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Electricity Distribution Information Disclosure Determination 2012 For prices applying from 1 April 2024

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## **Section 1: Introduction**

#### **1.1** The Lines Company Limited (TLC)

TLC is an electricity distribution business (distributor). TLC's assets include power lines, poles, cables, substations, transformers, and other infrastructure. TLC owns, manages, and maintains the energy network that connects around 24,000 homes and companies to the national grid throughout the King Country and Central Plateau.

As a supplier of an essential service, a key objective for TLC is to set fair and reasonable prices for small, large, and seasonal electricity users who have shared access to the network. This document outlines the pricing methodology TLC uses to determine its delivery prices.

#### 1.2 Pricing Methodology RY2025

This document applies to the pricing of all TLC's electricity lines services, regulated under Part 4 of the Commerce Act 1986.

The regulatory year ending 31 March 2025 (RY2025) is the final year before the Commerce Commission 'resets' revenue for most distributors. TLC is looking to revise our pricing from 1 April 2025, including simplification of our pricing structure and prices through consideration and review of allocators with our cost of supply model. Accordingly, we will also be publishing a fully refreshed pricing methodology and other pricing-related documents effective from 1 April 2025.

#### **1.3 TLC's ownership and WESCT**

TLC is proudly owned by the Waitomo Energy Services Customer Trust (WESCT), on behalf of customer beneficiaries. More information about WESCT, customer beneficiaries and the TLC Discount for WESCT Customers is detailed in this document or on WESCT's website wesct.org.nz.

#### **1.4 TLC's distribution network**

TLC delivers electricity from five Grid Exit Points (GXPs): Hangatiki, National Park, Ongarue, Ohakune and Tokaanu, plus from major Waikato generation plants connected to the sub-transmission network. Supply to the network is also supported by several hydro generators connected to the distribution network at 11kV and 33kV.

TLC prices connections less than 150 kVA consistently regardless of their connection point due to relatively homogenous characteristics but delineates between a connection's use, density and whether a connection has controllable hot water load. Unmetered load also has one pricing area for simplicity.

TLC has six pricing areas for connections greater than 150 kVA, mapping to the source of delivered electricity.

The network covers an area of 13,700 km<sup>2</sup> and provides approximately 24,000 connections and 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.

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, nor has there been a significant increase in demand. 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.

In the 2023 Asset Management Plan (AMP) and the 2024 AMP Update, TLC describes the balancing of investment to support New Zealand's transition to a low-emission future, improve reliability and maintain customer affordability.

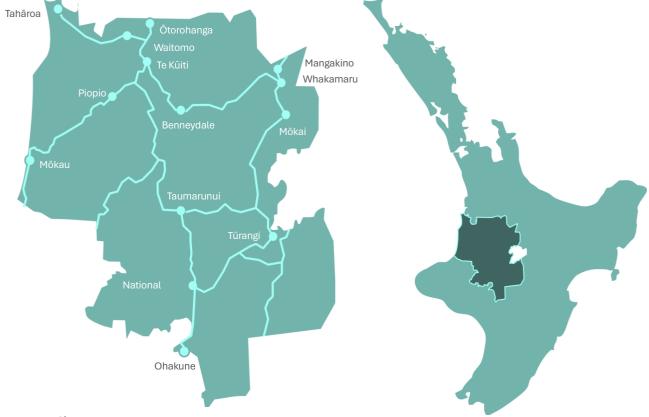


Figure 1, below, shows the geographic location and arrangement of the network.

FIGURE 1 TLC'S NETWORK REGION

#### **1.5** Price-setting context

The Commerce Commission (the Commission) regulates the maximum annual revenue TLC can earn from its customers and the minimum quality of service it must deliver. In November 2019, the Commission published its final decision on TLC's default price-quality path (DPP3)<sup>1</sup>, including a schedule of forecast net allowable revenue for the five years from 1 April 2022 to 31 March 2025.

In April 2023, TLC published the five-year pricing strategy and roadmap for pricing improvements to prepare for the significant electrification expected as New Zealand pursues its decarbonisation and infrastructure resilience goals. This has been updated on 1 April 2024.

<sup>&</sup>lt;sup>1</sup> Electricity Distribution Services Default Price-Quality Path Determination 2020

## Section 2: Cost reflective pricing and the future discussion

#### 2.1 Overview

TLC's pricing strategy and roadmap are available on TLC's website <u>Disclosures - The Lines Company</u> but a brief discussion is contained in this section.

Technology changes, such as more affordable small-scale distributed generation and electric vehicles (EV), are making well-designed network pricing increasingly important. This is driving reform across New Zealand (and in Australia and the UK) toward cost-reflective pricing (CRP). Figure 2, below, describes cost-reflective pricing in more detail.

