



Pricing Methodology

Electricity Distribution Information Disclosure Determination 2012
For prices applying from 1 April 2023



Executive Summary

This pricing methodology describes the approach used by The Lines Company (TLC) to formulate the pricing structure and to set prices for the 12 months commencing 1 April 2023. It has been prepared to meet the requirements of the Commerce Commission's NZCC 22/2012 Electricity Distribution Information Disclosure Determination 1 October 2012. It also assesses our methodology against the Distribution Pricing Principles that were issued by the Electricity Authority in 2019 and Transmission charges pass-through guidelines issued by the Authority in 2022.

The distribution pricing methodology does not vary significantly from the previous year. TLC continues to use a Time of Use (TOU) pricing structure for residential and other connections billed on kWh, which was first implemented in October 2018 following a community consultation process. However, the transmission charges pass-through methodology has been changed following the new Transmission Pricing Methodology (TPM) that will come into effect from 1 April 2023.

In determining prices, TLC has had regard to many factors, which include regulatory requirements, the unique network geography, customer base and network architecture. The cost allocation model that underpins TLC's pricing methodology assigns revenue targets to customer groups according to asset use. This is defined by customer load characteristics and asset requirements. However, while these are important factors in setting prices from an economic perspective, they have been balanced with some other pricing objectives, including equity, transparency, simplicity and affordability.

For the period 1 April 2023 to 31 March 2024, TLC's target revenue is \$41.9 million. This figure represents the cost of providing electricity lines services to approximately 24,000 installations and allows for a return on investment to shareholders. On 31 March 2022, the value of the investment in the network was \$251 million. TLC is allowed to earn up to \$42.2 million for the period, which is lower than the previous year's revenue. TLC has not increased distribution prices for its customers; however, transmission and pass-through prices may vary for some customers due to the change in the TPM and other recoverable and pass-through costs.

The target revenue is lower than the previous year by \$0.9 million or 2%. Key drivers of this are changes in TLC's wash-up account balance from previous years. TLC's Transpower transmission costs have increased significantly but have been offset by the removal of generators' avoided cost of transmission (ACOT).

On average, annual residential customer charges are expected to decrease by over 3%, due to the decrease in the target revenue. Customers may experience different increases or decreases due to usage and the shift in fixed cost and consumption costs. TOU consumption prices impacting customers' bills can be managed by shifting load into off-peak periods (consuming electricity during lower pricing periods). Approximately half of the transmission cost has been allocated to fixed daily charges, excluding Low Fixed Charge (LFC) pricing category that is constrained by LFC Regulations. The remaining transmission costs have been allocated based on a flat kWh price. Consequently, the TOU consumption price per kWh has reduced. Energy equity and affordability of customers has been assessed in the changes associated with the TPM.

The LFC amendment in November 2021 allows TLC to increase fixed daily prices on the LFC pricing plan from \$0.30 to \$0.45 per day.

¹ Consolidating all amendments as of 25 November 2022.

² Acknowledging that what customers pay is dependent upon electricity retailers' pricing plans.

For General pricing plan connections, including local business and community installations, an increase is expected of 2% but this can be affected by usage. TPM has affected the allocations between fixed and consumption prices. Daily fixed prices were signalled to increase due to changes in the TPM in our RY2023 pricing methodology.

The distribution component of lines charges for capacity and dedicated (CAPDED) customers (typically >150 kVA capacity) on standard contracts do not change in RY2024. However, customers may see changes to their total charges due to the change in transmission prices.

Retailers continue to bill most of TLC's customers. As a result, some customers may face different pricing structures, depending on whether and how TLC's prices are passed through by the retailers. TLC will continue to direct bill CAPDED Customers.

TLC's long-term pricing strategy is for prices to gradually reflect the underlying cost structure of the business when comparing fixed and consumption-based pricing, while achieving efficiency in the use of the network assets. Any change to pricing structures will be done with careful consideration of customer affordability, energy equity, and limit potential price shock. TLC cares for its customers and we aim to deliver fair and simple pricing for all customers on our network.

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Abbreviations

ACOT	Avoided Cost of Transmission
AMP	Asset Management Plan
Authority	Electricity Authority
Code	The Electricity Industry Participation Code 2010
CAPDED	Capacity and dedicated
DPP	Default Price-Quality Path
EDB	Electricity Distribution Business
GWh	Gigawatt hours
ICP	Installation Control Point
ID2012	Information Disclosure Determination 2012
kVA	Kilovolt-ampere
kW	Kilowatt
kWh	Kilowatt-hour
LFC	Low Fixed Charge
LMP	Locational Marginal Pricing
LNI	Lower North Island Transpower transmission region
POS	Point of Supply
Pricing Principles	Electricity Authority distribution pricing principles
RCPD	Regional Coincident Peak Demand
Registry	National database that contains information on every ICP
RY2023	Regulatory year from 1 April 2022 to 31 March 2023
RY2024	Regulatory year from 1 April 2023 to 31 March 2024
TLC	The Lines Company
TPM	Transmission Pricing Methodology
TOU	Time of Use
WESCT	Waitomo Energy Services Customer Trust

Introduction

TLC is an Electricity Distribution Business (EDB or distributor). EDBs face regulatory requirements relevant to pricing, administered by either the Commerce Commission or the Electricity Authority. Some of these regulations relate to the total revenue that can be earned, others are relevant to the specific levels of prices, and some relate to disclosure requirements. The following table shows the key pricing-related regulations which apply to TLC.

Regulatory body	Commerce Commission	Electricity Authority
Key objective	<ul style="list-style-type: none"> Long-term interests of consumers in markets where there is little or no substantial competition 	<ul style="list-style-type: none"> Efficient operation of the industry and for the long-term benefit of the consumer
Key Regulatory Guidance Documents	<ul style="list-style-type: none"> EDB Information Disclosure Determination 2012 EDB Price-Quality Determination 2019 	<ul style="list-style-type: none"> Distribution Pricing Principles Low Fixed Charge Regulations Electricity Industry Participation Code Part 6: Distributed Generation

The Commission's Information Disclosure Determination requires TLC to disclose a pricing methodology each year. This document is intended to meet this requirement in a clear and easy-to-understand way. A summary of the relevant information disclosure requirements and where they are addressed in this document is set out in Appendix 2.

We provide:

- contextual information about [our network](#);
- present an [overview of our prices and how we determine them](#);
- a more detailed discussion of how we determine our [target revenue](#), how that revenue is [allocated to customer groups](#) and the methodology used to convert the revenue requirement into [standard prices](#) and [Capacity and Dedicated asset](#) prices are then described;
- a section then discusses the [distributed generation pricing methodology](#);
- we then assess our pricing against the Electricity Authority's [Distribution Pricing Principles](#) and;
- provide our forward [pricing strategy](#).

Our network



TLC was formed in April 1999 following the Government's electricity industry reforms. The company is wholly owned by the Waitomo Energy Services Customer Trust (WESCT).

TLC owns and operates the electricity distribution network in the King Country, Ruapehu and Central Plateau areas.

Our network covers an area of 13,700 km² and provides approximately 24,000 connections. Our network has:

- 4,500 km of power lines
- 35,000 power poles
- 5000+ transformers
- 29 substations
- 8 supply points including 5 points of supply from the national grid.

TLC supplied 368 GWh of power to our customers with a system peak load of 78 MW in RY2022 – which is the equivalent of supplying 46,000 homes.

Over the past five years, TLC has made a significant investment to improve the security of supply and reliability of the network, primarily focusing on substation resilience and asset renewal. Investment in system growth has not been a primary focus because historically TLC's network has not been capacity constrained. However, New Zealand's transition to a low-carbon economy means this is beginning to change, which in turn is adjusting our investment and planning decisions.

Each year TLC spends money to operate the network and keep its assets in good health. Planning that expenditure is undertaken over a ten year forward looking planning cycle, and is outlined in our annual Asset Management Plan (AMP). The AMP describes how we will balance our asset investment to manage safety, improve reliability, maintain customer affordability and support New Zealand's transition to a low-emission future. Our expenditure planning focuses on the following areas when making decisions.

Safety

Safety is our number one priority. We invest to ensure our assets are safe for the public and for our workforce. This includes renewal and upgrade of assets, processes and systems that help us safely manage our work and our environment.

Reliability

The reliability of the electricity supply has a direct impact on the wellbeing of our customers and the prosperity of our local economy. In the future we expect that electricity supply will have a greater economic and social importance as the economy becomes more reliant on electricity for industry and transportation in the future. Maintaining consistent reliability performance is challenging in our region because our network is large, heavily forested and is exposed to a wide range of environmental conditions.

Affordability

Our network is geographically vast, has a very low population base and includes areas of significant deprivation. We are cognisant that while we need to invest in our network we also must balance this with affordability for all customers we supply.

Decarbonisation and industrialisation

Historically the economy of our region has been driven by primary industries, mining and tourism. We are starting to see changes within these industries that are increasing the electricity supply needs on our network.

Innovation

We recognise that our network, our business, and our customers have a unique set of challenges and opportunities. Innovation through a combination of technology and novel business models can answer a lot of the pressing challenges that we face.

We are investing on both these fronts and our innovation efforts are focused on enabling our customers to enjoy affordable energy into the future. In 2022, we invested in several community projects, installing solar panels on Marae and Māori housing, and testing peer-to-peer trading systems to allow excess energy to be shared across the community.

We intend to continue and expand our innovation initiatives, testing the merits of new business models and alternative (non-network) supply models which can reduce costs or be of benefit to our customers.

