



# PRICING METHODOLOGY

Pursuant to the Electricity Distribution Information Disclosure Determination 2012,  
clause 2.4.1

and

Electricity Authority Distribution Pricing Principles and Information Disclosure Guidelines

**For the Period: 1 April 2021 – 31 March 2022**

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**Certification for Year-Beginning Disclosures**  
**Pursuant to Schedule 17**  
**Clause 2.9.1 of section 2.9**  
**Electricity Distribution Information Disclosure Determination 2012**

We, Christopher J. Dennison and Anthony J. Wood, being directors of Network Waitaki Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

- a) The following attached information of Network Waitaki Limited prepared for the purposes of clause 2.4.1, disclosure of pricing methodologies, 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.



\_\_\_\_\_  
Christopher J. Dennison

Date: 29 March 2021



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Anthony J. Wood

Date: 29 March 2021

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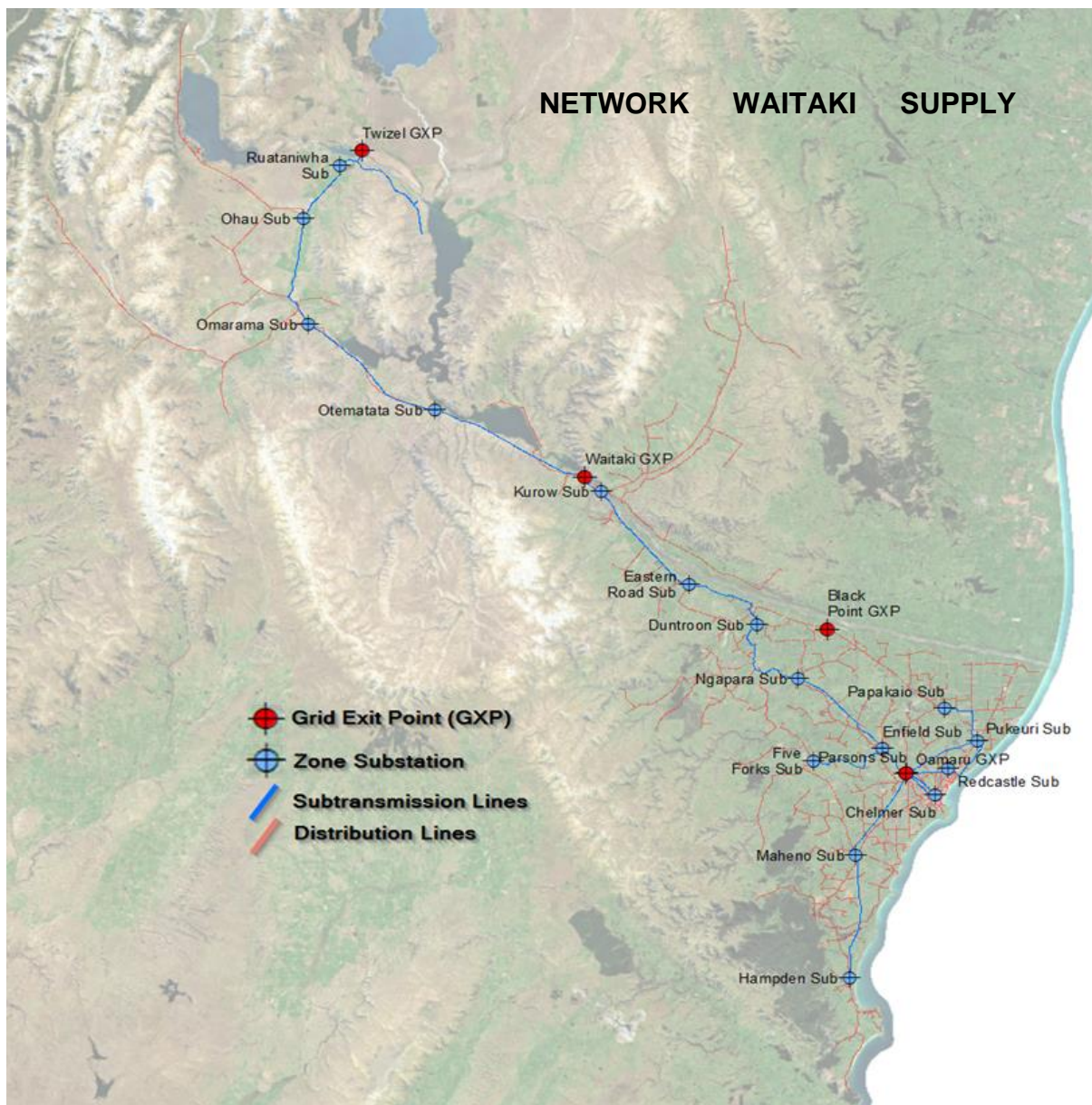
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# 1 INTRODUCTION

This document outlines Network Waitaki's pricing methodology for the period 1 April 2021 to 31 March 2022.

## 1.1 Overview of Network Waitaki

Network Waitaki owns, manages and operates the electricity distribution network in the supply area covering North Otago and parts of South Canterbury, and is 100% owned by the Waitaki Power Trust. Due to its ownership structure the company is an exempt Electricity Distribution Business (EDB) under Part 4 of the Commerce Act and therefore is not subject to price-quality regulation, however is subject to Information Disclosure requirements.



### 1.1.1 Network features

The network has a footprint of approximately 8,400 square kilometres. The number of Installation Connection Points (ICPs) connected to the network is approximately 13,100, the maximum coincident system demand is approximately 66 MW and the annual delivered energy after losses is about 270 GWh.

Within our network area, the distribution network includes 17 zone substations, approximately 1,890 km of lines and cables, and 2,918 distribution transformers of which 413 have a capacity in excess of 100 kVA. Network Waitaki's distribution assets are dispersed over a large area and the company services a mix of towns, rural land and remote farmland.

The network has a strong rural character, with low load density measured in kVA per km of line: Network Waitaki records 121 kVA of network capacity per km of line, against a New Zealand average of 144 kVA/km. Although 80% of ICPs on our network are residential connections and only close to 10% of ICPs are agricultural connections, irrigation (as the major driver for agricultural use of electricity) consumes on average more than a third of annual energy, slightly more than residential consumption. Retail, hospitality, industrial, commercial and social services combined make up the balance of the ICP numbers.

### 1.1.2 Network demand

The size and capacity of the network is driven by the peak demand for electricity by our customers<sup>1</sup>. Unlike most other electricity networks, peak demand on our network is not experienced in the winter when residential heating demands are at their highest. Rather, our network peaks in the summer when demand for irrigation is at its highest.

Irrigation customers are less sensitive to price signals based on volume usage compared to residential customers and, as a consequence, traditional price signalling mechanisms such as night rates for water heating are not nearly as effective for irrigation customers.

Irrigation energy volume growth over the last ten years averaged about 1.7% p.a. while the number of irrigation ICPs have increased at about 4.5% p.a. from 450 in 2009 to about 550 now. Total energy volume growth for this period was also 1.7%, indicating that non-irrigation volumes had also been growing at the same rate.

Figure 1 below shows the long-term trends in energy consumption growth. The figure shows the volatility in summer demand (due to irrigation) which supports the move to capacity-based pricing. This move away from volume-based pricing will eliminate the impact of volatile annual volumes and the associated revenue risk.

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<sup>1</sup> In this methodology we use the term "customer" to refer to electricity end consumers. We consider the terms to be interchangeable and recognise that "consumer" (rather than "customer") is the defined term as per clause 2.4.1(4) in the Commerce Commission, Decision NZCC 22: Electricity Distribution Information Disclosure Determination 2012.