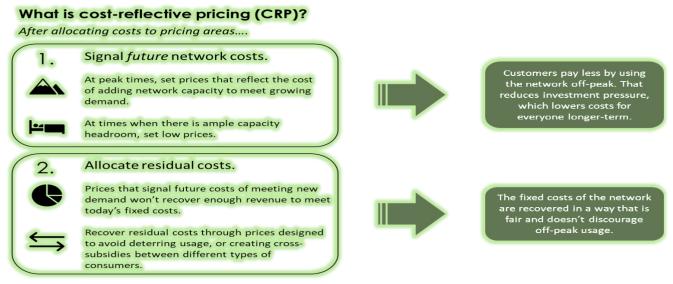


FIGURE 2 COST REFLECTIVE PRICING

TLC is committed to implementing best-practice pricing plans that play a constructive role in encouraging efficient network use and investment, for the long-term benefit of the customers. With the revision of prices, over the next year, we aim to:

- Develop economic cost estimates we need sound estimates of the long-run marginal cost of supply (LRMC) for the network.
- Simplify pricing structures and cost allocation TLC intends to consult with customers about adopting a simpler approach.
- Implement gradually and carefully TLC continue to want to avoid unnecessarily exacerbating the bill pressure on customers. We will continue to implement pricing reform gradually and carefully, considering affordability, to allow the realisation of the longer-term benefits of cost-reflective pricing.

#### 2.2 Context

New technologies and trends (including solar generation, batteries, EVs, irrigation, electrification, and resilience) are increasing the scope for network pricing to influence investment and cost-shifting outcomes – for the better (if well-designed) or for the worse.

It is important that pricing arrangements can signal future costs. Example outcomes from price signal misalignment respective solutions are detailed below:

• inefficient EV charging. EV uptake will grow rapidly and could cause significant network investment pressure if charging adds to peak demand. To encourage efficient EV charging, prices for off-peak or interruptible demand need to align where usage does not drive new network costs;

- poorly targeted solar installations. Ideally, we should send a well-calibrated and targeted price signal that encourages a helpful (but not excessive) investment in solar. This helps manage overall energy costs;
- electricity rationing. Usage-based charges at times when there is ample network capacity deters consumption, contributing to under-heated or under-cooled homes, and suppressed electrification; and
- unnecessary network investment. Over time, well-targeted pricing should produce flatter network profiles, supporting deferral of reinforcement work and potentially avoiding altogether a wave of low voltage (LV) reinforcement that may otherwise be needed to accommodate EVs or high solar uptake.

There is also a policy and regulatory focus on network pricing that reinforces the case for CRP and adds some elements:

- Low Fixed Charge (LFC) the Government is phasing out the Electricity (Low Fixed Charge Price Option for Domestic Consumers) Regulations 2004 (LFC Regulations). This improves the alignment of price signals with underlying costs;
- Cost allocation there is some Government and regulatory focus on reviewing how costs are allocated between customer groups (e.g., households versus businesses); and
- New connection costs and capital contributions there is a focus on clarifying and aligning terminology to assist customers in understanding these costs and the processes for new connections.

Operationally, there is scope to simplify pricing.

- revenue path we will continue to have a relatively steep revenue path in coming years as we invest to
  enable decarbonisation and address resilience factors across the network. This heightens the need to
  carefully manage any additional bill shock that could flow from pricing reform;
- increased capex profile reflecting our continuous drive to achieve our assigned quality standard thresholds with material investment changes on vegetation, security of supply, resilience, asset renewal and maintenance; and
- affordability we are particularly mindful that current inflationary and interest rate pressures are impacting customers. Our immediate focus is to deliver a safe reliable network that meets customer and regulatory requirements, while implementing the pricing strategy, with affordability being forefront.

These factors help drive TLC's review and the direction of TLC's pricing strategy.

#### 2.3 Objectives and approach

TLC aims to optimise network investment, for the long-term benefit of consumers. We are entering a period where growing demand will intensify network investment pressures and TLC must stay ahead of demand while not investing more than necessary into the network.

Investing too little or too late reduces security and reliability and will impact the economic growth of our region. Investing too much or too early pushes up prices for consumers.

#### 2.4 Develop economic cost estimates

To refine pricing, TLC needs to develop sound estimates of how an increase in usage translates into more (or earlier) investment in the capacity of the network (and any other capital or operating costs that flow from the new capacity). This is termed the long-run marginal cost (LRMC).

To estimate LRMC values, TLC will need to further develop a suitable methodology and complete engineering studies. This work is ongoing and includes selecting an appropriate LRMC methodology. The engineering studies are underway. This is likely to involve developing one or more LRMC values for the LV networks, and LRMC estimates for the high-voltage networks and grid connection in each pricing area. In future, an LRMC value may also be required for network reinforcement needed to support high solar penetration.

#### 2.5 Implement gradually and carefully

With current inflation pressures, our charges will already reflect relatively large year-on-year changes in pricing. While implementing pricing change is important, TLC wants to make sure we set a pace that:

- avoids unduly exacerbating bill pressure for those customers for whom new prices will cause higher bills (e.g. because they are low or peaky users);
- allows for careful planning and design, including the analysis that will be needed for key inputs such as LRMC and subsidy-free values; and
- supports effective consultation and engagement, which is crucial for informing us and customers.

