



Pricing Methodology

1 April 2021

Pursuant to Electricity Distribution Information Disclosure Determination 2012

Contents

1. INTRODUCTION	3
1.1 OVERVIEW OF MLL	3
1.2 PRICING CHANGES FOR DISCLOSURE YEAR 2022	5
1.3 PRICING METHODOLOGY	6
2. CONSUMER ENGAGEMENT	6
2.1 CONSUMER SATISFACTION SURVEY	6
2.2 DISTRIBUTION PRICING SURVEY	7
2.3 FURTHER CONSUMER ENGAGEMENT	9
3. PRICE SETTING	9
3.1 CONSUMER GROUPS	10
3.2 NETWORK STATISTICS	11
3.3 FORECAST COSTS	11
3.4 ALLOCATION METHODOLOGY	13
3.5 TARGET REVENUE BY PRICE COMPONENT	14
3.6 NON-STANDARD CONTRACTS	16
4. DISTRIBUTION PRICING ROADMAP (STRATEGY)	17
4.1 PRICING TO ALLOW AN APPROPRIATE COMMERCIAL RETURN	17
4.2 MOVE TOWARDS MORE COST REFLECTIVE PRICING	18
4.3 OTHER PRICING REFORM CONSIDERATIONS	20
4.4 PRICING REFORM TIMELINE (INDICATIVE)	22
APPENDIX 1 – INFORMATION DISCLOSURE REQUIREMENTS	24
APPENDIX 2 – CONSISTENCY WITH PRICING PRINCIPLES	26
APPENDIX 3 – TARGET REVENUE BY PRICE COMPONENT	30
APPENDIX 4 – DIRECTORS’ CERTIFICATION	31

1. Introduction

1.1 Overview of MLL

1.1.1 Ownership structure and regulatory regime

Marlborough Lines Limited (MLL) is the electricity distribution business (EDB) connecting more than 26,000 consumers across the Marlborough region. It is owned by the Marlborough Electric Power Trust (MEPT), which holds shares on behalf of the consumers connected to MLL's network. The MEPT has six elected trustees, with elections held biennially, the most recent elections were held in March 2020.

MLL meets the criteria specified for a consumer owned EDB, under part 4 of the Commerce Act 1986 and as a result is not regulated by the Commerce Commission's default price-quality path (DPP) provisions. MLL is, however, required to comply with other regulations, including the Information Disclosure (ID) regime.

The Electricity Authority also has regulatory oversight of the electricity industry. It also sets out several requirements for EDBs.

1.1.2 MLL's business structure

MLL has its own inhouse electrical contracting capability that undertakes capital and operational (maintenance) work, primarily for the network but also for other local customers. MLL has approximately 135 staff across both the network office and the contracting depot, both of which are in Blenheim.

Outside of its core electricity distribution business, MLL has invested in other companies both within the distribution sector and outside of the electricity industry. MLL owns 50% of Nelson Electricity Limited, the EDB supplying consumers in urban Nelson, and 100% of Yealands Wine Group Limited, a large vineyard and winery business located in Marlborough.

1.1.3 Network characteristics

MLL's network has a particularly extensive 33kV (sub-transmission) network (owing to the single Transpower grid exit point, located in Blenheim), connecting 16 zone substations. In total there is approximately 3,400km of overhead lines and underground cables. Lines typically radiate out (there is some meshing in urban areas) to supply most areas of Marlborough. Significant extents of MLL's network is in remote and rugged areas, including the outer Marlborough Sounds, upper Wairau, Waihopai and Awatere Valleys, the southern extent of Marlborough's East Coast and its inland valleys, such as the Clarence Valley.

These areas are very sparsely populated¹, and as a result, MLL has many connections where the cost to supply far exceeds the recoverable revenue. Electrical infrastructure supplying these areas was typically constructed in the 1960s and 1970s from grant funding from the Rural Electrical Reticulation Council. Many of the connections in these areas are holiday homes, where there is typically very low occupancy rates and consequently low electricity consumption.

¹ Across the network, there are on average 7.5 ICPs/km of line. In the remote areas, 1 to 2 ICPs/km of line is not uncommon.

The urban areas of the network (including their immediate surrounds) are typified by domestic premises, small to medium businesses, and large commercial and industrial consumers. The latter are concentrated at the Cloudy Bay and Riverlands industrial estates, and other wineries around the outskirts of Blenheim.

A significant number of irrigation consumers are connected to the network. These typically supply irrigation and/or storage water for irrigation or other agricultural/horticultural purposes.

Further information on MLL's network (including demand forecasting and network capacity) is included in the Asset Management Plan, available on MLL's website².

1.1.4 Electricity retailers (traders)

MLL has an interposed relationship with the consumers connected to its network, i.e. the contractual relationship to deliver services is through the energy retailers trading on the network. As such, MLL does not have a direct contractual relationship with the consumers connected to its network.

At the time of writing, there are 18 electricity retailers trading on MLL's network. MLL has an agreement in place with each of these retailers (noting that some retailers have multiple brands). Approximately 93% of consumers connected to MLL's network are represented by six of the 18 electricity retailers.

1.1.5 Consumer connections

Of the approximately 26,000 consumers connected to the network, the vast majority are domestic premises, or residential connections. Table 3 includes a breakdown of consumer connection numbers on MLL's network.

In addition to these (predominantly) load connections, there are a few distributed generation connections on MLL's network, including:

- Weld Cone wind farm: 3 * 250kW wind turbines (0.75MW generation)
- Lulworth wind farm: 4 * 250kW wind turbines (1.0MW generation)
- Dominion Salt Limited's wind turbine: single 660kW turbine; and
- Kea Energy's Wairau Valley solar farm: generation of up to 1.85MW.

MLL's experience to date with distributed generation connection applications is that they involve considerable work on MLL's part in providing information requested by the applicant, and significant resource to review the application and its potential impacts on MLL's network (and potentially, existing consumers connected to the network).

In addition to the above, Trustpower's Waihopai hydro power station generates up to 2.4MW and is connected to MLL's 33kV network in the Waihopai Valley.

1.1.6 Annual discount payment

To recognise the benefits of being community trust owned, MLL makes an annual discount payment (posted) from its line ownership and operations to eligible consumers connected to its

² <https://www.marlboroughlines.co.nz/About-us/Disclosures/Asset-Management.aspx>

network. Applicable discount payment rates for eligible price plans are included in MLL's line delivery price schedule.³

In accordance with the Electricity Industry Act 2010, MLL, as a community trust owned EDB, must apply income distributions (i.e. the discount payment) to at least 90% of its beneficiaries.

The amount of the discount payment for each consumer is dependent on the type of connection (i.e. price plan the consumer is on) and the amount of energy consumed over the qualifying discount period. The discount payment is funded from MLL's return on investment (ROI) – refer to section 3.3.6 for further detail.

The discount payment rate set for most applicable price plans is approximately 20%.

1.2 Pricing changes for disclosure year 2022

Price changes become effective for disclosure year 2022 (DY22), from 1 April 2021. The most recent pricing changes prior to this took effect on 1 April 2020.

The following is a summary of the changes being introduced for DY22:

- A minor increase of approximately \$4.30, or 0.4% (pre-discount) for an “average”⁴ domestic consumer, which mostly reflects the increase to MLL in transmission costs for the year;
- A distinction in prices for remote vs non-remote residential consumers to more fairly reflect the cost of supply;
- A 1% increase in prices for Commercial and Industrial consumers (excluding the Regional Coincident Peak Demand (RCPD) price which is treated separately as a pass-through cost);
- A 2% increase in prices for Irrigation consumers;
- A 1.5% increase for power factor prices, and street lighting prices; and
- Adjustments from variable to fixed prices to improve cost reflectively for some consumer groups.

A full copy of the line delivery price schedule applying from 1 April 2021 is available on the pricing page of MLL's website. The schedule includes price changes from the 2021 disclosure year, as well as what components of the line delivery price are attributable to distribution and transmission components.

1.2.1 Reasons for price changes

The price increases outlined above have been applied to recover additional costs from Transpower (\$6.9m in DY2021 to \$7.0m in DY2022), as well as other forecast increased costs in operational expenditure. Price changes have also been made in line with MLL's distribution pricing reform strategy.

Prices have been set to target revenue of \$45.6m for DY22, which is based on applying proposed prices to forecast connections, consumption, and demands across the DY22 year.

