



Wellington Electricity Lines Limited

2019/20 Pricing Methodology

30 January 2019

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

Glossary

Abbreviation	Definition Or Description
2019/20 Disclosure of Prices	Wellington Electricity Lines Limited's Disclosure of Prices
ACOT	Avoided cost of transmission – an amount payable to large distributed generators within Wellington Electricity's network in recognition that these generators may cause WELL to avoid Transpower charges.
Capacity	The maximum amount of energy that a part of the network is able to carry at any point in time
Commerce Commission	New Zealand Commerce Commission (NZCC)
Consumer	A person, residential or business, that uses electricity or acquires electricity lines services
Consumer Group	The category of consumer used by the EDB for the purpose of setting prices
Controlled Load	An amount of electrical load which a consumer makes available to the distributor's load control system to turn off during periods of network congestion or to assist in restoring supply
CPI	Consumer Price Index inflation
CPP	Customised Price-quality Path A customised price-quality path is a path the Commission can set to better suit the specific needs of a regulated business and those of its consumers.
CPP Determination	Decision No [2018] NZCC 6, Wellington Electricity Lines Limited Electricity Distribution Customised Price-Quality Path Determination 2018
Delivery price	The total delivery price for both distribution and transmission services (also known as lines charges).
Demand	Electricity use at a point in time
Distributed Generator	Any person who owns or operates equipment that is connected to Wellington Electricity Lines Limited's distribution network, including through a consumer installation, which is capable of injecting electricity into the network

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

Abbreviation	Definition Or Description
DPP Determination 2015	Decision No. NZCC 33, Electricity Distribution Services Default Price-Quality Path Determination 2015
EDB	Electricity Distribution Business
Electricity Authority	The Electricity Authority
GXP	A point of supply to Wellington Electricity Lines Limited's distribution network from Transpower's national transmission grid
HV	High Voltage – equipment or supplies at voltages of 11kV, 22kV or 33kV
ID Determination 2012	Electricity Distribution Information Disclosure Determination 2012, 22 March 2015
ID Guidelines 2010	The Electricity Authority's Distribution Pricing Principles and Information Disclosure Guidelines, February 2010
IM Determination 2012	Electricity Distribution Services Input Methodologies Determination 2012, 30 March 2015
LFC Regulations	Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulation 2004
Lines Charges	Refer to Delivery price
LRMC	Long Run Marginal Costs
LV	Low Voltage – equipment or supply at a voltage of 220V single phase or 415V three phase
Network	The electricity distribution network owned by Wellington Electricity Lines Limited for the conveyance of electricity. Network assets include substations, lines, poles, transformers, circuit breakers, switchgear, cabling etc.
Point of Connection	A point at which a consumer's fittings interconnect with the Network as described by diagrams as used from time to time by Wellington Electricity Lines Limited
Power Factor (PF)	A measure of the ratio of real power to total power of a load. The relationship between real, reactive and total power is as follows: PF = Real Power (kW) / Total Power (kVA) Total Power (kVA = $(kW^2 + kVAr^2)^{0.5}$)

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

Abbreviation	Definition Or Description
Pricing Methodology	Wellington Electricity Lines Limited's Pricing Methodology Disclosure Document
RAB	Regulated Asset Base – is the regulated value of the distribution assets that Wellington Electricity uses to provide line function services.
WELL	Wellington Electricity Lines Limited

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

Contents

Glossary	2
1 Introduction	7
2 Regulatory Background	8
2.1 Commerce Act 1986 Regulation	8
2.2 Price-Quality Path Determination	8
2.3 ID Determination 2012.....	8
2.4 Other Regulatory Requirements	9
2.5 Related Pricing Documents	9
2.6 Future Pricing – The Roadmap	9
3 Changes To WELL’s Pricing Structures	10
4 Objectives For Setting Prices	10
5 Consumer Groups	11
5.1 Defining Consumer Groups	11
6 Target Revenue	15
6.1 Cost Components	16
7 Cost Allocation.....	17
7.1 COSM Summary	17
7.2 Application To Prices	20
8 Impact Of 2019/20 Price Changes.....	21
8.1 Changes To Standard Prices.....	22
8.2 Non-Standard Contracts	23
8.3 Obligations And Responsibilities To Consumers On Non Standard Contracts.....	24
8.4 Distributed Generation	24
8.5 Service Charges (Previously Other Charges).....	26
8.6 Consumer Views On Pricing.....	26
Appendix A: Pricing Methodology - Information Disclosure Requirements.....	29
Appendix B: Consistency With Pricing Principles	31

