recovered from these consumers. For the non-LFC consumers, the proportion of Group 1 transmission revenues recovered via fixed charges has increased from 65% to 100%.

For Group 2, the forecast total revenue from fixed charges increases from 64% to 69%.

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

With respect to the variable charges for Groups 1 and 2, a set of relative weightings is applied to the prices on offer. For longstanding tariff options, the relative weights have been partly 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.

These 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.

The relative cost of providing network services at peak versus off-peak times has been guided by Network Tasman's long-run marginal cost (LRMC).

Network Tasman has developed a model to estimate LRMC. The first tranche of model development has been completed and the results of the model have been used to inform Network Tasman's price levels for 2024/25.

The model is sensitive to some input parameters, particularly the WACC, which has been relatively volatile in recent years.

One of Network Tasman's pricing objectives is for pricing to provide medium-term stability and certainty for consumers and retailers. As such, Network Tasman has not relied on the LRMC model to determine price levels, rather it has been used to inform the price setting process.

Further work is planned to refine the LRMC model, the issues of model sensitivity to key input parameters and how to address volatility will be a core focus of this work.

Group 3

As part of Network Tasman's ongoing programme to improve the efficiency of its prices, Network Tasman reviewed the fixed charges levied on Group 3 consumers.

Efficient pricing is typically achieved via prices that apply during periods of network peak demand (a variable price) because demand during these times drives the need for (potentially avoidable) network capacity upgrades. By using prices to signal the cost of these investments, consumers can determine

whether they would prefer to continue using the network during peak periods and fund the network upgrades or shift their demand away from these peak times to defer or avoid the cost of these investments.

In situations where a network has excess capacity or, flat/declining peak demand, the resulting peak price signal should, in theory, be low or zero. This reflects the minimal cost implications of using the network during peak (but not congested) periods. Conversely, if a network is facing imminent capacity constraints, the price signal will result in higher prices, as further peak demand growth will trigger network investments.

Irrespective of whether a network is facing imminent capacity constraints or flat/declining demand, variable price signals do not usually recover all of a distributor's target revenue. The difference between a distributor's targeted revenue and the revenue obtained from variable charges can be referred to as the "residual" revenue.

Since the residual amount doesn't require a price signal (in theory variable prices should be the only prices that influence consumer behaviour), the recovery process for this residual revenue should be designed in a manner that ensures customers have no incentive to modify their electricity consumption patterns. This concept is termed "non-distorting."

To be non-distorting, the prices should be unavoidable, indicating that customers shouldn't be able to take actions that enable them to evade payment of all or a portion of the charge (aside from disconnecting from the network). The methods employed to recover residual revenues are commonly referred to as "fixed" charges.

It is these fixed charges that Network Tasman reviewed.

Network Tasman identified four potential options in this review. They were:

- Daily fixed charge - A daily fixed charge involves imposing a charge on all consumers regardless of their consumption levels or connection size.
- Capacity charge - A capacity charge is based on the capacity (in kVA) of a consumer's connection to the network.
- Anytime maximum demand (AMD) - An AMD charge is based on each consumer’s highest period/s of demand.
- Capacity x distance charge - The Capacity x distance charge is influenced by both the distance from the GXP supplying the connection and the connection's capacity.

To assess and compare the merits of the four options summarised above, Network Tasman developed the following assessment framework. The development of this assessment criteria has been guided by Network Tasman’s pricing objectives and guidance from the Electricity Authority. The assessment criteria include:

- Economic efficiency: As noted above, the most efficient way to recover residual costs is to use a price component that minimises the incentives for consumers to alter their behaviour.

- Equity: For prices to be durable and accepted by consumers, they must be perceived to be fair and equitable.
- Simplicity: The simplicity of a price signal is a key consideration. Clear and understandable price structures improve consumer understanding and behaviour. Even when options are similar in other aspects, those with simpler pricing mechanisms tend to result in better outcomes.
- Stability: Unnecessary price volatility is a cost to consumers. Stable and predictable prices provide consumers with greater certainty about their lines charges and are less likely to provide consumers with incentives to alter their behaviour to minimise year-on-year price changes.

Consideration of the Capacity × Distance approach was excluded due to the overlap of incentives with Network Tasman's new load policy. This option also carried the risk of substantial price increases for larger and more remote loads, which is likely to be perceived as unjust due to the retrospective nature of the charge.

The fixed daily charge option scored well against all four assessment criteria, provided it is only used to recover costs that are not influenced by consumer characteristics, such as overheads. This is because in cases where costs are influenced by the size of the connection, such as physical network costs, a fixed daily charge is unlikely to be fair. Larger capacity connections are more costly to serve and inherently place more demand on the network. As such, they should contribute proportionally more to network costs than smaller capacity connections.

Accordingly, Network Tasman decided introduce a daily fixed charge for the purposes of recovering the overhead costs allocated to Group 3.

To a degree, anytime maximum demand and capacity charges share similar characteristics, albeit with variations in their levels of granularity.

Neither anytime maximum demand nor capacity charges are purely economically efficient, as both introduce incentives for consumers to modify their behaviour. The relative strength of these incentives is unclear.

With capacity charges, incentives to change behaviour grow as consumers approach the limits of their capacity band. Those situated in the middle of the capacity band have few incentives to alter behaviour. In contrast, anytime maximum demand charges provide uniform incentives for behaviour alteration for all consumers. The strength of the anytime maximum demand charge's incentive lies between the bounds of incentives offered by a capacity charge. As capacity bands decrease, the capacity charge more closely resembles the anytime maximum demand charge.

In practice, the magnitude of these incentives and whether they are sufficiently material to influence consumer behaviour is unclear. However, as the costs of distributed energy resources fall and it becomes cheaper for large loads to respond to price signals, the incentives created by these price options may begin to become more material.

The Electricity Authority has stated distributors should use capacity charges rather than anytime maximum charges to recover residual costs because capacity charges are less distortionary. Several

stakeholders have questioned the evidence for this view, including Network Tasman. To date, the Authority's position appears to be based on a view that anytime maximum demand is more distortionary, rather than any evidence of such.

Network Tasman's position is that both options create incentives for consumers to distort their behaviour, but it is not clear which is more distortionary.

In terms of equity, the anytime maximum demand charge yields fairer outcomes due to its superior targeting. The anytime maximum demand charge is based on each consumer's individual peak demand, while the capacity charge groups consumers within a capacity band, meaning those at the top and bottom of the capacity band pay the same amount. The relative fairness of a capacity charge is influenced by the breadth of capacity bands employed.

Capacity charges are more simple than anytime maximum demand charges. Connection capacities are easily understood and observed. Anytime maximum demand charges are straightforward to understand in principle but can be challenging to observe. Consumers cannot generally predict their real-time peak demands with certainty. The incumbency of Network Tasman's current anytime maximum demand charge means that Group 3 consumers are likely to already be aware of the charge and how it works.

With respect to stability, capacity charges provide consumers with greater assurance about their fixed charges year on year and is consistent with our capacity charge in Group 2, where many of those in Group 3 have upgraded from. The granular nature of anytime maximum demand charges leads to year-on-year fluctuations based on measured peak demand variability.

As noted above, both options sit on a spectrum, and each have contrasting advantages and disadvantages. Rather than choose one option over the other, Network Tasman decided, following consultation with traders, to introduce a capacity charge to complement the existing anytime maximum demand charges. These two charges will operate in combination to recover all remaining residual revenues that are not recovered via the fixed daily charge.

The primary benefit of adopting capacity and anytime maximum demand charges is that revenues are split between the two charges, which naturally moderates the disadvantages of each charge. It also allows Network Tasman the flexibility to adjust the revenues recovered from each charge should the strength of the signals sent by one of the charges require adjustment over time.

To manage the risk of these new recommended charges causing bill shock, Network Tasman has decided to introduce these changes incrementally over several years, rather than making this change in a single year. This transition length will be guided by a bill shock analysis conducted as part of the routine annual price-setting process, in a similar manner to the recent peak/off-peak pricing introduction for Groups 1 and 2.

An additional and significant advantage of introducing the capacity-based approach is its potential to encourage Group 3 connections to regularly review their capacity requirements. This contrasts with the current situation where the incentives for new or growing consumers to accurately estimate their capacity requirements are limited. Network Tasman has a growing number of locations where

transformer capacity significantly exceeds the site's apparent requirements. Introducing a capacity charge requires each Group 3 consumer to specify their desired connection capacity and provides Network Tasman with a clearer understanding of each site's capacity requirements. This information will allow Network Tasman to better optimise transformer deployment across the network and reduce costs for all consumers.