The work plan for the past year has been to ready pricing plans for simplification in April 2025. After simplification, the plan is to refine and tune the strength of TOU pricing signals over the following two years so that TOU prices are fully cost-reflective from RY2027 (when the LFC Regulation phase-out is complete).

#### 2.6 Customer impact

As TLC implements its strategy, it will alter customers' bills – some will pay less, and some will pay more. TLC is cognisant of this and undertakes analysis with pricing changes to understand impacts. TLC encourages customers to utilise the network at cheaper times of the day, where possible, especially with our prices for off-peak being reduced.

As progress is made through the gradual implementation of the pricing strategy, TLC will continue to monitor the impact of changes to understand the impact on customer affordability.

#### 2.7 Alignment to Electricity Authority distribution pricing reform objectives

In September 2022, the Electricity Authority published an open letter to distributors outlining their expectations for pricing reform. Table 1 summarises the five areas of focus from the open letter alongside an explanation of how TLC's strategy is meeting the Electricity Authority's expectations.

Focus Area	How TLC is meeting reform expectations
Distributors' roadmaps responding to future network congestion	As the uptake of EVs increases, new prices will be considered. Engineering studies will be used to calculate LRMC values that will inform peak TOU prices. At this stage, it is anticipated that network
	growth investment within a 5 to 15-year window will be signalled through peak TOU prices.
Distributors' response to any significant first- mover disadvantage (FMD) issues facing customers seeking to connect to their networks (new and expanded connections)	TLC's Capital Contributions Policy describes the approach to funding new network connections. The policy is due to be reviewed this year and FMD will be addressed as part of that review.
The extent to which distributors are following the Authority's guidance on the pass-through of new transmission charges	TLC has followed the Electricity Authority's guidance to recover transmission costs through fixed charges where possible.
	This means that for RY2025 residential transmission charges have been recovered through daily fixed charges to the extent permissible under the LFC regulations, with the balance recovered evenly from each variable charge to minimise the distortionary impact of TPM changes.

Focus Area	How TLC is meeting reform expectations
	For other customers, transmission charges for RY2025 will be recovered through the fixed daily charge.
Whether distributors are increasing their use of fixed charges to match the phase-out path of the low fixed charge price regulations	In line with regulation changes, TLC has continued to phase out LFC charges to support the move towards more cost-reflective pricing. RY2025 is the third year of a five-year phase-out that will be completed in RY2027 and results in fixed charges for residential consumers increasing, from \$0.45 per day to \$0.60 per day from 1 April 2024.
Distributors avoiding, or transitioning away from, recovery of costs that are fixed in nature through use-based charges, such as charges based on a customer's Anytime Maximum Demand (AMD)	TLC is reviewing cost recovery and will update alongside our pricing review.

 TABLE 1 – ALIGNMENT TO ELECTRICITY AUTHORITY DISTRIBUTION PRICING REFORM OBJECTIVES

## Section 3: Overview of TLC's pricing

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.

#### 3.1 Pricing changes made this year

This section summaries the key changes that will affect prices for RY2025:

#### 3.1.1 Continued phase out of Low Fixed Charge Regulations (LFC)

In line with regulation changes, TLC has continued to phase out LFC charges to support the move towards more cost-reflective pricing. RY2025 is the third year of a five-year phase-out that will be completed in RY2027 and results in fixed charges for residential consumers increasing, from \$0.45 per day to \$0.60 per day from 1 April 2024.

#### 3.1.2 Transmission Pricing Methodology (TPM)

Transpower's new TPM for the recovery of transmission charges came into effect on 1 April 2023. TLC has followed the Electricity Authority's guidance to recover transmission costs through fixed charges where possible. This means that for RY2025 transmission charges have been recovered through daily fixed charges to the extent permissible under the LFC regulations, with the balance recovered evenly from each variable charge to minimise the distortionary impact of TPM changes. For other customers transmission costs are recovered fully through fixed daily charges.

#### 3.1.3 Increase fixed daily prices

The Authority has indicated that they want to see distributors' prices align with distributors' costs i.e. have fixed prices recover fixed costs and variable prices recover variable costs. TLC has increased fixed daily prices for RY2025 and is forecast to recover 48% of revenue from these prices from consumption-based customers.

#### 3.1.4 Reduction in off-peak prices

TLC has reduced off-peak prices by about 55% to \$0.0245 per kWh from RY2024 (except LFC prices). This is in support of decarbonisation, allowing innovative pricing options for retailers to benefit customers and encouraging the use of the network during off-peak times e.g. for EV charging.

#### 3.2 Customer engagement

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 Plan and Annual Report.

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 as needed 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.

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 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).

#### 3.3 TLC's customers

TLC has several different types of customers. Large customers make proportionately greater use of high voltage (HV) network elements than smaller customers. This is considered in the pricing methodology by allocating forecast allowable revenue to these customers proportional to their use of the network. This approach means that prices differ between pricing areas and customer groups. Customer types are summarised in the table below.