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

List Of Tables & Figures

Table 1 – Consumer Group And Load Characteristics	12
Table 2 – Key Cost Components To Cover Provision Of Electricity Line Services	15
Table 3 – Key Cost Components To Cover Provision Of Electricity Line Services	16
Figure 1 - COSM Model Illustration	17
Table 4 – Key Cost Components To Cover Provision Of Electricity Line Services	18
Table 5 - COSM Allocators By Consumer Group.....	20
Table 6 - COSM Allocations Of Costs To Consumer Groups.....	20
Table 7 – Revenue From Prices Relative To Cost Of Supply (Excl. Non-Standard) -.....	21
Table 8 – Change In Delivery Charge	23
Table 9 – Non Standard Contract Statistics	24
Table 10 – Service Charges	26
Table 11 – Monthly Cost/Quality Trade-off Survey Questions.....	27
Table 12 – Proportion Of Target Revenue By Price Component	28
Figure 2 - Comparison Of Distribution Avoided Costs, Standalone Costs, COSM Outputs, And Prices By Consumer Group	31

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

1 Introduction

Wellington Electricity (WELL) owns and operates the electricity distribution network in the Wellington region, covering Wellington, Porirua, Lower and Upper Hutt cities, connecting electricity infrastructure to more than 167,000 homes and businesses. WELL recovers the cost of owning and operating the network through a combination of standard (published) and non-standard prices for electricity lines services, and capital contributions for new connections.

WELL is regulated by the Commerce Commission (“Commission”) and is required to publish its pricing methodology for electricity lines services. WELL is also regulated by the Electricity Authority under the Electricity Industry Act 2010. This document describes WELL’s pricing methodology and outlines how costs are allocated to and recovered from the consumer groups connected to and taking line function services from the Wellington network for the 2019/20 pricing year commencing 1 April 2019.

During March 2018 the Commerce Commission issued the Wellington Electricity Lines Limited Electricity Distribution Customised Price-Quality Path Determination 2018 (CPP Determination). WELL had deferred the usual timing of its price changes from 1 April 2018 to 1 July 2018 to allow for the CPP Determination to be made. In 2019, WELL is resuming the 1 April timing of its annual price changes.

2 Regulatory Background

WELL is a supplier of electricity distribution lines services and is regulated by:

- The Commission under Part 4 of the Commerce Act 1986 (Part 4); and
- The Electricity Authority under the Electricity Industry Act 2010.

2.1 Commerce Act 1986 Regulation

Under Part 4, the Commission regulates markets where competition is limited, including electricity distribution services. Regulation for electricity distribution services includes regulation of price and quality through a price-quality path to ensure incentives and pressures, similar to those in a workably competitive market, are faced by distributors so that consumers will benefit in the long term.

2.2 Price-Quality Path Determination

These prices are compliant with WELL's regulatory CPP Determination for the 2020 Assessment Period, i.e.: the 12 months ending 31 March 2020.

The CPP Determination regulates two components of WELL's prices: the distribution price component and the pass-through price component. The pass-through price component recovers costs that are largely outside WELL's control. These include council rates, levies, transmission costs and other recoverable costs. The distribution price component recovers WELL's costs of operating the distribution network and associated lines function services.