Variable prices for Group 3 consumers have also been guided by Network Tasman's new LRMC model. The result of this is that the differential between peak and off-peak prices has been increased.

Group 6

There are only two consumers in Group 6. Both have sought direct service and billing arrangements with Network Tasman rather than choosing to operate through standard 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.

Large generators

Network Tasman has three large (1MW+) embedded generators. Prices for one of these generators are set in accordance with the terms set out in a connection agreement between Network Tasman and the asset owner.

Charges for the remaining two generators are set using the methodology specified in Section 6.

5. 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 $5.3m

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

Non-standard contracts are typically used when 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.

Prices for connections with a non-standard contract are set after considering 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's obligations and responsibilities to consumers with non-standard contracts are no different to those for consumers with standard contracts.

6. Distributed generation (DG)

Network Tasman uses the regulated terms set out in Schedule 6.2 of Part 6 of the Electricity Industry Participation Code 2010 (Part 6) as a default contract with small scale distributed generation (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.

6.1. 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).

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

- Distribution costs – The cost of deploying new distribution assets 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 because 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 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 may be recovered directly from the DG owner upfront or recovered as a separate item.

Where a DG owner funds all incremental network augmentation costs upfront, Network Tasman applies judgement over whether the ongoing incremental costs associated with the DG connection are sufficiently material to warrant ongoing monthly invoicing.

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

6.2. 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.

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%).

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

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 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:

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.

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.

Maintenance costs can vary significantly, making it difficult to prescribe a precise methodology for allocating maintenance costs. The methodology for recovering maintenance costs is 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 adjusted each year changes in the asset values that underpin the connection charge that occurr as a result of asset renewals, revaluations and replacements.

6.3. Transmission Related Transactions

Network Tasman directly passes on the cost of any incremental cost incurred from Transpower due to the connection of new, or increased capacity, DG to its network. The following describes the most common incremental cost components Network Tasman incurs due to 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 typically arise via a direct increase in connection charges due to the installation of new assets and an increase in Network Tasman's allocation of existing assets (generally the substation).

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 will be passed directly through to the DG owner as levied by Transpower.

Benefits based charges

Network Tasman does not currently pass on any benefits-based charges to DG. Given the complexity of the calculation of benefits-based charges, the materiality and practicality of determining a DG's contribution to Network Tasman's benefits based charges will be taken into consideration when electing whether to pass these costs on to the connected DG.

6.4. 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), the incremental effect of this change will be passed through to the DG owner.

6.5. 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 incurred responding any subsequent breach investigation from the relevant DG owner/s.

6.6. 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.

7. 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 the consistency of Network Tasman's pricing with the principle is discussed.

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. 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 mass market line services 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 is highly likely to result in prices within the subsidy free range.

Standalone Test

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

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 present, the cost of standalone reliance on micro generation remains higher than the industry average and incremental supply costs, although this test is more about the 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. 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 are likely to be well in excess of Network Tasman's current line charges, which is not supportive of an overbuild business case.

The option of disconnecting from the network, in favour of self-supply, is always an option for consumers of any size. The option of self-supply offers a natural ceiling to Network Tasman's prices. If Network Tasman's prices exceed the cost of self-supply, consumers would be incentivised to disconnect from the network to in favour of self-supply.

To date, Network Tasman is unaware of any consumers with existing network supply disconnecting from the network in favour of self-supply for economic reasons.

Avoidable Cost Test

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

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 "distributors run primarily fixed-cost businesses". 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 capital contributions 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. The result is that the combination 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 capital contributions policy also seeks network development levies based on distance and kVA for new loads in uneconomic areas of the network. 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 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 most Network Tasman's domestic customers use less than 8000 kWh/year.

Prices are to signal the economic costs of service provision, including by reflecting the impacts of network use of economic costs

Developing price components that reflect the economic costs of use with precision requires, in theory, locational marginal prices, but in practice this most likely means charges that have locational and time components associated with them.

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 stakeholders 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 usage charges, particularly if it results in significantly higher prices at the times when people most want to use electricity.

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 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 $0.60 per day.

Historically, Network Tasman applied the low user rate across all Group 1 ICPs in order avoid excessive transaction costs. In 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 does 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 benefit from 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 actual or potential demand consumers in these groups can make on the distribution network and the transmission grid.

Group 3 consumers face a capacity charge, derived exclusively on their connection capacity. They are also subject to an anytime maximum demand charge. These two charges combine to reflect the current and future cost of delivering capacity on the distribution network.

The distribution component of Group 6 network charges is 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 would require additional investment and the costs of that investment would be directly passed back to these consumers.

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 Group 3 consumers use available network and grid capacity inefficiently Network Tasman reserves the right to apply a kVA based power factor correction charge on sites with a non-compliant power factor (PF<0.95).

The application of a mandatory Peak/Off-peak tariff for all Group 1 and 2 consumers with communicating AMI meters will provide these consumers with growing incentives to shift load away from the peak demand periods that trigger network investments. Similarly, the existing seasonal time-of-use tariff for Group 3 consumers provides a similar incentive for those consumers to minimise network use during network peaks.

The level of these peak prices are guided by Network Tasman's LRMC model, which improves the efficiency of these signals and the resulting network use.

As noted earlier, Network Tasman 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 directly from those responsible for the cost.

Network Tasman also has a mechanism in its capital contributions policy (new load policy) that allows flexible loads to share the benefits of deferring/avoiding investment in distribution assets.

Historically, Network Tasman's new load policy allocated network capacity based on the installed fuse capacity of the connection. This was in recognition that Network Tasman does not generally have the ability to limit when a connection uses the network – load is limited by fuse size only. Similarly, few connections had the ability (or incentives) to manage their load during periods of local network peaks.

Network Tasman's new load policy broadly allocates the cost network upgrades triggered by a new connection to that connection. With some long rural feeders nearing capacity and facing costly upgrades to serve new capacity, the cost of upgrading these feeders can pose a considerable barrier to new load connecting on these feeders.

Capital contributions that are calculated on the basis of installed fuse capacity provides little incentive for a flexible load that could avoid the local network peak to connect to the network. As such, our capital contributions policy includes the option for a *profiled connection*.

A *profiled connection* is available to new connections where network capacity is limited and the new load agrees to a low, or zero, connection capacity during times of local network peaks, whilst having access to higher capacity connections during off-peak periods.

This outcome creates a mutually beneficial outcome for the new load and the network. The new load can connect to congested parts of the network without triggering costly network upgrades and the network improves its ability to host more load on the existing network.

Prices are to signal the economic costs of service provision, including by reflecting differences in network service provided to (or by) consumers.

Network Tasman 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 their capacity and reflect the differences in the service provided.

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 with better tools to manage network load at peak times and defer network investment, as discussed in the section above about the development of the Peak/Off-peak tariff.

From the consumer-side, having their hot water controlled may affect the supply of hot water, although this is largely mitigated by the service standards that dictate the maximum length of time hot water can be disconnected. Anecdotal evidence indicates few consumers are aware their hot water is subject to network control. This suggests the cost to the consumer of a lower "quality" service is small, whereas the benefits are relatively large given the price differential between the controlled tariff option and an uncontrolled tariff option.

Network Tasman also offers a 'night only' tariff where the use of specific appliances is limited to operating overnight (11pm to 7am). This tariff is typically used for night store heaters, underfloor heating and night only water supply.

As noted in the previous section, the introduction of a profiled connection for new loads that are able to minimise or avoid network use during local network peaks allows them to avoid contributing to costly network upgrades that would be required for equivalent inflexible loads. Where significant network upgrades are required, the economic costs avoided can be significant.

Prices are to signal the economic costs of service provision, including by encouraging efficient network alternatives.

Network Tasman's line prices directly or indirectly encourage the 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.
- Group 3 prices include a power factor charge for consumer sites where the power factor is non-compliant (worse than 0.95).

- Group 2 prices include capacity charges based on installed fused sizes. This provides incentives for consumers to minimise their ICP fusing requirements and to find ways of avoiding increasing peak demands on the network.
- Network Tasman has tariff options available for all consumers that have higher kWh rates for on-peak consumption than for off-peak or controlled consumption. These differentials have been increased for the 2024/25 pricing year.
- 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.
- The introduction of the *profiled connection* option offers incentives for new loads to invest in additional load management tools if they are less costly than the cost of funding a network upgrade.
- New large 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 the minimisation of capacity use and consideration of alternatives. It also encourages new loads 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 chosen locations.

