



DS1002

Centralines' Pricing Methodology Disclosure 2023

Pursuant to: Electricity Distribution Information Disclosure Determination 2012

For prices applying from 1 April 2023

Issue Version Number: 14.0

Data Classification: Public

Published Date: 03/05/2023

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DS1002 Centralines' Pricing Methodology Disclosure

Document purpose Pricing Methodology Disclosure for the 2023-24 pricing year, provided pursuant to the Electricity Distribution Information Disclosure Determination 2012.

Intended audience This disclosure document is supplied to the Commerce Commission (Commission) and made publicly available at www.centralines.co.nz.

Document contributors

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Board certification

Refer to *Appendix B – Certification for Year Beginning Disclosures*.

Key dates

Published Date 03/05/2023

Related references

Legislation

Centralines' pricing methodology and prices are guided by, and comply with, key legislation, regulations and guidelines governing the electricity industry, including:

- Commerce Act 1986
- Electricity Industry Act 2010
- Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004
- Electricity Distribution Information Disclosure Determination 2012 (consolidated April 2018)
- Electricity Distribution Services Input Methodologies Determination 2012 (consolidated December 2021)
- Electricity Industry Participation Code 2010

Related references
(cont)

- Electricity Authority: Distribution Pricing: Practice Note – August 2019
- Electricity Authority: Distribution Pricing: Practice Note, Second Edition v2.2, 2022
- Electricity Authority Pricing Scorecard reports

Policy

- CL-CM0002 Centralines' Pricing Policy and Schedules 2023 to 2024

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1. Definitions/Abbreviations

AMD	Anytime Maximum Demand – a measure of consumers' peak use of Centralines' network at any time in a given month. AMD is measured in kilowatts (kW). Centralines calculates AMD by multiplying by two the energy in kilowatt-hours (kWh) it delivers over the half hour period when the consumer's peak use of its network occurred in that month.
Authority	The Electricity Authority – the electricity regulator who ensures distributors apply and comply with key regulations governing the electricity industry.
Avoided transmission	The expenses incurred by Centralines as a direct result of payments to: <ul style="list-style-type: none">• generators for generation, or• any other activity, which substitutes for the use by Centralines of the national grid transmission system.
Code	The Electricity Industry Participation Code 2010 – sets out the rules made by the Electricity Authority under section 36 of the Electricity Industry Act 2010.
Commission	The Commerce Commission – sets the regulation for cost recovery and price setting known as the Default Price-Quality Path.
Consumer	Any person who is a party to an agreement with a retailer for the supply of electricity by means of Centralines' distribution network.
Consumer group	A category of consumers for which Centralines develops its pricing. These categories reflect groups of consumers with a common: <ul style="list-style-type: none">• site usage (e.g. place of residence versus place of business), and• capacity and metering.
Cost Allocation Model	The methodology used by Centralines to allocate costs to their consumer groups.
CPI	Consumer Price Index.
Customer	A direct customer of Centralines receiving line function services or a retailer whose customers use Centralines' (the distributor's) network.

Demand	The rate at which electricity is being used expressed in kilowatts (kW).
DG	Distributed generation – electricity generation that is connected and distributed within the Centralines' network.
DPP	Default Price-Quality Path – set by the Commerce Commission to control the level of revenue and prices that regulated distributors can set.
EDB	Electricity Distributor Business – a company that distributes electricity within New Zealand. Centralines is an EDB.
Generator	An organisation that owns or operates generating units that inject electricity into the network.
GXP	Grid Exit Point – a point of connection where Centralines' network connects to, and receives electricity from, the national transmission system run by Transpower.
ICP	Installation Control Point – a point of connection on the distributor's (Centralines) network, which: <ul style="list-style-type: none">• Centralines nominates as the point at which a retailer is deemed to supply electricity to a consumer, and• the connection point has the attributes set out in the Electricity Industry Participation Code 2010.
kVA	Kilovolt Amp – a unit of measure for how much power is being provided through a business or home's electrical circuits or technology. It is the apparent power expressed in thousand volt-amps.
kW	Kilowatt – Kw (1000 x watts) – a unit of measure of power or electricity.
kWh	Kilowatt hour – The amount of electricity consumed in an hour.
LFC Regulations	Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004.

Loss code	Distributors determine loss factors applying on their networks against which traders should submit consumption to the reconciliation manager. Each loss factor has a specified loss code that is stated on Centralines' public website under Loss Factors Methodology and Disclosure.
Network	The lines and associated equipment owned or operated by a distributor in a continuous geographic area or areas.
Non-TOU	Non-Time of Use – a consumer's site where electricity is metered over a period (e.g. month).
Power factor	The ratio of active power to apparent power (kW divided by kVA).
Price category	A category of charges identified as a price category in Centralines' Pricing Policy and Schedules (CL-CM0002). It defines the delivery charges applicable to a particular group of ICPs with a common capacity need or usage behaviour.
Price option	The price option within a price category that gives consumers a choice of how the energy they consume is collated and charged. The options available are usually determined by the configuration of metering and load control equipment used by the consumer.
Pricing period	1 April to 31 March year.
RAB	Regulatory Asset Base – the regulatory value of Centralines' network assets that Centralines is allowed by regulation to generate a return on.
Retailer	The company that supplies electricity to consumers with installations connected to the distributor's network.
TOU	Time of Use – a consumer's site where half-hour metering is installed. These values are used for the calculation of charges.
Transmission	The movement of electricity from its place of generation through the grid injection points to grid exit points.

Transmission charge Charge incurred by Centralines for transmission of electricity from the national grid operated by Transpower to Centralines' network. This enables Centralines to deliver power to its network users.

In this document this term also has the meaning defined under 'Recoverable Costs' in Part 3 of the Electricity Distribution Services Input Methodologies Determination 2012 dated 20 May 2020. It excludes transmission rebates passed on to consumers and retailers.

WACC Weighted Average Cost of Capital – a measure of the return on shareholder capital that distributors can achieve under the Default Price-Quality Path regulations set by the Commerce Commission.

2. Introduction

2.1 Context

This document sets out Centralines' methodology for setting its price structure and prices for the 2023/24 pricing year. The disclosure document is prepared pursuant to requirement 2.4 of the Electricity Distribution Information Disclosure Determination 2012 (Disclosure Determination), consolidated December 2021.

Centralines' Pricing Methodology Disclosure provides information to assist interested parties to understand how Centralines' delivery prices are set. This includes the methods used to determine revenues, consumer groups, and allocation of costs of providing and maintaining the network.

In developing Centralines' prices, we have been mindful of the importance of transitioning in a timely way to more cost-reflective pricing approaches.

Residential pricing approaches have not been as effective in signaling network cost structures due to:

- legacy pricing approaches (especially under the constraint of the LFC Regulations), and
- limits on the measurement capabilities of residential consumers' meters (i.e. non-smart meters).

Centralines is actively engaged with its industry peers to develop new approaches and to seek residential pricing reform. With a transition process now in place to remove LFC Regulations, residential pricing can move towards a position that is more reflective of costs, whereby variable prices will be able to reduce to reflect marginal costs.

The transition is phased over a five-year period, and this will allow Centralines to plan with more certainty on the progress that can be made while minimising any rate shocks for consumers during the transition.

In developing this Pricing Methodology Disclosure, Centralines' has considered the Electricity Authority's guidelines and industry scorecards. Where the Authority has identified specific areas of improvement and highlighted best practice, we have sought to incorporate this feedback into this Disclosure Statement.

2.2 Centralines

Centralines serves the Central Hawke's Bay region with the majority of consumers in the main towns of Waipukurau and Waipawa. An extensive rural region is served in the surrounding areas as shown in Figure 1.