Description	Customer Groups	Description	No. of active connections
Volumetric/Consumption (kWh) billed	Residential	connections at a principal place of residence (home) sharing LV assets	14,256
	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. sharing LV assets	5,308
	Dairy	connections where the end use is 'dairy cattle milking shed' sharing LV assets	458
	Temporary Accommodation	connections where the end use is a holiday home or accommodation sharing LV assets	4,000
Capacity and Dedicated Asset	Standard Contract	> 150 kVA utilising 11 kV or 33 kV assets	38
	Non-standard contracts	> 150 kVA utilising 11 kV or 33 kV assets	41
	Unmetered Load	Public street lighting with a defined load pattern sharing LV assets	122
Distributed Generation	> 100 kW	Hydro and geothermal electricity generation	11
Total			24,234

TABLE 2 – TLC CUSTOMER GROUPS

#### 3.3.1 Volumetric/Consumption (kWh) billed customers

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 as above.

Pricing for these connections consists of a daily price plus kWh consumption prices (peak, shoulder and offpeak or anytime). The daily price varies according to the capacity requirement and the connection density of the installation.

An electricity low-use option is available for 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 45 cents to 60 cents per day. There are no changes to the pricing structure for RY2025, however, the recovery of all transmission costs has shifted to daily fixed prices.

#### 3.3.2 Capacity and Dedicated Asset customers (CAPDED)

CAPDED customers are those with capacity requirements greater than 150 kVA or who use assets for specific purposes (e.g. streetlights and unmetered load). 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.

#### 3.3.3 Distributed generation

This covers electricity generators on TLC's network with pricing following the intent of Part 6: Connection of Distributed Generation of the Electricity Industry Participation Code 2010.

### **Section 4: 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.

The following sections step through these processes.



### Section 5: Calculate target revenue

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



Target revenue is based on 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 network management 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 legislative obligations, and provide a 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 \$263 million on 31 March 2023. Pass-through, recoverable and

transmission costs reflect costs we incur that are largely outside of our control and are passed through to our customers.

TLC's forecast revenue for the year commencing 1 April 2024 is \$45.7 million, with the forecast being \$3.8 million (9%) more than RY2024's forecast. The components are detailed in the table below:

Component	RY2024	RY2025	% of target
Constructional and a sector	(\$000)	(\$000)	revenue
Capital related costs	11 700	12.410	27.20/
Depreciation	11,706	12,418	27.2%
Revaluations and other regulatory income	(5,000)	(5,000)	(10.9)%
Tax	1,805	1,023	2.2%
Return on capital	11,649	7,851	17.2%
Total Capital related costs	20,160	16,292	35.6%
Operational expenditure			
Service interruptions and emergencies	1,559	2,109	4.6%
Vegetation management	1,516	1,711	3.7%
Routine and corrective maintenance and inspection	1,555	1,941	4.2%
Asset replacement and renewal	584	373	0.8%
System operations and network support	2,611	5,369	11.7%
Business support	5,875	5,890	12.9%
Total Operational expenditure	13,700	17,393	38.0%
Pass-through and recoverable costs excluding financial incentives			
and wash-ups			
Rates	335	446	1.0%
Commerce Act levies	131	137	0.3%
Electricity Authority levies	81	85	0.2%
Utilities Disputes levies	19	40	0.1%
FENZ levies	46	33	0.1%
Transpower transmission costs	6,331	6,498	14.2%
Total Pass-through and recoverable costs excluding financial	6,943	7,239	15.8%
incentives and wash-ups	0,543	7,235	13.070
Regulatory allowances, incentives, and wash-ups			
IRIS opex incentive adjustment	(1,578)	333	0.7%
IRIS capex incentive adjustment	189	195	0.4%
Quality incentive adjustment	(42)	(234)	(0.5)%
Capex wash-up adjustment	(211)	(218)	(0.5)%
Opening wash-up account balance	122	4,717	10.3%
Total Regulatory allowances, incentives, and wash-ups	(1,520)	4,793	10.5%
Total Regulatory anowances, incentives, and wash ups	(1,520)	4,755	10.3/0
Target Revenue	41,926	45,717	100.0%
Forecast revenue from prices for the previous period x (1 + 10%)	47,058	46,119	100.9%
Forecast allowable revenue	47,038	49,611	100.5%
	42,243	45,011	100.5%

TABLE 3 – COMPONENTS OF TARGET REVENUE

#### 5.1 Revenue deferred to future periods

The Commission sets a 10% limit on the annual increase in revenue that can be recovered from prices. For the year commencing 1 April 2024, TLC's allowable revenue is higher than the allowable revenue limit. This means that there is a surplus of \$3.9m that is not being recovered from prices this year, and instead may be recovered

in future regulatory periods.

#### **5.2 TLC Discount for WESCT Customers**

WESCT on behalf of its beneficiaries owns TLC. TLC makes available discounts to consumers who are WESCT beneficiaries. TLC's pricing schedule for RY2025 sets out the discount on price. This discount is a 'posted discount' and is forecast to be \$5.2 million for RY2025.

TLC has assigned a 60% - 40% split for the TLC Discount RY2025. This means that fixed prices are allocated 60% of the discount which is consistent with TLC moving toward pricing that reflects a higher proportion of fixed prices that reflect our costs.