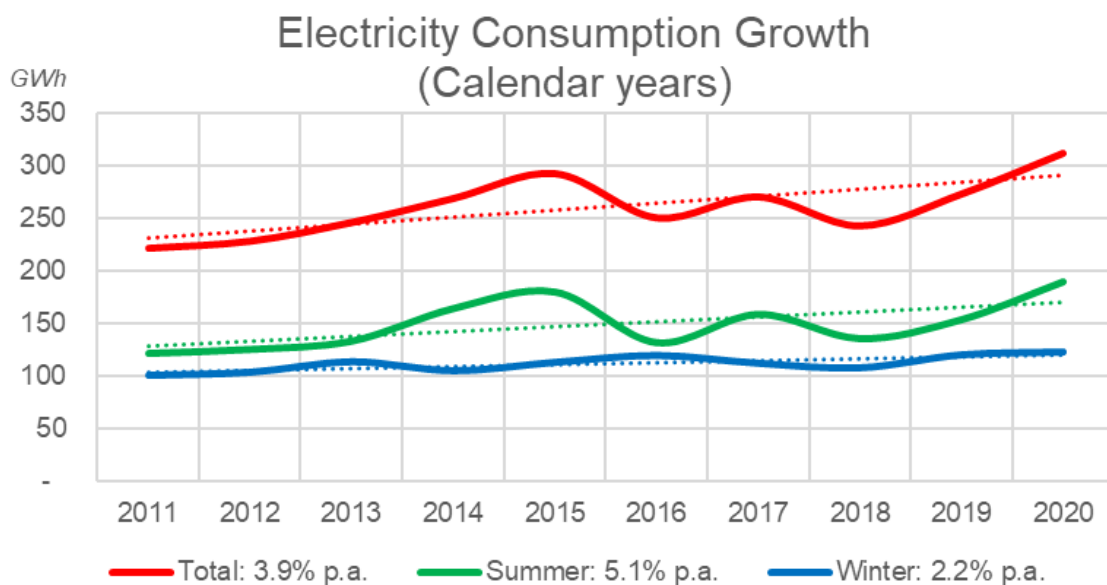


Figure 1: Load growth over last 8 years

### 1.1.3 Customers on the network

Network Waitaki’s supply area is dominated by residential customers making up 80% of the customer base that contributes about a third of revenue (36%) and energy used (28%) on the network.

Agriculture, commercial and industrial customers make up the balance of 20% of the customer base, with agriculture generating 35% of revenue and industry and commercial customers the other 29%. Agriculture varies substantially from year to year due to irrigation’s volatility associated with rainfall levels.

## 1.2 Legal requirements and compliance

Under section 2.4 (pricing and related information) of the *Electricity Distribution Information Disclosure Determination 2012 (consolidated in 2018)*, Network Waitaki must publicly disclose, before the start of each disclosure year, a pricing methodology which:

- Describes the methodology used to calculate prices payable or to be payable;
- Describes any changes in prices and target revenues;
- Explains the approach taken with respect to pricing in non-standard contracts and distributed generation; and
- Explains whether, and if so how, we have sought the views of customers, including their expectations in terms of price and quality, and reflected those views in calculating the prices payable or to be payable.

Network Waitaki's pricing methodology is consistent with the Electricity Authority's March 2010 Pricing Principles (EA Principles and Guidelines) as amended<sup>2</sup> outlined in Appendix 2.

Network Waitaki complies with the *Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004* (LFC Regulations). Residential Low User (RL) customers at the 9,000 unit average domestic household consumption threshold level for the Lower South Island will pay no more than standard price plan customers.

A detailed summary of how Network Waitaki complies with the Information Disclosure Determination 2012 and which sections of this pricing methodology comply with each requirement can be found in Appendix 3.

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<sup>2</sup> Electricity Authority (4 June 2019). More efficient distribution network pricing – principles and practice.

## 2 PRICING RESTRUCTURE

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### 2.1 Overview

Network Waitaki is committed to cost-reflective, service-based pricing to improve the use of its electricity network and to support efficient use of the network.

The aim of Network Waitaki's pricing strategy over the next four years (up to 2024-2025) is to:

- Reflect the cost of service of the company more accurately through achieving an approximately 80% capacity-based fixed and 20% volume-based pricing structure by 2024-2025 (subject to impact of constraints such as LFC regulations);
- Ensure revenue reliability through implementation of this cost-reflective price structure;
- Limit negative impacts of price rebalancing on customers;
- Minimise the impact of price rebalancing by communicating with and advising affected customers of mitigating actions; and
- Continuously monitor wider regulatory developments to ensure the direction of price structure development is aligned with industry and regulatory developments.

### 2.2 Capacity based pricing

The cost to operate our network is predominantly driven by the size (capacity) of the network required to meet peak demand. The impact of the amount of electricity conveyed across our network has no material impact on the cost of operating the network.

Capacity-based pricing effectively charges customers for the size of their connection rather than the amount of electricity conveyed. This aligns the pricing for connecting to the network with the cost of providing the connection which provides an effective price signal to customers that incentivises them to optimise their contracted capacity which in turn enables Network Waitaki to optimize the size of the network.

Optimising the size of the network ultimately results in an optimised cost to customers of connecting to the network. Consequently, capacity-based pricing is the most appropriate pricing mechanism because:

- It represents the long-term cost driver related to capital spending that is based on the customer's connected capacity.
- It provides for customer choice with a direct influence on cost and is a known quantity for each customer.
- Capacity is a known variable that we can use in pricing without any need for estimation or approximation.
- It is the only customer driven factor that the customer has direct control over due to customer's choice of capacity.



- A contractual capacity limit will be a stronger incentive to control maximum demand than an ex post measurement of maximum demand, for all cases where the maximum demand is close to the contracted capacity plan limit.

### **2.3 Implementation progress**

Network Waitaki has been re-balancing fixed capacity-based and volume prices since 2017 to achieve a cost reflective pricing structure by 2024-2025 to:

- mitigate revenue uncertainty due to volume risk (weather and emerging technologies) as well as
- providing customers with the right information through pricing signals to invest in the appropriate connection that will satisfy their electricity demand requirements.

Except for Individually Assessed customers, whose pricing has the closest relationship to the cost to supply already, our current pricing structure has been flawed with customers receiving a signal that encourages them to use less electricity and have larger connections than what they need, enabling a larger maximum demand and more peaky usage.

The price adjustment applicable to the pricing year 2021-2022 will result in a change in the capacity-based (33%) / volume (67%) make-up of prices to a 41/59 ratio putting us well on the way to achieving an 80/20 capacity-based/volume ratio in 2024-2025.

### **2.4 Impact on customers**

Our customers will be individually affected differently. Some customers will be favourably affected (typically those that have relatively high utilisation of their contracted capacity) and some negatively. We are actively working with the worst affected customers to ensure they are on the most appropriate pricing plan.

Figure 2 below provides an illustration of different impacts our customers may experience. It shows that the majority of 15C customers (mostly residential) will face an increase of less than 20% and \$100 per year.

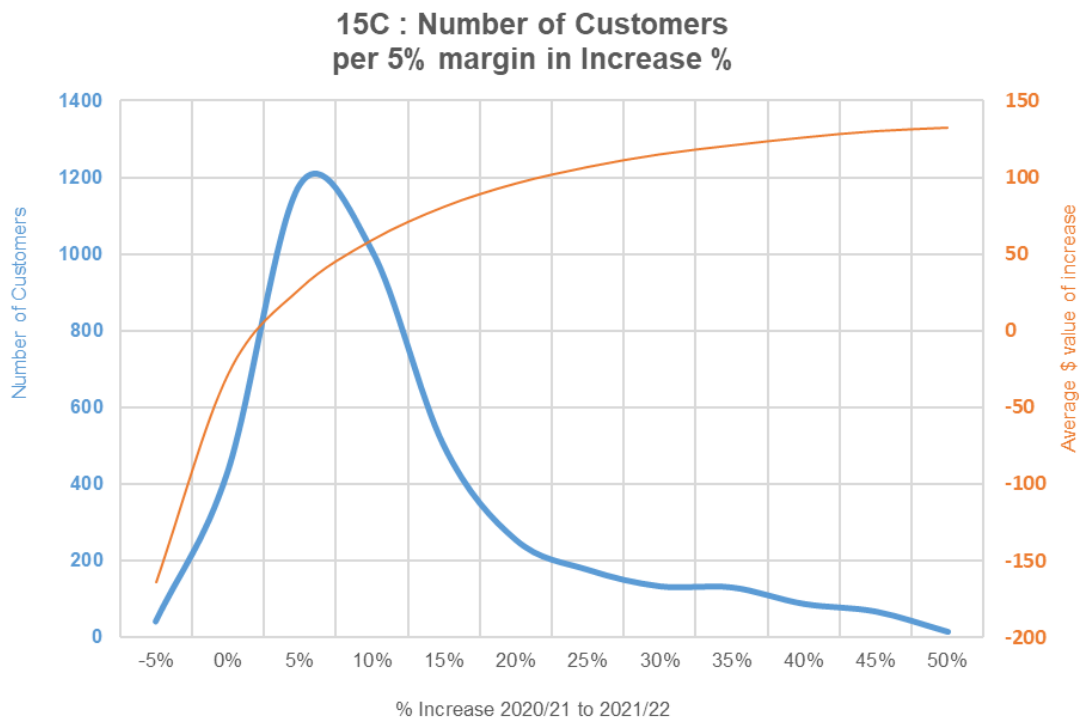


Figure 2: Impact of price restructuring on small customers

## 2.5 Going forward

Our strategy is to achieve an 80% capacity-based / 20% volume-based price structure by 2024-2025. To achieve this outcome the focus will be on the following actions:

- a) Reduction in volume-based charges by 2024/25 to an approximately 80-20 ratio between capacity-based (fixed) / volume-based charges.
- b) Maintain load control pricing plans (lower fixed charge relative to uncontrolled for the same capacity).
- c) Consider more customer groups to implement when LFC regulations are removed to better address 'low user' pricing.