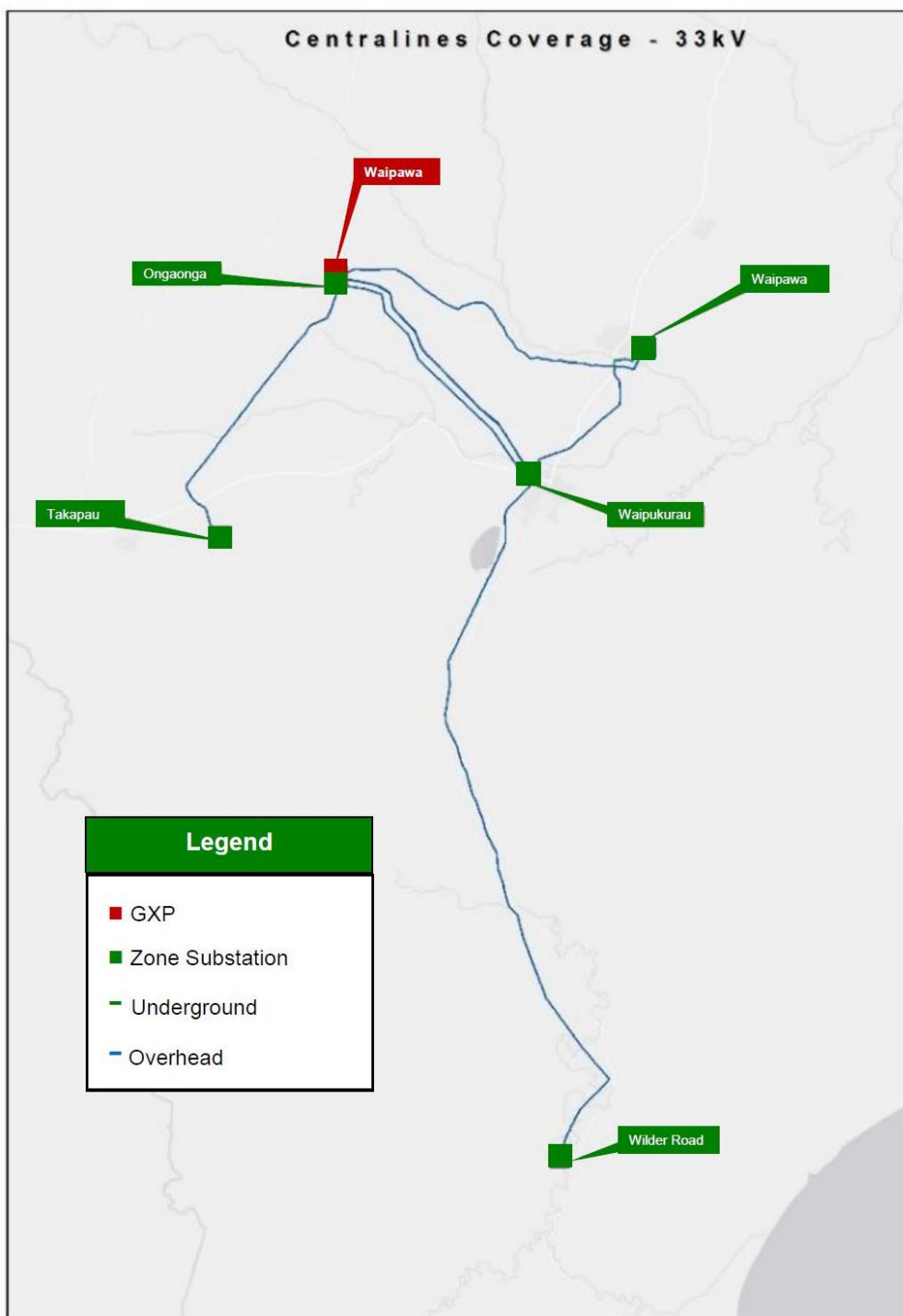


Figure 1 – Centralines' GXPs and Substations

**2.2
Centralines
(cont)**

Centralines' network is relatively lightly loaded, with much of the load being relatively small and spread over a large geographic area. This is reflected in the low connection point density at 4.9 ICPs per km, the third least dense network in New Zealand. The major load types are:

- three large commercial consumers in excess of 435kVA connection size
 - 200 Commercial connections
 - 1,750 small commercial connections situated in the business districts of the small towns and throughout the rural area, and
 - 6,700 residential consumers in urban and rural locations.
-

**2.3 Future
development**

Centralines has observed a recent lift in residential building activity in its major towns. However, it is not at levels that require upgrades in capacity of the network to meet new demands.

The other area of growth that has occurred in recent years has been related to irrigation connections. There are more than 70 connections where irrigation is the prime or sole type of use. The advantage of this type of load, however, is that it occurs at a time that does not typically coincide with residential peak loads.

There are a number of large customers who are planning to increase their demand in the next five years. Once the customer confirms their needs, Centralines will consider the appropriate network solutions and the appropriate allocations of costs.

The dominant large connection on the network is the Silver Fern Farms meat processing factory based close to Takapau. This connection uses over 20% of the total consumption and approximately 10% of the maximum demand in the network.

**2.4 Pricing
review**

Centralines reviews its pricing annually to meet company, industry, legislative and regulatory requirements.

**2.5 Pricing
Policy and
Schedules**

The methodology does not contain full details of eligibility for price categories, price options or capital contributions. These details can be found in Centralines' Pricing Policy and Schedules (CL-CM0002) available on Centralines' website (www.centralines.co.nz).

3. Regulatory Context

3.1 Introduction

The Commission regulates many distribution businesses because they are natural monopolies. Part of this process involves the Commission:

- setting a limit on the amount of revenue collected from consumers, while maintaining quality of supply, and
- requiring the disclosure of certain information about its business, including this Pricing Methodology Disclosure Statement.

During the 2021/22 pricing year, Centralines became an exempt EDB, which means that Centralines must now determine its own level of revenues. Centralines has elected to use the Commission's financial model as a template, with updated cost inputs, to determine a reasonable level of revenues to cover the costs of delivering its network services.

3.2 Information disclosure requirements

Centralines must comply with the Electricity Distribution Information Disclosure Determination 2012 (Disclosure Determination), which includes the requirement for the annual disclosure of its pricing methodology.

The key requirements in complying with the disclosure of pricing methodologies are outlined in clauses 2.4.1 – 2.4.5 of the Disclosure Determination.

The purpose of this regulation is to ensure that sufficient information is readily available to interested persons to assess whether the purpose of Part 4 of the Commerce Act is being met.

3.3 Distribution Pricing Principles

The Authority has a monitoring role in respect of distributors' price setting approaches. Centralines has developed its prices with reference to the Authority's 2019 Distribution Pricing Principles and the second edition of the Distribution Pricing Practice Note released in October 2022.

The Authority's recent reform of the Pricing Principles was to make changes that:

- promote cost reflectivity
 - focus on the essential elements of efficient pricing, and
 - continue to recognise that distributors should have regard to transaction costs, consumer impacts and uptake incentives.
-

3.3 Distribution Pricing Principles (cont)

While compliance with the Pricing Principles is voluntary, the Disclosure Determination requires each distributor to either:

- demonstrate consistency with the Pricing Principles, or
- provide reasons for any inconsistencies.

The Authority has also developed a scorecard approach to monitor and comment on distributors' pricing structures and pricing reform. The pricing scorecards evaluate distributors' pricing plans against the Authority's Pricing Principles.

The Authority's intention is for the scorecards to form a basis for regular, constructive engagement with distributors on their price reform aspirations, efforts and roadblocks. Centralines has considered the Authority's commentaries on distributors' previous pricing methodology disclosures. Centralines has sought to address the Authority's recommendations and observations on distributor best practices in redeveloping this disclosure.

Appendix A sets out how Centralines has addressed the Pricing Principles.

3.4 LFC Regulations

Centralines is required to make available low user prices in line with the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 (LFC Regulations).

The key requirements of this regulation are as follows:

- Centralines must offer a fixed daily charge to residential consumers of no more than \$0.45 per day excluding GST, and
- a consumer on the low fixed charge daily rate should pay the same or less than a residential consumer on a comparable non-low fixed charge price plan at an annual consumption of 8,000kWh.

These requirements have a significant impact on Centralines' prices and price structure as outlined in *Section 4*.

The Government has passed an amendment which has the effect of phasing out the LFC Regulations over a five-year period. The 2023-24 pricing year allows distributors to set the fixed daily charge for low users at 45c per day.