More information is available within this document and on TLC's website Disclosures - The Lines Company.

#### 5.3 Distribution costs

Distribution costs are incurred to maintain the quality of supply that meets customer and regulatory requirements – 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:

#### 5.3.1 Capital-related costs, comprising:

- a. Depreciation of assets (return of capital);
- b. Return on investment; and
- c. Regulatory tax.

#### 5.3.2 Operating expenditure, comprising:

- a. Network maintenance costs including vegetation management, lines and pole maintenance and fault response;
- b. Network management and administration costs including all other costs required to operate and support the network and wider business including network management, business support systems and customer engagement costs; and
- c. Data costs including the cost of delivering data and relay services.

#### 5.4 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 forecast to be \$0.7 million.

#### 5.5 Transmission costs

Transmission charges payable to Transpower are forecasted to be \$6.5m. Under the new TPM, transmission charges cannot be avoided, hence generators are not eligible for payment for avoiding transmission charges (ACOT).

## **Section 6: Allocate to customer groups**

Having established the target revenue of \$45.7 million, we then identify customer groups and allocate the target revenue to each of those groups. TLC utilised its current cost model to allocate for RY2025.



- Volumetric/Consumption (kWh) billed
- Capacity and Dedicated Asset Standard and Non-standard contracts
- Distributed Generation

Within the Volumetric/Consumption (kWh) customer 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.

## Section 7: Allocation model



The application and choice of cost allocators involve a degree of judgment. 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 pricing model allocates 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; and transmission and pass-through costs.

#### 7.1 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.

#### 7.2 Operational costs

#### 7.2.1 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.

#### 7.2.2 Network management and administration

Network management 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.

#### 7.3 Rates, levies, and other pass-through costs

Effective 1 April 2025, rates, levies, and other pass-through costs are allocated based on capacity. Transmission cost allocations are discussed below.

#### 7.3.1 Transmission costs

From 1 April 2023, Transpower recovers its costs using a new transmission pricing methodology (TPM). Transmission charges in the new TPM are designed to be fixed-like to avoid altering the efficient signal provided by locational marginal prices. From 1 April 2024, TLC will recover all the transmission charges allocated to volumetric-priced customers through a component of the fixed daily charge. Consequently, customers will see an increase in the daily fixed prices.

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 2022 to August 2023. The connection quantity is a proxy of connection capacity.
- Benefit-based and residual charges are allocated based on their lagged anytime maximum demand from July 2016 to June 2020 and charged at the residual charge rate of \$54.54 per kW published by Transpower i.e. replicating Transpower's methodology.

#### 7.4 Revenue allocations by customer group

The allocations of revenue for the RY2025 pricing year are:

- \$35.7m (inclusive of a forecast \$3.9m TLC Discount) from standard contract consumption customers; and
- \$10.0m (inclusive of a forecast \$1.3m TLC Discount) from CAPDED, Unmetered Load and Distributed Generation customers.

The target revenues are detailed in the table below (\$000):

Customer group	ICP count	Pass- through	Transmission	Distribution	TLC Discount for WESCT Customers	Total	%
Residential	14,256	311	1,810	15,149	(1,702)	15,568	34%
General	5,308	204	1,182	9,788	(1,235)	9,939	22%
Dairy	458	79	459	4,097	(763)	3,873	8%
Temporary Accommodation	4,000	121	702	5,714	(221)	6,316	14%
Unmetered Load	122	8	66	425	(49)	450	1%
CAPDED Standard	38	36	687	2,661	(525)	2,858	6%
CAPDED Non- standard	41	59	1,804	5,077	(653)	6,287	14%
Distributed generation	11	-	-	494	(78)	416	1%
DG new connections	n/a	0	0	10	n/a	10	0%
Total	24,234	818	6,710	43,415	(5,226)	45,717	100%

TABLE 4 – TARGET REVENUE BY CUSTOMER GROUP

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

Customer group		Peak kWh	Shoulder kWh	Off Peak kWh	Anytime kWh	Total kWh	%
Residential	14,256	28,229,504	51,561,033	26,577,567	2,414,412	108,782,516	48%
General	5,308	13,172,474	29,416,306	14,398,748	2,857,243	59,844,772	27%
Dairy	458	10,689,401	18,639,612	9,144,261	258,675	38,731,949	17%
Temporary Accommodation	4,000	4,432,350	8,040,393	4,628,424	609,731	17,710,899	8%
Total	24,022	56,523,729	107,657,345	54,749,000	6,140,062	225,070,136	100%

 TABLE 5 – COMPONENTS OF TARGET REVENUE

## Section 8: Pricing for volumetric/consumption billed customers

**Target Revenue** 

**Customer Groups** 

Allocation Model

Price Structure & Levels

#### 8.1 Choice of pricing structure

The pricing structure used for prices for TLC's volumetric/consumption billed customers (all customers except CAPDED customers with loads > 150 kVA, Unmetered Load, 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.

#### 8.2 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.

#### 8.3 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.

#### 8.4 Pricing categories

The figure below shows the pricing categories for TLC's volumetric/consumption billed customers.