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 20%-25% of most consumers' power bills while the generation and retail component make up the remaining 70%-75%. 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 also likely to be muted.

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 bottled gas for cooking) are not particularly viable substitutes in this region.
- 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, carbon pricing and broader perceptions around social acceptability.
- 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 an economic option in many cases when compared to electrically heated water for those installing a new hot water system. Despite this, anecdotal evidence suggests that adoption has been muted. There are several factors contributing to this outcome, including large upfront capital costs of solar water heating, the practicality of installing equipment on some roof types, incumbency bias, inability of renters to invest in the technology and limited incentives for consumers to unnecessarily replace existing operational hot water systems.

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.

The 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. However, until the low user fixed charge regulations have been fully removed, there is a limit on what can be achieved with respect to domestic customers, which forces loadings on variable tariffs.

Network Tasman has also reformed the fixed charges for Group 3 consumers, as discussed earlier in this document. The introduction of a fixed daily charge and a capacity charge are both expected to reduce incentives for Group 3 consumers to distort their network use.

Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to reflect the economic value of services.

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 has a prudent discount 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.

The absence of a formal prudent discount policy does not, however, preclude the possibility of one being granted in appropriate circumstances.

Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to 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 time differentiated 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 or not they want, or are prepared, to pay for the service.

However, larger customers can contract for different levels of service where they have high levels of asset dedication. Network Tasman's Group 6 consumers have dedicated network requirements, and these requirements are reflected in the assets provided.

Network Tasman has 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, although appetite for more sophisticated pricing is growing. Network Tasman has reflected this desire with the introduction of time-of-use pricing for consumer groups 1 and 2.

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.

The availability of a *profiled connection* as an option for new loads to reduce their capital contributions can provide these new loads with strong incentives to invest in technologies that increase the flexibility

of their loads where costly network investments would be required to serve an equivalent 'traditional' inflexible load. This provides new loads with an additional price/quality trade-off.

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 Statement of Corporate Intent 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:
    - Statement of Corporate Intent (agreed with Trustee owners)
    - Annual Financial Statements (audited)
    - Pricing Methodology
    - Line prices split into distribution and transmission components
    - Asset management plan
    - DPP Annual 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.

8. 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 consumer 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.

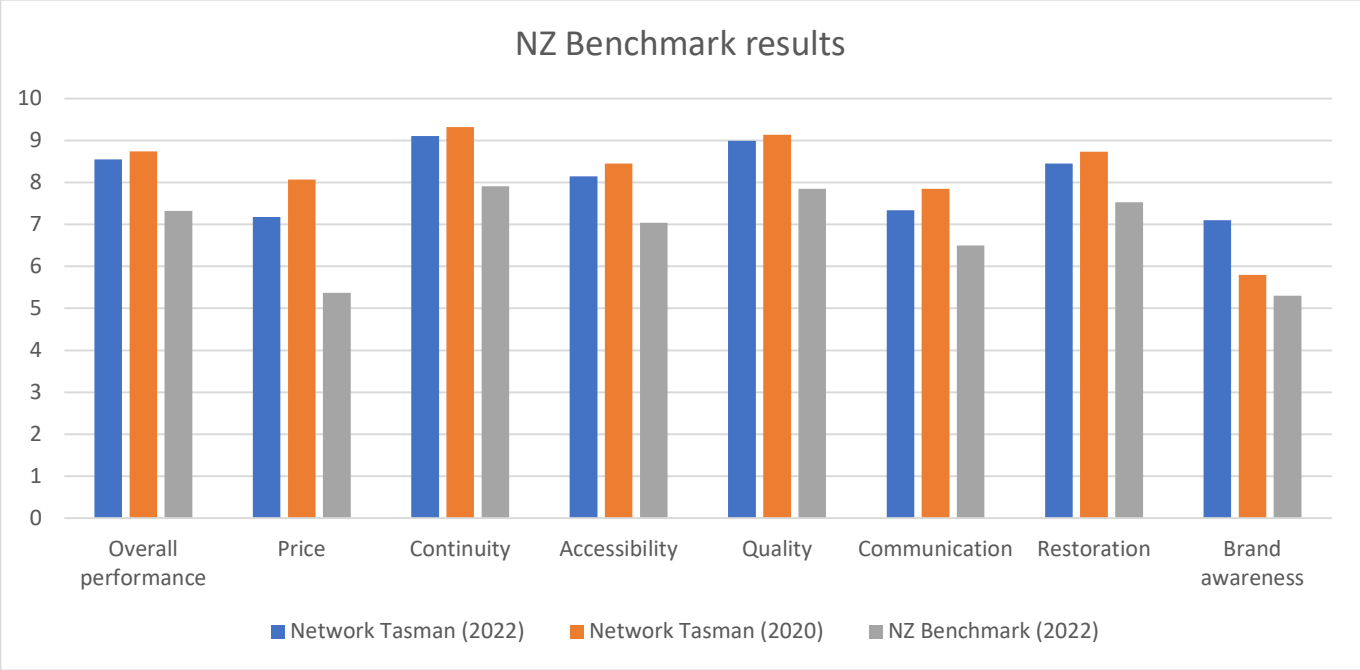
Network Tasman does not have a formal pricing strategy as defined in the Information Disclosure Determination. However, the following summarises Network Tasman's current perspectives on future pricing.

8.1. Consumer perspectives on pricing

Network Tasman conducted a consumer survey in late 2022 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 amongst consumers and a high level of satisfaction with the company's performance with regard to quality of service, continuity and restoration. Consumers gave Network Tasman an overall performance satisfaction rating of 8.55/10.

The survey report compares Network Tasman's results against a national benchmark across a range of categories. Network Tasman exceeded the national benchmark across all eight categories measured.



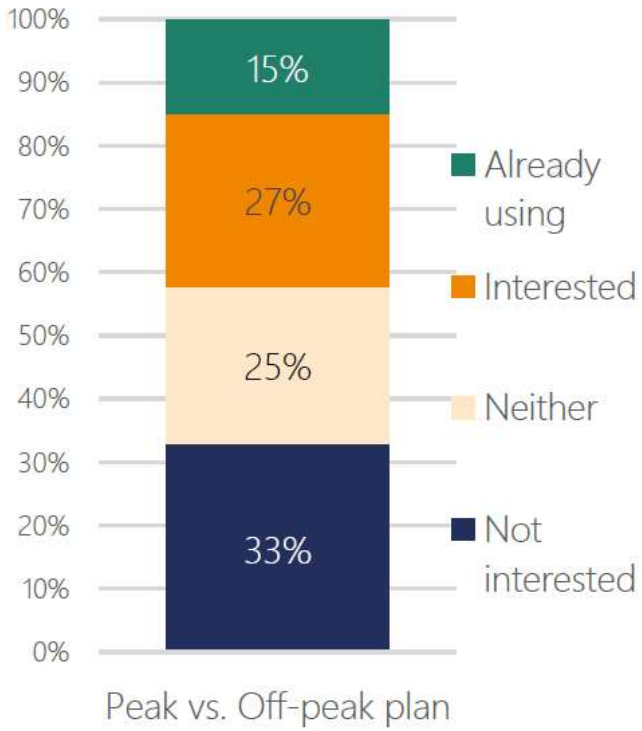
Consumers were surveyed on price structures. Just one third of consumers indicated that they would not be interested in a peak/off-peak plan where prices are higher during network peak periods such as morning and evening and less during off-peak periods. This result is similar to the responses to this question in previous consumer surveys. These results contributed to Network Tasman's introduction of a Peak/Off-peak tariff from 1 April 2023.

The presence of the retail market sitting between distribution prices and the bills consumers receive mitigates the risk of Network Tasman introducing a tariff that some consumers may not wish to receive. Retailers can, and many do, repackage our Peak/Off-peak tariff into a standard flat kWh charge for those consumers that do not want to be subject to a time varying electricity price.

As such, the flexibility of the retail market means consumers can receive the tariff structure they prefer, be it a flat kWh tariff, a tariff with stronger time-of-use prices, or something in-between.

In the absence of a Peak/Off-peak tariff, retailers are limited in their ability to offer consumers a Peak/Off-peak tariff, irrespective of consumer demand.