At this stage it is the expectation that this will occur through to the end of the transition period. As the revised daily charges are implemented, Centralines will assess the effect on residential consumers and will consider if any additional revisions to the overall residential pricing plans are needed. This includes standard price plans where fixed charges have not been constrained to artificially low levels.

3.5 Electricity Industry Act 2010

The Electricity Industry Act provides a framework for the regulation of the electricity industry, including:

- establishing the Authority, and
 - incorporating provisions from the now revoked Electricity Industry Reform Act.
-

3.6 Distributed generation

Centralines' policies and procedures for installation and connection of distributed generation are in accordance with the requirements of Part 6 of the Electricity Industry Participation Code 2010.

4. Strategic Intent

4.1 Introduction

This section describes the:

- context in which Centralines has set its prices, and
- strategic considerations that will impact on future changes in the structures of Centralines' prices.

New technologies, changes in regulatory requirements and changing consumer opportunities and preferences will have a significant impact on Centralines' pricing over the next several years, especially at the residential level.

4.2 Network characteristics

Centralines has a single grid exit point (GXP) connection to the National Grid at Waipawa. This is connected south via Dannevirke from Woodville, and north to Fernhill.

Transpower has load scenarios in place that suggest an increase in load from the current 23MW peak demand to 32MW by 2037.

There is recognition by Transpower that some upgrade work is required on the GXP including an outdoor to indoor conversion and the installation of an 'Overload Protection Scheme'. This upgrade work has current indicative costs of \$500,000 and a possible implementation within the planning period prior to 2030. While this would be a pass-through cost that would increase prices, the impact is not significant.

Transpower recognised that low voltage and transformer capacity issues will affect the Waipawa GXP. These are planned to be managed without additional investment.

4.2 Network characteristics
(cont)

Centralines continues to monitor load growth and maintains some pricing measures that can be used to incentivise movement of load where possible. The removal of the Irrigation category should assist in this by requiring the largest of the irrigation connections to be priced on demand instead of consumption methods.

The demand and peak demand pricing options will reflect the consequences of use during peak periods and allow consumers to make informed decisions on the timing of their activity.

As mentioned earlier, Centralines has been informed of customer plans to increase demand that may require transmission and distribution upgrades.

Residential load and irrigation load are somewhat complimentary, so very strong signals in one or other load type are unlikely to solve future constraints. Cost reflective pricing for Centralines is therefore to emphasise the use of fixed charges and other pricing approaches that have limited impact on consumption decisions.

Nevertheless, Centralines also recognises that there may be longer term benefits to encouraging low-value discretionary loads to be shifted to off-peak times. Centralines is considering the most effective pricing structure to encourage this (e.g. TOU pricing with modest differentials between peak and off-peak prices that are mandatory for all residential consumers).

4.3 Changes to 2023/24 pricing

Centralines have made no changes to the structure of distribution pricing for the 2023/24 year aside from:

- The increase in the daily fixed charge for LFC compliant price plans, CH1 and CH1T.
 - An increase in overall pricing to achieve target revenue levels with an emphasis on fixed prices where practical.
-

4.3 Changes to 2023/24 pricing (cont)

Revenue 2023/24 (\$000)	
Target Distribution Revenue	12,111
Pass-through Costs	2,218
Total Target Revenue	14,329
2023-24 Forecast Revenue	14,301
2022-23 Forecast Revenue	12,490
Change	14.5%

Table 1 – Revenue 2023/24

The price changes implemented for the 2023-24 year will be, on average, 9.6%. There is, however, an increase in forecast revenue of 14.5% compared to the actual revenue we expect to receive in the 2022-23 year. The current period has seen a reduction in forecast revenue mainly due to minimal irrigation use. For the coming year irrigation load is forecast at a typical level and this will result in an increase in annual revenue, as shown in the table above, compared to the 2022-23 forecast. Irrigation use is particularly challenging to forecast given it relies on weather patterns.

Note

The revenue forecast through pricing is the amount received after the posted consumer discount is applied. It is assumed that the full discount will be taken up by consumers, but acceptance of the discount is voluntary to consumers and may not be fully applied.

4.4 Strategic considerations

In the context of the capacity available on the network, Centralines' strategic intention is principally to ensure:

- that prices are set in a way that does not create undue signals for consumers to change their use of the network, and
- equity between consumers.

For example, Centralines does not need to set strong price signals for consumers to reduce their demand during peak periods. Centralines can rely on existing use of residential hot-water load control and commercial demand price signals to manage periods of high demand.

4.4 Strategic considerations
(cont)

Accordingly, Centralines intention is to investigate options for providing appropriate signals for consumers to shift discretionary loads to off-peak times where there is limited or no cost to consumers from doing so. This may involve realigning peak time periods, including an additional TOU pricing period or developing technology-specific price plans such as an EV residential plans.

Apart from this weak price signal the key role of Centralines' prices is to recover the fixed costs of providing the network service in a manner that is equitable across users.

Over the longer term, increasing penetration of EVs may place pressure on parts of the network, especially if consumers choose to recharge their vehicles at peak times.

Centralines expects that uptake of EVs in its region will follow the rest of New Zealand, so intends to monitor pricing approaches used by other EDBs to determine an optimal pricing approach to encourage off-peak pricing. Centralines have residential TOU plans available and have set the peak/off-peak pricing to provide a modest incentive for consumers to consider time-shifting discretionary loads to off peak periods.

Centralines intends to lift residential fixed charges in alignment with the LFC Regulations transition allowances, with commensurate reductions in variable charges to achieve better cost-reflectivity in residential plans.

This rebalancing of residential pricing is expected to continue beyond the eventual removal of the LFC Regulations in a progressive manner to ensure consumer impacts can be well-managed.

Centralines has not yet determined the optimal balance between fixed and variable prices for recovering revenue requirements but notes that decisions on this are not required yet given the five-year transition path for the LFC Regulations.

The Commercial pricing options are relatively cost reflective in their current form so little change of note would be expected in this area. The Commercial categories involve relatively low numbers of connections and there is limited anticipated growth.

The two areas of potential significance in the commercial sector are firstly in irrigation, and secondly the single large industrial connection. There has been growth in numbers of irrigation-focused connections in the last 10 years and while this growth has tapered off there remains potential for continued increases.

The Silver Fern Farms meat processing facility is a significant consumer and changes to the nature of this connection, either increases or decreases, would affect Centralines to a considerable degree.

5. Centralines' Pricing Methodology

5.1 Purpose In this section we explain the specific basis for setting Centralines' prices.

5.2 Guiding industry principles

As well as meeting the above considerations described in *Section 4*, Centralines endeavours to ensure its pricing methodology is consistent with the Authority's Pricing Principles and guidance provided by the Authority's Distribution Pricing: Practice Note 2019 for all electricity distributors. These principles are as follows:

- a) *Prices are to signal the economic costs of service provision, including by:*
 - (i) *being subsidy free (equal to or greater than avoidable costs, and less than or equal to standalone costs);*
 - (ii) *reflecting the impacts of network use on economic costs;*
 - (iii) *reflecting differences in network service provided to (or by) consumers.*
 - (iv) *encouraging efficient network alternatives.*
- 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.*
- c) *Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to:*
 - (i) *reflect the economic value of services; and*
 - (ii) *enable price/quality trade-offs.*
- d) *Development of prices should be transparent and have regard to transaction costs, consumer impacts, and uptake incentives*

Full details of how Centralines applies these principles to its pricing methodology can be found in *Appendix A*.

5.3 Core methodology

To achieve the objectives and principles listed above, Centralines uses the following core process to drive its pricing methodology and annual review of prices.

1. Establish a target distribution allowable revenue using the current DPP determination as a guideline but applying Centralines-specific costs including inflation and forecast growth.
2. Determine the value of pass-through costs to be recovered through prices.
3. Establish allocators for each component of Centralines' costs/revenue requirement to allocate to consumer groups where costs cannot be directly attributed.
4. Set or adjust prices to ensure forecast revenues from each consumer group equate to the allocated costs.

The Authority has provided in the practice notes an idealised 'cost-reflective price-setting methodology' whereby marginal prices are set first to reflect marginal costs. Once these prices and likely revenues from those prices have been established, the balance of the revenue requirement should be recovered in as non-distortionary manner as possible.