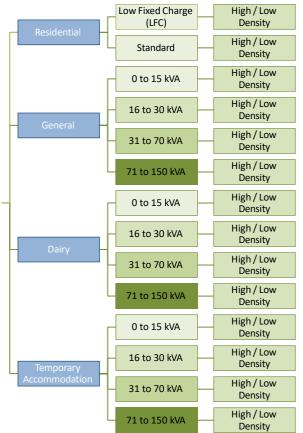


FIGURE 2 TLC'S PRICING CATEGORIES

#### 8.5 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, nonnetwork asset depreciation, network management costs) and transmission costs.

#### 8.6 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 and consideration of industry standards.

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

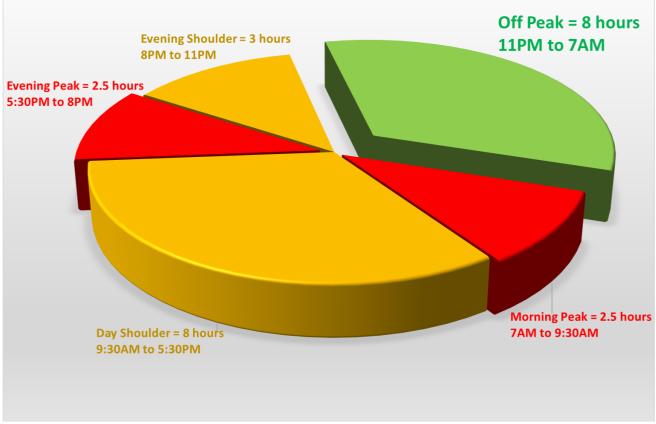


FIGURE 3 TLC'S TOU PRICING TIMES

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

- 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 management to help manage network congestion and additional network investment. TLC also rewards customers who provide network load control, through lower peak prices.

For customers where TOU data is not available (because of metering), anytime prices apply to the total kWh usage, irrespective of the time of day.

#### 8.7 Low Fixed Charge

LFC regulations are a regulatory requirement for electricity distributors and retailers. The regulations were amended on 29 November 2021. For eligible customers, the daily fixed charge has been increased by 15 cents

per day from 45 cents to 60 cents per day and the consumption charges adjusted so that for an average consumer using 8,000 kWh per year the LFC price is no more than any alternative tariff offered.

#### 8.8 Forecast volumes

Forecast growth has been modelled with compounding organic growth rates of 1% (low) and 2% (high). Step load increases of circa 3.5 MVA for new EV chargers and decarbonisation are also included in the forecast.

TLC has set RY2025 forecast pricing volumes based on four prior 12-month periods being 2% growth for RY2025. New connections and decommissioning of connections on TLC's network will likely result in a standard organic growth profile. Further detail is provided in TLC's Price-setting Compliance Statement <u>Disclosures - The Lines Company</u>.

#### 8.9 Setting price levels

Price levels have been adjusted to:

- Increase daily fixed prices significantly (approximately 56% for residential customers).
- Reduce peak prices (approximately 6% for residential customers).
- Reduce off-peak prices significantly (approximately 51% for residential customers.
- Increase shoulder prices (approximately 4% for residential customers)

#### 8.9.1 Residential, General, Dairy and Temporary Accommodation pricing

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

Transmission costs have been allocated differently – all transmission costs are recovered via a daily fixed charge. Previously these costs were spread across fixed and variable prices.

#### 8.10 Proportion of forecast revenue

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

### Section 9: Capacity and Dedicated Asset customers

#### 9.1 Capacity and dedicated asset standard customers

TLC has 37 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.

#### 9.2 Capacity and dedicated asset non-standard contract customers

TLC currently has 41 ICPs 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;
- Network management and administration depending upon the time commitment and frequency of • interaction, are required to maintain the contractual relationship.

#### 9.3 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 demand quantities.

#### 9.4 Forecast quantities

Capacity and Dedicated Asset customer prices are applied to capacity and demand quantities and are either historical measures, 'fixed' capacity or asset-based pricing. 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 data and invoiced for the 12 months effective 1 April 2024;
- Distribution revenue: Quantities are determined from contracted capacity or that customer's individual peak demand.

Capacity and Dedicated Asset customer capacity growth is expected to impact RY2025 and in future years as described in TLC's Asset Management Plan.

#### 9.5 Target revenue

Forecast target revenue for CAPDED standard and non-standard contracts and distributed generation (after TLC Discount) has increased by 10% (7.2% when TLC Discount for WESCT Customers is included) from RY2024 being a combination of price changes, growth, and new connections.

Customer group	ICP count	Pass- through	Transmission	Distribution	TLC Discount for WESCT Customers	Total
Unmetered Load	122	8	66	425	(49)	450
CAPDED Standard	38	36	687	2,661	(525)	2,858
CAPDED Non- standard	41	59	1,804	5,077	(653)	6,287
Distributed generation	11	-	-	494	(78)	416
Total	212	103	2,557	8,657	(1,305)	10,011

The table shows the target revenue allocated by the pricing component (\$000):

TABLE 6 – TARGET REVENUE FOR CAPDED AND DISTRIBUTED GENERATION

#### 9.6 Supply obligation

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

## Section 10: Distributed Generation

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.