³ Available at <https://www.marlboroughlines.co.nz/About-us/Disclosures/Pricing.aspx>

⁴ As defined by MBIE's Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004

1.3 Pricing Methodology

This pricing methodology provides detail on MLL’s pricing structure. The pricing structure (and prices) are determined for the disclosure year, to recover sufficient revenue for MLL to cover its costs and meet its objectives. Information on MLL’s costs, and how these costs are allocated to various consumers connected to its network (via their electricity retailers) are included in this pricing methodology.

MLL considers this pricing methodology to meet the requirements of Information Disclosure, while giving due consideration to the Electricity Authority’s pricing principles. For reference and completeness, these are included in Appendix 1 – Information Disclosure Requirements and Appendix 2 – Consistency with Pricing Principles respectively.

Two separately published documents⁵ should be read in conjunction with this pricing methodology:

- MLL’s line delivery price schedule, which comprises a schedule of all prices for the various consumer groups and price plans, including a breakdown of distribution and transmission components, as well as applicable discount payment rates for the pricing year, and, the prior year’s (DY21) line delivery prices for comparative purposes.
- MLL’s line delivery price guidelines. The guidelines provide detail on the various consumer groups, respective qualification criteria, and a breakdown of the prices for each consumer group.

2. Consumer engagement

MLL undertakes regular consumer satisfaction surveys, to assess consumers’ views on MLL’s performance. Included within the survey, are questions regarding the quality of the services provided.

Separately, in December 2019, MLL conducted a distribution pricing survey of consumers connected to its network.

2.1 Consumer satisfaction survey

The most recent consumer satisfaction survey was completed in August 2020. The survey comprised 200 domestic consumers, and 30 commercial business managers. The surveys were conducted over the phone with consumers by an external research firm.

The survey includes questions regarding consumers’ views on MLL’s performance regarding service quality and reliability of the network. Key results from the survey include:

- With respect to network reliability, the survey recorded a 95% satisfaction rate, which is consistent with previous year’s results and the same as recorded in 2019. 2% of the consumers surveyed were dissatisfied, up from 0% in 2019.
- 85% of consumers who could recall experiencing a fault were satisfied with the number of faults that they had experienced, with 5% being dissatisfied.

⁵ Available on MLL’s website at <https://www.marlboroughlines.co.nz/About-us/Disclosures/Pricing.aspx>

- Of the 64% of consumers surveyed who had experienced (or could remember experiencing) an outage, 92% of those were satisfied with the duration of the outage (or length of time taken to restore an electricity supply).
- 90% of consumers surveyed were satisfied with the annual discount payment, relatively evenly spread across both the domestic and commercial consumers surveyed.

The survey results indicate that most consumers are satisfied with MLL’s performance, particularly with respect to quality (reliability) and the discount payment made by MLL.

2.2 Distribution pricing survey

The purpose of this survey, undertaken in December 2019, was to:

- Help MLL better understand the level of interest consumers had with respect to distribution pricing, and their understanding of it; and
- Assess whether the current pricing structure and prices were appropriate from the consumers’ perspective, and whether there was a demand for a change to the existing pricing structure.

2.2.1 Overview

In December 2019, MLL invited consumers to participate in a survey on electricity distribution pricing. The survey comprised 11 short questions, allowing for selectable options (with comments available to be made). Prior to issuing, the survey questions were passed to retailers trading on MLL’s network for their review and to provide opportunity to raise any concerns. The survey took on average five minutes for respondents to complete.

Information regarding the survey was included in MLL’s ‘Connections’ newsletter, which was issued either via e-mail, or post, to all consumers⁶. Those who received the survey via e-mail, simply needed to click a hyperlink within their email to access the survey. Those who received a hard copy of Connections, were asked to visit MLL’s website and click on the distribution pricing survey link on the homepage.

Table 1 presents a summary of the number of surveys issued (by means) and response rates. Table 2 provides a breakdown of respondents by consumer type.

Table 1 – Summary of surveys issued and response rate.

Communications type	Number sent	Responses	Response rate
E-mail	3,717	77	2.1%
Hard copy (posted)	17,640	35	0.2%
Total	21,357	112	0.5%

While the number of respondents was much lower than had been hoped for, a reasonable sample size of responses has been obtained from the survey. Further, the lack of responses is telling in itself – presented with an opportunity to comment on MLL’s distribution pricing, close to 99.5% of consumers elected not to complete the survey.

⁶ Noting that 21,257 individual persons (businesses or people) were issued a copy of the Connections newsletter – some persons have multiple ICPs.

Table 2 – Summary of respondents by consumer type

Consumer type	Respondents (%)
Residential	88.3
Small to medium business	7.2
Large commercial/industrial	0.9
Irrigation	3.6

Information on the questions put to consumers, and the responses received are summarised in the following sub-sections.

2.2.2 Views on quality with respect to prices

With regards to the power supply provided, consumers were asked whether they were satisfied, dissatisfied, or had a neutral opinion on the reliability (number and duration of outages experienced) of their electricity supply. 93% of responses were satisfied, with 7% neutral, and 0% dissatisfied.

82% of survey respondents were satisfied with the current pricing with respect to reliability. 16% selected the option to pay less for decreased reliability, with 3% suggesting they would pay more for increased reliability.

2.2.3 Understanding of cost of supply for remote consumers

Consumers were questioned whether they were aware that some of the areas of the network cost more for MLL to supply than others. 71% of respondents were aware, 29% were unaware.

When asked whether they thought prices should reflect the cost of supply, i.e. should consumers in remote areas, which typically have higher costs, pay more for those in urban areas, 61% of respondents felt that there should be at least some sort of cost reflectivity in pricing (20% of respondents felt that prices should be fully cost reflective for remote consumers).

2.2.4 Views on pricing structure

The survey asked consumers whether time of use pricing (i.e. a higher price during peak demand periods, and lower price during low demand periods) would impact on their electricity consumption. 8% of respondents were unsure, another 32% said that they would not adjust their consumption behaviour, while 60% said that time of use pricing would at least have some influence on their consumption behaviour.

One of the key survey questions was around the type of pricing preferred. Various types of pricing – such as fixed price per day plus flat rate consumption vs TOU consumption, pricing based solely on capacity, or pricing based on capacity – were listed along with explanatory notes. 40% of consumers selected their preference as the existing pricing approach, i.e. fixed daily price with flat rate consumption. Another 31% preferred a fixed daily charge with a price component that varied by time (time of use), reflecting network demand.

2.2.5 Solar PV installation

Of the consumers surveyed, 17% indicated that they had solar panels installed at their premises. A further 29% indicated that they were considering installing them in the future. The balance, 54%, had no intention of installing solar panels.

2.2.6 Summary

From the distribution pricing survey undertaken, MLL's views formed are as follows:

- a. While the response rate was disappointingly low, it is felt that the sample size is enough to provide a representative view;
- b. There is limited consumer understanding of distribution pricing, or certainly a lack of interest in it;
- c. Consumers are largely satisfied with MLL's current pricing and quality;
- d. Consumers believe that there should be an element of cost reflectivity based on the location of a connection (i.e. that remote consumers should incur higher prices if it costs more to supply them);
- e. Some consumers feel that a time of use pricing option would be appropriate and influence their electricity consumption; and
- f. Many consumers' views on solar installation are possibly misguided, for example 42% of respondents thought that solar reduced their dependence on the network.

The survey responses are useful and for MLL, confirm that its current approach to pricing (both structure and prices) is satisfactory to consumers connected to its network. However, consumers views are only one of several considerations for MLL when determining its pricing.

2.3 Further consumer engagement

MLL is planning to again undertake its annual customer satisfaction survey during 2021. Prior to doing so, MLL will review the content of the survey, particularly with respect to distribution pricing and may ask questions more specific to prices.

Separately, MLL is considering other initiatives to engage with local consumers. MLL is intending during the 2021 calendar year establishing a 'stall' at a local market or community event day, whereby community members could participate in questionnaires relating to MLL's performance, particularly with respect to distribution pricing and quality (reliability) to confirm whether there is broad support (or otherwise) for MLL's distribution pricing strategy.

MLL will continue its approach of liaising with the larger Commercial and Industrial (and other) consumers and offer those consumers the opportunity to speak about pricing to better understand it and to raise any concerns.

3. Price setting

The setting of line delivery prices is multi-faceted. Existing (legacy) pricing structures need to be considered, along with the nature of the network (cost to operate the network and network capacity for example), the number and type of consumers connected, the assets servicing those connections, the views of stakeholders including EDB peers, regulators and consumers for example.

This section provides detail on how MLL sets its prices. Firstly, the splitting of consumers into various consumer groups is summarised. Secondly, the costs forecast to be borne by MLL for the pricing year are set out, along with the cost allocation methodology that is applied to the various consumer groups. The target revenue for the year is also included in this section.