This sequence differs from Centralines' historical approach. Centralines believes this makes no practical difference to the end result because marginal costs are effectively close to zero on a distribution network that is not capacity constrained. Centralines' approach is to:

- use direct attribution and cost allocators to allocate costs and revenue requirements to each customer category, then
- determine cost-reflective pricing elements within each price category as far as possible, and finally
- make adjustments to ensure the overall revenue requirement is met.

Note

In addition, information is not available to accurately deploy the method suggested by the Authority, because price-elasticity information is not available to determine efficient mark-ups.

5.3 Core methodology (cont)

A considerable portion of network costs are essentially fixed. The assets that are currently available for use are long-life assets that are used by many individual connections of varying size and with a diversified pattern of use. The value of the existing asset base is distributed using a Cost Allocation Model.

This Model allocates each asset on the network based on a nominal demand value. This is a stable measure that is not a reflection of use but of anticipated use profiles. The network is built to manage expected future loads and therefore the allocation through the Cost Allocation Model reflects this.

Residential and non-residential connections of a similar connected size are allocated a similar level of demand with consumer group separation occurring later.

A truly cost reflective price option would be a fixed charge for all these connections at the same rate to recover fixed costs. The current limitations of the LFC Regulations, even with reform in progress, prevent this from occurring.

The change in Transmission Pricing Methodology that has been implemented from 1 April 2023 involves a reduction in overall transmission costs compared to the 2022-23 year. In addition, the method of allocation for the majority of transmission costs has changed from a winter-focused peak demand basis to an average annual consumption basis.

The final step in the core process is to set or adjust the range of prices and options available to consumers so that they:

- achieve the desired cost allocations/revenue requirement
- establish relativities that can assist in reflecting future costs, and
- will generate income as close as reasonably possible to Centralines' allowable revenues.

Note

Sections 7 and 8 cover the key price categories and how prices for each category are determined.

5.4 Consumer considerations

When applying the above process to the annual setting of prices Centralines takes account of several consumer considerations. These considerations are listed below.

- Prices are as transparent as possible to aid consumer understanding of how their prices are determined.
- Prices logically relate to each other:
 - progressions between load groups follow a consistent pattern
 - within a price category, prices consistently reflect the costs and benefits of the consumption at different times (e.g. lower rates for controlled load)
 - options are priced to reflect future benefits, i.e. night rates are at a level that would encourage additional load to be concentrated at these times, and
 - peak and off-peak prices reflect that while there is no broad congestion on Centralines' network, there is recognition that it is advantageous to move load into non-peak times.
- Avoiding price shocks to individual consumers or groups of consumers. Stability and consistency of prices is one of Centralines' objectives. In line with the industry norm, Centralines aims to limit price increases to a maximum of 10% per annum for individual consumers.

Note

Centralines has historically not differentiated pricing between rural and urban consumers. Centralines does not intend to, unless there is a clear understanding that Centralines' consumers would be broadly agreeable.

6. Cost/Revenue Recovery

6.1 Overview This section sets out the amount of revenue that Centralines are expected to recover through prices (total forecast revenue) in the 2023/24 financial year and breaks this down by key cost components.

Centralines is not subject to a revenue cap but applies a similar methodology to establishing overall revenue and prices. The target distribution revenue is established using a building block of required revenue and including costs that are passed through into pricing.

Centralines' total forecast revenue for the 2023/24 year is shown in Table 2, net of posted discounts.

Components of Revenue	\$000
Target Distribution Revenue	12,111
Transmission	2,090
FENZ Levy	13
Local Body Rates	56
Commerce Commission Levy	29
Electricity Authority Levy	25
Utilities Disputes Levy	5
Annual Consumer Discount	1,439
Total Target Revenue	15,768

Table 2 – Components of Target Revenue

6.2 Target distribution revenue

The Forecast Net Allowable Revenue' provided by the Commission before Centralines became exempt from the DPP Determination was calculated incorporating a number of factors involved in operating an electricity distribution business. The key components are:

- depreciation
- operating expenditure
- return on investment on the regulated asset base (RAB), and
- regulatory tax.

6.2 Target distribution revenue
(cont)

Each of these cost components is discussed in more detail below.

- **Depreciation** – Depreciation is calculated on a straight-line basis in accordance with ID Determination using a standard life for the asset¹. Depreciation costs for the year ending 31 March 2023 are forecast using historical depreciation on our regulatory asset base.
- **Operating Expenditure** – The two main costs components of operating expenditure are:
 - network OPEX including maintenance and inspections, and
 - non-network OPEX including the overhead costs of running the network.
- **Return on Investment** – Centralines' return on investment has been calculated using the regulated weighted average cost of capital (WACC) on a forecast value for network regulatory asset base (RAB) as at 31 March 2023. A vanilla WACC of 4.57% was used to determine the return on investment, from which revaluation gains (essentially capital gains) are deducted at the rate of 2.9% for 2022/23, based on RBNZ forecasts current at the time of setting prices.

Centralines' RAB value, which determines the asset value that Centralines can make returns on, was forecast to be \$69.4 million as at 31 March 2023.

Regulatory Tax – The assessed value of tax payable is determined in the Commerce Commission's DPP reset financial model, which is based on a deemed efficient capital structure.

Centralines' prices for the 2023/24 year are based on the previous 2022/23 target distribution revenue (established under the DPP components set out above), adjusted by the Centralines' specific-costs and growth set out below:

- future volume increases at 2% per annum
- raising future prices at the rate of inflation
- including forecast pass-through costs
- applying an inflation catch-up for the year ended 21 March 2022, and
- setting future discounts at 10% of prior year forecast gross line revenue.

¹ Standard lives for each asset group is determined by the Commerce Commission, *Handbook of Optimised Deprival Valuation of System Fixed Assets of Electricity Lines Businesses*, 30 August 2004.

6.3 Pass-through costs

In addition to the core costs of operating the network, Centralines also makes allowance for pass-through costs.

These are costs paid to third parties who provide essential services in the electricity value chain to allow Centralines' to operate a distribution network, over which Centralines has little or no control. These pass-through costs include:

- **Transmission**

The primary pass-through cost is for the operation of the national grid that moves electricity around the country, and to and from Centralines' network.

The methodology used to allocate transmission charges to connected parties, Transmission Pricing Methodology, has been changed and is taking effect from 1 April 2023. For Centralines, this has meant a reduction in total transmission charges compared to the previous year from \$2.69m to \$2.09m. The method of determining the allocation has changed and is focused mostly on total usage therefore there is some reallocation of costs between price categories. With Centralines this has been minimal therefore there has not been any price shocks as a result.

- **Fire and Emergency Levies**

These are levies charged as part of Centralines insurance cover for the network.

6.3 Pass-through costs
(cont)

- **Local Body Rates**
Centralines operates within a number of local body jurisdictions and where rates are charged on the site of network equipment required to deliver distribution services, these are recovered through prices.
- **Commerce Commission Levy/Electricity Authority Levy/Utilities Disputes Levy**
These government agencies charge levies to each industry bodies, including distributors, to cover costs of operating.

The table below shows the expected costs Centralines is seeking to recover in the 2023/24 year.

Pass-through Costs	\$
Transmission	2,090,197
FENZ Levy	12,522
Local Body Rates	56,363
Commerce Commission Levy	29,000
Electricity Authority Levy	25,000
Utilities Disputes Levy	5,000
Total Pass-through Costs	2,218,082

Table 4 – Pass-through Costs

7. Consumer Groups and Cost Allocation

7.1 Rationale for consumer grouping

Centralines groups consumers firstly by the size of their connection to the network. As connection size increases the demands placed on the network and the level of build required to support the connection increases.

Residential connections generally have different load profiles from other small connections where a residence is not the dominant form of use. Residences have similarities with each other that allow more specific price options to be applied, such as recognition of controlled hot water load, in order to deliver a more tailored solution for these consumers. Accordingly, they are separated into their own group.