#### 10.1.1 Distributed Generation Connection Charge

The DG connection charge recovers costs associated with assets provided by TLC in the following situations:

- assets provided solely for the connection of the DG to the distribution network; and
- use of shared assets that are required due to the capacity required by the DG and which are more than that required for the local network.

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.

TLC will likely move to a distribution system operator (DSO) model – a method of operation that evolved from modern distribution network operators to actively balance power inputs and outputs by integrating a diverse range of distributed energy resources into the grid. Our review of pricing will incorporate the DSO model.

#### 10.1.2 Distributed generation payments

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

## Section 11: Other pricing considerations

Other considerations relevant to TLC's pricing methodology are:

- prices apply per ICP;
- prices do not include energy losses on the distribution network. Energy retailers purchase their share of system losses using the loss factors as published on TLC's website;
- prices exclude metering services involved with the provision of meters or meter readings. Others provide these services.

## Section 12: Customer examples and help available

As a supplier of essential services, TLC is aware of the impact price changes have on customers. TLC has implemented changes gradually and carefully, to help avoid bill pressure on customers. We encourage customers to take advantage of the independent resources available for energy advice:

- Powerswitch is by Consumer NZ (Powerswitch: Compare and find cheap energy plans)
- Citizens Advice Bureau (Citizens Advice Bureau (cab.org.nz))
- Work and Income (Work and Income)

Home insulation is important. The following resources may be useful if customers are considering upgrading the insulation of their home. In certain circumstances, grants or subsidies are available for insulation installation:

- Maru Energy Trust (<u>Homepage Maru Energy Trust</u>)
- Energy Efficiency and Conservation Authority (EECA Energy Efficiency & Conservation Authority | EECA)
- Electricity Retailers' Association of New Zealand (<u>How the Power Credits scheme works ERANZ</u> | <u>Electricity Retailers' Association of New Zealand</u>)

#### 12.1 Pricing examples RY2023, RY2024 and RY2025

The level of pricing change for customers will differ depending on which customer group the connection belongs, to and their consumption patterns. This section provides worked examples to demonstrate how bills are calculated and then applied to the average energy consumption for that pricing plan to show bill changes per annum.

#### 12.1.1 Residential

The chart below demonstrates pricing for a connection customer consuming the average kWh on RTSTDHC (Residential–Standard–High Density–Controlled Load being 4,034 or 17% of ICPs) for RY2023 to RY2025. In RY2024 there was an average decrease of 5% and for RY2025 it was 9%.

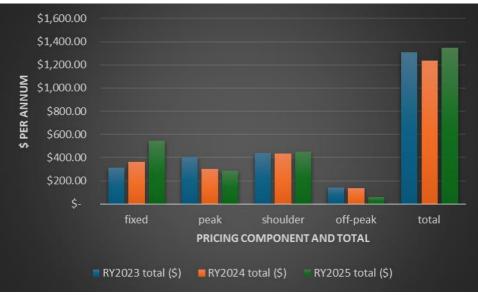


FIGURE 4 RESIDENTIAL CUSTOMER EXAMPLE

#### 12.1.2 General

The chart below demonstrates pricing for a general connection consuming the average kWh on GT15HU (General–15 kVA–High Density–Uncontrolled Load being 2,008 or 9% of ICPs) for RY2023 to RY2025. In RY2024 there was an average decrease of 1% and for RY2025 it was 12%.



FIGURE 5 GENERAL CUSTOMER EXAMPLE

#### 12.1.3 Dairy

The chart below demonstrates pricing for a dairy connection consuming the average kWh on DT70L (Dairy–70 kVA–Low Density being 152 or 1% of ICPs) for RY2023 to RY2025. In RY2024 there was an average decrease of 3% and for RY2025 it was 4%.

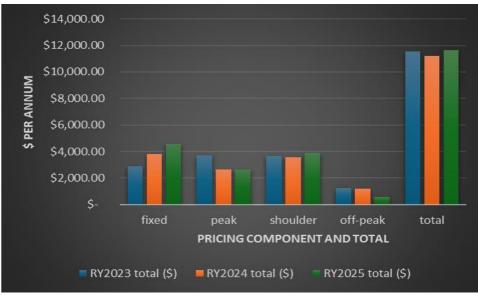


FIGURE 6 DAIRY CUSTOMER EXAMPLE

#### 12.1.4 Temporary Accommodation

The chart below demonstrates pricing for a temporary accommodation connection consuming the average kWh on TT15HC (Temporary Accommodation–15 kVA–High Density–Controlled Load being 2,152 or 9% of ICPs) for RY2023 to RY2025. In RY2024 there was an average increase of 1% and for RY2025 it was 21%. The increase in fixed prices has further impacted RY2025.