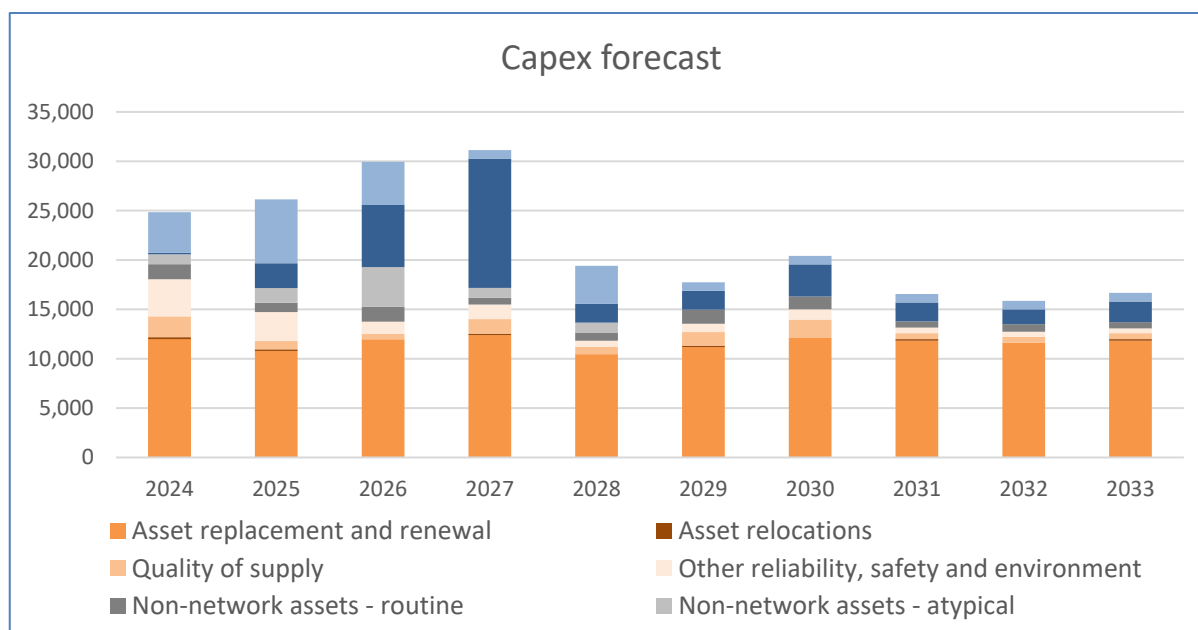
Our Asset Management Objectives

We have revised our asset management objectives this year to reflect the broader needs of our customers and stakeholders. They are outlined below:

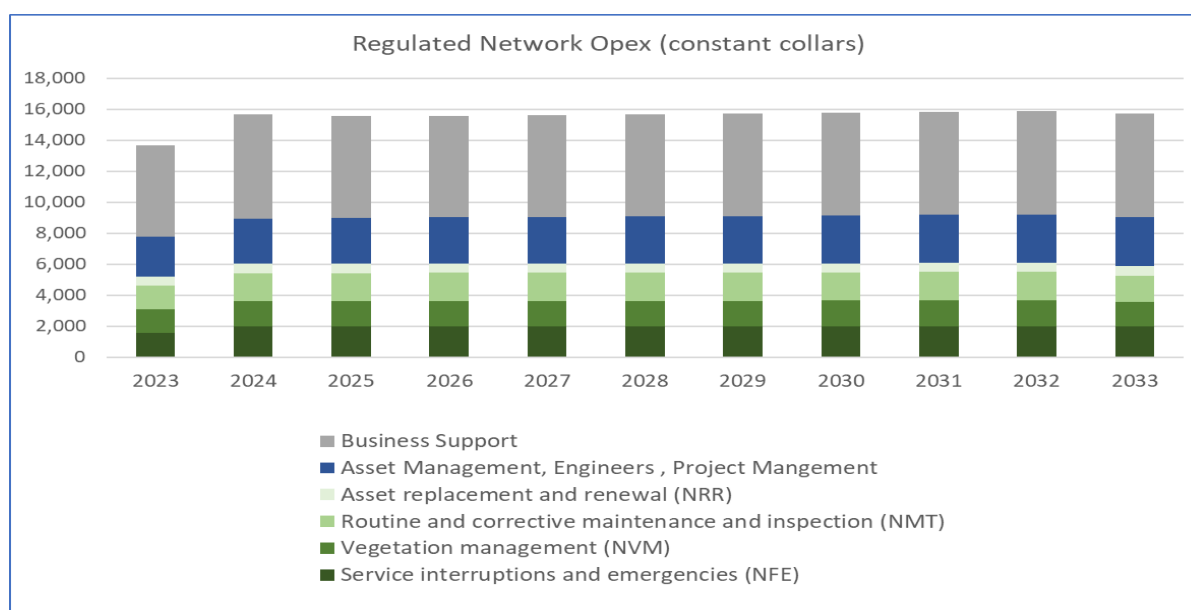


A summary of capital and operational expenditure for the next ten years is detailed below:

Capital Expenditure



Operational Expenditure



Although we have a significant investment programme for the next decade, deferral of investment is a key consideration before we invest. We endeavour to maximise the life cycle of its assets where it makes sense to do so having regard for safety, risk, economic outcomes and customer service.

We have undertaken several innovations that defer asset replacements by easing network constraints. These include:

- Time of use pricing that incentivises customers to shift load out of peak times, and to utilise controlled water heating.
- Extensive deployment of load control and metering technologies enabling control of up to 16 MW load (25% of our coincident GXP demand) at critical times.
- Use of mobile and fixed power factor correction capacitor banks. Mobile capacitor banks are a bank of capacitors mounted on a trailer that can be deployed at short notice to support network constraints during faults or outages.
- Installation of voltage regulators. TLC uses voltage regulators extensively in its rural reticulation. These improve power quality and allow small conductors to remain in service which defers reconductoring projects.
- Confirming line condition before replacement. TLC now regularly uses drones to verify asset conditions before commencing planned line renewal work. This has resulted in some projects being de-prioritised and their replacement deferred.
- Development of Business Intelligence (BI) tools. We are investing in BI technologies and systems to provide a deeper analysis of our assets and their performance. This is providing new insights on how our assets perform against a range of environmental and electrical conditions, allowing more informed decisions in our renewal planning.

Overview of our prices and how we determine them

TLC's lines charges are mostly billed to retailers, who then bill our customers, acting as agents for TLC. The lines charges cover the cost of TLC's distribution network, levies and the cost of using Transpower's national grid and local connection assets.

Our pricing groups

TLC has three pricing groups:

- Standard contracts;
- Capacity and Dedicated Asset Standard and Non- standard contracts;
- Distributed Generation.

Standard contracts

This covers most customers within the TLC network, which largely share network assets and network operations resources. These customers are further broken down into groups based on common customer characteristics including network usage. These groups are:

- **Residential:** connections at a principal place of residence (home)
- **General:** connections for which the end use is not a principal place of residence, holiday home, accommodation or dairy cattle milking shed. The general category includes pumps, sheds, etc
- **Dairy:** connections where the end use is 'dairy cattle milking shed'
- **Temporary Accommodation:** connections where the end use is a holiday home or accommodation

These standard contract customer groups were created in the context of TLC's previous demand pricing structure. This was done based on a detailed analysis of demand and kWh profiles.

The current pricing structure for all standard contracts consists of daily price and kWh consumption charges (peak, shoulder and off-peak or anytime). The daily price varies according to the capacity of the installation and connection density. A low-user option is also provided to residential consumers, in line with the LFC regulations and is generally suitable for customers that use less than 8,000 kWh per annum. With the phasing out of the LFC regulations, customers will see daily fixed prices for customers on TLC's LFC pricing plan increase from 30 cents per day to 45 cents per day. There are no changes to the distribution pricing structure from 1 April 2023, however, approximately half of the transmission costs have been transferred from variable kWh prices to daily fixed prices.

The following table shows the number of connections for each group and capacity size within the broader Standard Contract Customer Group.

Standard Contract Customer Categories					
Capacity	Total	Up to 15 kVA	15 - 30 kVA	30 - 70 kVA	70 - 150 kVA
Residential	14,136	14,136	n/a	n/a	n/a
General	5,435	4,809	407	167	52
Dairy	457	41	83	278	55
Temporary Accommodation	3,945	3,735	132	67	11

Capacity and Dedicated Asset Standard and Non-Standard contracts

CAPDED customers are those with demand greater than 150 kVA or who use assets for specific purposes (e.g., streetlights). TLC's pricing schedule sets out pricing for most CAPDED customers. In some cases, non-standard contracts and prices are used separately or in combination with standard contracts and prices due to the customer's use of dedicated assets.

Distributed Generation

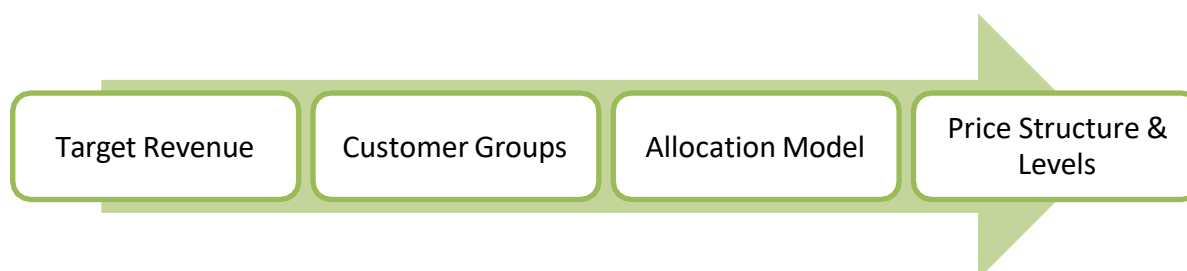
This covers generators embedded in TLC's network who are following the intent of Part 6: Connection of Distributed Generation of the Electricity Industry Participation Code 2010.

TOU pricing for standard contracts

TOU is considered an appropriate pricing structure for our standard customers. TOU provides signals to customers regarding network peak times and is generally simpler for customers to understand and respond to.

Process for determining prices

The process used by TLC is to first determine the target revenue required to recover costs, including operating costs, depreciation and a return on capital invested. Customer groups to which the target revenue will apply are then identified. The target revenue is then allocated across customer groups using allocators that relate to how each group influences cost. Pricing structures are formulated considering the Authority's Distribution Pricing Principles, TLC's own pricing principles and customer feedback. Price levels are then determined using forecasts of connection numbers and usage.