Centralines' consumer groupings are illustrated in the following diagram:

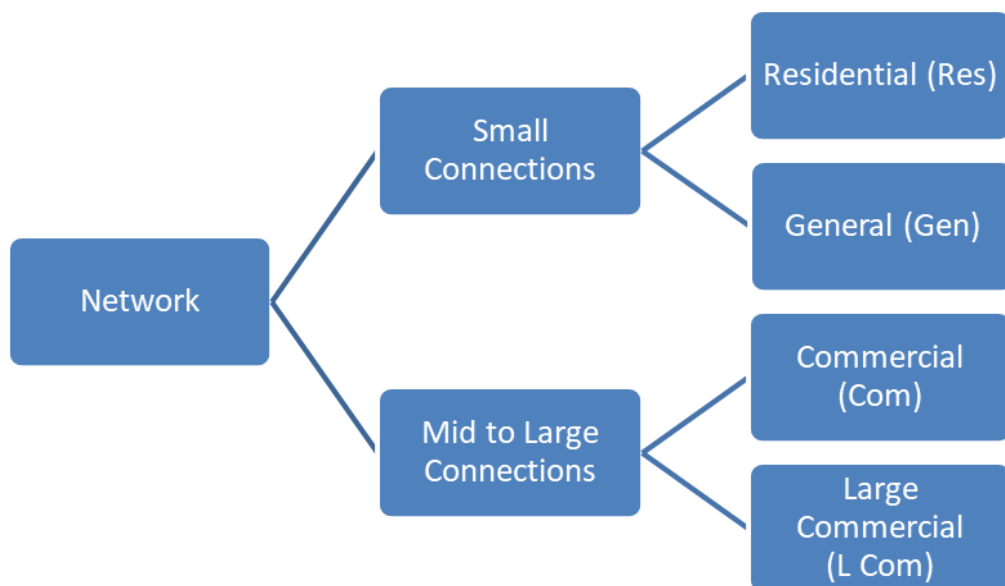


Figure 2 – Consumer Groupings

7.2 Method and criteria of allocating consumers

Consumers are assigned to a load group based on:

- fuse size at the installation control point (ICP)
- type of use, and
- meter type, e.g. half-hour metering is mandatory for consumers within the TOU load group.

7.2 Method and criteria of allocating consumers
(cont)

Although Centralines has price categories for a number of different consumer groups as identified in *point 7.1*, cost allocations are made to two broad consumer groups: residential and commercial.

Because of the small scale of the network, Centralines has found that to allocate at any higher degree of disaggregation would cause discontinuities in price structures, so it is only practical to allocate to the two groups.

Cost allocators are chosen to reflect as reasonably as possible the key underlying drivers for each cost component so that the allocation can be reflective.

Table 6 shows the cost components and the allocators used along with the reason chosen for the allocator.

Cost Component	Allocator	Reason for Allocator
Operating Expenditure	Installed Asset Value	All connections are subject to these costs. The more assets that are required to deliver the required energy, the greater the allocation of costs.
Depreciation		
Return on Investment		
Fire and Emergency Levies		
Commerce Commission Levies	Installed Asset Value	These levies are assessed on network asset value.
Transpower Connection	Measured/ Assessed Capacity	Connection charges are based on the assets required to supply energy through the GXP.
Transpower Benefit-based	Annual usage (kWh)	Both charges are most closely allocated by total annual energy usage. As Benefit-based charges increase over time the Residual charge will decrease therefore providing stability between the two charges.
Transpower Residual Charges		
Local Body Rates	Number of Connections	All connections are subject to these costs, which are location based.
Electricity Authority Levy	kWh Consumption	The dominant method of basis for the levy.
Utilities Disputes Levy	Number of Connections	Levies are based on the number of connections.

Table 6 – Cost Components

7.3 Cost allocation

The value of each allocator for each consumer group is shown in Table 7.

Allocator	Residential	Commercial
Connections	6,750	2,120
Consumption (000 kWh)	48,558	68,040
Asset Value (\$000)	75,080	57,030
Capacity (kVA)	28,830	35,560

Table 7 – Relative Value of Allocators for Consumer Groups

7.4 Basis for selection of allocators

Centralines approach to the allocation of costs has been to ensure allocators are:

- reasonable
- fair, and
- simple to measure and apply.

Where a cost is directly driven by a variable, costs are allocated in proportion to that variable. For example, transmission connection costs are directly driven by the maximum demand required by the network and therefore the capacity of each connection is a good proxy for this. In addition, this measure is stable and not variable to any great extent from year to year, like the connection charge.

Asset driven allocators make up the biggest share of total costs allocated to each region and consumer group. Centralines uses a combination of assets utilised by ICPs and an assessed demand to proportionately allocate a representative share of assets.

Centralines:

- traces all assets utilised in the connection of the network to each ICP
- allocates the replacement value of these assets using the assessed demand, and then
- aggregates firstly to each connection, and then to a consumer group level.

Note

This approach takes account of the distance of consumers from the GXP and therefore the length, number and value of assets needed to connect them to the network.

7.4 Basis for selection of allocators (cont)

The network is built to service the types of connection prevalent in that part of the network. In a residential area the assets employed to build the network to meet criteria, allowing for diversity, is not dependent on the consumption of individual connections.

Likewise, as commercial connections require larger capacity, they are allocated a larger portion of the existing assets than smaller-sized connections. While the demand and consumption at a particular site will vary from year-to-year, the assets employed do not, therefore, an assessed level of demand produces a more stable asset allocation.

While pricing, particularly of smaller connections, is generally based on consumption this is not a good proxy for allocating assets. Distribution assets are installed to meet demand requirements, not volumes consumed.

7.5 Forecast revenue allocation

Total annual target revenue is allocated to consumer groups to provide a target revenue for each consumer group. Forecast volumes for each price are then used to set rates to achieve as close to target revenue as is practical.

A comparison of target revenues and forecast revenues (before discount) is set out in Table 8. These revenue figures are stated before the forecast annual consumer discount is accounted for.

Consumer Group	Target Revenues (\$000)	Forecast Revenues (\$000)
Residential	8,664	8,967
Commercial	7,100	6,770
Total	15,764	15,737

Table 8 – Comparison of Target Revenues and Forecast Revenues

This table indicates that both Residential and Commercial revenues are forecast to be close to the target revenue established. Residential volumes, and therefore revenues, are more predictable than Commercial volumes, especially those that deal with highly volatile loads such as irrigation. The last two seasons have seen wetter summers than is typical therefore volumes attributable to irrigation have been even more difficult to forecast.

Centralines seeks to manage price volatility, so forecast and target revenues do not match perfectly in any given year but are within reasonable levels of tolerance.

8. Price Categories

8.1 Converting cost allocations to prices

Once costs have been attributed and/or allocated to Centralines' consumer groups, Centralines forecasts whether existing prices and activity levels will generate the revenue needed for Centralines to fully collect those allocated costs.

If there is a difference, Centralines adjusts its prices to better align forecast revenue to allocated costs. This alignment of revenue and prices is not an exact match. Centralines must estimate variables like:

- environmental factors
- changes in consumer usage, and
- responses to price incentives to reduce demand on the network.

Note

Centralines reconciles the final prices to ensure that the amount of revenue Centralines forecasts to collect does not exceed target revenue.

8.2 Price categories and price options

Centralines sets prices at a category level for groups with common needs or usage. Centralines then offers consumers within each category price options so that they have some choice and control over the end cost of their electricity.

Price categories reflect groups of consumers with a:

- common site usage (e.g. place of residence versus place of business), and
- common capacity and metering. Centralines' price categories are detailed below.

Price options represent the choices consumers have on how they will be charged for the use of Centralines' network. These prices are structured in such a way as to:

- maintain equality between consumers who create similar costs for the network
- signal to consumers the benefits and costs of different patterns of consumption
- maintain relativities between options to incentivise desirable behaviour, e.g. consuming outside of peak hours, and
- minimise opportunities for arbitrage i.e. seek to gain a cost advantage by using a price option for a purpose for which it was not intended.

Note

Details of price options available to Centralines' consumers are detailed in *Section 9*.