To mitigate price shocks to consumers, MLL when making price changes, does so in an incremental manner. The existing pricing regime has been in place for over ten years and provides stability. For DY2022, however, MLL has introduced some pricing changes to be more cost reflective, this is outlined in detail under Section 4.

3.1 Consumer groups

Typical of the electricity distribution sector, MLL separates consumers connected to its network into the following categories:

- Residential – those consumers that meet the definition of ‘domestic premises’ in relevant legislation;
- Residential (low fixed charge) – those consumers defined as ‘domestic premises’ in the Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 (LFC regulations), who consume <8,000kWh per annum and that meet other eligibility criteria (granted ministerial exemptions), including:
 - Not being supplied by three phases;
 - Not being supplied with capacity >15kVA;
 - Not located in areas deemed remote on MLL’s network⁷; and/or
 - Not being a home that is serviced by a single line that serves few homes and no other significant electricity consumers.
- General – generally those consumers that do not meet criteria for other consumers groups. These are typically small to medium businesses, but may also be residential dwellings used for commercial accommodation purposes;
- Commercial and Industrial – those consumers with installed capacity greater than 150kVA;
- Irrigation – consumers where connections are to supply pumps for water irrigation or storage purposes solely;
- Unmetered – connections where metering is not installed to measure the volume of energy consumed (due to its low volume and as it is cost prohibitive); and
- Streetlights – connections supplying private or utility owned street lights.

These consumer groups are common throughout most EDB’s across New Zealand and have been the basis of MLL’s pricing structure for many years.

Ambiguity can exist, particularly between the residential and general consumer groups. This is particularly the case for holiday homes (of which there are many connected on MLL’s network, particularly in the Marlborough Sounds), residential dwellings that are used to house workers, and residential dwellings that are used primarily as a place of residence but from which also a small business operates (and/or a bedroom is let out through ‘AirBnB’ for example).

In DY2021, MLL introduced remote price plan equivalents within the Residential group. This allows MLL to more easily distinguish remote residential consumers who are ineligible for the annual discount payment. For the first time, MLL has increased prices for these remote residential consumers relative to the non-remote equivalents.

⁷ A map showing remote areas is included on MLL’s website’s pricing page <https://www.marlboroughlines.co.nz/About-us/Disclosures/Pricing.aspx>

The method and way in which consumers are allocated to respective consumer groups is set out in MLL's Line Delivery Price Guidelines⁸.

3.2 Network statistics

Key network statistics for each consumer group is set out in Table 3. These statistics are used to assist in the allocation of costs amongst these consumer groups. ICPs, billed units and kWh/ICP are based on forecast amounts for the disclosure year. Capacity provided, peak demand, regional peak demand (RPD) and assets are based on existing available information.

Table 3 – Summary of key network statistics by consumer group

Consumer group	ICPs	RPD demand (MVA)*	MWh/ICP	Assets (%)
Residential standard	11,038	16.9	8.5	23.7%
Residential remote	2,136	1.6	4.1	14.7%
Residential low user	9,093	8.7	5.3	12.0%
General	3,356	13.6	23.4	36.1%
Commercial and Industrial	129	19.1	1,100.0	8.4%
Irrigation	355	1.7	49.2	4.8%
Other (excl. MLL)	49	0.2	26.6	0.4%
TOTAL	26,156	61.8	-	100.0%

* Average from last three years

3.3 Forecast costs

3.3.1 Costs overview

Table 4 presents a summary of MLL's regulated business costs for the disclosure year. Further detail on each of these cost components is provided in the sub-sections that follow.

Table 4 – Summary of forecast costs for disclosure year with cost allocator type

Cost component	DY2022 (\$m)	DY2021 (\$m)	Allocation type
Transmission (interconnection RPD)	6.1	6.0	Contribution to RPD
Transmission (connection and new investment)	0.9	0.9	Share of assets
Levies and Rates [†]	0.2	0.0	ICPs
Network operations, support and maintenance	12.0	10.9	Share of assets
Business support	4.2	4.2	MWh/ICP
Depreciation	9.6	9.9	Share of assets
Taxation	1.9	2.3	Revenue
Return on investment	11.8	11.2	Share of assets
TOTAL*	46.7	45.4	-

[†] included under Business Support in DY21

* Does not include forecast miscellaneous revenue of \$0.6m, and, may not add due to rounding.

3.3.2 Transmission costs

Transmission costs comprise primarily the interconnection (regional coincident peak demand, or RPD) charge, the connection charge, and new investment charges. The values charged to MLL by

⁸ Available at <https://www.marlboroughlines.co.nz/About-us/Disclosures/Pricing.aspx>

Transpower vary due to their maximum allowable revenue (set by the Commerce Commission through the 'regulatory control period' process).

3.3.2.1 Interconnection (RPD) charge

The interconnection, or RPD charge, which is clearly the most significant portion at \$6.1m (up from \$6.0m from DY21), is dependent on MLL's network load coincident with the 100 highest half-hour upper South Island⁹ demands.

MLL's approach to passing on the transmission charges to consumers is outlined as follows:

- a. The aggregate demand during times of USI peaks by consumer group is determined. For mass market consumers, this is averaged based on available consumption data.
- b. A share of the RPD demand (percentage) is then allocated to each consumer group.
- c. The average for this and the two preceding years share (i.e. three-year rolling average to mitigate any year on year volatility) is then determined.
- d. The RPD charge is then assigned to consumer groups based on the three-year average.
- e. For non-Commercial and Industrial consumers, the costs are attributed typically to the energy price components, to signal that the consumption has an impact on the total amount of RPD charge borne by MLL.
- f. For Commercial and Industrial consumers, whose direct impact on MLL's network load coincident with the 100 upper South Island half hourly peaks is known, an RPD value is determined and applied from 1 April 2021.
- g. The amount is calculated from averaging the half hourly demand between the months of May and September (inclusive), on weekdays between 7.30am and 11am, and 4.30pm and 7.30pm. This is to signal that this is typically the time periods that upper South Island half hourly peaks are set.

3.3.2.2 Connection and new investment charges

The connection and new investment charges are fixed, and for the disclosure year amount to \$0.9m (no change from DY21). These charges are allocated to consumer groups based on their share of network assets.

3.3.3 Levies and Rates

A total of \$0.2m for levies and rates has been forecast for DY22. This comprises local government rates for properties owned by MLL, and Commerce Commission, Electricity Authority, and Utilities Disputes levies. Note that within the DY21 Pricing Methodology, levies and rates were included under Business Support.

Levy and rates costs are allocated by consumer group ICPs.

3.3.4 Network operations, support and maintenance expenditure

System operations and maintenance expenditure includes the types¹⁰ set as follows:

⁹ The current transmission pricing methodology splits RPD costs across four regions, the upper South Island being one of these and comprises seven EDBs.

¹⁰ The operational expenditure types are in Commerce Commission's 'Electricity Distribution Information Disclosure 2012'.

- Service interruptions and emergencies: Works relating to unplanned instantaneous events impairing the normal operation of the network – i.e. work to rectify faults and ensure electricity supply restored.
- Vegetation management: Works involved with trimming or felling vegetation, including inspections and liaising with landowners.
- Routine and corrective maintenance and inspection: planned inspections, testing and maintenance work schedules for assets.
- Asset replacement and renewal: need to maintain network asset integrity to maintain safety, security of supply and physical security of assets.
- System operations and network support: management of the network, control room operation and office-based system operations (asset management, customers, IT, engineering, planning, asset related system management etc). comparative

As most of these costs are directly related to the assets servicing consumers, these costs have been allocated based on each consumer groups' share of network assets.

3.3.5 Business support expenditure

Business support activities, such as commercial, legal, finance, property and HR related work (commonly referred to as administration and overhead costs) are related to MLL's servicing of all consumers and other company obligations. These shared costs are not directly attributable to any consumer group, or consumer. As such, the number of ICPs and volume of energy consumed has been combined for a cost allocator for business support costs.

3.3.6 Depreciation, taxation and return on investment

The depreciation expense relates to the annual estimated amount incurred, based on MLL's regulatory asset base. The taxation expense has been determined from the estimated revenue.

MLL has historically targeted an ROI lower than the weighted average cost of capital (WACC) rate determined by the Commerce Commission for non-exempt EDBs. The post-tax WACC rate for EBD's for the five-year period to 31 March 2020 (at the 67th percentile) was 6.43%. DY2021 was the first year of the new five-year DPP3 period, which has a post-tax WACC at the 67th percentile of 4.23%.