FIGURE 1: INTEREST IN PEAK VS OFF-PEAK PLAN (2022)



Network Tasman has also 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, such as 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, most 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.

8.2. Future Pricing Strategy

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 more commonplace. Fixed consumption-based prices are unlikely to promote efficient investment in and use of these technologies.

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

The commercial implications of solar panels are something Network Tasman continues to monitor and consider as part of its future price reform plans. Increasing penetrations of solar PV can cause equity issues if these consumers are able to reduce their lines charges at the expense of other consumers.

The revenue implications of growing EV penetration on our network are less clear as revenues are dependent on when these EVs are charged.

Network Tasman offers all consumer groups very low off-peak consumption rates. Electricity retailers are increasingly passing these low rates on to consumers via attractive off-peak consumption prices. Given the relatively low barriers to consumers charging their vehicles off-peak, Network Tasman expects the majority of EV owners to charge their vehicles during off-peak periods. As such, Network Tasman expects the revenue growth associated with growing EV penetration to be relatively modest.

Network Tasman has the second highest rooftop solar PV penetration of all distributors in New Zealand. Approximately 5.25% of connections on Network Tasman's network have solar generation and about 3.9% of connections in the combined Network Tasman and Nelson Electricity network areas have an electric vehicle, up from 4.25% and 2.7% twelve months ago, respectively. Although these figures are starting from a low base they are beginning to exhibit robust growth.

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.

Network Tasman took a significant step to modernise its prices with the introduction of a mandatory Peak/Off-peak tariff for Group 1 and 2 consumers in 2023/24. This tariff provides consumers with increasingly strong incentives to shift discretionary load away from periods of network peak demand. Initial price differentials were moderated to manage the bill effect of the new tariff. For 2024/25, Network Tasman has incrementally increased the differential between the peak and off-peak tariffs to provide consumers with stronger incentives to shift load away from the peak.

The Electricity Authority has an ongoing project to reform distribution prices and has stated it will publish an update on its work programme in April 2024. The Authority has signalled that it may introduce significant reforms during 2024. As such, Network Tasman's scheduled reform programme has been rationalised to ensure there is sufficient internal capacity to fully engage with any consultation processes and execute any reforms that are introduced.

Appendix A: Glossary

Anytime maximum demand (AMD): The Maximum Demand of the customer measured at the customer's installation during any half hour period during the year.

Advanced Metering Infrastructure (AMI): Electronic meters that measure electricity, record consumption and meter event information electronically, have two-way communication and can be remotely read.

The Code: The *Electricity Industry Participation Code 2010*.

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

Distributed Energy Resources (DER): Devices and equipment connected to distribution networks that manage, generate and/or consume electricity, including solar PV, battery storage, hot water cylinders, air-conditioning units and other responsive devices.

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

Default Price Path (DPP): The default price path is a form of price-quality regulation administered by the Commerce Commission under Part 4 of the Commerce Act. Price-quality paths constrain the total revenue a distributor can recover from its consumers. The paths also set standards for the quality of service that each distributor must meet. There are two types of price-quality paths relevant to electricity distributors. All businesses start on a 'default' path. If a default path does not suit the particular circumstances of a business, however, it can apply for and propose its own 'customised' path.

EDB: Electricity Distribution Business.

Electricity Authority (EA): The Electricity Authority is an independent Crown entity responsible for overseeing and regulating the New Zealand electricity market.

EV: Electric vehicle.

Gigawatt-hour (GWh): A unit of energy, being the product of power in watts and time in hours. Used for the measurement of electricity consumption. One GWh is equal to 1,000MWh.

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

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.

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

LFC tariff: A tariff option that is subject to the LFC Regulations.

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

Megavolt-ampere (MVA): A measure of apparent power being the product of volts and amps. Used for the measurement of capacity and demand. One MVA is equal to 1,000kVA.

Megawatt-hour (MWh): A unit of energy being the product of power in watts and time in hours. Used for the measurement of electricity consumption. One MWh is equal to 1,000kWh.

Regional Coincident Peak Demand (RCPD): The measure of demand previously used by Transpower for its transmission grid charges. It was measured as the 100 highest half-hour periods of Upper South Island regional demand (measured in kW) from 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.

Small Scale Distributed Generation (SSDG): Small scale distributed generation, i.e., not exceeding 10 kW capacity.

Statement of Corporate Intent (SCI): A document that outlines the overall intentions and objectives that the company will follow for the current financial year and the two following financial years.

Time-of-use (TOU) prices: Time-of-use pricing refers to prices that vary based on the time of consumption (or use). TOU pricing plans have a higher price during "peak demand" and lower prices during "off-peak times". There can also be a "Shoulder" price which is the time leading into, or out of, the peak demand period.

Transmission Pricing Methodology (TPM): The methodology used by Transpower to set prices for its customers.

Weighted Average Cost of Capital (WACC): The cost of capital is the financial return the Commerce Commission estimates electricity distribution businesses may earn from their regulated businesses. The WACC is used by the Commission to set revenue limits for electricity lines businesses.

Appendix B: Information Disclosure requirements

Requirement	ID reference	Network Tasman pricing methodology reference
Describes the methodology, in accordance with clause 2.4.3, used to calculate the prices payable or to be payable.	2.4.1(1)	Refer to sections 2-4.
Describes any changes in prices and target revenues.	2.4.1(2)	Refer to sections 2-4.
Explains, in accordance with clause 2.4.5, the approach taken with respect to pricing in non-standard contracts and distributed generation (if any).	2.4.1(3)	Refer to sections 5 and 6.
Explains whether, and if so how, the EDB has sought the views of consumers, including their expectations in terms of price and quality, and reflected those views in calculating the prices payable or to be payable. If the EDB has not sought the views of consumers, the reasons for not doing so must be disclosed.	2.4.1(4)	Refer to section 8.
Changes in pricing methodology.	2.4.2	Changes are discussed throughout the document where appropriate.
Include sufficient information and commentary to enable interested persons to understand how prices were set for each consumer group, including the assumptions and statistics used to determine prices for each consumer group.	2.4.3(1)	Refer to section 3 and 4.
Demonstrate the extent to which the pricing methodology is consistent with the pricing principles and explain the reasons for any inconsistency between the pricing methodology and the pricing principles.	2.4.3(2)	Refer to section 7.

State the target revenue expected to be collected for the disclosure year to which the pricing methodology applies;	2.4.3(3)	Refer to section 3.
Where applicable, identify the key components of target revenue required to cover the costs and return on investment associated with the EDB's provision of electricity lines services. Disclosure must include the numerical value of each of the components;	2.4.3(4)	Refer to section 3.
State the consumer groups for whom prices have been set, and describe: (a) the rationale for grouping consumers in this way; (b) the method and the criteria used by the EDB to allocate consumers to each of the consumer groups	2.4.3(5)	Refer to section 2.
If prices have changed from prices disclosed for the immediately preceding disclosure year, explain the reasons for changes, and quantify the difference in respect of each of those reasons.	2.4.3(6)	Refer to section 2.
Where applicable, describe the method used by the EDB to allocate the target revenue among consumer groups, including the numerical values of the target revenue allocated to each consumer group, and the rationale for allocating it in this way	2.4.3(7)	Refer to section 3.
State the proportion of target revenue (if applicable) that is collected through each price component as publicly disclosed under clause 2.4.18.	2.4.3(8)	Refer to Appendix E.
If the EDB has a pricing strategy: (1) explain the pricing strategy for the next 5 disclosure years (or as close to 5 years as the pricing strategy allows), including the current disclosure year for which prices are set.	2.4.4	Refer to section 8.

(2) explain how and why prices for each consumer group are expected to change as a result of the pricing strategy (3) If the pricing strategy has changed from the preceding disclosure year, identify the changes and explain the reasons for the changes.		
Describe the approach to setting prices for non-standard contracts, including: (a) the extent of non-standard contract use, including the number of ICPs represented by non-standard contracts and the value of target revenue expected to be collected from consumers subject to non-standard contracts. (b) how the EDB determines whether to use a non-standard contract, including any criteria used. (c) any specific criteria or methodology used for determining prices for consumers subject to non-standard contracts and the extent to which these criteria or that methodology are consistent with the pricing principles.	2.4.5(1)	Refer to section 5.
Describe the EDB's obligations and responsibilities (if any) to consumers subject to non-standard contracts in the event that the supply of electricity lines services to the consumer is interrupted, including: (a) the extent of the differences in the relevant terms between standard contracts and non-standard contracts; (b) any implications of this approach for determining prices for consumers subject to non-standard contracts;	2.4.5(2)	Refer to section 5.
Describe the EDB's approach to developing prices for electricity distribution services provided to consumers that own distributed generation, including any payments made by the EDB to the owner of any distributed generation, and including the- (a) prices; and	2.4.5(3)	Refer to section 6.