Each of the steps in the above process is the sections following:

- [Target revenue](#)
- [Customer Groups](#)
- [Allocation Model](#)
- [Pricing Structure & Levels](#)

In setting prices and discounts, TLC ensures the forecast revenue net of discounts is no higher than the revenue cap set by the Commission in its Default Price Path Determination 2019.

Customer consultation and engagement

TLC is different to most electricity distributors in New Zealand in that it has a direct relationship with its customers through a conveyance model with Retailers.

TLC provides quality customer service and maintains a direct relationship with its customers through a dedicated Customer and Community Engagement team. This team engages more closely with our customers and represents their voices within our business. Their mandate includes educating customers and working with vulnerable communities to provide support, increase energy knowledge and reduce energy costs.

Performance targets and current service levels are presented in the following annual publications - Statement of Corporate Intent, the Asset Management Plan⁶ and Annual Report⁷.

TLC continues to strengthen its communications concerning public safety, outage management, decarbonisation and energy education. Direct mail, website updates, social media content, newspaper advertising, press releases and regulatory disclosures are the primary media for communicating these topics with customers.

TLC also has a Customer Service Panel and meets with them regularly to discuss customer views and expectations for price and service levels. Customer views are also considered for network investment decisions.

Customer consultation is an important element in the development of TLC's pricing methodology, particularly where there is a significant change. For example, the decision to migrate from TLC's demand-based pricing approach to TOU followed an extensive engagement process with the community from September 2016 to September 2017.

Since TOU pricing was implemented, we have continued to engage with customers and the community providing one-to-one advice and support services for our more vulnerable customers.

Many, if not all retailers also offer online apps and other tools that enable people to manage their usage and bills. We see this as a meaningful support for customers on our network. Even though our charges are included within the energy retailer invoice, we maintain full transparency of TOU lines charges from TLC for customers and ensure that information is easily accessible.

There are also several other TLC initiatives underway that will ensure we continue to maximise our value to customers and our wider community, including an increased investment in assets to further improve safety and resilience, expansion of our vulnerable customer programme, energy education programme in schools and the community and targeting to insulate 500 homes by continuing to support Maru Energy Trust (Maru).

⁵ [2022 Statement of Corporate Intent](#)

⁶ [2022 Asset Management Plan Update](#)

⁷ [2022 Annual Report](#)

Changes in price levels

Our RY2024 revenue is expected to be \$0.9 million lower than RY2023. This is due to a change in the wash-up account balance from the previous year. In RY2023 target revenue from prices was \$42.8 million compared with \$41.9 million targeted for RY2024.

For RY2024, TLC has not changed the distribution component of pricing but has shifted a portion of transmission charges from consumption-based kWh charges to daily fixed charges as per the TPM. All customers will see an increase in daily fixed charges and a decrease in consumption charges due to the TPM shift.

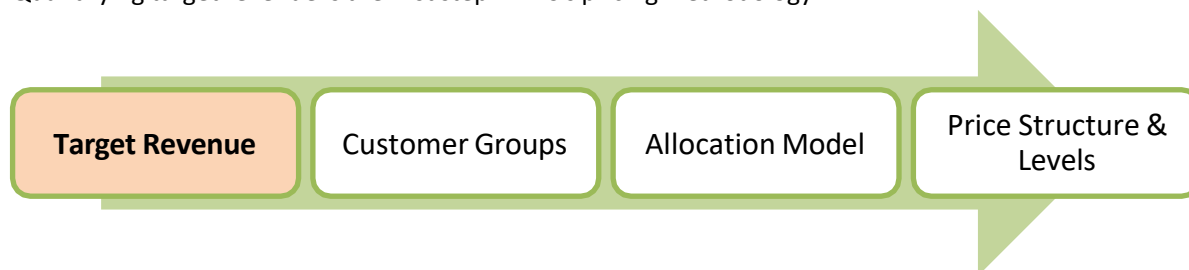
On average, residential customer charges are expected to decrease by over 3%, with impacts on individual customers varying according to their individual usage.

For general pricing plan connections, including local business and community installations, an increase is expected of 2% on average, but this can vary depending on usage.

The distribution component of lines charges for most CAPDED customers (>150 kVA capacity) on standard contracts will not increase with changes in transmission charges being passed through as per the method described below.

Target revenue

Quantifying target revenue is the first step in TLC's pricing methodology.



Target revenue is based on the aggregate of the following costs:

- Return on capital invested and regulatory tax;
- Recovery of capital invested (depreciation);
- Recovery of direct operating costs (e.g. maintenance);
- Recovery of customer and administration costs (e.g. billing, network management); and
- Recovery of pass-through costs (e.g. industry rates and levies).

These costs are required to operate and maintain the network, meet all our legislative obligations, and provide a regulated return on our investment in network assets. The capital investment by TLC includes expenditure on network assets such as poles, wires, transformers, switchgear and substations.

The value of the regulated asset base was \$251 million on 31 March 2022⁹. Pass-through, recoverable and transmission costs reflect costs we incur that are largely outside of our control and are passed through to our customers in our delivery prices¹⁰.

TLC's target revenue for the year commencing 1 April 2023 is \$41.9 million, with the forecast being \$0.9 million less than RY2023's forecast. A key reason for this is the pass-through wash-up account balance (that is, the carry forward of the Incremental Rolling Incentive Scheme (IRIS) from previous years).

The forecast composition of revenue for RY2024 is as follows:

Cost	Description	\$m	% of target revenue	% of allowable revenue
Distribution	Depreciation	10.2	25%	24%
	Return on capital	3.3	8%	8%
	Regulatory tax	3.3	8%	8%
	Operating expenditure	13.9	33%	33%
	TLC Discount expense	4.3	10%	10%
Total distribution		35.0	84%	83%
Pass-through costs	Rates and levies	0.5	1%	1%
Recoverable costs	Transmission	6.4	15%	15%
Target revenue		41.9	100%	99%
Allowable revenue		42.2		100%

⁹ [TLC's Information Disclosure Year End 31 March 2022](#)

¹⁰ TLC's load control reduces our peak demand during system peaks to help manage network congestion.

WESCT on behalf of its customers owns TLC. TLC provides discounts to consumers who are WESCT customers. TLC's pricing schedule for RY2024 sets out the discount on prices these customers will receive. This discount is a 'posted discount' and is forecasted to be \$4.3 million. The TLC discounts are shown on the pricing schedule. TLC has not made any changes to the distribution pricing structure in RY2024.

TLC is subject to a regulated cap on total revenue which is set out in the default Price-Quality Path Determination (DPP2020) and applies for five years. DPP compliance requires the revenue net of posted discounts to be no more than \$42.2 million. TLC's prices net of discounts provides a forecast revenue of \$41.9 million that is compliant with this requirement.

Distribution costs

Distribution costs are incurred to maintain an acceptable quality of supply – reflected in network safety, reliability and power quality. It also ensures that there is enough network capacity available to meet customer demands.

The distribution costs recovered in the target revenue include:

1. **Capital-related costs**, comprising:
 - a. Depreciation of assets (return of capital);
 - b. Return on investment; and
 - c. Regulatory tax.
2. **Operating expenditure**, comprising:
 - a. Network maintenance costs – including vegetation management, lines and pole maintenance and fault response;
 - b. Customer and administration costs – including all other costs required to operate and support an EDB including network management, business support systems and customer engagement costs; and
 - c. Data costs – including the cost of delivering data and relay services.

Rates and levies

TLC's annual levies to the Commerce Commission, Electricity Authority and Utilities Disputes are passed through via prices to customers. Local council and authority rates charged on fixed assets used for subsystem delivery are also included, as are Fire and Emergency NZ (FENZ) levies.

Rates and levies are forecasted to be \$0.5 million.

Transmission costs

Transmission costs include charges payable to Transpower, and any such charges on-charged at cost by a third party to an EDB that does not have a transmission agreement with Transpower for the relevant point of supply.

Transmission charges payable to Transpower are forecasted to be \$6.3m.

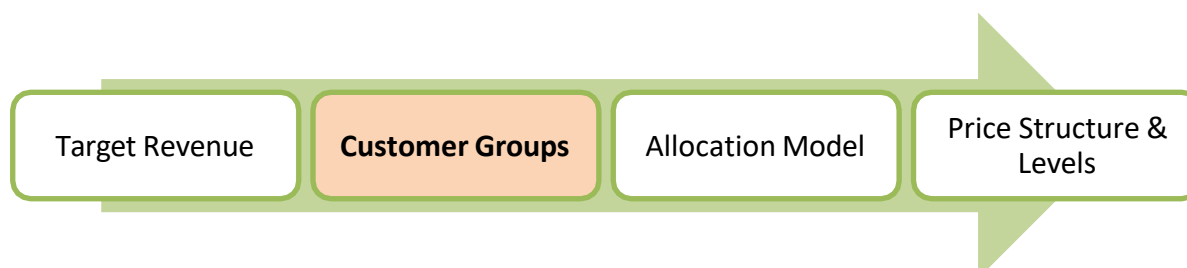
Under the new TPM, transmission charges cannot be avoided, hence generators will not be able to receive any payment for avoiding transmission charges (ACOT).

Customer groups

Having established the target revenue of \$41.9 million, we then identify the customer groups and allocate the target revenue to each of those groups. The target revenue allocations for RY2024 mirror the revenue allocations from the past three years.

TLC utilised its current cost model to further consider allocations from 1 April 2023 with TPM changes.

The discussion below describes the cost of supply model that has been used to establish the allocations which are consistent with previous years.