This migration strategy will not impact total revenue being generated, except for volume variations, but rather reprice individual customers, irrespective of consumption.

We are actively working with worst affected customers to ensure they are on the most appropriate pricing plans.

The largest benefits of this strategy are:

- a) Cost reflective and service-based pricing structure containing improved price signalling to better align customer behaviour with key cost to supply drivers;
- b) Reduction in revenue volatility;
- c) Adoption of a pricing strategy consistent with EA guidance; and
- d) Preparation for the anticipated removal of LFC regulations.

## **2.6 Consumer survey**

In February 2019, Network Waitaki conducted a consumer survey to understand consumers' experiences on a range of issues, including overall satisfaction with Network Waitaki's service on outages, price and reliability balance, awareness of company ownership, familiarity with smart meters and emerging technologies and interest in price structure consultation. The survey was completed in two parts, as follows:

- Face-to-face interviews with sixteen of our large consumers; and
- Telephone interviews with a sample of 400 residential and commercial users.

In terms of consumer satisfaction regarding price and quality, consumers were asked whether they would prefer to either?

- 1) Pay more, and keep outages to a minimum?
- 2) Pay the same, with outages kept about the same?
- 3) Pay less, with slightly more outages?

The majority of consumers prefer to 'pay the same with outages kept about the same', i.e. 78% of the sample interviewed by telephone and 83% of consumers interviewed face-to-face.

A consumer survey is currently being conducted with the results not available at the time of conclusion of this report.

## **2.7 Changes to Network Waitaki's pricing methodology**

There have been no material changes to Network Waitaki's pricing methodology, approach and rationale since the last methodology was published in March 2020.

### **3 PRICING METHODOLOGY**

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The pricing methodology is aimed at setting prices that, as far as practicable, achieve Network Waitaki's identified pricing objectives, recover the full cost to operate the network efficiently and over time reflect the cost of serving different customer load groups better to encourage efficient use of the network.

#### **3.1 Pricing objectives**

This section outlines Network Waitaki's pricing objectives of revenue reliability, efficiency, fairness, simplicity, transparency, innovation, and support of regional economic growth on future price direction and the ability to provide an annual discount to customers.

##### **3.1.1 Revenue reliability**

Network Waitaki must generate sufficient revenue to:

- meet the costs associated with the use of the Transpower national grid, the cost of transmission alternatives, and other pass through costs;
- meet the costs associated with providing a safe, reliable and efficient network to meet customer service levels, and fulfil its contractual obligations for the delivery of energy over its distribution network;
- comply with statutory requirements on health and safety, environmental protection, and quality of supply;
- provide for new network investment; and
- provide a rate of return on assets that is acceptable to its owners.

To meet the revenue requirement, Network Waitaki uses the following principles in setting prices:

- Prices should be simple to understand and administer and must comply with regulations;
- Maintain the stability of historic pricing structures in order to lessen price shocks to customers;
- Prices should not differentiate between urban and rural customers;

##### **3.1.2 Discount to consumers**

Network Waitaki has a policy of paying discounts to qualifying consumers towards the end of each financial year. Except when noted otherwise, all revenues stated in this pricing methodology are before the payment of any discount. Network Waitaki's discount to consumers consists of a fixed component and sometimes a variable component. The discount is announced in March of every year and the discount allocation methodology is available on Network Waitaki's website.

### 3.1.3 Efficiency

#### **For Standard Contracts this applies as follows:**

From an economic efficiency perspective:

- A rebalancing of capacity-based fixed prices and volume prices to reflect the cost structure of the business;
- Off-peak usage is encouraged through differentiated day and night volume pricing by retailers.

From a technical and operational efficiency perspective:

- Monitoring of power factors;
- Maintaining loss factors;
- Load control to manage peak system demand within Transpower's supply constraints; and
- Emergency load shedding schemes to cope with transmission and generation constraints.

From an administrative efficiency perspective:

- Network Waitaki applies a 'GXP billing' approach where volume charges are based on electricity volumes measured at the three injection points (Transpower grid exit points) into the Network Waitaki network for each retailer in aggregate rather than per ICP. Chargeable quantities attributed to each retailer are determined by the wholesale electricity market reconciliation process.

#### **For Individually assessed non-standard contract (IND) efficiency is promoted as follows:**

- Efficient investment in the network by large customers through passing through the cost of different size connections using capacity and demand prices.
- Ongoing efficient operation of the network by signalling the capacity and demand costs of the delivery of electricity to each customer of this type.

### 3.1.4 Fairness

As a supplier of essential services Network Waitaki is continuously striving to set fair and reasonable prices for each customer load group. Fairness is a contentious subject and customers might disagree about what is fair and what is not.

Having prices with a dominant volume base makes achievement of fair prices complex as the resultant charge is in most cases not reflective of the cost to supply the customer. Network prices will continuously become fairer as the cost of supply is increasingly reflected in it over time as per our pricing strategy.

Individually assessed prices reflect customers' use of network assets together with the associated transmission costs.

### **3.1.5 Simplicity**

Network Waitaki has a simplistic, “easy to understand” two-part pricing structure with a fixed component and a day/night volume component applicable to each customer load group.

Except for the RL customers, all customer load groups have the same day/night volume prices. Appendix 1 contains the delivery price schedule for Network Waitaki.

### **3.1.6 Transparency**

Network Waitaki follows a philosophy of setting prices such that they increasingly reflect costs and allow customers to have choices and the ability to respond to price signals. This philosophy will be continued and is part of Network Waitaki’s future pricing directions, i.e. to reflect the fixed cost nature of the company accurately through continuous re-balancing of the capacity-based fixed and volume components of electricity distribution prices (subject to constraints such as LFC regulations).

### **3.1.7 Innovation**

Network Waitaki’s prices support innovation through retailers making decisions as part of a competitive market on how they present Network Waitaki’s pricing structures to customers. Non-standard customers similarly can decide how to respond to price structures especially going forward as prices become more capacity-based with less variation, promoting better price stability for customers.

### **3.1.8 Supporting regional growth**

Network Waitaki supports regional growth by investing in infrastructure to meet expected load growth requirements. Network Waitaki’s capital contributions policy outlines how this investment is funded with growth investments partially funded upfront through capital contributions and connection levies and partially funded over time through distribution pricing.

## **3.2 Cost structure**

Network Waitaki’s main cost components are outlined below and consist of operation and maintenance cost, depreciation, return on investment, administration cost and pass-through cost.

### **3.2.1 Operation and Maintenance**

- Maintenance costs are based on the programmes and expenditure levels outlined in the 10-year Asset Management Plan (AMP).
- Operational costs include all other direct and indirect network expenses excluding administration costs.

### **3.2.2 Depreciation**

Depreciation on network assets is based on the standard life for each asset category.

### **3.2.3 Return on Investment**

Return on Investment provides for a return to the business and the shareholder, which is used to fund growth and development, fund renewals in excess of depreciation and provide a return to the shareholder or allow for a discount to customers.

### **3.2.4 Administration**

A provision for a share of costs associated with the administration of the business, and the full cost of support services related to the management and operation of the network.