FIGURE 7 TEMPORARY ACCOMMODATION CUSTOMER EXAMPLE

## Section 13: Loss and Constraint Excess Payments

Loss and Constraint Excess Payments are credits rebated by Transpower because of money received from the Clearing Manager for the Wholesale Electricity Market and are excluded from transmission charges. The rebates are allocated each month to retailers and direct billed customers based on each customer's total transmission charges for the month in which the rebate is applied. This process is consistent with the Settlement Residue Allocation Methodology (SRAM) amendments in the Code which came into effect on 1 April 2023. For further information, please refer to our Loss and Constraint Excess Payments document <u>Disclosures - The Lines Company</u>.

## Section 14: Definitions

Abbreviation	Definition
ACOT	Avoided Cost of Transmission
AMD	Anytime Maximum Demand
Authority	Electricity Authority
Сарех	Capital Expenditure
CMD	Co-incident Maximum Demand
СМР	Transpower's capacity measurement period, to calculate RCPD in the lower North Island, is the twelve months from 1 September to 31 August annually but excluding the summer months of November to April, inclusive
Code	the Electricity Industry Participation Code
CoSM	Cost of Supply Model
Commission	Commerce Commission
CPI	Consumers' Price Index
CRP	Cost-Reflective Pricing
DG	Distributed Generation
DUML	Distributed Unmetered Load
EV	Electric Vehicle
FENZ	Fire Emergency New Zealand
GXP	Grid Exit Point
HD	High Density
HV	High Voltage
ICP	Installation Control Point
IR	Interconnection Rate
IRIS	Incremental Rolling Incentive Scheme
km	Kilometre
kVA	kilovolt-ampere
kW	Kilowatt
kWh	kilowatt Hour
LNI	Lower North Island
LFC	Low fixed charge
LRMC	Long-Run Marginal Cost
LD	Low Density
LV	Low Voltage
Opex	Operating Expenditure
RAB	Regulatory Asset Base
RCPD	Regional Coincident Peak Demand (LNI top 100 half-hourly peaks during Transpower's CMP)
ROI	Return on Investment
SCADA	Supervisory Control and Data Acquisition
SONS	System Operations and Network Support
SSDG	Small-scale Distributed Generation
ΤΟυ	Time-of-Use Pricing
TLC	The Lines Company Limited
TABLE 7 – DEFINITION	

TABLE 7 – DEFINITIONS

## Section 15: Alignment to Pricing Principles

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

#### **2019 Distribution pricing principles**

- Prices are to signal the economic costs of service provision, including by:
  - being subsidy-free (equal to or greater than avoidable costs, and less than or equal to standalone costs);
  - reflecting the impacts of network use on economic costs;
  - o reflecting differences in network service provided to (or by) consumers; and
  - encouraging efficient network alternatives.
- Where prices that signal economic costs would under-recover target revenues, the shortfall should be made up by prices that least distort network use.
- Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to:
  - o reflect the economic value of services; and
  - enable price/quality trade-offs.
- Development of prices should be transparent and have regard to transaction costs, consumer impacts and uptake incentives.

In addition, in September 2022, the Authority sent a letter to distributors setting out their expectations for pricing reform. This letter sets out the following five focus areas for distributors:

- planning for future congestion
- avoiding first mover disadvantage for new/expanded connections
- transmission pricing pass-through
- increased use of fixed charges
- not applying use-based charges (e.g. AMD) to recover fixed costs.

The Authority has advised that there will be no distribution pricing assessments in RY2025. They will publish updated guidance on distribution pricing in 2025 and a pause of scorecards will enable distributors to effectively incorporate this guidance for 2026.

#### **15.1 TLC's pricing and the pricing principles**

#### 15.1.1 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, 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 volumetric/consumption billed customers, 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.

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 points of supply areas, 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.

#### 15.1.2 Reflecting the impacts of network use on the economic cost

Capacity-based load groups are used to assist where 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. TOU pricing is one means used to defer investment in distribution network assets. 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 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). Calculated over eight years (RY2026 to RY2033), TLC estimated that TLC's LRMC is \$370 per kW per annum. The distribution component of the peak TOU price to apply to residential customers on the standard plan from 1 April 2024 is broadly in line with this estimate. For residential customers on the LFC plan, the peak price still over-signals the LRMC because the 60 cents per day regulatory limit on fixed charges means that a high proportion 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 to recover 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. As discussed, 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 a 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 adjusted peak/shoulder/off-peak differentials from the previous year's pricing which, reflects our estimate of Long Run Marginal Cost (LRMC). The LRMC unitised planned system capex uses 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, including customer education.

Given this, we think there is a 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.

#### 15.1.3 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.

#### **15.1.4** 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.

## 15.1.5 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 fewer 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 the 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.

## **15.1.6** 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 sources 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 etc in return for lower off-peak (or shoulder prices).

## **15.1.7** 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 RY2025 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.

## Section 16: Certification for Year-beginning Disclosures

#### **16.1 Schedule 17** Certification for Year-beginning Disclosures

Clause 2.9.1

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 clauses 2.4.1, 2.6.1, 2.6.3, 2.6.6 and 2.7.2 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.

ante

Bella Takiari-Brame Director

lel Maci

Mike Underhill Director

28 March 2024

Date