This regulated WACC for DPP3 is lower than MLL's cost of capital, as MLL targets a 5% post-tax return on shareholders' funds pre-discount payment and has no debt. Accordingly, MLL has factored a post-tax 5% ROI into its costs. This approach to maintain a relatively consistent ROI over time, assists MLL to maintain consistency with its prices across regulatory periods and avoid price volatility to its consumers. MLL's approach to targeted ROI is outlined further in section 4.1.

MLL's forecast pre-discount ROI is 4.8%, reducing to 1.0% when the forecast discount payment is allowed for. This is in line with previous years' ROI, and well below the Commerce Commission's determined WACC value for non-exempt EDBs, when assessed net of posted discounts.

3.4 Allocation methodology

3.4.1 Cost allocation by consumer group

Table 4 provides a summary of the costs by consumer group.

Table 5: Summary of costs (\$000) to recover through line delivery prices by cost component for each consumer group

Cost type	Residential			General	Comm & Industrial	Irrigation	Other	Total
	Standard	Remote	Low					
Transmission interconnection	1,639	152	839	1,318	1,847	166	22	5,983
Transmission connection & NIC	180	17	86	180	347	114	3	928
Fees and levies	84	16	69	26	1	3	0	199
Network Ops	2,809	1,742	1,425	4,277	991	569	42	11,855
Business Support	1,382	217	982	688	771	122	11	4,172
Depreciation	2,246	1,393	1,139	3,419	792	455	34	9,477
Taxation Expense	504	71	263	439	491	70	11	1,849
Rol	2,749	1,705	1,394	4,186	970	557	41	11,602
TOTAL	11,593	5,314	6,197	14,532	6,211	2,055	164	46,064

Note that miscellaneous revenue (\$0.6m) has been netted off for the amounts included here.

3.5 Target revenue by price component

3.5.1 Prices overview

Revenue is typically recovered from consumer groups through a combination of fixed and variable prices.

Fixed prices are generally set in \$/day/connection, with the price varying based on the capacity supplied for the connection. There will be variances between consumer groups for this (e.g. Residential vs General), as the costs of supplying consumer groups can vary.

Variable prices are set in \$/kWh of energy consumed. This is a flat rate and is not related to the time of use (consumption). Different prices are available for controlled for uncontrolled energy, with a night only rate (a form of time of use pricing) available for residential and general consumers. For irrigation consumers, the variable prices vary seasonally. This is a longstanding approach by MLL signalling that winter months are typically the time of year when network demand is highest.

For Commercial and Industrial consumers, a peak demand-based price is the most significant price component. As these consumers have time of use metering, and their electricity demand is readily available, MLL can determine their maximum demand.

3.5.2 Price differentials

The setting of prices within consumer groups is subject to several considerations, are outlined as follows.

Table 6: Overview of price differentials applied to consumer groups

Consideration in price setting	MLL's approach
Existing/legacy prices	Existing prices must be considered when changing prices. MLL carefully considers the impacts on consumers of any price changes, and in doing so, manages price "shocks".
Price signalling	<p>For Residential and General consumers, MLL applies a price differential for uncontrolled vs controlled energy. Controllable energy can assist in MLL managing network peaks. MLL currently utilises load control to manage the interconnection charge from Transpower, which is based on network peaks coincident with Upper South Island grid peaks, rather than for managing any local network constraints.</p> <p>For an "average" domestic consumer, the difference (per annum) from uncontrolled energy is \$106.35 + GST (\$492.75 vs \$386.40).</p> <p>MLL believes that the current price differential between uncontrolled and controlled energy is appropriate. However, if in future MLL's network approaches capacity constraints, then MLL will consider if there is a higher 'premium' on controllable energy and whether further price separation may be warranted.</p> <p>Similarly, MLL believes that its price separation for various capacity options offered within consumer groups is appropriate. Higher prices are applied where a consumer requires greater capacity, reflecting that much of the cost associated with the network is capacity related.</p>
Retailer pass through	While this does not influence MLL's prices, MLL does have concerns that its efforts to reform distribution pricing may somewhat be masked by the re-bundling of distribution prices by electricity retailers.

3.5.3 Target revenue from prices

Table 7 provides a summary of target revenue vs costs by consumer group for DY22. Figure 1 then shows the breakdown in revenue by price type (fixed, variable, or capacity) and by consumer group. Figure 2 highlights the change in the revenue from fixed pricing type from DY21 to DY22. Note the distinction in fixed vs variable for the low fixed charge residential consumer group.

Table 7: Forecast costs vs target revenue by consumers group for DY2022

Consumer group	Target revenue (\$000)	Forecast costs (\$000)	Difference (\$000)	ICPs
Residential (excl. low fixed charge)	12,437*	11,593	845	11,038
Residential remote	1,753*	5,314	-3,561	2,136
Residential low fixed charge	6,459	6,197	262	9,093
General	10,788	14,532	-3,744	3,356
Commercial and Industrial	12,063	6,211	5,853	129
Irrigation	1,727	2,055	-328	355
Other	331	164	167	49
Total	45,557	46,064	-507	26,156

* Forecast revenue for Residential and Residential Remote approximated based on variable revenue price components 10, 12 and 18 which are grouped across both consumer price plans.

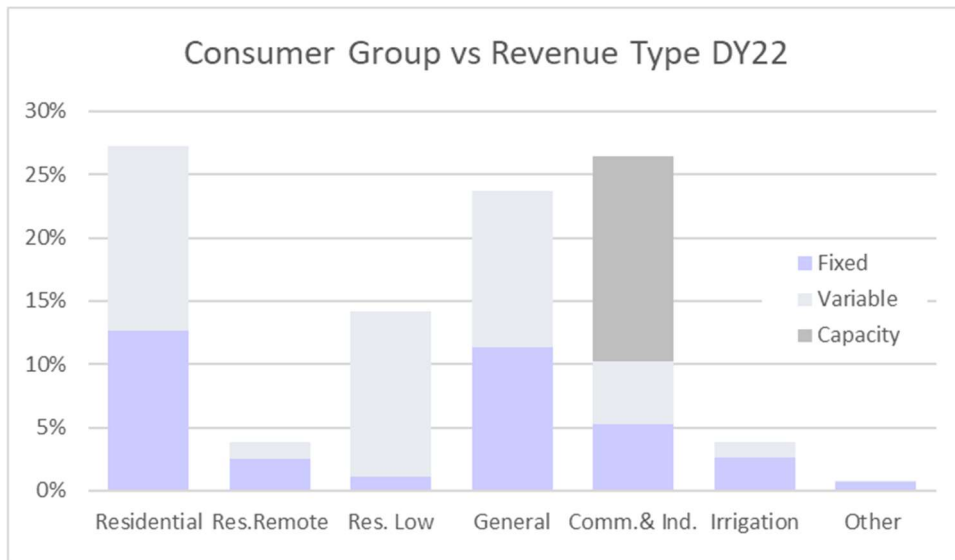


Figure 1 – Consumer group vs revenue type for DY22 forecast revenue.

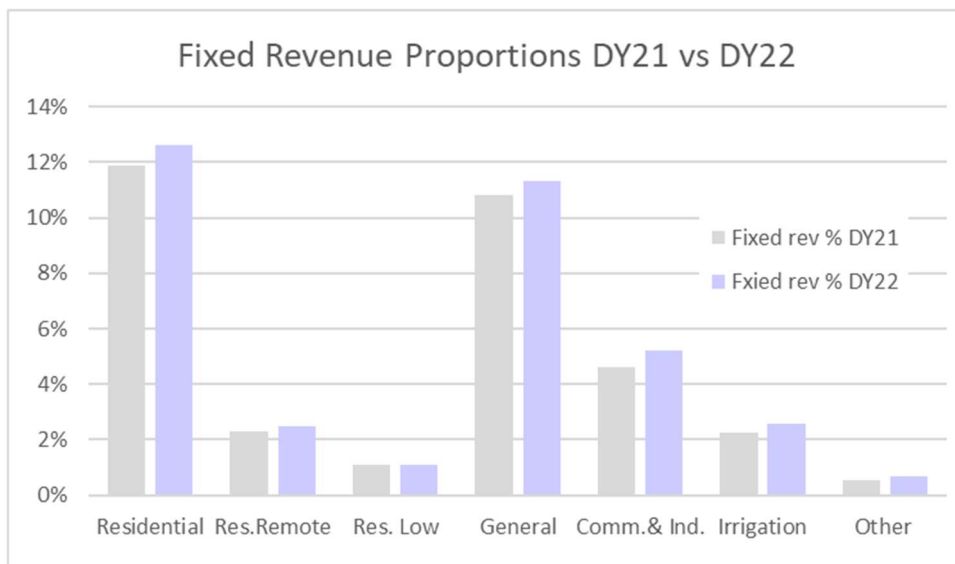


Figure 2 – Comparative increase in percentage of fixed revenue by consumer group, DY22 vs DY21

In accordance with Clause 2.4.3 (8) of Information Disclosure, the proportion of target revenue forecast to be collected through each price plan included in MLL’s pricing schedule for the disclosure year, are set out in Appendix 3.