### **3.2.5 Recoverable and Pass-Through Cost**

Recoverable and Pass-through cost consists of transmission prices charged by Transpower, avoided transmission cost and new investment contracts as well as local authority rates, Electricity Authority levy, Commerce Commission levy and Utilities Disputes levy.

Transmission prices charged by Transpower consists of the following price components:

- Interconnection Charge

This charge is based on the average of the 100 highest half-hour regional coincident peak demands. The prices for the 2021-2022 financial year are based on the demands recorded between 1 May 2019 and 31 October 2020. All Network Waitaki GXP's are located in the Lower South Island region.

- Connection Charge

This charge represents the fixed costs associated with the dedicated assets at each GXP. Shared assets are allocated based on each off-take customer's share of the 12 highest half-hour demand peaks measured at the GXP.

Avoided transmission costs are associated with transmission assets that have been provided by Network Waitaki rather than by Transpower. In many instances, distributors can provide certain classes of transmission assets at a lower cost to customers than assets provided by Transpower.

New Investment Contracts relate to improvements to the Grid undertaken by Transpower to meet Network Waitaki's supply requirements.

### 3.3 Target Revenue

For the period 1 April 2021 to 31 March 2022 the overall impact of the price adjustment is a weighted average increase of 4.5% in network prices.

The price adjustment is allocated as follows:

Price adjustment	% Adjustment
Distribution fixed (Standard and Non-Standard)	32%
Distribution volume	-12%
Recoverable and pass-through fixed (Standard and Non-Standard)	13%
Recoverable and pass-through volume	-3.9%
<b>Weighted average increase</b>	<b>4.5%</b>

Table 1: Price adjustment 2021-2022

The reduction in volume prices include an increase of 5.5% in distribution volume prices and 3% in recoverable and pass-through volume prices of LFC customers.

This price adjustment is in line with the aim of rebalancing fixed/volume-based prices to move to cost-reflective prices and becoming less exposed to revenue variations due to changing weather conditions.

The target revenue required to cover the costs and return on investment of Network Waitaki's business activities for 2021-2022 amounts to \$21.098 million and is shown in Table 2 below.

Target revenue	2021-2022
Operation and Maintenance	\$5,079,692
Depreciation	\$4,517,922
Administration	\$4,192,931
Return on Regulatory Assets	\$2,086,419
Transmission	\$5,116,971
Pass-through	\$104,150
<b>Revenue Requirement</b>	<b>\$21,098,085</b>
Fixed Discount	(1,000,000)
<b>Net Revenue Requirement</b>	<b>\$20,098,085</b>

Table 2: Target Revenue

### 3.4 Cost Allocation Methodology

Network Waitaki's cost allocation model is based on the connection size (measured in kVA) and distance to GXP as a proxy for the geographical load density for the lines portion of cost, and demand and load factor as the proxy for the substation related



cost. The load factor is used to estimate the likelihood of load diversity of customer groups.

The cost allocator used is described in the Table 3 below:

<b>Allocator</b>	<b>Description</b>	<b>Cost categories and rationale</b>
Assets	Optimised replacement cost <sup>3</sup> (ORC) of all assets are allocated on an aggregate basis to customer load groups based on each group's respective usage of the assets.	The ORC of assets is indicative of capital employed and drives most of Network Waitaki's cost. If depreciated asset values are used maintenance cost will be under represented, especially for older assets partly depreciated but more in need of maintenance than newer assets.  Furthermore, the rationale of using assets as the main cost allocator is to ensure a simple and easy to understand approach, while ensuring it is based on engineering and costing principles.

*Table 3: Cost allocator used in cost allocation methodology*

### 3.4.1 Asset cost allocation

The allocation of expenditure relating to network assets is assumed to occur in proportion to the ORC of assets employed in the network. For example, sub-transmission lines are more expensive to build per km of line than distribution lines due to higher voltage insulation and heavier poles and conductors. Maintenance of these assets will thus require more expensive replacement spares and also more time to plan and execute than for distribution lines, driving the maintenance cost to be aligned with the replacement value of the assets.

<b>Network component</b>	<b>Load groups included in allocation</b>	<b>Allocator</b>
Sub-transmission lines and cables	All load groups	Sub-transmission line sections in the supply path of each ICP, allocated and aggregated into the applicable customer load groups, valued at ORC, provide a measure of the relative cost to supply each kVA of customer demand per load group from this specific network component.

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<sup>3</sup> ODV handbook issued by the Commerce Commission in 2004

<b>Network component</b>	<b>Load groups included in allocation</b>	<b>Allocator</b>
Distribution lines and cables	All load groups	Distribution line sections in the supply path of each ICP, allocated and aggregated into the applicable customer load groups, valued at ORC, provide a measure of the relative cost to supply each kVA of customer demand per load group from this specific network component.
Zone substation equipment (including all assets not classified as lines and cables)	All load groups	The contracted capacity in kVA of each ICP is used to allocate the ORC of these network components to the cost of supply of each ICP and load groups.
All non-line Distribution assets	All load groups	The contracted capacity in kVA of each ICP is used to allocate the ORC of these network components to the cost of supply of each ICP and load groups. The likely potential for diversity of load groups is then calculated using the respective group's capacity-based load factors to moderate the cost to supply of these load groups.

*Table 4: Asset cost allocation*

### **3.4.2 Allocation to customer load groups**

The annual cost of supply of each load group is obtained through scaling the target revenue in proportion to the aggregated asset cost allocation values per load group and is presented in Table 5.

1	2	3	4	5	6
Load Group	Capacity bands (kVA)	Number of connections (ICP)	Energy delivered (kWh)	Contracted Capacity (kVA)	Revenue Targeted 2021/22
RLC/RLU	15	39.7%	13.9%	21.3%	12.6%
15C/15U	15	44.2%	18.3%	23.7%	26.4%
30C/30U	30	5.1%	2.7%	5.4%	6.0%
50C/50U	50	5.9%	8.4%	10.6%	11.8%
100	100	2.8%	11.8%	9.9%	10.9%
200	200	1.0%	7.5%	6.8%	7.6%
300	300	0.4%	4.4%	4.6%	5.0%
500	500	0.2%	4.2%	3.6%	4.0%
750	750	0.1%	2.2%	2.5%	2.7%
IND	IND	0.7%	26.5%	11.7%	13.0%

Table 5: Customer load groups share of ICPs, kWh, kVA and targeted revenue

### 3.5 Allocation of Target Revenue Components to customer load groups

Table 6 illustrates the reconciliation of Network Waitaki's target revenue to small, medium, large and IND customers.

Target revenue for 2021-2022 is apportioned over the standard customer load groups based on the revenue shares reported for these groups in Network Waitaki's Information Disclosure to the Commerce Commission for the year ended 31 March 2020.

Allocation of target revenue for 2021-2022		
	Distribution	Pass-through
<b>Small customers:</b> RLU, RLC, 15U, 15C	\$5,737,076	\$1,897,367
<b>Medium customers:</b> 30U, 30C, 50U, 50C	\$2,219,210	\$861,377
<b>Large customers:</b> 100, 200, 300, 500, 750	\$5,360,762	\$1,733,216
<b>IND:</b> Individually assessed non-standard	\$1,939,165	\$1,349,910
<b>Total Revenue Requirement</b>	<b>\$15,256,214</b>	<b>\$5,841,871</b>

Table 6: Allocation of target revenue to customer load groups

Network Waitaki does not apply distance-based (locational) prices to customer load groups, i.e. different prices for urban and rural customers. Any cost variations as a result of the location of ICPs are taken into account in the cost of supply calculations through the aggregation of the distance signal for all ICPs in each load group.

Approximately 90% of Network Waitaki customers are supplied through the Oamaru GXP showing that the market is relatively concentrated. At this point the complexity and possible ambiguity of applying distance-based prices to a few remote rural customers do not justify distance-based pricing, and the inherent security-of-supply/cost trade-off between urban and rural customers tend to equalise the situation: The lack of real customer reaction to such pricing signals would most probably result in very little impact on economic efficiency in the supply area.

Urban customers supplied from Chelmer Street and Redcastle substations enjoy a higher level of security due to the N-1 status of these substations. Also, the higher level of interconnectivity in the urban areas provides alternative supply routes in the event of a fault or planned outage.