(b) value, structure and rationale for any payments to the owner of the distributed generation		

Appendix C: Cost allocators by load group

Customer Group	Number of ICP's	Coincident Maximum Demand	Capacity	Total Consumption	RAB Value Allocated
	#	kW	kVA	kWh	$(m)
Group 1	39,987	61,006	599,804	273,030,898	$107.40
Group 2	3,027	21,555	137,008	108,538,381	$52.06
Group 3	202	24,767	122,251	160,368,623	$42.74
Group 6	2	14,157	N/A	109,486,534	$2.64
Total	**43,218**	**121,485**	**840,069**	**538,151,266**	**$204.85**

Appendix D: Network Tasman prices effective from 01 April 2024

Network Tasman Limited Pricing From 01 April 2024 to 31 March 2025

Price description	Price Code	Approx Connections with this price	Unit of measure	2023-24 Distribution price	2023-24 Transmission price	2023-24 Pass through price	2023-24 Delivery price	2023-24 Discount price	2024-25 Distribution price	2024-25 Transmission price	2024-25 Pass through price	2024-25 Delivery price	2024-25 Discount price
Metered connections 15-150 kVA capacity													
Low-Use Residential (<8,000 kWh pa) 15 kVA connections. Price Category 1RL													
Daily fixed price	1RL	19,352	$/day	0.3585	0.0900	0.0015	**0.4500**	0.0000	0.3799	0.2185	0.0016	**0.6000**	0.0000
Uncontrolled	1RLANY	5,496	$/kWh	0.0623	0.0132	0.0009	**0.0764**	0.0313	0.0670	0.0066	0.0009	**0.0745**	0.0320
Day (of day/night)	1RLDAY	124	$/kWh	0.0681	0.0148	0.0011	**0.0840**	0.0350	0.0771	0.0066	0.0012	**0.0849**	0.0385
Default	1RLDEF	732	$/kWh	0.0623	0.0132	0.0009	**0.0764**	0.0313	0.0670	0.0066	0.0009	**0.0745**	0.0320
Night	1RLNIT	1,480	$/kWh	0.0331	0.0083	0.0003	**0.0417**	0.0106	0.0262	0.0066	0.0003	**0.0331**	0.0059
Off Peak	1RLOFP	13,258	$/kWh	0.0526	0.0132	0.0009	**0.0667**	0.0250	0.0477	0.0066	0.0009	**0.0552**	0.0196
Peak	1RLPEK	13,258	$/kWh	0.0704	0.0132	0.0009	**0.0845**	0.0366	0.0854	0.0066	0.0009	**0.0929**	0.0438
Controlled water	1RLWSR	15,348	$/kWh	0.0368	0.0093	0.0005	**0.0466**	0.0144	0.0360	0.0066	0.0005	**0.0431**	0.0122
Generation Export	1RLGEN	1,239	$/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	16,690	$/day	0.8238	0.2332	0.0030	**1.0600**	0.0000	0.7534	0.3644	0.0032	**1.1210**	0.0000
Uncontrolled	1RSANY	5,261	$/kWh	0.0411	0.0066	0.0008	**0.0485**	0.0313	0.0500	0.0000	0.0008	**0.0508**	0.0320
Day (of day/night)	1RSDAY	146	$/kWh	0.0469	0.0082	0.0010	**0.0561**	0.0350	0.0601	0.0000	0.0011	**0.0612**	0.0385
Default	1RSDEF	653	$/kWh	0.0411	0.0066	0.0008	**0.0485**	0.0313	0.0500	0.0000	0.0008	**0.0508**	0.0320
Night	1RSNIT	1,403	$/kWh	0.0119	0.0017	0.0002	**0.0138**	0.0106	0.0092	0.0000	0.0002	**0.0094**	0.0059
Off Peak	1RSOFP	10,802	$/kWh	0.0314	0.0066	0.0008	**0.0388**	0.0250	0.0307	0.0000	0.0008	**0.0315**	0.0196
Peak	1RSPEK	10,801	$/kWh	0.0492	0.0066	0.0008	**0.0566**	0.0366	0.0684	0.0000	0.0008	**0.0692**	0.0438
Controlled water	1RSWSR	13,207	$/kWh	0.0156	0.0027	0.0004	**0.0187**	0.0144	0.0190	0.0000	0.0004	**0.0194**	0.0122
Generation Export	1RSGEN	842	$/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	3,688	$/day	0.8238	0.2332	0.0030	**1.0600**	0.0000	0.7534	0.3644	0.0032	**1.1210**	0.0000
Uncontrolled	1GLANY	1,064	$/kWh	0.0411	0.0066	0.0008	**0.0485**	0.0313	0.0500	0.0000	0.0008	**0.0508**	0.0320
Day (of day/night)	1GLDAY	74	$/kWh	0.0469	0.0082	0.0010	**0.0561**	0.0350	0.0601	0.0000	0.0011	**0.0612**	0.0385
Default	1GLDEF	308	$/kWh	0.0411	0.0066	0.0008	**0.0485**	0.0313	0.0500	0.0000	0.0008	**0.0508**	0.0320
Night	1GLNIT	136	$/kWh	0.0119	0.0017	0.0002	**0.0138**	0.0106	0.0092	0.0000	0.0002	**0.0094**	0.0059
Off Peak	1GLOFP	2,304	$/kWh	0.0314	0.0066	0.0008	**0.0388**	0.0250	0.0307	0.0000	0.0008	**0.0315**	0.0196
Peak	1GLPEK	2,304	$/kWh	0.0492	0.0066	0.0008	**0.0566**	0.0366	0.0684	0.0000	0.0008	**0.0692**	0.0438
Controlled water	1GLWSR	907	$/kWh	0.0156	0.0027	0.0004	**0.0187**	0.0144	0.0190	0.0000	0.0004	**0.0194**	0.0122
Generation Export	1GLGEN	49	$/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	2,905	$/kVA/day	0.0778	0.0261	0.0006	**0.1045**	0.0000	0.0762	0.0422	0.0006	**0.1190**	0.0000
Uncontrolled	2ANY	883	$/kWh	0.0508	0.0066	0.0008	**0.0582**	0.0287	0.0553	0.0000	0.0008	**0.0561**	0.0287
Day (of day/night)	2DAY	349	$/kWh	0.0581	0.0073	0.0008	**0.0662**	0.0322	0.0663	0.0000	0.0008	**0.0671**	0.0344
Default	2DEF	293	$/kWh	0.0508	0.0066	0.0008	**0.0582**	0.0287	0.0553	0.0000	0.0008	**0.0561**	0.0287
Night	2NIT	431	$/kWh	0.0204	0.0000	0.0000	**0.0204**	0.0084	0.0204	0.0000	0.0000	**0.0204**	0.0106
Off Peak	2OFP	1,466	$/kWh	0.0392	0.0066	0.0008	**0.0466**	0.0230	0.0352	0.0000	0.0008	**0.0360**	0.0182
Peak	2PEK	1,465	$/kWh	0.0586	0.0066	0.0008	**0.0660**	0.0325	0.0684	0.0000	0.0008	**0.0692**	0.0355
Controlled water	2WSR	690	$/kWh	0.0283	0.0000	0.0004	**0.0287**	0.0125	0.0198	0.0000	0.0004	**0.0202**	0.0103
Generation Export	2GEN	162	$/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) connections. Price Category 2LLFC													
Daily capacity price	2LLFC	64	$/day	0.4161	0.0323	0.0016	**0.4500**	0.0000	0.0000	0.5983	0.0017	**0.6000**	0.0000
Uncontrolled	2LANY	31	$/kWh	0.1029	0.0290	0.0013	**0.1332**	0.0287	0.1360	0.0000	0.0013	**0.1373**	0.0287
Day (of day/night)	2LDAY	5	$/kWh	0.1102	0.0297	0.0013	**0.1412**	0.0322	0.1470	0.0000	0.0013	**0.1483**	0.0344
Default	2LDEF	2	$/kWh	0.1029	0.0290	0.0013	**0.1332**	0.0287	0.1360	0.0000	0.0013	**0.1373**	0.0287
Night	2LNIT	9	$/kWh	0.0725	0.0224	0.0005	**0.0954**	0.0084	0.1011	0.0000	0.0005	**0.1016**	0.0106
Off Peak	2LOFP	28	$/kWh	0.0913	0.0290	0.0013	**0.1216**	0.0230	0.1159	0.0000	0.0013	**0.1172**	0.0182
Peak	2LPEK	28	$/kWh	0.1107	0.0290	0.0013	**0.1410**	0.0325	0.1491	0.0000	0.0013	**0.1504**	0.0355
Controlled water	2LWSR	34	$/kWh	0.0804	0.0224	0.0009	**0.1037**	0.0125	0.1005	0.0000	0.0009	**0.1014**	0.0103
Generation Export	2LGEN	3	$/kWh	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	8	$/day	0.4161	0.0323	0.0016	**0.4500**	0.0000	0.0000	0.5983	0.0017	**0.6000**	0.0000
Uncontrolled	2HANY	2	$/kWh	0.1740	0.0529	0.0018	**0.2287**	0.0287	0.2441	0.0000	0.0018	**0.2459**	0.0287
Day (of day/night)	2HDAY	0	$/kWh	0.1813	0.0536	0.0018	**0.2367**	0.0322	0.2551	0.0000	0.0018	**0.2569**	0.0344
Default	2HDEF	0	$/kWh	0.1740	0.0529	0.0018	**0.2287**	0.0287	0.2441	0.0000	0.0018	**0.2459**	0.0287
Night	2HNIT	0	$/kWh	0.1436	0.0463	0.0010	**0.1909**	0.0084	0.2092	0.0000	0.0010	**0.2102**	0.0106
Off Peak	2HOFP	6	$/kWh	0.1624	0.0529	0.0018	**0.2171**	0.0230	0.2240	0.0000	0.0018	**0.2258**	0.0182
Peak	2HPEK	6	$/kWh	0.1818	0.0529	0.0018	**0.2365**	0.0325	0.2572	0.0000	0.0018	**0.2590**	0.0355
Controlled water	2HWSR	2	$/kWh	0.1515	0.0463	0.0014	**0.1992**	0.0125	0.2086	0.0000	0.0014	**0.2100**	0.0103
Generation Export	2HGEN	0	$/kWh	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	41	$/kVA/day	0.4585	0.0673	0.0042	**0.5300**	0.0978	0.4434	0.0822	0.0044	**0.5300**	0.0842
Uncontrolled	HLFANY	4	$/kWh	0.0129	0.0017	0.0002	**0.0148**	0.0076	0.0187	0.0000	0.0002	**0.0189**	0.0097
Day (of day/night)	HLFDAY	3	$/kWh	0.0141	0.0019	0.0002	**0.0162**	0.0079	0.0225	0.0000	0.0002	**0.0227**	0.0117
Default	HLFDEF	6	$/kWh	0.0129	0.0017	0.0002	**0.0148**	0.0076	0.0187	0.0000	0.0002	**0.0189**	0.0097
Night	HLFNIT	4	$/kWh	0.0038	0.0006	0.0002	**0.0046**	0.0030	0.0055	0.0000	0.0002	**0.0057**	0.0029
Off Peak	HLFOFP	27	$/kWh	0.0099	0.0017	0.0002	**0.0118**	0.0061	0.0144	0.0000	0.0002	**0.0146**	0.0075
Peak	HLFPEK	27	$/kWh	0.0156	0.0017	0.0002	**0.0175**	0.0090	0.0226	0.0000	0.0002	**0.0228**	0.0117
Controlled water	HLFWSR	8	$/kWh	0.0059	0.0008	0.0002	**0.0069**	0.0054	0.0086	0.0000	0.0002	**0.0088**	0.0045
Generation Export	HLFGEN	2	$/kWh	0.0000	0.0000	0.0000	**0.0000**	0.0000	0.0000	0.0000	0.0000	**0.0000**	0.0000