8.3 Fixed and variable components to prices

Centralines recovers costs for most price options through a mix of a:

- fixed daily charge to the consumer, and
- variable charge that is based on their consumption over a given billing period.

The fixed component is designed to give some certainty of cost to consumers and cost recovery to Centralines. It also reduces the revenue risk to Centralines' and its shareholders should there be:

- material and unforeseen changes to consumption quantities, or
- major movements of ICPs between price categories and price options.

Fixed charges also better reflect the fixed nature of the underlying costs Centralines incurs in operating a network to distribute electricity.

Centralines offers consumers multiple price options and combinations for the variable component of prices. This includes options for both uncontrolled and controlled load services. In addition, for residential connections TOU categories offer price signals with higher variable prices at times of typically higher use and lower prices for periods of reduced use.

This range of options allows individual consumers to control their total electricity costs through their patterns of consumption. It provides incentives to reduce Centralines' recoverable costs by reducing demand and loads on network assets.

Large Commercial customers may also pay a daily fixed charge to recover specific network investments made to meet the needs of customers on individual contracts with Centralines.

8.4 Residential price categories

8.4.1 Overview

Centralines seeks to clearly categorise ICPs as either residential or non-residential. ICPs that are places of residence versus business show similarities in:

- their patterns of consumption, and
- the demand they place on the network.

Demand responsiveness mechanisms, such as control of hot water heating, are applied for ICPs in this category, as are prices compliant with the LFC Regulations.

Centralines offers both accumulative and TOU pricing to customers in the Residential category. Accumulative is where a meter records consumption accumulated over the whole billing period. TOU is where consumption is grouped into time periods relating to typically high and low network demand.

8.4 Residential price categories (cont)

8.4.2 Accumulative Pricing

The following price categories apply to places of residence that are charged on accumulative price options (i.e. non-TOU):

- Permanent Residence (CH1 and CH2R)

Under the LFC Regulations, Centralines is required to offer a price option with a maximum fixed daily charge of 45c, this is catered for with the CH1 price category. The low fixed charge categories, when compared to other comparable permanent residential plans (i.e. CH1 compared to CH2R) should have total charges that are the same or less based on 8,000kWh annual consumption.

8.4.3 TOU Pricing

The following price categories apply prices based on the time of the day when consumption occurs:

- Permanent Residence TOU (CH1T and CH2T)

In a move to encourage the application of TOU pricing to residential consumers, Centralines has in place two price categories for 'Permanent Places of Residence'. The CH1T option offers a low fixed rate equivalent to the CH1 category.

8.5 General categories

8.5.1 Non-Residential <30kVA

This category includes connections with a wide range of use types. There are very diverse consumption patterns, some with very occasional use.

This category is priced on fixed daily rates and accumulative consumption. Centralines will look to introduce a General Time of Use price category once the roll-out of improved metering is complete. This could be as early as the 2024-25 pricing year. Once implemented, this will allow consumers to elect whether to use peak and off-peak pricing for these connections or remain on monthly accumulative pricing.

With the very diverse consumption patterns of this group of connections, there may be some that can take significant advantage using this option. This will allow customers to choose to pay less overall for electricity consumption by shifting their demand to periods of lower network demand.

8.5.2 Temporary (Builders Supply)

The General category also includes a category for Temporary (Builders Supply) connections. This caters for connections that are temporary in nature due to the initial build or renovation. Once the build is complete the connection will be priced according to the final connection requirement and the type of use.

8.5 General categories
(cont)

8.5.3 Unmetered Supply

Where a connection does not have individual metering and they fit a tight guideline they can be charged under the Unmetered category. These connections have small but relatively predictable consumption where a reasonable estimation of total consumption can be made without needing to individually meter each connection. Typically lighting and communications cabinets are included.

Where streetlighting is connected and is managed via a database, generally through a local authority, the connections will be priced under the U03 category where the majority of revenue is collected via a fixture per day price. This is more reflective of the costs placed on the network as they do not directly correlate with the level of consumption.

8.6 Commercial price categories

Centralines prices commercial connections according to the size of the fused connection. As the size increases, the applicable category will be subject to a higher fixed daily charge.

The CH3 and CH4 Commercial categories (up to 138kVA capacity) have both accumulative and demand-based pricing options available, and the choice is defined on the metering available on-site.

Demand pricing is considerably more cost reflective as the units of measure relate more accurately to the costs placed on the network, compared to accumulative where consumption is the unit of measure. The larger Commercial connections are required to have full TOU metering and are therefore a cost reflective demand pricing option.

Centralines have three large Commercial connections over 436 kVA capacity. They are priced on an individual basis relating to their specific characteristics.

8.7 Forecast revenue by price category

The following table shows the forecast revenue for 2023-24 by price category.

Centralines	Forecast Revenue (\$,000)	% of Total Revenue
Low Fixed Charge – CH1	3,112	19.8%
Std Fixed Charge – CH2R	5,466	34.7%
Time of Use LFC – CH1T	186	1.2%
Time of Use Std – CH2T	202	1.3%
Residential	8,967	57.0%
Non-Residential – CH2	2,912	18.5%
Temporary – T1P	2	0.0%
Unmetered – U01, U02 and U03	149	0.9%
General	3,063	19.5%
Commercial to 69 kVA – CH3	1,008	6.4%
Commercial to 138 kVA – CH4	1,031	6.6%
Commercial to 276 kVA – CH5	500	3.2%
Commercial to 435 kVA – CH6	208	1.3%
Commercial	2,747	17.5%
Large Commercial	961	6.1%
Region	15,737	

Table 10 – Forecast Revenue by Price Category and Consumer Group

9. Price Options

9.1 Price Options

Within each price category, there are different price options. These options seek to signal the value of consuming outside of network peaks, while aiming to cover Centralines allowed revenues under the price path. Depending on whether consumers have TOU or non-TOU metering and their price category, the following price options are available:

Non-TOU metered consumers:

- 24UC – no ability to control load (e.g. water heating)
- AICO – controllable load, but no separate data stream (cannot identify exactly how much load is reduced)
- CTRL – separately controlled and recorded load
- NITE – controlled to be available from 11pm to 7am
- CTUD – controlled to be available from 7am to 11pm, and
- DEFT – for ICPs required to have TOU meters but have accumulative.

TOU consumers:

- ONPK – consumption occurring during the periods 7am to 11am and 5pm to 9pm each day
- OFPK – consumption occurring outside of peak periods
- SOPD – highest peak load occurring within on peak periods on a working day, during a summer month
- WOPD – highest peak load occurring within on peak periods on a working day, during a winter month
- DMND – maximum load during the month, and
- KVAR – a charge for consumption having less than .95 power factor.

Note

Refer to **CL-CM0002 Centralines' Pricing Policy and Schedules** for full details of the applicability of each price option.

**9.2
Relativities
between
Residential
price options**

9.2.1 Residential Uncontrolled – 24UC

The residential low user 24UC rate forms the basis where all other small user variable rates are derived. The 24UC option is a single charge for a continuous supply where there is no load that is controllable by Centralines on that meter register or equipment.

9.2.2 Residential Night – NITE

The NITE option is a separate charge for electricity consumed between the hours of 11pm and 7am. The NITE rate is set at 33% of the 24UC rate.

9.2.3 Residential Day – CTUD

CTUD is a separate day time charge for electricity consumed between 7am and 11pm. It can only be used in conjunction with the NITE option above.

The CTUD (day only) rate is set so a consumer with a day/night meter who has the standard day/night consumption split of 70/30 will pay the same as an equivalent consumer with a 24UC meter. Consumers can benefit by having a day/night meter if they direct more than the average proportion of their load out of day periods. This benefit to the consumer reflects the network benefit of moving load out of higher demand periods.

9.2.4 Residential Controlled – CTRL

This option allows Centralines to offer a different price for consumption of load that Centralines can control for the consumer under Centralines' Load Management Service.

9.2.5 Residential All Inclusive – AICO

Centralines currently offers an AICO price option, i.e. a single price which applies to both controlled and uncontrolled load where the controlled load is not separately metered. This option is offered in residential price categories. A residential consumer on an AICO price would pay approximately 15% less than if they were on an uncontrolled option.