## 4 CUSTOMER LOAD GROUPS AND PRICING STRUCTURES

Customer load groups fall into two main categories, namely:

- Standard customer load groups where network costs are recovered by means of a fixed annual price (based on connection capacity) applicable to the particular customer load group, and a day/night volume (kWh) price as shown in the schedule of delivery prices in Appendix 1. Most Network Waitaki customers are on standard contracts which mean that they have a supply contract with a retailer and not with Network Waitaki.
- IND customers where network costs are recovered by means of a fixed annual price based on the individual customer's asset usage, capacity requirements, and contribution towards the system peak demand.

### 4.1 Standard customer load groups

Customer load groups are based on the standard distribution transformer capacities used on the network, with no distinction being made between a single-phase and three-phase connection.

The minimum connection capacity for a single-phase supply is 15kVA, while the minimum connection capacity for a three-phase supply is 30kVA.

Customers are allocated into the various load groups based on their contracted connection capacity, with no distinction being made between residential and non-residential connections except for the RL categories which is available only to low use primary domestic supplies.

Load groups are differentiated based on kVA as it is a measure of service capacity and load density, and is reflective of the costs incurred to serve each group.

The current Network Waitaki customer load groups are:

<b>Load Group</b>	<b>Description</b>	<b>Maximum Fuse Rating</b>
RLC	Residential Low User 15C	1x 63A fuse
RLU	Residential Low User 15U	1x 63A fuse
15C	0 - 15kVA controlled	1 x 63A fuse
15U	0 - 15kVA Uncontrolled	1 x 63A fuse
30C	16 - 30kVA Controlled	1 x 100A fuse or 3 x 40A fuses
30U	16 - 30kVA Uncontrolled	1 x 100A fuse or 3 x 40A fuses
50C	31 - 50kVA Controlled	3 x 80A fuses
50U	31 - 50kVA Uncontrolled	3 x 80A fuses
100	51 - 100kVA	3 x 160A fuses
200	101 – 200kVA	3 x 315A fuses

Load Group	Description	Maximum Fuse Rating
300	201 – 300kVA	3 x 400A fuses
500	301 – 500kVA	NA
750	501 – 750kVA	NA
LC	750kVA +	NA
IND	Individually Assessed	NA

Table 7: Customer load groups

**Street lighting** is a specialist load group which utilises dedicated LV assets and is covered by an IND contract.

## 4.2 Distribution fixed prices: Standard customer Load Groups

### 4.2.1 0 – 50kVA Load Groups

Customers in the 15, 30, and 50kVA groupings are typically domestic or small commercial installations which may have water-heating or other loads that can be controlled. Even though we are moving towards fixed prices with very little or no volume pricing in future, for 2021-2022 a significant portion of revenue will still be generated by volume prices.

Network Waitaki will continue to use the control options for those customers that foster economic use of the network assets and enable load to be moved to off-peak periods. In recognition of this, the fixed prices for installations that provide year-round access to controllable load are lower than for installations with no controlled load.

In addition, controlled installations can utilise two-rate, day/night metering, which enables customers to benefit from the cheaper night rate prices that apply between 11:00pm and 7:00am.

An RL option is also available in accordance with the *Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulation 2004*. This option is cost-neutral for a customer using 9,000 kWh per annum before and after a discount has been applied.

### 4.2.2 51 – 750kVA Load Groups

Installations in the 100 – 750kVA load groups are predominantly commercial, light industrial, or farming, and as generally high consumption customers they will most likely benefit from the future move to fixed capacity-based prices. These customers do not usually have loads that can be controlled externally and load control is therefore not generally available for these load groups. These installations are normally supplied from a dedicated transformer and therefore do not utilise the same range of network assets as small low-voltage connections.

Energy use within these load groups is typically much higher than the groups on connections below 51kVA resulting in the costs currently being predominantly

governed by energy use rather than fixed prices but this inefficient cost recovery mechanism will be resolved with the move to fixed capacity-based pricing in the next four years.

We recognise that currently the dominant volume-based pricing incorrectly provides customers within these load groups with pricing signals that relate directly to consumption. Fixed capacity-based prices will in future adequately reflect the fixed cost nature of Network Waitaki's business.

#### **4.2.3 Large Commercial Load Group**

This load group requires connections larger than 750kVA. Pricing for this group is similar to the pricing method applied for IND price plans. The costs associated with the network assets are recovered as a fixed price based 50% on contribution to network system demand and 50% on contracted capacity. Customers in this group can reduce their costs by improving their utilisation of assets and controlling their peak demands.

#### **4.3 Distribution prices for Individually Assessed non-standard contracts**

IND customers are assessed on their contribution to network system demand and the contracted capacity they require. The assets required to supply each customer installation are assessed and valued at ORC, and the contribution that the installation makes towards network system demand is determined from half hour metering data.

The costs associated with the network assets are then recovered as a fixed price based 50% on demand and 50% on contracted capacity. Customers in this group can reduce their costs by improving their utilisation of assets and controlling their peak demands.

Network Waitaki currently has 21 customers on Individually Assessed connections contributing 15.5% of the total target revenue.

#### **4.4 Volume prices: Standard customer Load Groups**

Volume prices for standard customer load groups are based on GXP volumes and individual customer usage. At this stage of the phased introduction of fixed capacity-based pricing, volume prices are still significant. Day volume prices apply to all units transported over the network between 7:00am and 11:00pm and night volume prices to all units transported over the network between 11:00pm and 7:00am.

Night volume prices are lower than day prices to encourage retailers to develop prices that reward customers for off-peak usage. Volume prices will reduce in the 2021-2022 pricing period in line with our move to fixed capacity-based pricing in order to change the ratio from 67/33 (volume-based/fixed capacity) to 59/41 (volumes-based/fixed capacity).

#### **4.5 Transmission prices: Standard customer Load Groups**

The following methodology has been used as the basis for the recovery of transmission prices in a way that is equitable to all groups and reflects Transpower's pricing structure.

Transpower's Connection Charges and Network Waitaki Avoided Transmission Costs are fixed asset-based costs and are allocated between load groups based on the group capacity requirements. These costs are recovered through mostly fixed prices.

Transpower's Interconnection Charges are currently recovered from Standard customer load groups as a volume (kWh) price plus a fixed price.

A rebalancing of the fixed and volume-based components will continue from 1 April 2021 to recover costs in proportion to the capacity being made available to load groups. This is aligned with the new Transmission Pricing Methodology (TPM) that is planned to be introduced on 1 April 2023 by the Electricity Authority. The current interconnection charge will be replaced with fixed charges in the form of benefit-based and residual charges in the new TPM. None of these charges contain volume-based price components.

#### **4.6 Transmission prices for Individually Assessed non-standard contracts**

Transpower's Connection Charges and Network Waitaki's Avoided Transmission Costs are recovered by means of a fixed price based on the capacity (kVA) requirements of each customer at the time of the investment and adjusted annually in accordance with the approved price adjustment.

Transpower's Interconnection Charges are recovered by means of a fixed price based on the average of the 100 highest half-hour demands (kW) recorded by each customer in the previous 12 months.

#### **4.7 Transmission prices relating to Loss and Constraint Rebates**

Loss and Constraint Rebates are credits rebated by Transpower, resulting from over-recovery of costs and are included in transmission prices.



## 5 LOSSES

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### 5.1 General

Losses represent the percentage of electricity entering the network that is either consumed or lost in the delivery process between the Grid Exit Points and the customer installation metering points, and can be categorised as either technical losses or non-technical losses.

Technical losses comprise:

- standing losses arising from zone and distribution transformers; and
- variable losses arising from resistive losses in conductors. Resistive losses are proportional to the square of the current passing through the conductor.

Non-technical losses comprise:

- losses arising from metering faults or errors; and
- losses arising from electricity theft etc.

The energy measured at customers' installations is therefore after losses and must be multiplied by the overall "loss factor" to determine each energy retailer's purchase quantities at each GXP.

### 5.2 Low Voltage and High Voltage connection

Most customers take supply and are metered at low voltage (400/230V) and the loss factor applied to these sites must account for distribution transformer and low voltage reticulation losses. A small group of customers take supply and are metered at 11,000V and the loss factor applied to these customers does not include distribution transformer and LV reticulation losses.

### 5.3 Loss factor allocation

The average loss factor for the network is calculated from data supplied by the National Reconciliation Manager. This information is compared with the GXP data to determine the long run overall loss factor.