The customer groupings utilised by TLC are:

- Standard Contracts
- Capacity and Dedicated Asset Standard and Non-standard contracts
- Distributed Generation

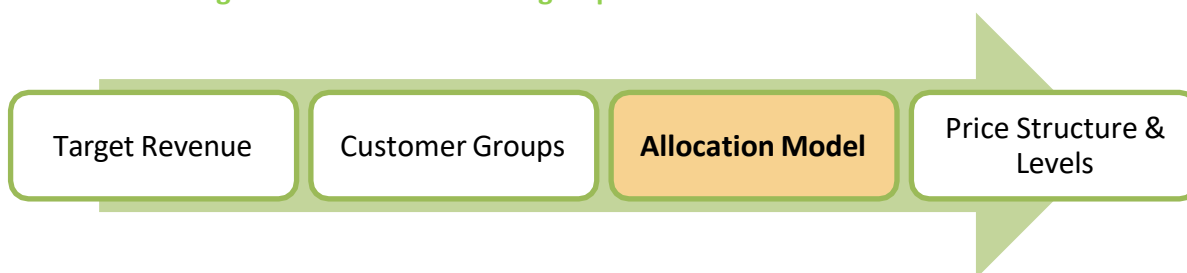
Within the Standard Contract group, there are also sub-groupings of customers, characterised by their location (density) and electrical capacity needs. These characteristics also impact the cost of supply, although capacity needs tend to mainly apply to non-residential customers. Accordingly, TLC has included sub-groupings within the four customer categories which provide clear demarcation points for pricing purposes, as follows:

- Residential
- General
- Dairy
- Temporary Accommodation

There have been no changes to the customer groups and their definition as compared with the previous pricing methodology disclosure.

Allocation model

Allocation of target revenue to customer groups



The application and choice of cost allocators involve a degree of judgement. While some costs may be attributable to particular customer types, a significant proportion of costs are common to the provision of service across customer types. TLC's cost allocation and price design model allocate target revenue to customer groups based on the assessment of how each customer group influences maintenance, service and investment costs. This is similar for rates, levies and transmission costs.

This section provides an overview of how the model allocates each type of cost: capital-related costs (depreciation and return on capital); operational costs; transmission and pass-through costs.

Capital-related costs

These costs are based on the estimated value of the network assets as recorded in TLC's asset management systems. The costs include an allowance for return on capital and operating expenditure as previously discussed. If a dedicated network asset use can be identified, the cost is allocated to those customers receiving the benefit of the dedicated assets. Otherwise, an appropriate allocator is used to proxy the use of the network asset by each customer group.

Operational costs

Maintenance costs

Asset management systems are used to identify maintenance costs by customer group, where available. Supply voltage, demand density and network age impact total maintenance costs.

Maintenance costs include both direct and indirect costs (principally network support costs). Historical averages are used to give a cost per km of line. These costs are allocated to customer groups based on line-length statistics. If there are negotiated contracts in place, a cost is deducted from the customer group allocation.

Customer and administration

Customer costs include demand-side management services and customer support services. The costs are allocated to customer groups on a proportional basis (ICP count) or as part of a negotiated contract.

Administration costs include the provision of shared services including corporate governance, finance, human resources, safety, pricing and regulatory management and information technology. Unless attributable to an individual these costs are allocated across the customer groups based on capital costs. If attributable, the cost will be passed on as a service fee or as part of a negotiated contract.

The Authority highlighted in its review of TLC's 2021 pricing scorecards that several other allocators could be used to allocate administration costs to load groups. Possible allocators include ICPs, capacity, anytime demand, peak demand and MWh.

Changing the basis of allocation would result in some customers facing price increases and others facing price reductions without any clear increase in efficiency. In general, allocation by ICP tends to allocate a relatively high proportion of costs to residential customers, whereas allocation by MWh allocates a relatively low proportion to residential customers, with other allocators producing outcomes that fall between those two extremes.

Changing allocators would improve efficiency if the new allocator reflected a significant cost driver. As administrative costs bear little relationship to any of the possible allocators identified above, it is unclear that changing the allocator will improve efficiency and so we have retained our use of capital costs as an allocator for administrative cost. These will be reviewed as part of our long-term pricing strategy.

Rates, levies and other pass-through

Effective 1 April 2023, rates, levies and other pass-through costs are allocated based on consumption kWh. Transmission cost allocations are discussed below.

Transmission costs

From 1 April 2023, Transpower will recover its costs using a new transmission pricing methodology (TPM). The Authority clearly states in its Practice Note¹⁵ that, Grid users are exposed to locational marginal prices (LMPs or "nodal prices") that provide appropriate signals for coordinating grid usage. Transmission charges in the new TPM are designed to be fixed-like to avoid altering the efficient signal provided by LMPs.

TLC previously recovered transmission charges through to mass-market customers via TOU variable transmission prices. The differential in TOU rate bands of the transmission component was used to reflect the transmission cost and was related to Transpower peak usage charges which were closely related to network usage during the peak time bands.

From 1 April 2023, about half of the transmission charges allocated to mass-market customers will be recovered through a fixed daily charge, with the remaining half recovered through a flat kWh rate in consumption kWh charges. Consequently, customers will see an increase in the daily fixed rates and, at the same time, a decline in the kWh rates, likely offsetting the increase in daily fixed charges.

Recovery of transmission costs through daily fixed charges and a flat kWh rate will result in increased efficiency by removing unnecessary signals from pricing. In its Practice Note¹⁶, the Authority provided its expectations for residential and small commercial consumers as, "fixed transmission charges, which are not intended to influence customers' network use decisions, should be passed through as fixed (daily) distribution charges."

As transmission costs pass-through is not intended to contain any signal, recovering part of transmission costs via flat kWh rate is also in line with the Authority's advice in its Practice Note¹⁷ in the context of distribution pricing, "if (cost) recovery via a fixed charge is not available, a second-best option may be a completely flat tariff structure that does not vary by time or amount of energy consumed". TLC has applied the same principle to transmission cost recovery.

¹⁵ Distribution Pricing: Practice Note Second Edition v 2.2, 2022, p62, section2, sub-section 2.2.

¹⁶ Distribution Pricing: Practice Note Second Edition v 2.2, 2022, p19, paragraph 112, supra n1.

¹⁷ Distribution Pricing: Practice Note Second Edition v 2.2, 2022, p6, paragraph 19.

The Electricity Authority highlighted in its 2021's assessment of TLC's pricing methodology and roadmap, that "Fixed charges' share of 28% of revenue" was low. Shifting part of transmission cost recovery from variable to fixed daily charges addresses this issue.

For CAPDED customers, TLC attempted to replicate the new Transmission Pricing Methodology to the extent possible (given the availability and quality of customer data) while managing customer impact.

- Connection charges are allocated based on connection quantity which is the average of 6 two-hourly highest kWh loads from September 2021 to August 2022. Connection quantity is used as a proxy of connection capacity.
- Benefit-based charges are converted into a benefit-based rate \$/per kW. Total Benefit based charge at every GXP is divided by lagged average AMDR of the GXP (from July 2015 to June 2019) to obtain a benefit-based rate \$/per kW. The residual charge rate \$/per kW for the year is calculated by Transpower at \$53.4718.
- Benefit-based and residual charges are allocated based on their lagged co-incident maximum demand from July 2015 to June 2019.

Revenue allocations by customer group

The allocations of revenue for the RY2024 pricing year are as follows:

- \$32.1m (inclusive of a forecast \$3.3m TLC Discount) from standard contract consumption customers; and
- \$9.8m (inclusive of a forecast \$1.0m TLC Discount) from CAPDED and distributed generation customers.

The target revenues are further disaggregated in the table below by customer sub-group:

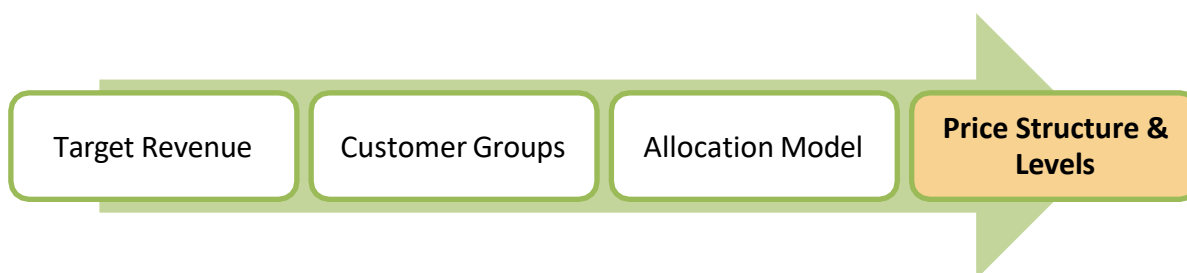
	Distribution prices (net of TLC Discount)	Pass-through/recoverable prices	Total prices
Residential	12.3	1.6	13.9
General	8.1	1.0	9.1
Dairy	3.0	0.7	3.7
Temporary Accommodation	5.0	0.3	5.3
Total	28.4	3.6	32.1

The measurements and statistics relevant to the allocation of costs to customer groups are provided in the following table:

Allocation Bases 1 April 2022 - 31 March 2023		
	No. of ICPs	Total kWh (000)
Residential	14,136	107,094
General	5,435	58,441
Dairy	457	38,450
Temporary Accommodation	3,945	17,108
Total	23,973	221,093

¹⁸ [Transmission Pricing Data for 2023/24 Pricing Year](#)

Pricing for standard contracts



Choice of pricing structure

The pricing structure used for prices for TLC's standard contract customers (all customers except CAPDED customers with loads > 150 kVA, streetlights, and non-standard contract customers) is based on a combination of fixed daily charges, and consumption prices (per kWh) which mostly vary according to the time of day (TOU).

The prices for each component vary according to the capacity of the connection and connection density.