At the commencement of each regulatory period, the Commission determines a quantum of allowable revenue for WELL to ensure that the business recovers what the Commission determines as a sufficient return on an efficient level of forecast operating and capital expenditure. This is achieved by computation of "building blocks", whereby the Commission determines the revenue that equates to recovery of operating expenditure, depreciation and an "industry benchmarked" rate of return on capital employed. Once allowable revenue is determined for each year of the regulatory period, the present value of the revenue is calculated; this present value is then "smoothed" over the regulatory period as forecast net allowable revenue.

The CPP Determination sets WELL's actual net allowable revenue from distribution prices for the year beginning 1 April 2018 and allows distribution prices to increase by CPI in the following years of the regulatory period. A mechanism at the end of each pricing year allows for any differences between allowable revenue and actual revenue to be washed up in subsequent years with a time value of money adjustment.

Pass-through price components recover the actual pass-through and recoverable costs that WELL incurs. A mechanism at the end of each pricing year allows for any differences between pass-through and recoverable costs and pass-through price revenues to be washed up in subsequent years with a time value of money adjustment.

2.3 ID Determination 2012

WELL is also subject to information disclosure regulation under Part 4¹. The purpose of this regulation is to ensure that sufficient information is readily available to

¹ Section 54F of the *Commerce Act 1986*

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

interested persons to assess whether the purpose of Part 4 of the Act is being met. As a result, WELL must make disclosures under the ID Determination 2012, including publicly disclosing its pricing methodology before the start of each disclosure year commencing 1 April. The requirements of the ID Determination 2012 relating to pricing methodologies are set out in Appendix A.

Additionally, the Electricity Authority's ID Guidelines 2010 set out voluntary principles and guidelines for information disclosure relating to EDBs pricing methodologies. We demonstrate WELL's pricing methods are consistent with the pricing principles in Appendix B.

2.4 Other Regulatory Requirements

Other regulatory requirements directly applicable to this pricing methodology are:

- The LFC Regulations - these require EDBs to offer a pricing plan to domestic consumers that use less than 8,000kWh per annum, which has a fixed daily price of no more than 15 cents per day. Other variable charges must be set such that residential low users are no worse off than residential standard users when consumption is at 8,000kWh per annum.
- Schedule 6.4 of Part 6 of the Code sets out pricing principles for distributed generation.

2.5 Related Pricing Documents

In addition to this Pricing Methodology Disclosure document, the following pricing related material applicable for the 2019/20 year is available on WELL's website:²

- Disclosure of Prices;
- Line Charge Notice;
- Electricity Network Pricing Schedule;
- Transmission Pass Through Methodology; and
- Customer Contributions Policy³.

2.6 Future Pricing – The Roadmap

As requested by the Electricity Authority, we publish our plans for introducing efficient future pricing ("future pricing roadmap") on our website. The purpose of the future pricing roadmap is to provide stakeholders, such as consumers, retailers and regulators, with information about WELL's plan for future changes to pricing structures and/or prices, together with expected timeframes for implementing the changes. The inputs for the future pricing roadmap take into consideration the following factors:

- Consultation with both retailers and consumers;

² Available at: <http://www.welectricity.co.nz/disclosures/pricing/2019-pricing/>

³ Available at: <https://www.welectricity.co.nz/disclosures/customer-contributions/>

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

- The future evolution of emerging technologies;
- Load shifting and the shared benefits for both network and consumers; and
- Mitigation of any price shocks for consumers as best possible.

WELL continue to utilise Electric Vehicle & Battery (EVB) pricing to better understand the potential implementation challenges in introducing efficient future pricing models. Further detailed information on the EVB plans can be found on our website at <http://www.welectricity.co.nz/disclosures/pricing/2019-pricing/>

3 Changes To WELL's Pricing Structures

We are not making any structural changes to our pricing for the 2019/20 pricing year however WELL is in the process of looking to introduce new tiered pricing structures in the near future. We are working collaboratively with the ENA who are looking at an industry wide consistent approach to future pricing structure changes.