Price description	Price Code	Approx Connections with this price	Unit of measure	2023-24 Distribution price	2023-24 Transmission price	2023-24 Pass through price	2023-24 Delivery price	2023-24 Discount price	2024-25 Distribution price	2024-25 Transmission price	2024-25 Pass through price	2024-25 Delivery price	2024-25 Discount price
Large Commercial ≥150 kVA capacity, TOU metered (Group 3)													
Category 3.1													
Daily fixed price	FXD3.1	41	$/day						2.0000	0.0000	0.0000	**2.0000**	0.2300
Anytime demand (Distribution)	AnyDem31	41	$/kVA/day	0.1196	0.0000	0.0060	**0.1256**	0.0126	0.1219	0.0000	0.0063	**0.1282**	0.0140
Anytime demand (Transmission)	ANY_T	41	$/kVA/day	0.0000	0.1116	0.0000	**0.1116**	0.0000	0.0000	0.0973	0.0000	**0.0973**	0.0000
Daily capacity price[1]	CAP3.1	4	$/kVA/day						0.0000	0.0130	0.0000	**0.0130**	0.0000
Summer day	SD31	41	$/kWh	0.0063	0.0000	0.0000	**0.0063**	0.0020	0.0033	0.0000	0.0000	**0.0033**	0.0010
Summer night	SN31	41	$/kWh	0.0031	0.0000	0.0000	**0.0031**	0.0011	0.0033	0.0000	0.0000	**0.0033**	0.0010
Winter day	WD31	41	$/kWh	0.0110	0.0000	0.0000	**0.0110**	0.0034	0.0166	0.0000	0.0000	**0.0166**	0.0049
Winter night	WN31	41	$/kWh	0.0031	0.0000	0.0000	**0.0031**	0.0011	0.0033	0.0000	0.0000	**0.0033**	0.0010
Generation	3.1GEN	41	$/kWh	0.0000	0.0000	0.0000	**0.0000**	0.0000	0.0000	0.0000	0.0000	**0.0000**	0.0000
Category 3.3													
Daily fixed price	FXD3.3	2	$/day						2.0000	0.0000	0.0000	**2.0000**	0.2300
Anytime demand (Distribution)	AnyDem33	2	$/kVA/day	0.1436	0.0000	0.0060	**0.1496**	0.0163	0.1463	0.0000	0.0063	**0.1526**	0.0168
Anytime demand (Transmission)	ANY_T	2	$/kVA/day	0.0000	0.1116	0.0000	**0.1116**	0.0000	0.0000	0.0973	0.0000	**0.0973**	0.0000
Daily capacity price[1]	CAP3.3	6	$/kVA/day						0.0000	0.0130	0.0000	**0.0130**	0.0000
Summer day	SD33	2	$/kWh	0.0187	0.0000	0.0000	**0.0187**	0.0059	0.0107	0.0000	0.0000	**0.0107**	0.0031
Summer night	SN33	2	$/kWh	0.0100	0.0000	0.0000	**0.0100**	0.0030	0.0107	0.0000	0.0000	**0.0107**	0.0031
Winter day	WD33	2	$/kWh	0.0479	0.0000	0.0000	**0.0479**	0.0149	0.0626	0.0000	0.0000	**0.0626**	0.0184
Winter night	WN33	2	$/kWh	0.0100	0.0000	0.0000	**0.0100**	0.0030	0.0107	0.0000	0.0000	**0.0107**	0.0031
Generation	3.3GEN	2	$/kWh	0.0000	0.0000	0.0000	**0.0000**	0.0000	0.0000	0.0000	0.0000	**0.0000**	0.0000
Category 3.4													
Daily fixed price	FXD3.4	190	$/day						2.0000	0.0000	0.0000	**2.0000**	0.2300
Anytime demand (Distribution)	AnyDem34	190	$/kVA/day	0.1533	0.0000	0.0060	**0.1593**	0.0174	0.1562	0.0000	0.0063	**0.1625**	0.0180
Anytime demand (Transmission)	ANY_T	190	$/kVA/day	0.0000	0.1116	0.0000	**0.1116**	0.0000	0.0000	0.0973	0.0000	**0.0973**	0.0000
Daily capacity price[1]	CAP3.4	190	$/kVA/day						0.0000	0.0130	0.0000	**0.0130**	0.0000
Summer day	SD34	190	$/kWh	0.0187	0.0000	0.0000	**0.0187**	0.0059	0.0107	0.0000	0.0000	**0.0107**	0.0031
Summer night	SN34	190	$/kWh	0.0100	0.0000	0.0000	**0.0100**	0.0030	0.0107	0.0000	0.0000	**0.0107**	0.0031
Winter day	WD34	190	$/kWh	0.0479	0.0000	0.0000	**0.0479**	0.0149	0.0626	0.0000	0.0000	**0.0626**	0.0184
Winter night	WN34	190	$/kWh	0.0100	0.0000	0.0000	**0.0100**	0.0030	0.0107	0.0000	0.0000	**0.0107**	0.0031
Generation	3.4GEN	190	$/kWh	0.0000	0.0000	0.0000	**0.0000**	0.0000	0.0000	0.0000	0.0000	**0.0000**	0.0000
Category 3.5													
Daily fixed price	FXD3.5	6	$/day						2.0000	0.0000	0.0000	**2.0000**	0.2300
Anytime demand (Distribution)	AnyDem35	6	$/kVA/day	0.1436	0.0000	0.0060	**0.1496**	0.0163	0.1463	0.0000	0.0063	**0.1526**	0.0168
Anytime demand (Transmission)	ANY_T	6	$/kVA/day	0.0000	0.1116	0.0000	**0.1116**	0.0000	0.0000	0.0973	0.0000	**0.0973**	0.0000
Daily capacity price[1]	CAP3.5	2	$/kVA/day						0.0000	0.0130	0.0000	**0.0130**	0.0000
Summer day	SD35	6	$/kWh	0.0127	0.0000	0.0000	**0.0127**	0.0039	0.0085	0.0000	0.0000	**0.0085**	0.0025
Summer night	SN35	6	$/kWh	0.0079	0.0000	0.0000	**0.0079**	0.0025	0.0085	0.0000	0.0000	**0.0085**	0.0025
Winter day	WD35	6	$/kWh	0.0409	0.0000	0.0000	**0.0409**	0.0128	0.0505	0.0000	0.0000	**0.0505**	0.0148
Winter night	WN35	6	$/kWh	0.0079	0.0000	0.0000	**0.0079**	0.0025	0.0085	0.0000	0.0000	**0.0085**	0.0025
Generation	3.5GEN	6	$/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	0.3111	0.0000	0.0000	**0.3111**	0.0000	0.3298	0.0000	0.0000	**0.3298**	**0.0000**
Individually priced categories													
Cat 6.1 - Annual charge	6.1	1	$ per annum	245,999	1,121,577	757.62	**1,368,335**	27,355	255,139	1,119,701	836	**1,375,674**	27,280
Cat 6.2 - Annual charge	6.2	1	$ per annum	263,647	188,276	758	**452,680**	40,663	273,443	189,266	836	**463,546**	40,552
Cat CB - Annual charge	CobbLine	1	$ per annum	1,601,989	227,376	0	**1,829,367**	0	1,676,562	234,833	0	**1,911,396**	0
Cat MAT - Annual charge	MAT	1	$ per annum	10,425	2,730	0	**13,155**	0	10,774	2,882	0	**13,656**	0
Embedded Network	NEL	1	$ per annum	0	1,557,510	0	**1,557,510**	0	0	1,558,349	0	**1,558,349**	0
Individual categories	EAL[1]	4	$/MWh [1]	0.0000	0.0000	0.1484	**0.1484**	0	0.0000	0.0000	0.1562	**0.1562**	0
Unmetered connections (Group 0):Low capacity: Electric fences, communications etc													
Daily fixed price	0UNM	76	$/day	0.5197	0.0753	0.0050	**0.6000**	0.0000	0.5371	0.0776	0.0053	**0.6200**	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	0.00098	0.00016	0.00001	**0.00115**	0.0000	0.00104	0.00016	0.00001	**0.00121**	**0.0000**