Capacity

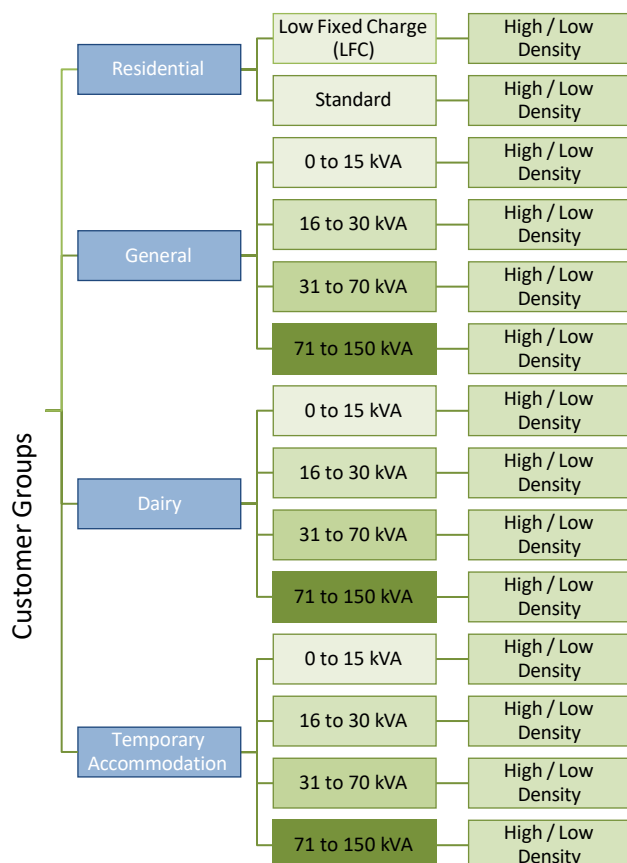
The capacity requirement of an individual customer affects the cost to supply because customers needing higher capacity require proportionally more assets or larger assets to supply them, and these assets can be shared with fewer customers. The capacity pricing categories used are: 0 to 15 kVA; 16 to 30 kVA; 31 to 70 kVA; and 71 to 150 kVA.

Density

Density, referred to as demand density is a ratio of demand (capacity as measured at the distribution transformer) to line length from the feeder. Low demand density areas (generally those remote areas with low population) require a higher level of investment per connection. Given that density is an important driver of cost, TLC makes a distinction between pricing in low and high-density areas.

Resulting pricing categories

The figure below shows the pricing categories for TLC's Standard contract customers.



Price components: Daily charge

Daily charges are applied to each ICP and vary according to capacity, customer type and connection density. Fixed daily charges provide for the recovery of a portion of fixed overhead costs (administration, billing, non-network asset depreciation, network management costs) and transmission costs.

Price components: Consumption charges

Consumption charges are based on energy use (kWh) and the time of day that consumption occurs. The periods have been defined by reference to network data. In particular consideration of peak periods and industry standards has been given. On this basis the following periods have been determined:

- Peak 7:00am to 9:30am
- Shoulder 9:30am to 5:30pm
- Peak 5:30pm to 8:00pm
- Shoulder 8:00pm to 11:00pm
- Off Peak 11:00pm to 7:00am

Consumption charges are a simplified means for reflecting the utilisation of network assets and recover capital-related costs and pass-through and recoverable costs.

- In this respect we note, the application of time-based cost recovery (particularly peak) reflects network constraints and variable recoverable costs.
- For pricing purposes, forecast kWhs are based on historical data. It is difficult to quantify with certainty potential changes in consumer behaviour that may affect the forecast kWh volumes. Where additional information/data is available, this is considered with future kWh forecasts.
- TLC utilises load control to help manage network congestion and additional network investment. To reward customers who provide network load control, lower peak prices exist.

For customers for which TOU data is not available, an anytime price applies to the total kWh usage, irrespective of the time of day.

Low Fixed Charge

LFC regulations are a regulatory requirement for distributors. The regulations were amended on 29 November 2021. For eligible customers, the daily fixed charge has been increased by 15 cents per day from 30 cents per day to 45 cents per day and the consumption charges adjusted such that for an average consumer using 8,000 kWh per year, the LFC price is no more than any alternative tariff offered. The requirement to offer such a pricing option, and the resulting subsidy, is acknowledged in section (a) (i) of the Pricing Principles.

Late payment fees

Late payment fees are no longer applicable with retailed billing. However, the fee remains for CAPDED customers.

Service fees

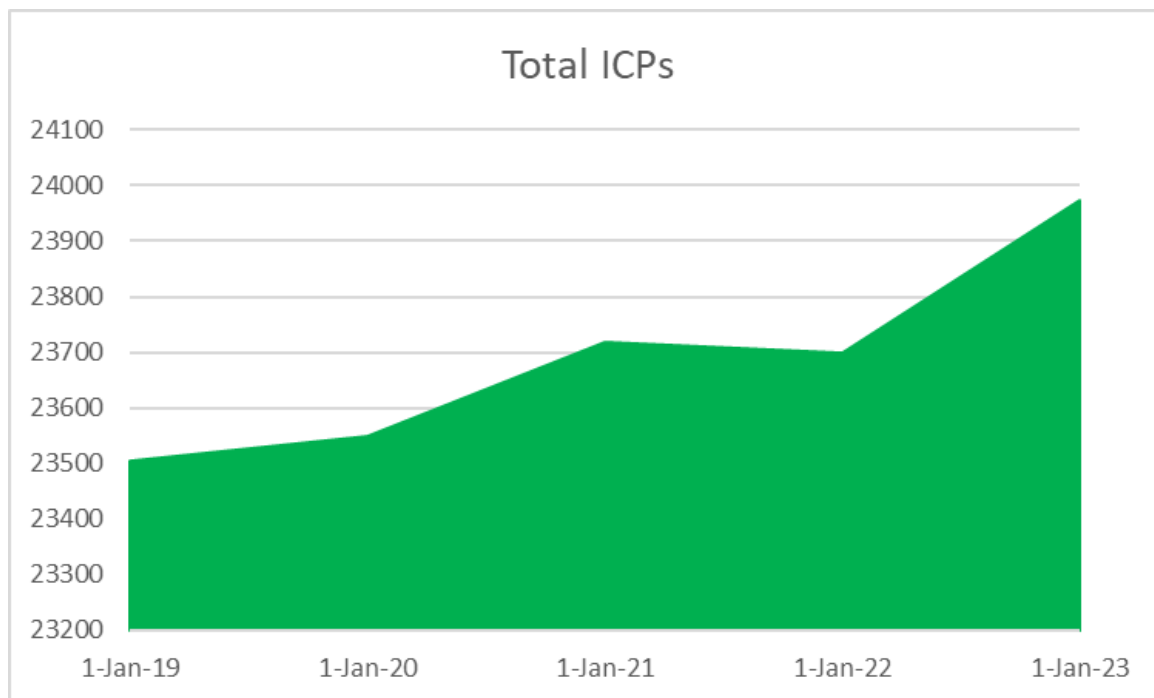
Service fees have been withdrawn from the pricing schedules for RY2024 as they are no longer applicable with retailer billing.

Forecast volumes

TLC has set RY2024 forecast volumes based on the volumes for three prior 12-month periods and has modelled a net growth of 1.5% in RY2024. New connections and decommissioning of connections on TLC's network will likely result in minimal growth. The following table details billed volumes by supply point and TLC's resulting forecast for RY2024.

Point of supply (GWh)	Oct 2019 to Sept 2020	Oct 2020 to Sept 2021	Oct 2021 to Sept 2022	Δ% 2021 to 2022	RY2024 forecast	Δ% forecast to year ending Sept 2022
Hangatiki	89.8	91.6	90.5	(1.2%)	91.7	1.4%
Whakamaru	35.5	36.9	36.7	(0.5%)	37.3	1.6%
National Park	8.3	8.2	7.6	(7.3%)	7.7	1.6%
Ohakune	15.4	15.4	15.1	(1.9%)	15.4	1.8%
Ongarue	36.6	37.5	37.3	(0.5%)	37.9	1.5%
Tokaanu	30.8	30.6	30.6	0.0%	31.1	1.7%
Total	216.4	220.2	217.8	(1.1%)	221.1	1.5%

The following chart shows there has been minimal growth in ICP's.



TLC has identified factors that affect the level of consumption in any given period, and these are discussed below. There is uncertainty on several variables. It is unclear that there is a methodology that is more meaningful or reliable than the simpler methodology of reviewing recent past growth (which reflects management expectations). Accordingly, TLC has decided to set RY2024 forecast volumes from recent annualised billing periods under consumption billing (1 October 2018 to 30 September 2022).

Effects of weather patterns on electricity consumption

From one year to the next, weather can impact total electricity consumption volumes on TLC's network. Examples of this include:

- a colder winter can drive more volumes through heating and more skiing days;
- a warmer summer can drive more volumes through air-conditioning, or it may mean reduced volumes through locals spending more time at holiday homes off-network e.g., Kawhia, Raglan;
- a warmer summer can mean more volumes through off-network customers coming to holiday homes e.g., Mangakino, Kuratau;
- a good dairy season can provide greater volumes; and
- climate change may alter long-term trends in electricity consumption through more unstable weather and generally increasing temperatures with milder winters.

However, TLC does not consider that there is enough analytical rationale to incorporate weather variation in its RY2024 forecasts due to the difficulty in doing so in a reliable manner.

Potential customer response to changes in pricing

The peak/shoulder differentials in distribution charges from RY2023 will be utilised for RY2024, adjusted for the reallocation of transmission costs. This should provide greater stability on usage profiles and forecasts.

Other factors that could affect volumes include: including:

- changes in the level of commercial activities (however, given the current global economic context a conservative growth assumption seems reasonable);
- the number of 'vacant' ICPs, though it is not evident that there would be cause for a step- change;
- the number of de-energisations for non-payment.

Consistency with TLC's internal budgeting processes

TLC's use of a 1.5% growth rate in forecast volumes is consistent with the methodology used in its internal budgeting processes.

To forecast volumes for billing for RY2024, TLC has taken the following approach:

- Assessed the billed kWh volumes for the three periods ending 30 September and normalise volumes to 366 days (leap year in RY2024);
- Use the volumes from the above as the forecast, adjusted for 1.5% growth, for RY2024.