This option, while providing valuable incentive for the provision of controlled load, is complex from an administration perspective, and creates a significant enforcement task. Centralines has no visibility as to what, if any, controlled load a consumer is providing. As such, this price option is likely to be withdrawn at some point in the future.

9.2.6 Residential On-Peak and Off-Peak

The residential TOU options are set so that a typical allocation of consumption between peak and off-peak would result in an equivalent cost to a consumer on an uncontrolled rate. As with the Day/Night options, a consumer can elect to reduce their line charges if they can move typical peak load across to off-peak periods.

9.3 Incentive for load control

The Controlled (CTRL) price option is set so a typical mix of uncontrolled and controlled consumption would result in a 15% discount compared to a connection solely on an uncontrolled rate.

Offering a price incentive to consumers, to allow load control and therefore move demand from peak to non-peak times, benefits the network in managing future network investment.

9.4 General

The General price category, CH2, encompasses a large range of connections with a small connection size, less than 30kVA. Being of a small connection size they typically have standard accumulative metering and are charged on kWh of consumption with a daily fixed charge.

A controlled price option is available although the level of discount available is reduced as these connections have a reduced level of controlled load available to them. Day/Night options remain available as encouraging consumption outside of the daytime period should offer network benefits.

9.5 Temporary

Temporary connections are used when premises are under construction before the final connection is confirmed. Because of the administrative work involved, and the relatively short time of connection, a 10% margin is charged on the standard residential (CH2R) rates.

9.6 Commercial fixed rates

The fixed daily rates are set within connection size bands. Moving up to the next band will see an increase in the daily rate. The margin between these bands has progressively been reduced with the aim of reflecting close to a \$/kVA of connection price.

9.7 Commercial variable options

Accumulative options are established on the same principles as the equivalent Residential and General options.

Demand-based options are available for all commercial categories. This type of pricing is mandatory for connections in the CH5 category and above.

At a commercial size the levels of network impact are such that the additional information attained from a meter, and the additionally reflective pricing, will allow the consumer to recognise the financial costs and benefits that behaviour incurs.

The demand option (AMD) is an expression of the monthly impact on the network while the On-Peak demand (SOPD and WOPD) options relate to the interconnection charges that Transpower pass through.

10. Specific Methodologies

10.1 Non-standard pricing use

Centralines does not currently have any ICPs subject to non-standard contracts.

10.2 Embedded generators

Centralines currently has one embedded generator on its network.

Embedded generators are sites/customers on the network who generate power and either deliver energy into Centralines' network, generate for their own use or both.

For those who generate for their own consumption, consumers are financially rewarded for this in the following ways:

- variable network charges based on kWh consumption reduce
- large-scale generators will have a reduced allocation of transmission charges in relation to their lower annual average usage of grid provided energy, and
- the proportion of network asset values allocated to the consumer is reduced if the AMD that they place on the network is reduced.

Note

Centralines also recognises the reduced costs associated with serving larger users who build close to the GXP, hence minimising the network investment required to service them. This is achieved via the pricing derivation which calculates the value of assets assigned to the ICP.

11. Customer Feedback

11.1 Survey of consumer price awareness

Centralines, in conjunction with Unison Networks, instigated pricing-focused research during January 2020. Consumers were contacted through an online survey or by telephone. The key focus for this research was seeking input into various pricing methods for distribution charges.

Centralines are aware there are a number of pricing options available that can be used for delivering distribution revenue with more or less cost reflective consequences.

The pricing methods described to consumers were Peak/Off Peak, Monthly Demand and Capacity pricing along with a fixed monthly price option. While these options can be technically difficult for non-industry people to understand, Centralines intentionally used a non-industry research organisation to improve the 'plain English' aspect of the communication.

When presented with these options, a flat fixed monthly fee was preferred marginally over Peak/Off-peak pricing, 30% to 24%. The feedback around the other options presented was that simplicity was a key factor with the lack of current understanding of demand and capacity proving a major negative. There was a strong 'fairness' attitude.

This translated to 'user pays' being important, with any charge based on how much energy used seen as fairer than a flat rate for connection. While this was slightly at odds with the 30% preference for a flat monthly fee, it essentially illustrated that those consumers not in favour of a flat fee, were strongly in favour of an energy use model.

Overall, most consumers when asked what changes they would desire were more concerned with a reduced level of price than any change in how calculations were made or allocated.

This research has encouraged Centralines to maintain the current broad pricing model, particularly in the residential space.

As changes are made, especially with the transition away from the LFC regulations, Centralines will be looking to maintain simplicity and transparency with communication in 'plain English' over a variety of different channels.

Appendix A – Pricing Principles

Principles guiding pricing approach

As noted earlier in this document, Centralines has prepared this disclosure considering the Authority's Distribution Pricing: Practice Note – August 2019 (Practice Note) and the second edition of the Distribution Pricing Practice Note released in October 2022.

The Practice Note sets out a number of principles that distributors are expected to formally demonstrate they adhere to. Centralines considers that many of the principles are 'common sense' and have under-pinned the development of its prices over time.

Electricity Authority pricing principles comparison

In this section, Centralines sets out how it considers it meets the Authority's pricing principles. Each principle is stated, followed by Centralines' commentary.

Signal economic costs

- a) *Prices are to signal the economic costs of service provision, including by:*
- i. *being subsidy free (equal to or greater than avoidable costs, and less than or equal to standalone costs);*
 - ii. *reflecting the impacts of network use on economic costs;*
 - iii. *reflecting differences in network service provided to (or by) consumers; and*
 - iv. *encouraging efficient network alternatives.*

Centralines interprets the requirements for subsidy-free prices as requiring that, for each consumer group, the revenues obtained from that consumer group must not:

- be below the cost of connecting that consumer to the network (incremental costs), or
- exceed the costs of serving that consumer group, as if they were the only consumer group (stand-alone costs).

These bounds are extremely wide as there are extensive shared assets on Centralines' network. As a result, if Centralines were to stop supplying any consumer group there would be limited reduction in costs and assets as different consumer groups are intermingled on the network.

Centralines considers that, by definition, its prices are subsidy free because it applies a Cost Allocation Model to allocate costs across the consumer base to determine the revenue requirement.

Appendix A – Pricing Principles, Continued

Signal economic costs (cont)

This is then used as a basis for establishing prices for each consumer group. As the Cost Allocation Model allocates the total cost of supplying all Centralines' consumers in proportion to percentage use of peak demands, which (by definition) adds up to 100%, no consumer group pays more than their stand-alone costs, given the economics of providing a shared network.

Centralines also ensures that new connections are not subsidised by calculating a capital contribution where the expected revenues from prices does not cover costs.

This ensures that total revenues from each consumer (including the capital contribution) are not expected to be less than incremental costs.

In adopting a capacity-based approach to assigning consumers to price categories, this signals to consumers the fact that increasing capacity demands on the network will increase costs over the longer-term.

As noted earlier, there is material capacity headroom on most parts of Centralines' network and only 12% of total capital expenditure over the next 10 years relates to system growth requirements.

Centralines does not consider it necessary to strengthen price signals to seek additional peak load reductions. Accordingly, Centralines' key objective is to set prices in a broad-based manner, so revenues are recovered on consumption at any point in time, rather than narrow time periods.

The following chart demonstrates the available capacity on various parts of Centralines' network. Combined with a demand growth forecast of 1.0% per annum, it is clear it is not necessary to signal future investment costs to consumers.