Appendix E: Proportion of target revenue collected via each price component

For April 2024 to March 2025 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	19,474	$/day	6.3%	3.6%	0.0%	9.9%
Uncontrolled	1RLANY	5,459	$/kWh	1.2%	0.2%	0.0%	1.5%
Day (of day/night)	1RLDAY	122	$/kWh	0.2%	0.0%	0.0%	0.2%
Default	1RLDEF	729	$/kWh	0.6%	0.1%	0.0%	0.7%
Night	1RLNIT	1,490	$/kWh	0.1%	0.0%	0.0%	0.1%
Off Peak	1RLOFP	13,318	$/kWh	1.6%	0.4%	0.1%	2.0%
Peak	1RLPEK	13,318	$/kWh	2.8%	0.4%	0.1%	3.3%
Controlled water	1RLWSR	15,297	$/kWh	1.5%	0.4%	0.0%	1.9%
Generation Export	1RLGEN	1,252	$/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	16,802	$/day	10.9%	5.3%	0.0%	16.2%
Uncontrolled	1RSANY	5,250	$/kWh	0.9%	0.0%	0.0%	1.0%
Day (of day/night)	1RSDAY	149	$/kWh	0.1%	0.0%	0.0%	0.1%
Default	1RSDEF	647	$/kWh	0.5%	0.0%	0.0%	0.5%
Night	1RSNIT	1,405	$/kWh	0.0%	0.0%	0.0%	0.0%
Off Peak	1RSOFP	10,858	$/kWh	0.9%	0.0%	0.1%	1.0%
Peak	1RSPEK	10,858	$/kWh	2.3%	0.0%	0.1%	2.4%
Controlled water	1RSWSR	13,191	$/kWh	0.5%	0.0%	0.0%	0.6%
Generation Export	1RSGEN	854	$/kWh	0.0%	0.0%	0.0%	0.0%
Non-Residential 15kVA connections. Price Category 1GL							
Daily fixed price	1GL	3,718	$/kWh	2.4%	1.2%	0.0%	3.5%
Uncontrolled	1GLANY	1,055	$/kWh	0.2%	0.0%	0.0%	0.2%
Day (of day/night)	1GLDAY	75	$/kWh	0.0%	0.0%	0.0%	0.0%
Default	1GLDEF	307	$/kWh	0.1%	0.0%	0.0%	0.1%
Night	1GLNIT	137	$/kWh	0.0%	0.0%	0.0%	0.0%
Off Peak	1GLOFP	2,312	$/kWh	0.1%	0.0%	0.0%	0.2%
Peak	1GLPEK	2,312	$/kWh	0.4%	0.0%	0.0%	0.5%
Controlled water	1GLWSR	904	$/kWh	0.0%	0.0%	0.0%	0.0%
Generation Export	1GLGEN	49	$/kWh	0.0%	0.0%	0.0%	0.0%
General (20-150 kVA) connections. Price Category 2							
Daily fixed price	2	2,873	$/kVA/day	8.7%	4.8%	0.1%	13.6%
Uncontrolled	2ANY	878	$/kWh	0.9%	0.0%	0.0%	1.0%
Day (of day/night)	2DAY	348	$/kWh	1.2%	0.0%	0.0%	1.2%
Default	2DEF	292	$/kWh	0.5%	0.0%	0.0%	0.5%
Night	2NIT	430	$/kWh	0.2%	0.0%	0.0%	0.2%
Off Peak	2OFP	1,438	$/kWh	0.8%	0.0%	0.0%	0.9%
Peak	2PEK	1,438	$/kWh	2.4%	0.0%	0.1%	2.4%
Controlled water	2WSR	687	$/kWh	0.1%	0.0%	0.0%	0.1%
Generation Export	2GEN	161	$/kWh	0.0%	0.0%	0.0%	0.0%
Residential Low Fixed (20 and 30 kVA capacity) connection		0					
Daily fixed price	2LLFC	67	$/day	0.0%	0.0%	0.0%	0.0%
Uncontrolled	2LANY	33	$/kWh	0.0%	0.0%	0.0%	0.0%
Day (of day/night)	2LDAY	5	$/kWh	0.0%	0.0%	0.0%	0.0%
Default	2LDEF	2	$/kWh	0.0%	0.0%	0.0%	0.0%
Night	2LNIT	9	$/kWh	0.0%	0.0%	0.0%	0.0%
Off Peak	2LOFP	28	$/kWh	0.0%	0.0%	0.0%	0.0%
Peak	2LPEK	28	$/kWh	0.0%	0.0%	0.0%	0.0%
Controlled water	2LWSR	34	$/kWh	0.0%	0.0%	0.0%	0.0%
Generation Export	2LGEN	3	$/kWh	0.0%	0.0%	0.0%	0.0%
Residential Low Fixed (40 to 150 kVA capacity) connections. Price Category 2HLFC							
Daily fixed price	2HLFC	8	$/day	0.0%	0.0%	0.0%	0.0%
Uncontrolled	2HANY	2	$/kWh	0.0%	0.0%	0.0%	0.0%
Day (of day/night)	2HDAY	0	$/kWh	0.0%	0.0%	0.0%	0.0%
Default	2HDEF	0	$/kWh	0.0%	0.0%	0.0%	0.0%
Night	2HNIT	0	$/kWh	0.0%	0.0%	0.0%	0.0%
Off Peak	2HOFP	6	$/kWh	0.0%	0.0%	0.0%	0.0%
Peak	2HPEK	6	$/kWh	0.0%	0.0%	0.0%	0.0%
Controlled water	2HWSR	2	$/kWh	0.0%	0.0%	0.0%	0.0%
Generation Export	2HGEN	0	$/kWh	0.0%	0.0%	0.0%	0.0%