Setting price levels

Price levels were set based on last year's levels, with pass-through components/decreased by a percentage to achieve the decrease in target revenue.

Residential customer pricing

For residential customers the decrease in the target revenue should result in a decrease in their overall charges. This may vary for customers depending on how the retailer of their choice passes these changes through to them and usage. Customers can check with their retailers if they are on the right pricing plan as per their capacity requirements and consumption levels.

The RY2023's distribution rates per kWh have been retained for RY2024.

Transmission costs allocated to the residential customers is also largely unchanged. However, transmission costs have been allocated differently in terms of the new TPM. Half of transmission cost for this customer group is recovered via a daily fixed charge and remaining through a flat kWh variable rate. Previously all the costs were recovered via the TOU consumption kWh rate.

LFC regulations are being phased out commencing from 1 April 2022. We reviewed our standard plan charges as well as ascertained an optimal LFC daily price.

Pricing for general, dairy, and temporary accommodation

In RY2023, TLC increased general fixed daily prices by 15% (slightly higher than for other load groups) to continue to transition TOU for general connections.

In RY2024, other mass market prices are expected to increase by at least 2% dependant on usage.

The RY2023's distribution rates are retained for RY2024.

Pass-through rates are declining and a shift in transmission charges from TOU consumption-based kWh rates to daily fixed charges and flat kWh rates.

Proportion of forecast revenue

Appendix 3 shows the proportion of revenue forecast to be earned from each pricing component.

Capacity and dedicated asset standard and non-standard contract customers

Capacity and dedicated asset standard customers

TLC has 28 ICPs included within its CAPDED standard contract customer group. Typically, CAPDED standard customers have capacity requirements of over 150 kVA. These contracts are priced based on the demand these customers place on the network, which reflects the load placed on network assets together with the service levels required to maintain supply at the CAPDED customer connection. Streetlight contracts are based on a standard charge reflecting the assets used to provide these services.

Capacity and dedicated asset non-standard contract customers

TLC currently has 14 customers connected to the network on CAPDED non-standard contracts. The rationale for using a non-standard contract reflects the cost of dedicated assets (or substantially dedicated assets) for customer connection and for the service levels required to maintain supply at the connection.

Shared network and transmission costs are recovered from non-standard customers as per standard contracts. Typically, a non-standard contract customer will require a capacity of over 150 kVA.

The price charged for the dedicated assets will typically include:

- An asset maintenance cost based on the costs to maintain dedicated assets. It includes a charge based on the line length of the dedicated asset multiplied by the relevant rate per km;
- A rate of return on the Regulatory Asset Value of the dedicated assets;
- Recovery of the depreciation of the asset during the contract term. The estimated value of the assets at the end of the current contract period is influenced significantly by the likelihood of the operation continuing beyond the contract period, or the assets being of value on contract expiry;
- Customer-related costs, depending upon the time commitment and frequency of interaction, are required to maintain the contractual relationship.

Pass-through and transmission costs

Pass through, and transmission costs are allocated to reflect actual customer impact on these costs. To achieve this, these customers are charged based on a combination of connection quantities and individual coincidental demand quantities.

Forecast volumes

CAPDED customer prices are applied to capacity and demand volumes and are historically measured. As a result, forecasting usage is not required to forecast this revenue. In particular:

- Pass-through and transmission revenue: Quantities are determined from the customer's historic metering demand data and invoiced for the 12 months effective 1 April 2023.
- Distribution revenue: Quantities are determined from contracted capacity, or that customers individual peak connection capacity.

CAPDED customer capacity growth is expected to impact RY2024 and in future years as described in TLC's Asset Management Plan.

Target revenue

Forecast target revenue recovered from CAPDED standard and non-standard contracts and distributed generation (after TLC Discount) has increased by 2.0% from RY2023 being a combination of price changes, growth and new connections. The table shows the target revenue allocated by the pricing component.

Capacity and Dedicated Asset Standard and Non-Standard - Target revenue and price components				
	Revenue RY2023	Revenue RY2024	Key pricing components RY2024	
			Distribution \$m	Pass-through \$m
	\$m	\$m		
Total	9.6	9.8	7.4	2.3

Supply obligation

There is no specific obligation that would increase the supply obligation in a non-standard contract or asset-based contract. However, an increased level of service is implicit when dedicated assets are installed as part of the infrastructure requirements.

Distributed generation pricing methodology

Prices charged and payments made to Generators on TLC's network are in accordance with the intent of Part 6: Connection of Distributed Generation of the Electricity Industry Participation Code 2010 and the pricing principles outlined in that document. The code has different regulations for injection, less than and greater than 10 kW.

Distributed generation charges

Distributed Generators, at the point of connection, may be charged:

- A network charge based on capacity requirements;
- A dedicated asset charge based on the recovery of investment and related costs;
- An administration charge to cover costs associated with general account maintenance, engineering and other technical costs that relate to distributed generation generally and for specific installations.

Distributed generation payments

Under the new TPM, transmission charges cannot be avoided, hence generators will not be able to receive any payment for ACOT.

After consultation with the industry and wider stakeholder groups, the Authority has amended the Code to remove the requirement for distributors to make these payments.

Distribution pricing principles

In 2019 the Electricity Authority published the distribution pricing principles below, to set clear expectations for efficient distribution prices:

The 2019 Distribution Pricing Principles:

- (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.
- (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.

The following discussion considers how TLC's pricing levels and structures compare with these principles.

Prices are to signal the economic costs of service provision

To be subsidy-free, prices must at least cover avoidable costs and not exceed standalone costs. As is explained by the Authority in its Distribution Pricing Practice Note,¹⁵ the assessment of whether prices are subsidy-free is most meaningfully assessed at a customer group level. TLC's process for allocating costs and establishing target revenues for each customer group would result in prices that cover avoidable costs. As discussed above in the [allocation model](#), where possible, costs are allocated according to how each customer group influences maintenance, service and investment costs. It is highly unlikely that revenue for any customer group would be above standalone cost, given that there is a large amount of shared and common costs, because of shared network and overhead costs.

Concerning Standard Contracts, TLC's pricing varies according to connection density, with high- and low-density price differences. This reflects that line density is a key cost driver and setting pricing separately for high- and low-density areas will reduce the potential for subsidies to occur. As discussed previously, customer groups (residential, general, dairy and temporary accommodation) are also a means for reflecting that customer types impose different costs on the network.

¹⁵ Electricity Authority, *Distribution Pricing: Practice Note August 2019*.

Pricing for CAPDED customers incorporates a capacity charge (per kVA), an individual peak demand charge and a coincidental demand charge to pass through the Transpower RCPD charges. Capacity and individual peak demand prices differ according to the 6 areas of point of supply, which assists in producing pricing that reflects the cost of provision and reduces the likelihood of subsidies.

Pricing for the largest customers is non-standard and is determined considering the dedicated assets used. Pricing that is determined in this way is responsive to the requirements and circumstances of stakeholders and would discourage uneconomic bypass.

New connections to the network are required to pay a capital contribution, which would reduce the potential for subsidisation to occur, by requiring recovery from the new connection account holder of incremental costs associated with assets that are not shared with other users.

Reflecting the impacts of network use on the economic cost

Capacity-based load groups are used to ensure prices have regard to the level of service capacity and encourage the use of controlled energy consumption by having a price differential, rewarding connections that have controlled load with lower usage prices.

The use of TOU pricing also provides a signal to consumers to reduce their costs by utilising spare network capacity at off-peak periods, reducing the need for capital investment in the network. TLC also highlights that TOU pricing is not only designed with existing network loadings in mind but puts in place a structure in which signals can be altered in the future according to changes in network context – for example, if growth accelerates (for example through Electric Vehicle uptake) then the peak signals can be strengthened. Customers will already understand the concept of TOU prices and how to respond.

Ideally, the distribution component of peak prices would reflect TLC's Long-Run Marginal Cost (LRMC). In the 2016/17 review of TLC's demand pricing, PwC estimated that TLC's LRMC was in the range of \$70-80 per kW and noted that TLC's demand charge appeared to be over-signalling peak costs. The distribution component of the peak TOU price to apply to residential customers on the standard plan from 1 April 2023 is broadly in line with PwC's LRMC estimate. For residential customers on the LFC plan, the peak price still over-signals the LRMC because the 45 cents per day regulatory limit on fixed charges means that around 81% of costs must be recovered through kWh charges, distorting the signals that kWh prices provide. However, a phased increase in the fixed charges will see this improve. Once LFC regulation has fully phased out, TLC expects recovering fixed costs through fixed charges, up to the extent it is necessary and where it can correctly signal current and/or future congestions.

The LRMC estimate is an average across the entire network. However, constraints are only in some parts of the network. Pricing that perfectly signalled upcoming investments would be more disaggregated with peak charges in constrained areas being higher, and peak charges in unconstrained areas being lower. However, pricing in this way would also have greater administrative costs (both for TLC and retailers) and would potentially create customer confusion. TLC has in the past had geographically averaged pricing, however, external expert advisors recommended that the pricing structure should be simplified. TLC followed that advice when implementing TOU pricing with less geographic disaggregation.

As technology evolves TLC will continue to evaluate the costs and benefits of more targeted pricing. For example, if demand-response becomes more viable and accessible, the benefits of geographically targeted price signals would increase.

The use of peak charging structures for CAPDED customers reflects key drivers of Transpower charges, to enable prices to signal the impact of additional demand on future investment costs and to pass through Transpower charges that result from demand. The use of peak charges also reflects that CAPDED customers tend to have greater resources to understand and manage demand charges than customers with smaller connections.