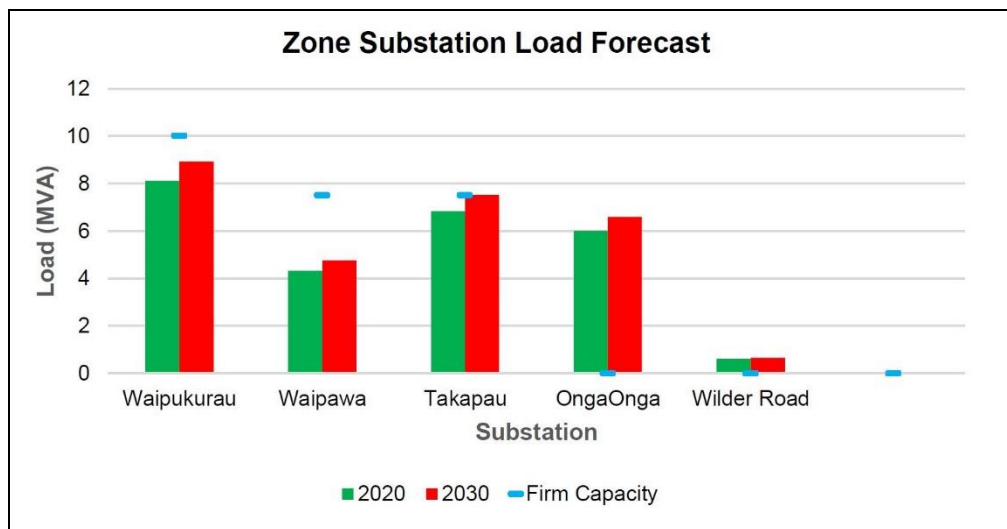


Figure 3 – Zone Substation Load Forecast

Appendix A – Pricing Principles, Continued

Signal economic costs (cont)

- 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.*

Centralines interprets this principle as a requirement to implement some form of 'multi-part' pricing², with Ramsey³-based considerations applied to the mark-up of variable prices above incremental costs.

As recognised above, Centralines takes account of consumer demand responsiveness in setting prices by recognising that there is not a strong need to influence behaviour patterns beyond what already exists through the existing relativities between prices (e.g. between controlled and uncontrolled loads) as there are high levels of capacity headroom on the network.

This factor dictates that Centralines should adopt broad-based approaches in setting prices that does not rely unduly on revenues being recovered over narrow time periods.

Prices responsive to end users

- c) *Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to:*
- i. Reflect the economic value of services; and*
 - ii. Enable price/quality trade-offs.*

Listed below is how Centralines' compliance under these principles is achieved.

- Uneconomic bypass is avoided through Centralines' cost allocation approach to setting prices, whereby (by the use of a proportional cost allocation approach) pricing is set below stand-alone costs.
- Centralines also avoids uneconomic bypass/inefficient disconnection by lowering charges to consumers who, but for the level of line charges, would cease business.
- It is generally not practical to negotiate with consumers (particularly small consumers) to provide different price-quality trade-offs, given the shared nature of the network. Centralines establishes performance metrics pertaining to different zones (e.g. fault restoration times for rural versus urban consumers).
- Centralines' most recent survey was conducted in April 2017. The 2017 survey has indicated that in general customers are satisfied with Centralines quality of service⁴.

² Multi-part pricing refers to a pricing approach where a consumer pays a combination of fixed and variable charges.

³ Ramsey-based pricing is an approach where those consumers with inelastic demand face higher charges.

⁴ Overall 88.7% of respondents were satisfied, with some variations across segments.

Appendix A – Pricing Principles, Continued

Prices responsive to end users (cont)

- Across all segments continuity of supply continues to be the most important deliverable (64.7% response). Followed by keeping costs down (24% response) and outages (20.7% response). Overall, four out of every five customers are not prepared to pay for an improvement in their power supply, stating an increase would be too much.
 - As a result of the regulatory regime and consumer preferences, Centralines' prices will track the costs associated with preserving the status quo quality and reliability levels.
 - Centralines sets specific charges for large industrial consumers to ensure that charges reflect the economic costs of service provision (thereby discouraging uneconomic bypass and allowing such consumers to negotiate their specific needs).
 - Centralines allows smaller generators, 10kW or less, to connect to Centralines' network and to utilise the distribution network for delivering their generation without incurring network charges. Compliance with Centralines' Network Connection Standards is required, and administration and connection costs may be applicable (these can be viewed on Centralines' website).
 - Because of Centralines' peak/control-period prices, larger consumers have a clear value against which to assess network alternatives or behaviour changes. Many consumers, particularly major consumers, can reduce demand in response to such signals. The majority of Centralines' residential consumers heat their water through controlled meters in response to Centralines controlled pricing rates.
 - The introduction of optional residential TOU pricing allows consumers that wish to make choices of when they use energy to reduce costs. While the peak periods are broad, they do deliver a signal on when the network is likely to reach peak levels.
-

Appendix A – Pricing Principles, Continued

Transparent development of prices

- e) *Development of prices should be transparent and have regard to transaction costs, consumer impacts, and uptake incentives.*

Centralines' development of prices:

1. Is transparent:

- through this disclosure statement, where Centralines provides information on the costs it allocates to different consumer groups, and
- by the publishing of a pricing policy, which details the relative prices for different price options and categories. Consumers can review charges and weigh up costs for changing capacity requirements or load profile and the resulting benefits.

Centralines annually consults extensively with electricity retailers on pricing strategy, price category, and option development. While there is significant variability in the degree retailers engage in this consultation process, the opportunity to engage in the process is equal for all retailers operating on Centralines' network.

2. Promotes price stability – Centralines' allocation model is only altered where a strong case exists for such alteration.

To ensure price stability to consumers, any price changes made, limit rate shocks to any particular consumer group to less than 10% in line with standard industry practice. As delivery charges make up around 50% of a typical consumer's bill, this ensures no consumer group would face more than a 5% delivered price increase due to changes in distribution charges.

3. Promotes certainty – Centralines endeavours to maintain consistency in its price structure and relativity between prices. This ensures consumers who make investments (e.g. in controllable loads) due to the savings between controlled and uncontrolled rates are able to realise the savings expected when the original investment was made.

As noted above, with the introduction of smart meters, Centralines intends to take a circumspect approach to developing and implementing TOU pricing. The new TOU categories are optional for the present, offering consumers a choice based on whether they can manage their load profile to benefit from savings while assisting to reduce demand on the network. Consumers will have time to consider behavioural changes and investment to avoid adverse bill impacts as Centralines:

- seeks to strengthen differentials between peak and off-peak charges over time, and
- considers phasing out less cost reflective consumption-based price categories and options.

Appendix A – Pricing Principles, Continued

**Transparent
development
of prices**
(cont)

Centralines recognises the need to minimise undue complexity for retailers, subject to its legitimate business needs to signal costs to consumers and ensure equity between consumers.

All retailers are subject to the same price schedules from Centralines. Therefore, Centralines considers that its prices are economically equivalent across all retailers.

Appendix B – Certification for Year Beginning Disclosure




CERTIFICATION FOR YEAR-BEGINNING DISCLOSURES

Pursuant to Schedule 17

We, Fenton David Wilson and Anthony Trevor Gray, being directors of Centralines Limited certify that, having made all reasonable enquiry, to the best of our knowledge -

- a) the following attached information of Centralines Limited prepared for the purpose 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.

Note: Following the impact of Cyclone Gabrielle, Centralines was granted an extension by the Commerce Commission under clause 2.11.1 to disclose the Pricing Methodology and Asset Management Plan (Year-Beginning Disclosures) separately. Two Schedule 17 certificates will be issued for the 2023/24 disclosures.



Director

Date: 1 May 2023



Director

Date: 1 May 2023

Appendix C – Summary of Document Changes

Date	Version No.	Changes to Document	Creator	Authoriser	Approver
19/03/2018	9.0	Full review and restructure of document for new pricing year. Definitions aligned to Centralines' Pricing Policy.	Pricing Manager	GM Business Assurance	GM Business Assurance
11/03/2019	10.0	Updated tables and content for new pricing year. Updated statistics.	Senior Regulatory Affairs Advisor	GM Business Assurance	GM Business Assurance
27/03/2020	11.0	Full review and update to document. Update of key statistics.	Pricing Manager and Senior Regulatory Affairs Advisor	GM Business Assurance	GM Business Assurance
31/03/2021	12.0	Full review and update to document. Update of key statistics.	Pricing Manager and Senior Regulatory Affairs Advisor	GM Commercial	GM Commercial
31/03/2022	13.0	Full review and update to document. Update of key statistics.	Pricing Manager	GM Commercial	GM Commercial
03/05/2023	14.0	Full review and update to document. Update of key statistics.	Pricing Manager	Pricing Manager	GM Commercial