## 6 DISTRIBUTED GENERATION

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Network Waitaki is always keen to work with customers and to advise them of distribution alternatives such as Distributed Generation (DG) from wind or solar. Any customer interested in DG is encouraged to get in touch to discuss the opportunity further.

Network Waitaki has 128 solar roof top generation plants, 3 hydro plant and 1 wind generator connected to and injecting into the network. This total of 132 connections equates to approximately 1.0% of all connections to the network. Generation from these DG connections make up about 0.25% of total energy consumption on the network.

Network Waitaki offers connection to DG by the standard terms defined by the Electricity Authority. The standard terms are easy to understand and are consistent with most distributors across the country. These terms can be found on the “Green Energy” page on Network Waitaki’s website: [www.networkwaitaki.co.nz](http://www.networkwaitaki.co.nz).

DG customers are not charged for injecting into the grid at this time. In future, there may be a need to charge for this, but it will be set at a level that does not discourage DG and relevant stakeholders will be consulted at the time.

For sufficiently large distributed generation customers located in an area of strategic importance where a contribution to peak demand reduction could be deemed useful, Network Waitaki has up to now considered making payments to a DG customer for the amount it reduces Network Waitaki’s Regional Co-Incident Peak Demand (RCPD).

However, any connections and payments must be done in accordance with Part 6 of the Electricity Industry Participation Code 2010 administered by the Electricity Authority which stipulates that only approved DG connections will be eligible to receive Avoided Cost of Transmission (ACOT) payments.

## 7 GLOSSARY

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ADMD	After Diversity Maximum Demand
AMP	Asset Management Plan
EA	Electricity Authority
EDB	Electricity Distribution Business
GXP	Grid Exit Point
ICP	Interconnected Control Point
IND	Individually Assessed non-standard contracts
kVA	kilo Volt Ampere
kW	kilo Watt
kWh	kilo Watt hour
LV	Low Voltage
ODV	Optimised Deprival Value
ORC	Optimised Replacement Cost
RCPD	Regional Coincident Peak Demand
RL	Residential Low User
LFC Regulations	Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004
RLC	Residential Low User Controlled
RLU	Residential Low User Uncontrolled
WPT	Waitaki Power Trust

## 8 APPENDIX 1 – DELIVERY PRICE SCHEDULE

### DELIVERY PRICE SCHEDULE FOR NETWORK WAITAKI

EFFECTIVE FROM 1 APRIL 2021

The prices in this schedule are used to charge electricity retailers for the delivery of electricity in the Waitaki region serviced by Network Waitaki. Electricity retailers determine how to allocate this cost together with energy, metering and other retail costs when setting the retail prices that appear in an end consumer's power account.

Code	Description	Units	Effective 1 April 2020			Effective 1 April 2021			Number of Consumers
			Distribution	Pass-through	Delivery Price	Distribution	Pass-through	Delivery Price	
<b>RESIDENTIAL LOW FIXED CHARGE / Price category code: RL (0 - 15 kVA)</b>									
RLU	Daily Price - Uncontrolled	\$/connection/day	0.0952	0.0548	<b>0.1500</b>	0.0952	0.0548	<b>0.1500</b>	807
RLC	Daily Price - Controlled	\$/connection/day	0.0952	0.0548	<b>0.1500</b>	0.0952	0.0548	<b>0.1500</b>	4,386
RLUD	Day Volume - Uncontrolled	\$/kWh	0.09024	0.03795	<b>0.12819</b>	0.09333	0.03907	<b>0.13240</b>	
RLCD	Day Volume - Controlled	\$/kWh	0.09024	0.02494	<b>0.11518</b>	0.09333	0.02568	<b>0.11901</b>	
RLUN	Night Volume - Uncontrolled	\$/kWh	0.00911	0.01363	<b>0.02274</b>	0.00942	0.01403	<b>0.02345</b>	
RLCN	Night Volume - Controlled	\$/kWh	0.00911	0.00257	<b>0.01168</b>	0.00942	0.00265	<b>0.01207</b>	
<b>GENERAL CONNECTIONS / Price category code: GC</b>									
15U	0 - 15kVA - Uncontrolled	\$/connection/day	0.8964	0.3112	<b>1.2076</b>	1.1743	0.3263	<b>1.5006</b>	1,688
15C	0 - 15kVA - Controlled	\$/connection/day	0.6897	0.1125	<b>0.8022</b>	1.0132	0.1515	<b>1.1647</b>	4,106
30U	16 - 30kVA - Uncontrolled	\$/connection/day	1.0313	0.5838	<b>1.6151</b>	1.5932	0.6243	<b>2.2175</b>	464
30C	16 - 30kVA - Controlled	\$/connection/day	0.8842	0.3681	<b>1.2523</b>	1.3660	0.4498	<b>1.8158</b>	200
50U	31 - 50kVA - Uncontrolled	\$/connection/day	1.7453	0.6643	<b>2.4096</b>	2.6840	0.8117	<b>3.4957</b>	622
50C	31 - 50kVA - Controlled	\$/connection/day	1.5982	0.4436	<b>2.0418</b>	2.4770	0.5420	<b>3.0190</b>	154
100	51 - 100kVA	\$/connection/day	3.3292	0.8529	<b>4.1821</b>	5.0266	1.0743	<b>6.1009</b>	360
200	101 - 200kVA	\$/connection/day	6.3843	1.4296	<b>7.8139</b>	10.0224	2.1346	<b>12.1570</b>	126
300	201 - 300kVA	\$/connection/day	9.0470	1.8178	<b>10.8648</b>	15.0167	3.2520	<b>18.2687</b>	55
500	301 - 500kVA	\$/connection/day	22.6130	2.6829	<b>25.2959</b>	27.0678	6.1756	<b>33.2434</b>	25
750	501 - 750kVA	\$/connection/day	28.3635	3.8918	<b>32.2553</b>	41.7388	9.2116	<b>50.9504</b>	12
WATAD	Day volume	\$/kWh	0.05737	0.02239	<b>0.07976</b>	0.04762	0.02118	<b>0.06880</b>	
WATAN	Night volume	\$/kWh	0.00638	0.00243	<b>0.00881</b>	0.00530	0.00230	<b>0.00760</b>	
<b>LARGE COMMERCIAL / Price category code: LC (750 kVA +)</b>									
LC	Daily fixed price	\$/connection/day	2.8246	0.0000	<b>2.8246</b>	1.8417	0.0000	<b>1.8417</b>	0
LCCAP	Daily capacity price	\$/kVA/day	0.1256	0.0705	<b>0.1961</b>	0.0755	0.0641	<b>0.1396</b>	
LCDEM	Daily demand price	\$/kW/day	0.1465	0.2287	<b>0.3752</b>	0.1242	0.2219	<b>0.3461</b>	
<b>INDIVIDUALLY ASSESSED / Price category code: IND</b>									
IND									31

Note: All prices are exclusive of GST.

#### NOTES:

All Charges are GST exclusive. GST is payable in addition to the charges.

The price movement amounts to an average overall 4.5% increase mainly as a result of increased operational and capital expenditure. This increase is necessary to allow Network Waitaki to operate efficiently and target a secure and reliable supply of electricity through appropriate levels of investment. Consumers will be impacted differently based on their usage patterns as the adjustment has been applied as an increase to the fixed (\$/connection) component and volume (\$/kWh) component of Low Fixed Charge price plans and a reduction to the volume component (\$/kWh) of standard price plans. More information on how prices are determined is published in our pricing methodology which is available on the Network Waitaki website ([www.networkwaitaki.co.nz](http://www.networkwaitaki.co.nz)).

Eligibility for the "Residential Low Fixed Charge" price category requires that the premises must be the consumer's principal place of residence as defined in the Electricity Industry Act 2010.

Volume (kWh) prices are based on volumes metered at the Grid Exit Points supplying the network. All metered loads should be grossed up using the appropriate loss factor to arrive at the chargeable GXP volume. Different rates are applied for "day volume" (07:00 a.m. until 11:00 p.m.) and for "night volume" (11:00 p.m. until 07:00 a.m. the next morning).

Large Commercial (LC) load group with connections higher than 750kVA: Daily capacity prices are based on contracted capacity and daily demand prices are applied to an assessed demand level.