TLC has maintained similar peak/shoulder/off-peak differentials from the previous year's pricing which, as discussed in our RY2023 Pricing Methodology, reflected our estimate of LRMC. The LRMC unitised planned system capex using forecast demand growth and includes transmission peak demand pricing signals. The LRMC will vary over time, for example, as capital expenditure relieves some constraints, and demand growth creates others. We will continue to review our TOU price differentials as the LRMC changes, and as the structure of the TPM changes, but we also recognise that there is some uncertainty around growth forecasts given the fundamental change occurring in the sector because of decarbonisation. Electricity demand is expected to grow, through electrification of transport, heating and industrial processes, but there is uncertainty as to how strong and when the growth will happen. Given this uncertainty, we consider it prudent to err on the side of having peak charges that are above rather than below our point estimates of LRMC. We also note that we have had significant engagement with our customers on TOU pricing, which has included customer education. Given this, we think there is benefit in avoiding volatility in TOU pricing differentials – having done the Mahi in implementing price signals and explaining these to our customers and given that these types of pricing signals are likely to become increasingly important in future, we are hesitant to reduce these signals at the current time.

Differences in network service

Different prices for controlled versus uncontrolled connections reflect that controlled load has different service availability than uncontrolled load.

For CAPDED customers, pricing reflects that customers may connect with the network at different levels: 400V, 11kV or 33kV.

Encouraging efficient network alternatives

By signalling when the network is likely to be at its busiest, TOU pricing is likely to encourage efficient network alternatives and avoid encouraging inefficient alternatives. Also, changes made to the TOU differentials from 1 April 2020 enhanced consumers' ability to choose between opting for the network to control their load and controlling it through some other means i.e., themselves or via a third party. Under Part 6 of the Code, TLC charges distributed generation only the incremental cost of connection.

Prices that signal economic costs would under-recover target revenues, the shortfall should be made up by prices that least distort network use

Capacity/daily charges are used to recover a significant proportion of revenue for standard and CAPDED customers – these types of charges tend to be the least distortionary way to recover remaining costs, but arguably fairer than a single fixed charge for all ICPs. However, there are limitations on the proportion of costs that can be recovered through capacity or daily charges because of the LFC regulations, as well as fairness considerations.

TLC also notes that while the recovery of fixed costs from variable charges will distort usage to some extent, low uptake of evolving technologies (PV, EVs) in TLC's network footprint area is likely to mean that there will be less adverse consequences from variable charges than in other areas where there is much stronger uptake of evolving technologies. Technology change remains a key driver for renewable energy. Solar energy and battery storage at a domestic level continue to become more economically viable. The uptake of these technologies in TLC network is still relatively low but we anticipate that investment in solar generation and batteries will continue to accelerate. These technologies introduce some new challenges for TLC, including how we will manage the network in an environment where there is significant bi-directional power flow, and how we support the growth of distributed generation while maintaining an economic supply for our customers using traditional electricity lines.

Prices should be responsive to the requirements and circumstances of end-users by allowing negotiation to reflect the economic value of services and enable price/quality trade-offs.

This principle is particularly relevant to pricing for large customers. Bypass risks are associated with directly connecting to Transpower's network, use of alternate energy source or the potential to locate their site in a location served by another lines company. Commercial negotiation and individual pricing/account management for large customers help minimise these risks e.g., using pricing that considers dedicated assets and distance from the customer site to the local zone substation. It also enables price/quality trade-offs: for example, some customers with high-capacity connections may choose to own their own local substation.

More generally, concerning price-quality trade-offs, the nature of electricity networks is such that there are limited means to enable price/quality trade-offs for smaller customers. However, the ability to opt in to load control effectively provides a price/quality choice. Also, TOU pricing allows customers to make decisions around shifting load in return for lower off-peak (or shoulder prices).

Development of prices should be transparent and have regard to transaction costs, consumer impacts, and uptake incentives

TLC has modelled customer bill impacts for customers. TLC has drawn on that analysis, feedback from customers, and benchmarking of prices from EDBs in setting price levels for the RY2024 pricing year. The fixed charge increases are more to align with TLC's costs and TLC will continue to increase fixed prices and decrease variable prices where there are fewer local constraints.

As a result of direct billing, TLC is aware of the transaction costs associated with pricing. TOU is considered by TLC to have lower transaction costs than demand charging for standard customers, because of being simpler to understand with less confusion arising from demand charges for which lines charges were affected by demand from the previous year.

Pricing strategy

The effective transition from demand pricing to TOU pricing was a core focus for TLC. That transition is complete. The next stage in our pricing reform was implementing changes to the phased removal LFC regulations and implementation of new Transmission Pricing Policy. These changes were implemented in RY2024. Approximately 50% of the transmission costs have been allocated to fixed daily charges and the remaining costs allocated using a fixed kWh price for consumption priced connections. RY2024 has seen increased fixed prices proportionate to variable prices with fixed prices now accounting for 41% of forecast revenue for consumption-priced connections. TLC has also increased the allowable fixed prices during the LFC transition.

CAPDED customers' system requirements and usage of TLC's network are unique in several ways:

- They have firm capacity requirements
- They have unique levels of tolerance for interruptions hence requirement-specific backup supply options are required by them
- The economic value of uninterrupted power supply is generally higher compared to a residential customer or a small commercial customer

TLC is at times required to make big investments for existing customers requiring upgrades and new capacity and dedicated asset customers. The cost is transparently signalled to the customer and is loaded in the charges to the customer requesting upgrade or new connection depending on the commercial negotiations. TLC also requires capital contributions from CAPDED customers to cover the cost of extending or upgrading the Network to deliver supply to the point of connection requested by the customer. It is ensured that the pricing is aligned with the impact on network costs.

TLC's long-term pricing strategy is for prices to gradually reflect the underlying cost structure of the business when comparing fixed and consumption-based pricing, while achieving efficiency in the use of the network assets. Any change to pricing structures will be done with careful consideration of customer affordability, energy equity, and limit potential price shock. TLC cares for its customers and we aim to deliver fair and simple pricing for all customers on our network. This will be further addressed in TLC's Pricing Roadmap.

TLC will continue reviewing our cost model and consider allocations with a view of adjusting, if necessary, for 1 April 2025 in line with the Authority's guidance provided in the Distribution Pricing Practice Note.

TLC defined the following overarching objective for pricing: "to achieve optimum equity, simplicity and transparency for the customers on our Network".¹⁶

¹⁶ [Terms of Reference, 'Service based pricing review, 6 December 2016](#)

The following criteria should be used in evaluating pricing options. Pricing methodologies and the actual prices that result should seek to achieve:

- **Equity**—Prices should allocate distribution costs proportionately to customers. Prices should be causer/user-pays based. Prices should reward demand-side behaviour where results are symmetrical to supply-side demand for the services
- **Stability**—Prices should be stable for customers year-on-year, and only change to the extent that the customers' underlying demand for the services changes. Prices should also deliver stable revenue to TLC to enable it to continue to invest in and maintain, the network.
- **Efficiency**—Prices should promote the efficient use of electricity network assets. Where necessary, prices should signal network constraints.
- **Control**—Customers should receive the information they require to manage their demand for service in a timely manner and hence be able to control the cost of the service by changing their demand. The information should be available in an economically efficient form that gives customers options and allows them to control the cost of the service. Prices and usage information should promote responsive behaviour from consumers.
- **Clarity and transparency**—prices should be understandable to customers. Prices should be able to be implemented simply without unnecessary complexity. Prices should be robust mathematically.
- **Compliance**—Prices should comply with the Electricity Authority's pricing principles and aligns with other legislation including Low Fixed Charge regulations, Distributed Generation Code Continuance of Supply and the Commerce Commission's Input Methodologies.
- **Durability**—The methodology needs to last for a long time.
- **Transition and implementation considerations**—Address any technical and customer issues relating to any changes.
- **Practical**—the pricing methodology can be efficiently implemented with existing technology. Our pricing is expected to continuously evolve to deliver on the pricing criteria above and in line with the Authority's principles. Any future changes to our pricing methodology will require the management of possible conflicting criteria.

Appendix 1: Directors' Certification

Schedule 17 Certification for Year-beginning Disclosure

Clause 2.9.1 of section 2.9, Information Disclosure Determination

We, Bella Takiari-Brame and Mike Underhill, being directors of The Lines Company Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