3.6 Non-standard contracts

MLL currently has one non-standard contract for the Waihopai hydropower station, which is connected to and distributes energy through MLL’s network. The price is fixed under a contract put in place in 1999 when MLL sold the generation assets to Trustpower. Price changes for each disclosure year are recalculated based on CPI data and presented to Trustpower for review.

The target revenue for the year to 31 March 2022 is \$72,319 (excluding GST).

MLL will consider non-standard contracts for consumers that do not readily meet the typical criteria of consumers making up the consumer groups outlined in section 3.1, or, if the

connection is one that is deemed to be higher revenue risk to MLL, and/or that could impart significant additional cost on MLL.

If another non-standard contract was to be considered, MLL would set prices following detailed financial analysis including a discounted cash flow, with due consideration of revenue risk. MLL may consider other circumstances, at its discretion.

4. Distribution Pricing Roadmap (strategy)

MLL is cognisant of the drive for more cost reflective pricing, and the supporting rationale. MLL's view of cost reflective pricing is that a balance approached to this is needed, and that any reform, needs to be carefully considered, and where implemented, transitioned in over time.

MLL is also aware of the Electricity Authority's request for MLL to produce a distribution pricing 'roadmap', which effectively sets out MLL's pricing strategy for relevant stakeholders, such as electricity retailers and consumers. MLL first prepared a pricing roadmap in April 2017 and provided an updated roadmap in the DY21 Pricing Methodology.

As has been highlighted in this pricing methodology, many of the connections on MLL's network are in areas that are rugged, and uneconomic to supply. As a result, there is considerable cross-subsidy across consumers (both inter and intra group).

This year's pricing sees a continuation of MLL's pricing reform, through:

- Where possible, shifting the balance of variable to fixed prices. MLL's costs are generally fixed for each additional unit of usage and therefore shifting the balance of pricing to fixed is more cost reflective. As a proportion of total targeted fixed revenue, DY22 has increased to 36.0% from 33.5% from DY21 (refer to Figure 1).
- RCPD interconnection charges are treated as fixed, and have increased by \$0.1m for DY22, but this only represents 0.2% of total revenue.
- The costs to supply MLL's remote consumers is relatively high, both in terms of the capital (assets) required to supply these consumers as well as ongoing operational costs, such as fault and vegetation management, and maintenance inspections (particularly in single wire earth return (SWER) networks which typically are in MLL's remote areas).

The following sub-sections provide an overview of MLL's pricing strategy, which in MLL's view, is essentially the roadmap towards distribution pricing reform that is appropriate for MLL and the consumers connected to its network.

The pricing roadmap (objectives and timeline summary) that was included in the DY21 Pricing Methodology is included in Section 4.4 and has been updated to reflect current status.

4.1 Pricing to allow an appropriate commercial return

One of the key strategic objectives of MLL's pricing is that an appropriate commercial return is made for MLL's shareholder, the Marlborough Electric Power Trust. An appropriate return is one that will consider:

- The target return on shareholder funds set in MLL's Statement of Corporate Intent;
- The pre-discount returns set by the Commerce Commission for non-exempt EDBs; and

- Smoothing across the end and beginning of five yearly regulatory periods. This is considered important to mitigate the potential for significant step changes across regulatory periods, and associated price volatility for consumers.

MLL is also duly aware of section 36 of the Energy Companies Act 1992, which requires that MLL, as an EDB, has the principal objective of operating as a successful business. MLL interprets this to mean that an appropriate return on its investment is therefore made. Making an appropriate return on its investment underpins MLL's pricing strategy.

4.2 Move towards more cost reflective pricing

MLL, subject to ongoing review of its pricing structure and prices, will continue its work in reforming its distribution pricing. This will primarily be done through reducing existing inter and intra consumer group cross subsidies, and through shifting the balance of prices from variable to fixed. This is something that will be reflected over time, to minimise price shocks to consumers.

4.2.1 Variable to fixed (and ToU pricing)

As MLL's costs are generally fixed in nature, MLL will look to shift the balance of its prices from variable to fixed. This will be done over time to mitigate the potential for any price shocks. If price increases are deemed appropriate when annually reviewed, where practicable increases would be applied to the fixed price components. Conversely, if price decreases are applied, these will generally be applied to variable price components.

For prices to apply from 1 April 2021, for an "average" domestic consumer, the proportion of fixed revenue has increased from 45.5% to 48.0%.

Similarly, of the total targeted revenue to recover during DY22, the fixed proportion is 36.0% which is an increase from 33.5% in DY21.

The LFC regulations, which limit MLL to recovering 15c/day for a low user residential consumer (refer to Figure 1 and Figure 2 in section 3.5.3 for further detail).

4.2.1.1 ToU pricing

MLL considers that a variable price component is still appropriate, and during this disclosure year will further review the way in which this is applied (i.e. moving from a flat to a time (of day and/or time of year) based consumption variable price.

Many of New Zealand's 29 EDB networks have moved or are moving to ToU based pricing. As a provincial network, with minimal electric vehicle penetration, no significant network capacity constraints, and an existing effective time of use controlled night price plan, MLL believes that the urgency to introduce more complete time of use pricing is currently not present and that it is better to observe outcomes from other EDBs who are implementing this pricing structure.

Of MLL's approximately 26,150 connections, approximately 69% are AMI/HHR (advanced metering/half hourly) metered with the balance non-half hourly (NHH).

4.2.1.2 Consideration for SSDG

Solar photovoltaic small-scale distributed generation (SSDG) is installed at approximately 2.5% of MLL's consumer connections as of March 2021 (up from 2.4% at March 2020). SSDG

installations do not reduce MLL’s costs of operating its business and managing the network. The reduction in electricity consumption at connections with SSDG, does reduce revenue generated from variable price components (as revenue for variable price components directly relates to the amount of electricity consumed). Shifting the balance of fixed to variable prices will help to negate this impact, through minimising cross subsidy from consumers without SSDG to those with SSDG.

The ability for MLL to negate this impact is restricted by the LFC regulations, as outlined in section 4.3.1.

Figure 3 illustrates the increased installed capacity of SSDG in recent years. While currently the penetration levels of SSDG are not resulting in material revenue reduction for MLL, further installations at current rates may impact MLL’s revenue materially. MLL is acting to address this risk through shifting the balance of pricing from variable to fixed, for example.

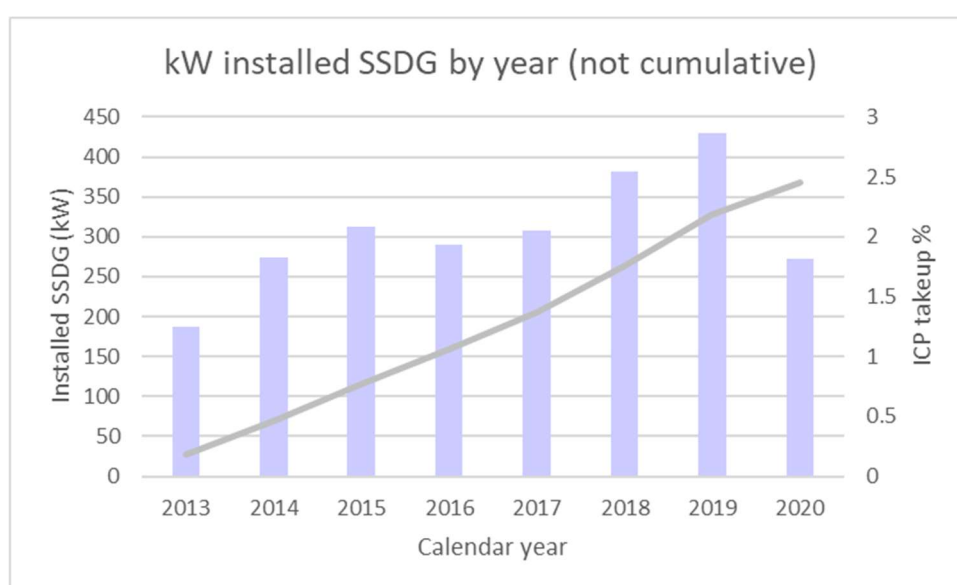


Figure 3: SSDG capacity (kW) installed by calendar year (source: EMI website)

4.2.2 Location based pricing

Due to the nature of MLL’s network, there are many consumers connected that are uneconomic to supply. Indeed, the variability in costs to supply an equivalent residential consumer (or other consumer type) in urban Blenheim, is vastly less than those in areas such as D’Urville Island, Forsyth Island, or the upper Wairau and Awatere Valleys.