Distribution and Pass-through prices are charged in respect of each site and electricity retailers are invoiced monthly in arrears. Fixed prices accrue on a daily basis at the rate of 1/365th of the annual amount due, or 1/366th during a financial year that includes a leap day.

Pass-through prices consist of transmission prices, rates and regulatory levies.

Network Waitaki pays an annual discount to consumers. Discounts will be payable based on the number of days the installation has been connected within a specific load group. The discount methodology is available on the Network Waitaki website.

## 9 APPENDIX 2 – COMPLIANCE TO EA PRINCIPLES

This section demonstrates the extent to which Network Waitaki’s pricing methodology is consistent with the Electricity Authority’s pricing principles<sup>4</sup>.

Pricing Principles	Network Waitaki alignment to EA principles
<b>(a) Prices are to signal the economic costs of service provision, by:</b>	
(i) being subsidy free (equal to or greater than avoidable costs, and less than or equal to standalone costs);	<p>Customers are allocated to load groups in line with their capacity requirements.</p> <p>The current pricing structure and specifically the volume/capacity price balance has resulted in an inefficient allocation of cost and recovery of revenue from load groups which does not appropriately signal the economic cost of service provision and network use.</p> <p>Customers that use the network efficiently with high load factors are generally subsidising those customers using very little electricity for the capacity they are connected to. This is mainly due to the dominant volume component in the current network price. As per the pricing strategy we will transition towards a mostly capacity-based charging regime over the next few years, with substantially less revenue generated by volume prices.</p> <p>Achieving a subsidy free pricing situation is compromised given LFC regulation which effectively requires the low use residential customer group to be subsidised by others. Removing the effective subsidy for LFC and other residential customers can be achieved through a grandfathering approach and also providing customers with more choice like increased granularity of capacity price plan options.</p>
(ii) reflecting the impacts of network use on economic costs;	<p>In moving away from the current volume dominated pricing regime and correcting the imbalance between capacity-based fixed and volume pricing, customers are presented with a ‘price signal’ that more accurately conveys the cost of electricity transportation.</p> <p>A fixed price based on contracted capacity allows the customer to contract for a properly sized connection, and similarly allows Network Waitaki to provide suitable</p>

<sup>4</sup> Electricity Authority (4 June 2019). More efficient distribution network pricing – principles and practice.

Pricing Principles	Network Waitaki alignment to EA principles
	<p>assets to honour the contract. Capacity-based prices signal the impact of network use on economic cost.</p> <p>Our current controlled load price plans encourage customers to make load available for control and to move load to night-time where possible. This benefits the network as it provides an ability to move load whenever the need arise to ensure supply stability and reliability, and to manage maximum demand.</p>
(iii) reflecting differences in network service provided to (or by) customers; and	<p>Price reflect differences in network services. Network Waitaki offers discounted prices for customer load groups (up to 50kVA price plans) who opt for controlled prices. Both distribution and transmission fixed prices are lower for controlled prices compared to the equivalent uncontrolled prices to signal the benefits of load control. In the case of transmission it signals the clear and direct impact that load control has on reducing transmission prices.</p> <p>Load control systems are effective in reducing demand at peak times by deferring non-critical electricity usage. The benefits of controlled load include greater predictability of the magnitude of peak demands and potential to defer transmission and distribution capacity upgrades.</p>
(iv) encouraging efficient network alternatives	<p>Our current price structure with a high volume-based component does not encourage efficient network alternative investment. It provides customers with an incentive to invest in alternative sources without being aware of the full cost of the network service.</p> <p>In moving to a cost-reflective pricing structure, that reflects the underlying cost structure through a mainly capacity-based fixed price component, customers will be encouraged to consider efficient network alternatives where it makes economic sense.</p> <p>For example, the current high impact of volume prices could encourage customers to invest in solar panels and battery banks before the prices of such equipment is optimally competitive with actual savings for the suppliers of grid electricity.</p> <p>Capacity pricing for delivery would assist with the decision making process through price signals that indicate the true economic cost of the remaining grid connection.</p>

Pricing Principles	Network Waitaki alignment to EA principles
	<p>Electricity distribution is a small component of the electricity bill of a customer and diluting signals with other components (e.g. Time of Use) will result in customers not being incentivised to optimise their contractual capacity size and so limit the cost of connection. For example, customers connected to capacity sizes in excess of their demand requirements as well as investment in distributed generation.</p>
<p><b>(b) Where prices that signal economic costs would under-recover target revenues, the shortfall should be made up by prices that least distort network use.</b></p>	
<p>Current price structures only partly signal economic cost through the capacity-based fixed price component. The high volume-based component applicable to standard customers does not provide an efficient signal and subjects Network Waitaki to revenue risk and potential under-recovery of target revenue, mainly due to weather volatility.</p> <p>Network Waitaki has not experienced any shortfalls on target revenue but any potential shortfall will be recovered through price increases to the capacity component that least distort network use. Mitigating this risk of the inefficiency of current price structures form the basis for moving to a mostly capacity-based pricing structure by FY25, which will reflect the impact of network use on economic cost and will be least distortionary as those customers requiring larger capacities with less elasticity will be allocated higher cost.</p> <p>Marginal pricing signals on the short term is not part of our long-term pricing approach, as the main impact on our business is providing for long-term capacity to ensure we supply customers' peak demand when required. This will be achieved through a mostly single pricing signal, aligned with the major cost driver of the business, to influence customer behaviour. Marginal pricing signals will in most cases not have an impact as distribution prices make up about 30% of the total electricity bill and the impact of marginal pricing signals on customer behaviour is negligible.</p> <p>Capacity-based pricing will enhance the ability to obtain customer reaction and to reduce network cost, while reducing the customer's price.</p> <p>Pricing for IND customers, are already mostly fixed (and thus least distortionary), although a small part is variable due to slight changes in demand required. Prices are calculated as an annually recalculated fixed price based 50% on contracted capacity and 50% on the contribution the customer's installation makes to system demand.</p> <p>In time, through reflecting the business cost structure and timeframes in pricing and by not being subject to uncontrollable variables, such as rainfall, under-recovery of target revenues should not be a major issue.</p>	
<p><b>(c) Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to:</b></p>	

Pricing Principles	Network Waitaki alignment to EA principles
(i) reflect the economic value of services; and	<p>Network Waitaki does have IND customers, that were considered and negotiated on a case-by-case basis according to the specific needs of the customer. Pricing was tailored to reflect the cost to supply the unique needs of the customer. However, no fixed discount policy is applied and care is taken to ensure prices are above avoidable cost and below stand-alone cost.</p> <p>Network Waitaki has 21 customers on IND price plans. This is high compared to most networks. For historic reasons, some customers are on these contracts when other very similar customers are on standard contracts. Network Waitaki will be reviewing IND contracts as part of its overall price structure realignment process.</p> <p>For Standard Contract customers Network Waitaki's current pricing structure (with a high-volume component) is inefficient. Our pricing strategy as described in section 2 explains the process of achieving a pricing structure that will result in prices faced by customers reflecting the true economic cost of their service provision.</p> <p>Each load group utilises some or all Network Waitaki's network assets to a greater or lesser degree, and the cost recovery from each load group is based on its utilisation of these assets. Allocation of the assets utilised by each group is based on the load density, using the capacity (kVA) requirements of each load group as the indicator of load density.</p> <p>The future pricing structure with a dominant capacity-component will provide customers with options and an appropriate signal to ensure they are on appropriate connection sizes for the electricity usage they have.</p>
(ii) enable price/quality trade-offs	<p>Network Waitaki is 100% owned by the Waitaki Power Trust (WPT). Trustees of the WPT represent the interests of customers and engage with Network Waitaki to ensure the company makes appropriate price/quality trade-offs.</p> <p>In addition, for IND customers, through a process of one-to-one consultation, Network Waitaki has in the past negotiated a service tailored to the requirements of the individual customer, making a price-quality trade-off appropriate for that customer. As part of its price structure realignment Network Waitaki will converge IND customers with standard load group categories as far as</p>