Price description	Price Code	Connections with this price	Unit of measure	Distribution	Transmission	Pass through & recoverable	Total
Metered connections 15-150 kVA capacity							
High Load Factor (Up to 150 kVA) connections. Price Category HLF							
Daily fixed price	HLF	34	$/kVA/day	0.9%	0.2%	0.0%	1.1%
Uncontrolled	HLFANY	4	$/kWh	0.0%	0.0%	0.0%	0.0%
Day (of day/night)	HLFDAY	3	$/kWh	0.0%	0.0%	0.0%	0.0%
Default	HLFDEF	6	$/kWh	0.0%	0.0%	0.0%	0.0%
Night	HLFNIT	4	$/kWh	0.0%	0.0%	0.0%	0.0%
Off Peak	HLFOFP	21	$/kWh	0.0%	0.0%	0.0%	0.0%
Peak	HLFPEK	21	$/kWh	0.0%	0.0%	0.0%	0.0%
Controlled water	HLFWSR	8	$/kWh	0.0%	0.0%	0.0%	0.0%
Generation Export	HLFGEN	2	$/kWh	0.0%	0.0%	0.0%	0.0%
Large Commercial ≥150 kVA capacity, TOU metered (Group 3)							
Category 3.1							
Anytime kVA demand	AnyDem31	4	$/kVA/day	0.2%	0.0%	0.0%	0.2%
Anytime kVA demand (Transmission)	ANY_T3.1	4	$/kVA/day	0.0%	0.1%	0.0%	0.1%
Capacity Charge	Cap3.1	4	$/kVA/day	0.0%	0.0%	0.0%	0.0%
Daily Charge	Fxd3.1	4	$/day	0.0%	0.0%	0.0%	0.0%
Summer day	SD31	4	$/kWh	0.0%	0.0%	0.0%	0.0%
Summer night	SN31	4	$/kWh	0.0%	0.0%	0.0%	0.0%
Winter day	WD31	4	$/kWh	0.1%	0.0%	0.0%	0.1%
Winter night	WN31	4	$/kWh	0.0%	0.0%	0.0%	0.0%
Category 3.3							
Anytime kVA demand	AnyDem33	7	$/kVA/day	0.3%	0.0%	0.0%	0.3%
Anytime kVA demand (Transmission)	ANY_T3.3	7	$/kVA/day	0.0%	0.2%	0.0%	0.2%
Capacity Charge	Cap3.3	7	$/kVA/day	0.0%	0.0%	0.0%	0.0%
Daily Charge	Fxd3.3	7	$/day	0.0%	0.0%	0.0%	0.0%
Summer day	SD33	7	$/kWh	0.1%	0.0%	0.0%	0.1%
Summer night	SN33	7	$/kWh	0.0%	0.0%	0.0%	0.0%
Winter day	WD33	7	$/kWh	0.2%	0.0%	0.0%	0.2%
Winter night	WN33	7	$/kWh	0.0%	0.0%	0.0%	0.0%
Category 3.4							
Anytime kVA demand	AnyDem34	189	$/kVA/day	6.2%	0.0%	0.3%	6.5%
Anytime kVA demand (Transmission)	ANY_T3.4	189	$/kVA/day	0.0%	4.1%	0.0%	4.1%
Capacity Charge	Cap3.4	189	$/kVA/day	0.0%	0.7%	0.0%	0.7%
Daily Charge	Fxd3.4	189	$/day	0.3%	0.0%	0.0%	0.3%
Summer day	SD34	189	$/kWh	0.9%	0.0%	0.0%	0.9%
Summer night	SN34	189	$/kWh	0.3%	0.0%	0.0%	0.3%
Winter day	WD34	189	$/kWh	4.5%	0.0%	0.0%	4.5%
Winter night	WN34	189	$/kWh	0.3%	0.0%	0.0%	0.3%
Category 3.5							
Anytime kVA demand	AnyDem35	2	$/kVA/day	0.3%	0.0%	0.0%	0.3%
Anytime kVA demand (Transmission)	ANY_T3.5	2	$/kVA/day	0.0%	0.2%	0.0%	0.2%
Capacity Charge	Cap3.5	2	$/kVA/day	0.0%	0.0%	0.0%	0.0%
Daily Charge	Fxd3.5	2	$/day	0.0%	0.0%	0.0%	0.0%
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%	2.6%	0.0%	3.2%
Cat 6.2 - Annual charge	6.2	1	$ per annum	0.5%	0.4%	0.0%	1.0%
Cat CB - Annual charge	CB	1	$ per annum	3.9%	0.5%	0.0%	4.5%
Cat MAT - Annual charge	MAT	1	$ per annum	0.0%	0.0%	0.0%	0.0%
Cat NEL - Annual charge	NEL	1	$ per annum	0.0%	3.6%	0.0%	3.7%
EAL Levy	EAL[1]		$/MWh [1]	0.0%	0.0%	0.0%	0.0%
Unmetered connections (Group 0):Low capacity: Electric fences, communications etc							
Daily fixed price	0UNM	67	$/day	0.0%	0.0%	0.0%	0.0%
Unmetered connections (Group 0): Streetlighting - General							
Streetlight only connection	0S	23	$/day	0.0%	0.0%	0.0%	0.0%
Capacity price for streetlights	0STL	0	$/W/day	0.4%	0.1%	0.0%	0.5%

Appendix F: Methodology for passing-on settlement residual rebates

In November 2022, the Electricity Authority published a decision to amend the Code to require distributors to pass through settlement residual rebates (otherwise known as *losses and constraints excess* payments) to their customers.

The newly amended Code states the purpose of the requirement to pass-on settlement residue is to allocate settlement residue to customers in proportion to the transmission charges paid by those customers in respect of each connection location.

Distributors must allocate these residues on a monthly basis to customers that pay lines charges directly. Distributors must develop a methodology for allocating settlement residue to its customers that gives effect to the purpose of the Code amendment.

Accordingly, Network Tasman's methodology for passing-on monthly settlement residues received from Transpower for any trading period on or after 1 April 2023 is described below.

Settlement residual for a given connection location will be allocated to customers in proportion to the transmission charges paid by each customer to Network Tasman at that connection location.

A customer's transmission charges at a connection location will be calculated by multiplying the transmission prices published on Network Tasman's regulated price schedule by the equivalent billing quantities used by that customer at the connection location.

For the avoidance of doubt, billing quantities refer to the initial quantities used by Network Tasman to invoice the customer for the month and connection location in question.

The settlement residual received by Network Tasman for a given location will be allocated to customers in proportion to their contribution to the total transmission charge received from all customers at that connection location.

The formula below summarises the methodology to be used:

$$Monthly\ settlement\ residual\ payment_{x,y} = Monthly\ settlement\ residual_y \times \left(\frac{Monthly\ transmission\ charge\ paid_{x,y}}{\sum_x Monthly\ transmission\ charge\ paid_y} \right)$$

Where:

x = customer

y = connection location

Monthly settlement residual$_y$ = Monthly settlement residual payment from Transpower to Network Tasman for connection location y

Monthly transmission charge $paid_{x,y}$ = Transmission charge paid by customer x to Network Tasman at connection location y

Payments will be based on initial billing quantities and will not be subject to adjustments.

Payments to customers will be made monthly.