Cost reflective pricing for MLL therefore should include an element of location-based pricing to offset the effective cross-subsidisation that occurs.

For prices commencing 1 April 2021, MLL has introduced a price differential between remote residential and non-remote residential consumer equivalents. Pre-discount line delivery price amounts (excluding GST) per annum will be \$1,058 and \$1,027 for “average” remote and non-remote residential consumers respectively.

MLL has, for now, only introduced a remote residential price plan (and not other consumer types remote price plans) primarily because most connections in remote areas are residential. This will

be reviewed over time, and particularly if Residential and General price plans are more closely aligned, then a remote general price plan could be introduced.

4.2.3 A stable approach

MLL's distribution pricing reform will include maintaining a degree of continuity/stability in pricing, thus, any pricing reform proposed is cautiously considered, and if adopted, transitioned incrementally over time to minimise impacts on consumers.

4.2.4 Transmission cost pass through

MLL will pass through transmission costs directly to consumer groups, based on consumer groups consumption at coincident times of 100 USI peaks (rolling three-year average to smooth volatility). Further detail on how the RPD allocations are determined is set out in section 3.3.2.1.

4.2.5 Alignment of Residential and General consumers

As part of its distribution pricing reform, MLL will further consider aligning the smaller (lesser capacity) general price plan consumers, to the equivalent residential price plans (with respect to the fixed price component).

4.2.6 Discount payments

Continue to use discount payments to demonstrate the benefits of consumer ownership. MLL intends to continue its policy of making discount payments to eligible consumers connected to its network.

For DY22, an eligible "average" domestic consumer would receive a discount payment of \$236 (including GST).

The amount of the discount payment received by each consumer is dependent on eligibility, the nature of the connection, the number of days connected, and, the amount of energy consumed across the qualifying discount payment period.

MLL does not make a discount payment to consumers designated "remote", for the reasons outlined in this Pricing Methodology.

4.3 Other pricing reform considerations

Other industry and sector workstreams will have an impact on MLL's (and other EDBs') distribution pricing reform.

4.3.1 Low fixed charge tariff

MLL eagerly awaits the final decision on the phasing out of the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 (LFC regulations), which in MLL's view has been an impediment to more cost reflective pricing with its widely accepted unintended consequences. MLL is encouraged by the outcomes of the Electricity Price Review, and subsequent support from MBIE to commence a phase out of these regulations.

MLL believes that removal of this legislation will reduce intra-group subsidy for residential consumers. By way of example:

- Example 1 - A modern three-bedroom home is owned by a relatively high-income couple. It has energy efficient lighting and appliances (including heating) and is well insulated. The home has solar photovoltaic cells installed on their roof, reducing their daytime energy consumption, particularly in summer months. Energy consumption is 6,000kWh per year and the consumer is on the low fixed charge plan.
- Example 2 – An older home is occupied by a large family (five children), who are dependent on government financial assistance. The home is poorly insulated, has inefficient electrical appliances (including heating) and lighting. Energy consumption is 10,000kWh per year.

In both instances, the connections are in the Blenheim township, and supplied by a three phase 30A connection, i.e. the costs for MLL to supply these connections is more or less the same – MLL’s costs are not directly related to the amount of energy consumed by these two consumers.

The price comparison (based on prices for 1 April 2021) for the two examples is summarised in Table 8.

Table 8: Cost comparison for a low fixed charge vs standard residential consumer

Price component	Example A – Low fixed charge consumer, 6.000kWh p.a.		Example B – standard residential consumer, 10,000kWh p.a.	
	Rate	Cost	Rate	Cost
Fixed charge	\$0.15/day	\$ 54.75	\$1.35/day	492.75
Uncontrolled (60%)	\$0.1351/kWh	\$ 486.36	\$0.0805/kWh	483.00
Controlled (40%)	\$0.1011/kWh	\$ 242.64	\$0.0462/kWh	184.80
Total	-	\$ 783.75	-	\$ 1,160.55

With the above example, the beneficiaries of the regulations are possibly not the consumers intended, with the lower income family paying over \$375 per annum more. While they consume more energy (kWh), this does not necessarily mean an increase in costs to MLL, i.e., there is disproportionate cost recovery between a low user vs standard residential consumer attributable to the MLL’s adherence to the LFC regulations.

4.3.2 Other active workstreams in pricing

The Electricity Networks Association (ENA) has a current workstream that is developing a pricing ‘menu’, an approach to align price plans across EDBs. This work is currently in progress and has sought input from ERANZ (Electricity Retailers Association of New Zealand). MLL will work with other EDB’s and align its prices where practicable, if there can be demonstrable benefit to electricity retailers and/or consumers, as well as EDBs.

The Electricity Authority’s Transmission Pricing Methodology (TPM) review work is ongoing. If proposed changes to the TPM occur, this will impact the way in which Transpower recovers its revenue from its customers, including MLL. Currently the majority of MLL’s Transpower costs that are passed on to consumers are based on the RPD interconnection charge, it has been signalled that this may be dissolved. This will have implications on the way in which MLL passes on its transmission costs to its consumers and could result in price plan changes for irrigation consumers for example.

4.3.3 Retailer pass through

While MLL acknowledges the importance of cost reflectivity, concerns remain that where prices are set to influence consumers behaviour, consumers may not ultimately see this due to the re-bundling of prices by electricity retailers, whom directly contract consumers.














As such, MLL is somewhat limited in its ability to ultimately influence consumers' consumption behaviour through its distribution prices.

4.4 Pricing reform timeline (indicative)

A summary of MLL's distribution pricing reform timeline is presented in Table 9. This includes key milestones targeted for discrete activities.

The DY21 pricing methodology committed that MLL would review and update the timeline. The table has been updated to reflect progress to date on MLL's pricing reform objectives.

Table 9: Update to DY2021 timeline for discrete distribution pricing reform activities

Objective from DY21 Pricing Methodology		Status	Comments
Location based pricing	1 April 2020 – Introduction of remote residential consumer price plan.		Remote residential price plans introduced on 1 April 2020.
	Throughout DY2021 – undertake economic assessment of ‘remote’ consumers, including potential impacts on consumers of price changes.		Analysis confirms significant under-recovery from remote consumers.
	Throughout DY2021 – formalise public strategy and communicate with consumers.		Further consumer communications and engagement to be undertaken in DY2022.
	1 April 2021 – confirm line delivery prices for DY2022 including price changes for remote consumers.		Price changes notified to retailers, published to newspapers, and effective from 1 April 2021.
	DY2022 to DY2024, target alignment (subject to further analysis) of remote residential prices with that of equivalent (capacity) general consumers prices.		Further analysis to commence in DY2022.
	DY2025 (to be confirmed), include remote General consumer price plan as per residential consumer equivalents.		Subject to further work, but for now, no change to objective.
Time of Use pricing	1 April 2021 – Commence discussions with electricity retailers regarding possibility of including time of use pricing option in pricing from 1 April 2022.		Discussions to commence Q2 DY22.
	Reviewing findings from other EDBs’ experiences from introducing ToU pricing.		Will seek out learnings from other EDBs Q2 DY22.
	Engage with consumers, pending outcomes on discussions with retailers, to further determine appetite for time of use pricing and to assist with their understanding of this pricing approach.		Subject to discussions with Retailers but targeting early Q3 DY22.
	1 April 2022 - Introduce time of use price option for consumers (subject to above outcomes).		Subject to achievement of above objectives/milestones.
	DY2023, monitor uptake of TOU pricing and change in consumption behaviour of consumers.		
1 April 2023, adjust TOU prices if and where appropriate following monitoring/analysis work.			
Fixed	As and when price changes are introduced, look to adjust prices such that fixed price components increase relative to variable price components.		Price changes from 1 April 2021 have seen an increase in fixed price components with a corresponding decrease in variable prices. Refer Error! Reference source not found.

 Objective/milestone achieved  Yet to be actioned  Objective/milestone partially complete and further work to do.