Pricing Principles	Network Waitaki alignment to EA principles
	<p>possible to ensure equitable treatment of similar customers.</p> <p>IND assessed price plans with quality aspects will continue to be available in future but only for those customers that do not fit into any of the standard load groups, and have special and unique requirements.</p>
<p><b>(d) Development of prices should be transparent and have regard to transaction costs, customer impacts, and uptake incentives.</b></p>	
<p>The pricing methodology of Network Waitaki is transparent, with a focus on limiting negative impact on customers and incentivising efficient usage through development of cost reflective pricing. Price structure realignment has occurred at a very slow pace over the past few years with no change to current price structures itself, i.e. capacity-based fixed prices and day/night volume-based prices are still in place. Only the magnitude of the components has changed over time and will continue as described in section 2. The intent is to keep prices structures simplistic and understandable while offering choices to customers to encourage the most efficient use of the network.</p> <p>Price structure rebalancing has been such that customers have not experienced major impacts and for those that have faced increases above a certain threshold Network Waitaki has engaged with and invited customers to discuss their options with a view of limiting transaction cost. Furthermore, through its ownership by WPT, and the regular engagement with Trustees of the WPT (who represent the interests of customers), Network Waitaki ensures that network prices are transparent to WPT and have full regard to the impact network prices have on customers. Any rebalancing of current and future price design is and will be accompanied by careful analysis of bill impacts on all customers.</p> <p>Network Waitaki's prices do not favour one retailer over another. The pricing methodology and applicable prices are identical across all retailers, with no discrimination in regard to available price plan options, applicable prices, calculation methodology, or discounts.</p> <p>As Network Waitaki is not considering structural changes to its current price structures assignment policies such as opt-in, opt-out and event-based will not be that relevant but will be considered throughout the price structure realignment process. Currently, the view is to transition to more cost-reflective prices through Network Waitaki's current price structures by following a phased approach to FY25.</p>	

## 10 APPENDIX 3 – INFORMATION DISCLOSURE COMPLIANCE CHECKLIST

The table below contains a check list that summarises compliance to all the pricing and related information requirements as per section 2.4. of the Information Disclosure Guidelines.

Clause in Determination	Reference in Pricing Methodology
<p><b>2.4.1 Every EDB must publicly disclose, before the start of each disclosure year, a pricing methodology which-</b></p>	
<p>(1) Describes the methodology, in accordance with clause 2.4.3 below, used to calculate the prices payable or to be payable;</p>	
<p>(2) Describes any changes in prices and target revenues;</p>	<p>Appendix 1 for changes to prices. Paragraph 3.3 for changes to target revenues.</p>
<p>(3) Explains, in accordance with clause 2.4.5 below, the approach taken with respect to pricing in non-standard contracts and distributed generation (if any);</p>	<p>Paragraphs 4.3 and 4.6 Paragraph 6 for a discussion on Distributed Generation.</p>
<p>(4) Explains whether, and if so how, the EDB has sought the views of customers, 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 customers, the reasons for not doing so must be disclosed.</p>	<p>Paragraph 2.6 for an explanation of Network Waitaki’s customer Engagement.</p>
<p><b>2.4.2 Any change in the pricing methodology or adoption of a different pricing methodology, must be publicly disclosed at least 20 working days before prices determined in accordance with the change or the different pricing methodology take effect.</b></p>	<p>Paragraph 2.7. There have been no material changes to the pricing methodology since publication of the last methodology in 2020.</p>
<p><b>2.4.3 Every disclosure under clause 2.4.1 above must-</b></p>	
<p>(1) Include sufficient information and commentary to enable interested persons to understand how prices were set for each customer group, including the assumptions and statistics used to determine prices for each customer group;</p>	<p>Paragraph 4 explain how prices were set for each customer group, for both standard and non-standard contracts.</p>

Clause in Determination	Reference in Pricing Methodology
	Paragraphs 3.3 and 3.4 provide more detail on allocation of revenue requirement.
(2) 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;	Appendix 2 details the consistency of Network Waitaki's pricing methodology with the Electricity Authority Pricing Principles and Information Disclosure Guidelines.
(3) State the target revenue expected to be collected for the disclosure year to which the pricing methodology applies;	Paragraph 3.3 shows the target revenue to be collected in the disclosure year 2021-2022.
(4) 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;	Paragraph 3.3 shows the target revenue to be collected in the disclosure year 2021-2022.
(5) State the customer groups for whom prices have been set, and describe (a) the rationale for grouping customers in this way; (b) the method and the criteria used by the EDB to allocate customers to each of the customer groups;	Paragraph 4 details customer groups and the rationale for grouping customers this way and the method and criteria that Network Waitaki has used to allocate customers to each group.
(6) 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;	Note 2 in Appendix 1 provides the details.
(7) Where applicable, describe the method used by the EDB to allocate the target revenue among customer groups, including the numerical values of the target revenue allocated to each customer group, and the rationale for allocating it in this way;	Paragraph 3.3, 3.4 and 3.5.
(8) State the proportion of target revenue (if applicable) that is collected through each price component as publicly disclosed under clause 2.4.18.	Network Waitaki's revenue is targeted across customer groups as

Clause in Determination	Reference in Pricing Methodology							
	stipulated in paragraph 3.5.							
2.4.4 Every disclosure under clause 2.4.1 above must, if the EDB has a pricing strategy-	Paragraph 2 outlines Network Waitaki's thinking on price reform.							
(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;	Briefly outlined as per above.							
(2) Explain how and why prices for each customer group are expected to change as a result of the pricing strategy;	Briefly outlined as per above							
(3) If the pricing strategy has changed from the preceding disclosure year, identify the changes and explain the reasons for the changes.	Not applicable.							
<b>2.4.5 Every disclosure under clause 2.4.1 above must-</b>								
(1) 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 customers subject to non-standard contracts;	<p>There are 21 customers on non-standard contracts. The value of target revenue from non-standard contracts is depicted in</p> <table border="1" data-bbox="1082 1391 1477 1794"> <thead> <tr> <th data-bbox="1082 1391 1477 1458" style="text-align: right;"><b>Allocati</b></th> </tr> </thead> <tbody> <tr> <td data-bbox="1082 1458 1477 1525"> </td> </tr> <tr> <td data-bbox="1082 1525 1477 1581"><b>Small customers:</b> RLU, R</td> </tr> <tr> <td data-bbox="1082 1581 1477 1637"><b>Medium customers:</b> 30U,</td> </tr> <tr> <td data-bbox="1082 1637 1477 1693"><b>Large customers:</b> 100, 20</td> </tr> <tr> <td data-bbox="1082 1693 1477 1749"><b>IND:</b> Individually assessed</td> </tr> <tr> <td data-bbox="1082 1749 1477 1805"><b>Total Revenue Requireme</b></td> </tr> </tbody> </table> <p>Table 6, paragraphs 3.5, 4.3 and 4.6.</p>	<b>Allocati</b>		<b>Small customers:</b> RLU, R	<b>Medium customers:</b> 30U,	<b>Large customers:</b> 100, 20	<b>IND:</b> Individually assessed	<b>Total Revenue Requireme</b>
<b>Allocati</b>								
<b>Small customers:</b> RLU, R								
<b>Medium customers:</b> 30U,								
<b>Large customers:</b> 100, 20								
<b>IND:</b> Individually assessed								
<b>Total Revenue Requireme</b>								
(b) how the EDB determines whether to use a non-standard contract, including any criteria used;	Network Waitaki has several historic non-standard contracts.							

Clause in Determination	Reference in Pricing Methodology
	However, it will only consider non-standard contracts to new customers when there are particular and compelling reasons for doing so.
(c) any specific criteria or methodology used for determining prices for customers subject to non-standard contracts and the extent to which these criteria or that methodology are consistent with the pricing principles;	The methodology for determining prices for non-standard contracts is detailed in paragraphs 4.3 and 4.6.
(2) Describe the EDB's obligations and responsibilities (if any) to customers subject to non-standard contracts in the event that the supply of electricity lines services to the customer is interrupted. This description must explain-	This is not applicable as Network Waitaki does not treat interruptions to non-standard contract customers any differently to those on standard contracts.
(a) the extent of the differences in the relevant terms between standard contracts and non-standard contracts;	Not applicable as above.
(b) any implications of this approach for determining prices for customers subject to non-standard contracts;	Not applicable as above.
(3) Describe the EDB's approach to developing prices for electricity distribution services provided to customers that own distributed generation, including any payments made by the EDB to the owner of any distributed generation, and including the-	Paragraph 6.
(a) prices; and	Paragraph 6.
(b) value, structure and rationale for any payments to the owner of the distributed generation	Paragraph 6.