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

21 February 2023

21 February 2023

Date

Date



Bella Takiari-Brame

Mike Underhill

Director

Director

Appendix 2: Information Disclosure Determination 2012 Alignment Table

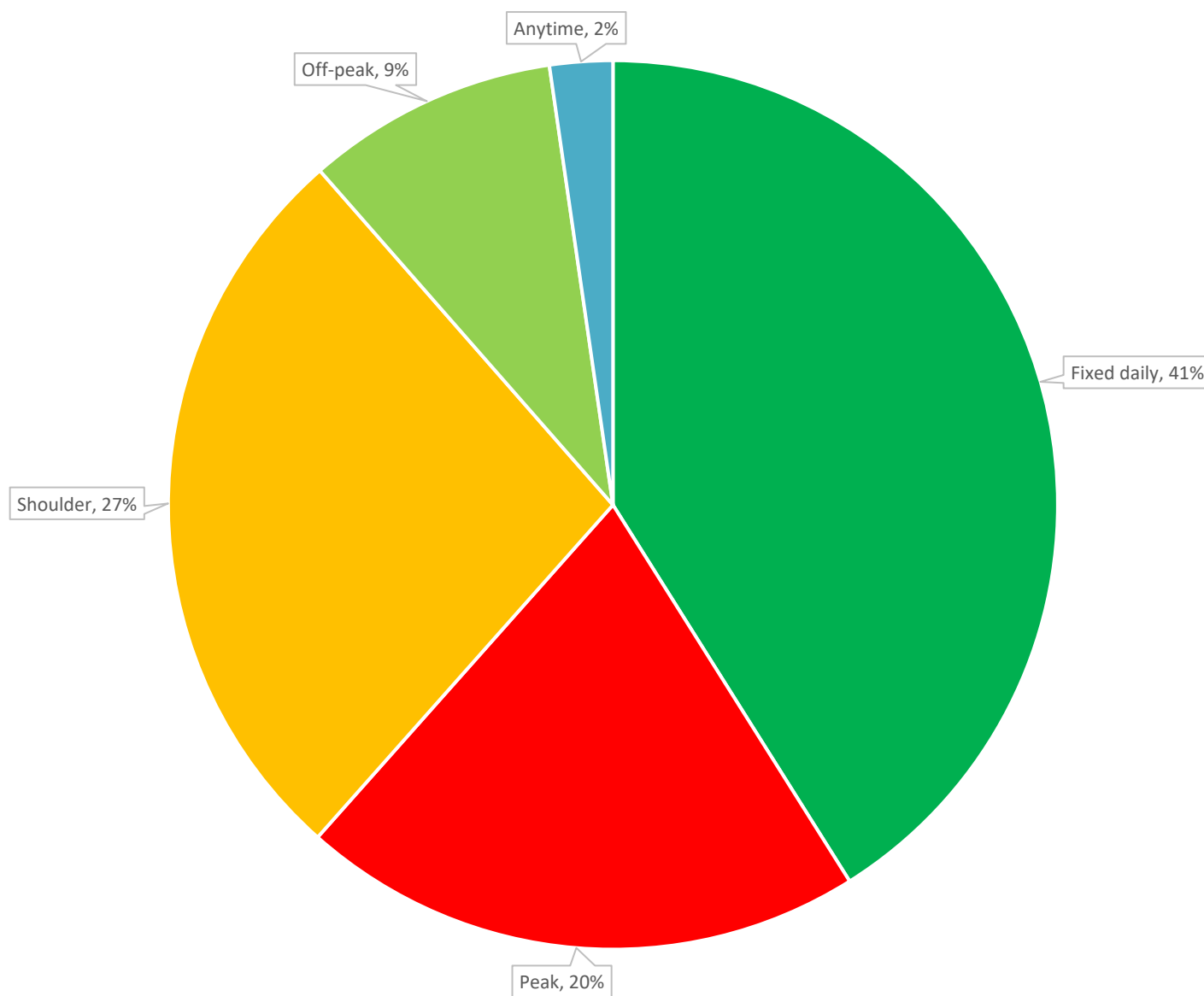
Information Disclosure Determination 2012 requirements	Price Methodology Reference
<p>Section 2.4.1 Every EDB must publicly disclose, before the start of each pricing year, a pricing methodology which-</p> <p>(4) Explains whether, and if so how, the EDB has sought the views of consumers, including their expectations in terms of price and quality, and reflected those views in calculating the prices payable or to be payable. If the EDB has not sought the views of consumers, the reasons for not doing so must be disclosed.</p>	Customer consultation and engagement
<p>Section 2.4.3 Every disclosure under clause 2.4.1 above must-</p> <p>(1) Include sufficient information and commentary to enable interested persons to understand how prices were set for each consumer group, including the assumptions and statistics used to determine prices for each consumer group</p>	Pricing for standard contracts and Capacity and dedicated asset standard and non-standard contract customers
<p>(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</p>	Distribution pricing principles
<p>(3) State the target revenue expected to be collected for the disclosure year to which the pricing methodology applies</p>	Target revenue
<p>(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</p>	Target revenue
<p>(5) State the consumer groups for whom the prices have been set, and Describe</p> <p>(a) the rationale for grouping consumers in this way</p> <p>(b) the method and the criteria used by the EDB to allocate consumers to each of the consumer groups</p>	Customer groups
<p>(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</p>	Changes in price levels
<p>(7) Where applicable, describe the method used by the EDB to allocate the target revenue among consumer groups, including the numerical values of the target revenue allocated to each consumer group, and the rationale for allocating it in this way</p>	Allocation model
<p>(8) State the proportion of target revenue (if applicable) that is collected through each price component as publicly disclosed under clause 2.4.18</p>	Appendix 3: Forecast revenue recovered through standard contract pricing components

Information Disclosure Determination 2012 requirements	Price Methodology Reference
<p>Section 2.4.4 Every disclosure under clause 2.4.1 above must if the EDB has a pricing strategy -</p> <p>(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</p> <p>(2) Explain how and why prices for each consumer group are expected to change as a result of the pricing strategy</p> <p>(3) If the pricing strategy has changed from the preceding disclosure year, identify the changes and explain the reasons for the changes</p>	<p>Pricing strategy</p>
<p>Section 2.4.5 Every disclosure under clause 2.4.1 above must-</p> <p>(1) Describe the approach to setting prices for non-standard contracts, including-</p> <p>(a) the extent of non-standard contract use, including the number of ICPs represented by non-standard contracts and the value of target revenue expected to be collected from consumers subject to non-standard contracts</p> <p>(b) how the EDB determines whether to use a non-standard contract, including any criteria used</p> <p>(c) any specific criteria or methodology used for determining prices for consumers subject to non-standard contracts and the extent to which these criteria or that methodology are consistent with the pricing principles.</p>	<p>Capacity and dedicated asset standard and non-standard contract customers</p>
<p>(2) Describe the EDB's obligations and responsibilities (if any) to consumers subject to non-standard contracts in the event that the supply of electricity lines services to the consumer is interrupted. This description must explain-</p> <p>(a) the extent of the differences in the relevant terms between standard contracts and non-standard contracts</p> <p>(b) any implications of this approach for determining prices subject to non-standard contracts</p>	<p>Supply obligation</p>
<p>(3) Describe the EDB's approach to developing prices for electricity distribution services provided to consumers that own distributed generation, including any payments made by the EDB to the owner of any distributed generation, and including the-</p> <p>(a) prices; and</p> <p>(b) value, structure and rationale for any payments to the owner of the distributed generation.</p>	<p>Distributed generation pricing methodology</p>

Appendix 3: Forecast revenue recovered through standard contract pricing components

Customer Group	No. of ICPs	Fixed daily (\$000)	Daily TLC Discount (\$000)	Peak (\$000)	Peak TLC Discount (\$000)	Shoulder (\$000)	Shoulder TLC Discount (\$000)	Off-peak (\$000)	Off-Peak TLC Discount (\$000)	Anytime (\$000)	Anytime TLC Discount (\$000)	Total before TLC Discount (\$000)	Total after TLC Discount (\$000)	Average per ICP after TLC Discount (\$)
Residential														
Low Fixed Charge	7,026	1,151	-110	1,663	-147	2,273	-204	833	-71	175	-6	6,096	5,558	791
Standard	7,110	3,092	-309	2,220	-219	2,830	-288	909	-86	175	-8	9,225	8,316	1,170
Subtotal	14,136	4,244	-419	3,882	-366	5,104	-492	1,742	-157	349	-14	15,321	13,874	981
General														
0-15 kVA	4,809	3,262	-370	971	-115	1,224	-141	356	-38	143	-10	5,956	5,282	1,098
16-30	407	568	-51	385	-41	518	-55	147	-14	89	-5	1,707	1,541	3,786
31-70	167	515	-44	258	-24	410	-38	125	-10	104	-3	1,413	1,293	7,740
71-150	52	359	-23	217	-16	359	-28	146	-11	6	-3	1,088	1,007	19,361
Subtotal	5,435	4,705	-488	1,831	-196	2,510	-261	773	-73	343	-22	10,163	9,122	1,678
Temporary Accommodation														
0-15 kVA	3,735	3,326	-113	367	-9	439	-11	150	-3	42	-3	4,323	4,183	1,120
16-30	132	254	-5	72	-2	79	-2	34	-1	5	0	443	434	3,287
31-70	67	310	-3	85	-1	107	-1	44	0	20	0	567	561	8,375
71-150	11	102	-3	37	-1	48	-1	21	0	0	0	208	202	18,367
Subtotal	3,945	3,991	-125	561	-13	673	-15	249	-5	67	-3	5,540	5,380	1,364
Dairy														
0-15 kVA	41	30	-4	26	-4	28	-4	9	-1	0	0	93	80	1,942
16-30	83	129	-17	120	-20	134	-23	49	-8	5	-1	438	369	4,443
31-70	278	952	-128	703	-110	912	-146	322	-49	1	0	2,890	2,457	8,837
71-150	55	386	-52	201	-29	305	-47	113	-17	13	-2	1,017	869	15,807
Subtotal	457	1,498	-202	1,051	-163	1,379	-220	493	-76	18	-3	4,438	3,774	8,259
Total	23,973	14,437	-1,233	7,325	-738	9,666	-989	3,257	-311	777	-42	35,463	32,150	1,341

Forecast revenue recovered through standard contract pricing components RY2024



Appendix 4: Forecast revenue recovered through standard contract pricing components after TLC Discount

Time of use/Anytime	No. of ICPs	Fixed daily	Peak	Shoulder	Off-Peak	Anytime	Total
Residential							
Low Fixed Charge	29%	3%	5%	6%	2%	1%	17%
Standard	30%	9%	6%	8%	3%	1%	26%
Subtotal	59%	12%	11%	14%	5%	1%	43%
General							
0-15	20%	9%	3%	3%	1%	0%	16%
16-30	2%	2%	1%	1%	0%	0%	5%
31-70	1%	1%	1%	1%	0%	0%	4%
71-150	0%	1%	1%	1%	0%	0%	3%
Subtotal	23%	13%	5%	7%	2%	1%	28%
Temporary Accommodation							
0-15	16%	10%	1%	1%	0%	0%	13%
16-30	1%	1%	0%	0%	0%	0%	1%
31-70	0%	1%	0%	0%	0%	0%	2%
71-150	0%	0%	0%	0%	0%	0%	1%
Subtotal	16%	12%	2%	2%	1%	0%	17%
Dairy							
0-15	0%	0%	0%	0%	0%	0%	0%
16-30	0%	0%	0%	0%	0%	0%	1%
31-70	1%	3%	2%	2%	1%	0%	8%
71-150	0%	1%	1%	1%	0%	0%	3%
Subtotal	2%	4%	3%	4%	1%	0%	12%
Total	100%	41%	20%	27%	9%	2%	100%

Appendix 5: Target revenue by customer group and No. of ICPs