Appendix 1 – Information Disclosure Requirements

From Electricity Distribution Information Disclosure Determination 2012 (Consolidated April 2018).

2.4 PRICING AND RELATED INFORMATION

Disclosure of pricing methodologies

2.4.1 Every EDB must publicly disclose, before the start of each disclosure year, a pricing methodology which-

- (1) Describes the methodology, in accordance with clause 2.4.3, used to calculate the prices payable or to be payable. **Refer to section 3.4.**
- (2) Describes any changes in prices and target revenues. **Refer to section 1.2, 3 and [MLL's line delivery price schedule](#).**
- (3) Explains, in accordance with clause 2.4.5, the approach taken with respect to pricing in non-standard contracts and distributed generation (if any). **Refer to section 3.6.**
- (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. **Refer to section 2.**

2.4.3 Every disclosure under clause 2.4.1 must-

- (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. **Refer to section 3.**
- (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. **Refer to Appendix 2 – Consistency with Pricing Principles.**
- (3) State the target revenue expected to be collected for the disclosure year to which the pricing methodology applies. **Refer to sections 1.2.1, 3 and Appendix 3 – Target revenue by price component.**
- (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. **Refer to section 3.**
- (5) State the consumer groups for whom prices have been set, and describe-
 - (a) the rationale for grouping consumers in this way;
 - (b) the method and the criteria used by the EDB to allocate consumers to each of the consumer groups. **Refer to section 3.1.**
- (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. **Refer to section 1.2 and [MLL's line delivery price schedule](#).**

(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. **Refer to section 3**

(8) State the proportion of target revenue (if applicable) that is collected through each price component as publicly disclosed under clause 2.4.18. **Refer to section 3**

2.4.4 Every disclosure under clause 2.4.1 must, if the EDB has a pricing strategy-

(1) Explain the pricing strategy for the next 5 disclosure years (or as close to 5 years as the pricing strategy allows), including the current disclosure year for which prices are set. **Refer to section 4.**

(2) Explain how and why prices for each consumer group are expected to change as a result of the pricing strategy. **Refer to section 4.**

(3) If the pricing strategy has changed from the preceding disclosure year, identify the changes and explain the reasons for the changes. **Refer to section 4.**

2.4.5 Every disclosure under clause 2.4.1 must-

(1) Describe the approach to setting prices for non-standard contracts, including-

(a) the extent of non-standard contract use, including the number of ICPs represented by non-standard contracts and the value of target revenue expected to be collected from consumers subject to nonstandard contracts. **Refer to section 0.**

(b) how the EDB determines whether to use a non-standard contract, including any criteria used. **Refer to section 0.**

(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. **Refer to section 0.**

(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-

(a) the extent of the differences in the relevant terms between standard contracts and non-standard contracts; **Not applicable.**

(b) any implications of this approach for determining prices for consumers subject to non-standard contracts; **Not applicable.**

(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-

(a) prices; and

(b) value, structure and rationale for any payments to the owner of the distributed generation **Not applicable.**

Appendix 2 – Consistency with Pricing Principles

MLL understands that compliance with the pricing principles is voluntary. The Electricity Authority, however, will assess MLL’s consistency with the pricing principles through the publication of their distribution pricing scorecards.

In considering the pricing principles, MLL has utilised the Electricity Authority’s “Distribution Pricing: Practice Note August 2019”.

The following provides a summary of the distribution pricing principles and MLL’s adherence to them.

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);

MLL understands that to satisfy this principle, the forecast total revenue for a consumer group should be subsidy free, i.e. fall between standalone and avoidable costs.

- Standalone costs are those that would solely be required to service any one of the consumer groups on its own (based on the network costs attributable to each consumer group as outlined in this Pricing Methodology – a non-network solution is impractical due to the spatial diversity of consumers within any consumer group); and
- Avoidable costs are estimated by considering how costs could reduce if electricity was not supplied to a consumer group.

In determining standalone and avoidable costs (and the subsidy free test), MLL has referenced the Electricity Authority’s Distribution Pricing Practice Note¹¹. MLL has considered consumer group-level analysis, as outlined in Table 10.

Figure 4 illustrates that the subsidy free test is satisfied, with costs for each consumer group lying within the limits of avoidable and standalone costs.

The assessment is estimated, because many assets are shared and consumers from different consumer groups are generally interspersed – i.e. specific areas of network are typically not dedicated to a single consumer group.

Table 10 – Summary of standalone and avoidable costs for consumer groups.

Consumer group	Target revenue (\$000)	Standalone costs	Avoidable costs
Residential (excl. LFC)	12,437*	30,854	5,037
Residential remote	1,753*	26,136	1,982
Residential low fixed charge	6,459	29,796	2,595
General	10,788	30,408	6,058
Commercial and Industrial	12,063	14,142	3,329
Irrigation	1,727	10,870	807
Other	331	16,780	78
Total	45,557	-	-

¹¹ <https://www.ea.govt.nz/assets/dms-assets/25/25528Distribution-Pricing-Practice-Note-August-2019.pdf>

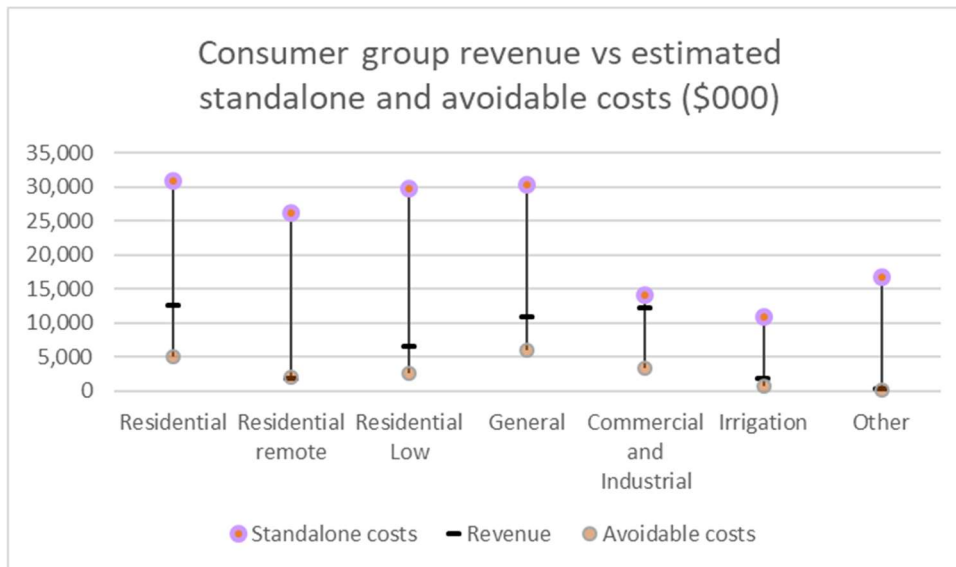


Figure 4 – Revenue by consumer group vs estimated standalone and avoidable costs

Table 10 and Figure 4 show that the subsidy free test is met, however, residential remote, commercial and industrial, and irrigation consumers are nearing either end of the limits which is reflective of the subsidisation associated with those consumer groups particularly.

(ii) reflecting the impacts of network use on economic costs;

MLL has price plans and pricing that reflects the impacts of network use on economic costs, including:

- Passing through of transmission charges from Transpower based on actual demand and consumption over periods when transmission charges are normally reflected;
- Lower prices for energy consumption that has the ability to be controlled by MLL;
- Night only energy consumption prices which are lower than other prices;
- Plans to further shift the balance of prices from variable to fixed, this better reflects the costs which are primarily fixed, and negates the potential future impact if there is higher SSDG penetration on the network;
- A power factor price to encourage consumers to manage power factor (to prevent impacts on quality of supply and to optimise network capacity); and
- Different price plans based on the installed capacity (fusing) of connections and maximum demand prices for Commercial and Industrial consumers (also for irrigation consumers relating directly to irrigation pump size). Prices increase with maximum demand to act as a price signal to consumers that increasing maximum demand results (cumulatively) in increased network costs through the provision of additional capacity.

(iii) reflecting differences in network service provided to (or by) consumers

MLL's prices allow for consumers to elect for different service provisions, including:

- The option of having hot water for example connected to a controlled (lower price) price;
- DY2021 introduced an uncontrolled irrigation price plan, giving irrigation consumers the option to elect a controlled vs uncontrolled price plan. MLL signals to irrigation consumers

- on the controlled price plan that it may elect to control their load if network demand is high, particularly if those times are coincident with high upper South Island transmission load; and
- Allows consumers to connect load to a night only energy price, lower than other alternative prices, giving them the option to shift (some of) their consumption to times of low network load.

(iv) encouraging efficient network alternatives

This pricing methodology has highlighted that SSDG installed on the network may not be efficient (at least from MLL’s perspective), and as such, MLL will consider further shifting the balance of prices from variable to fixed to negate this inefficiency. SSDG (particularly solar) is considered inefficient (from an MLL network cost perspective) generally as it generates at times typically when network demand is not high.

The likely introduction of time of use pricing may encourage more efficient investments in SSDG, if for example the variable price component was considerably lower when SSDG (solar) generates, relative to peak demand periods (typically still early mornings and evenings over winter months).

The approach to passing on transmission RPD charges and the maximum demand (capacity) price signals to consumers (especially commercial and industrial) that network alternatives could be considered to manage their peak demands at times coincident with network peaks. MLL notes here that this may change with the current review of the existing and proposal for a new Transmission Pricing Methodology by Transpower.

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.

Target revenue does not meet forecast costs for residential remote consumers. MLL has increased prices for this consumer group to bridge that gap, and, has applied the increase to the fixed charge component as MLL considers that will less distort network use (noting that network usage can be very limited in the case of remote residential consumers, many of whom are holiday homes in the Marlborough Sounds).

Other consumer groups where there is anticipated to be revenue shortfall are for general and irrigation consumers. Price plans for these consumers relate to the installed capacity of the connection (i.e. kVA capacity bands for general and pump size (kW) for irrigation pumps installed), with higher prices for higher available capacity. MLL to least distort network usage and make up shortfall is increasing the fixed price component for these consumer groups

C) Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to:
 (i) reflect the economic value of services

MLL’s standard prices are below standalone costs, as outlined earlier in this appendix. MLL can enter into non-standard contracts, if and where required, particularly if consumers would not connect on the basis of standard pricing.

MLL has no evidence to suggest that consumers are not connected (or are disconnecting) due to its standard prices.

(ii) enable price/quality trade-offs

MLL has, in this pricing methodology, confirmed its intention to introduce time of use pricing for DY2023 (subject to further review). This will give a price signal to consumers, allowing them to shift the timing of their electricity consumption – effectively a price/quality trade off.

Most of MLL’s price plans offered are based around the capacity (kVA) available for connections, this is a price/quality trade off – allowing consumers to elect the capacity that they require, consistent with their needs but also their willingness to pay.

Prices for residential and general consumers also include options for controlled and uncontrolled energy (and also for irrigation consumers as of 1 April 2020), allowing consumers to choose to pay a higher price if they are willing to in order to have an uninterrupted supply of energy.

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

MLL publicly publishes its pricing methodology, line delivery price schedule, and a line delivery pricing guidelines document on an at least annual basis. Prior to confirming any structural changes to its pricing, MLL consults with electricity retailers trading on its network.

As has been outlined in this pricing methodology, MLL has engaged with consumers on distribution pricing to better understand consumers understanding of pricing, and their views on some pertinent distribution pricing matters relevant to MLL. By way of example, following irrigation consumer’s feedback that they do not want to be controlled (MLL reminds irrigation consumers that the irrigation tariff is controllable ahead of irrigation season), MLL offered an uncontrolled irrigation price plan equivalent.

As part of its distribution pricing reform, MLL will look to introduce time of use pricing. Assuming that materialises, MLL will look to the experiences of other EDBs to ensure that the pricing introduced is consistent where possible with EDB peers and will consult with retailers to ensure that any transaction costs incurred by retailers as a result of structural pricing changes are minimised where possible.

Appendix 3 – Target revenue by price component

Price plan	Price plan description	Price units	Target revenue (\$)	% of Total
DS 15	Standard daily price up to 15kVA capacity	\$/con/day	3,859,427	8.5%
DS30	Standard daily price 16kVA to 30kVA	\$/con/day	1,297,650	2.8%
DT	Standard daily price 31kVA to 50kVa	\$/con/day	553,267	1.2%
DSR15	Standard daily price up to 15kVA remote	\$/con/day	1,031,313	2.3%
DSR30	Standard daily price 16kVA to 30kVA remote	\$/con/day	72,281	0.2%
DTR	Standard daily price 31kVA to 50kVA remote	\$/con/day	28,844	0.1%
10	Uncontrolled energy	\$/kWh	6,134,686	13.5%
12	Controlled energy	\$/kWh	1,105,725	2.4%
18	Night only energy	\$/kWh	50,103	0.1%
DL	Daily price up to 15kVA capacity	\$/kWh	497,807	1.1%
11	Uncontrolled energy	\$/kWh	4,529,091	9.9%
16	Controlled energy	\$/kWh	1,354,157	3.0%
17	Night only energy	\$/kWh	77,551	0.2%
NS	Daily fixed price up to 15kVA capacity	\$/con/day	691,783	1.5%
NH	Daily fixed price 16 to 30kVA	\$/con/day	472,102	1.0%
NT	Daily fixed price 31 to 45kVA	\$/con/day	1,900,830	4.2%
RT	Daily fixed price 46 to 70 kVA	\$/con/day	1,018,196	2.2%
RV	Daily fixed price 70 to 105kVA	\$/con/day	578,684	1.3%
RX	Daily fixed price 106 to 140kVA	\$/con/day	487,978	1.1%
23	Uncontrolled energy 0 to 45kVA	\$/kWh	2,952,876	6.5%
31	Uncontrolled energy 46 to 70kVA	\$/kWh	1,136,887	2.5%
40	Uncontrolled energy 70 to140 kVA	\$/kWh	1,447,513	3.2%
22	Controlled energy 0 to 140kVA	\$/kWh	88,775	0.2%
28	Night only energy 0 to 140kVA	\$/kWh	5,789	0.0%
20	20 hour controlled 0 to 45kVA CLOSED	\$/kWh	3,652	0.0%
30	20 hour controlled 46 to 70kVA CLOSED	\$/kWh	2,624	0.0%
US	Unmetered	\$/con/day	42,848	0.1%
TS	Temporary supply	\$/con/day	36,464	0.1%
71	Temporary supply energy	\$/kWh	20,364	0.0%
BF/BHM/BHC	Daily fixed price	\$/con/day	294,800	0.6%
51	Day energy LV	\$/kWh	1,695,796	3.7%
50	Night energy LV	\$/kWh	130,950	0.3%
61	Day energy HV	\$/kWh	416,289	0.9%
62	Night energy HV	\$/kWh	31,450	0.1%
AL	Capacity charge C&I	\$/kVA/day	5,859,700	12.9%
AM	Capacity charge HV ML equipment	\$/kVA/day	949,854	2.1%
AH	Capacity charge HV consumer owned	\$/kVA/day	603,410	1.3%
WL, WM, WH	Regional Peak Demand	\$/kVA/day	1,871,094	4.1%
PM and PMU	Daily fixed price 7.5 to 23kW capacity	\$/con/day	203,189	0.4%
PK and PKU	Daily fixed price above 23kW capacity	\$/kW/day	757,347	1.7%
PH	Daily fixed price capacity CLOSED	\$/kVA/day	101,526	0.2%
96	Seasonal energy	\$/kWh	484,470	1.1%
97	Non seasonal energy	\$/kWh	61,792	0.1%
80	SL energy	\$/kWh	13,867	0.0%
MDCFC	MDC/Transit fixed charge	\$/con/day	190,416	0.4%
PMFC	Port Marlborough fixed charge	\$/con/day	6,939	0.0%
RNZAF	RNZAF fixed charge	\$/con/day	3,553	0.0%
PSLT1	Private SL less than 150W fixed charge	\$/fitting/day	688	0.0%
PFT	ToU	\$/kVAr/day	209,990	0.5%
PFI	Non-ToU	\$/kVAr/day	118,520	0.3%
Waihopai	Non-standard contract for Waihopai DG	\$/con/yr	72,319	0.2%
Total			45,557,226	100.0%

Appendix 4 – Directors’ Certification

In reference to Clause 2.9.1 of Electricity Distribution Information Disclosure Determination 2012 (consolidated April 2018), we, David William Richard Dew and Philip Ian Robinson, being directors of Marlborough Lines Limited certify that, having made all reasonable enquiry, to the best of our knowledge, the information of this Marlborough Lines Limited Pricing Methodology, prepared for the purposes of clauses 2.4.1, of the Electricity Distribution Information Disclosure Determination 2012, in all material respects complies with that determination.

Signed by:



DWR Dew

23/3/21

Date



PI Robinson

23/3/21

Date