4 Objectives For Setting Prices

The objective of WELL's pricing methodology is to develop electricity delivery prices that:

- Are cost reflective – better signalling to consumers the impact of their usage on future expenditure;
- Are consumer and retailer centric, such that prices:
 - Are logical and simple to understand;
 - Allow consumers to manage their usage and bills;
 - Can be passed on transparently by retailers
- Minimise revenue volatility and under-recovery;
- Seek to reduce price shock to consumers;
- Are forward looking, being robust to changes in technology and regulation;
- Are practical and achievable to implement within the next 1-5 years; and
- Are not inconsistent with pricing structures used by other EDBs.

Changes To Price Structures Post 2019/20

WELL implemented Time Of Use (TOU) pricing for EVB customers from 1 July 2018. WELL continues to offer EVB and still intends to investigate, and if appropriate, introduce demand or time of use (e.g. peak period pricing) based pricing signals across the residential and commercial consumer groups. With time of use metering in the Wellington region now available for approximately 80% of all connections, there is an opportunity for WELL to consider transitioning to time and/or demand based pricing.

In addition to providing price signals to consumers to shift consumption to periods outside of the peak demand period, our future pricing changes are likely to ensure that

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

consumers with solar pay their full share of network capacity and demand costs, rather than being subsidised by consumers without solar.

We plan to consult with consumer advocacy groups and retailers on any significant price changes, and will provide further updates as our review progresses.

5 Consumer Groups

This section sets out the rationale and criteria for our consumer groups.

5.1 Defining Consumer Groups

WELL has adopted the following consumer groups for pricing purposes:

- Standard contracts:
 - Residential Low User (RLU);
 - Residential Standard User (RSU);
 - Residential Low User EV and Battery Storage (RLUEVB);
 - Residential Standard User EV and Battery Storage (RSUEVB);
 - General Low Voltage Connection (GLV);
 - General Transformer Connection (GTX); and
 - Unmetered (G).
- Non Standard Contracts.

Consumers are grouped by voltage level connection, end use, and their utilisation of electricity assets. As an example, the General Transformer Connection group does not make use of the low voltage (LV) reticulation network, as it connects directly to the high voltage network via a dedicated transformer.

Our Electricity Delivery Price Schedule⁴ sets out prices for the 2019/20 year for the Standard contract consumer groups. Non-standard contract consumer groups are notified directly of their pricing.

The criteria used by WELL to allocate consumers to consumer groups is as follows:

Residential (including EVB)

The Residential consumer groups are consistent with the definition of “Domestic consumer” in the Low Fixed Charge Regulations, where the primary use of the point of connection is a home not normally used for any business activity. Consumers in these groups almost exclusively are connected to the LV Network, place similar capacity demands on the network, and can use night boost⁵ and controlled⁶ tariffs,

⁴ Available at: <http://www.welectricity.co.nz/disclosures/pricing/2019-pricing/>

⁵ Night boost is a separately metered supply to permanently wired appliances, such as night store heaters, which are switched on and off at specific times. Night boost supply will be switched on during the night period (11pm to 7am) and for a minimum two hour boost period during the day (generally between 1pm to 3pm). Customers on EVB plans are not eligible for Night boost pricing.

⁶ A controlled supply is a supply that allows WELL to control energy supply to permanently wired appliances, such as hot water cylinders. The load control associated with a controlled supply is not operated based on specific daily times.

WELLINGTON ELECTRICITY LINES LIMITED

2019/20 PRICING METHODOLOGY DISCLOSURE

provided they have the required metering, dedicated interruptible load and meet other eligibility criteria.

WELL has four residential price category options available, being:

- Residential Low User (RLU)
- Residential Standard User (RSU)
- Residential Low User Electric Vehicle and Battery Storage (RLUEVB)
- Residential Standard User Electric Vehicle and Battery Storage (RSUEVB)

A low user is a residential consumer who consumes less than 8,000 kWh per year and who is on a low fixed charge retail pricing plan. The Low Fixed Charge Regulations require electricity distribution businesses (EDBs) to offer a pricing plan to domestic low users with a fixed price of no more than 15 cents per day.

A standard user is a residential consumer who consumes more than 8,000 kWh per year.

Only private owners of Electric Vehicles (EV) with a battery capacity of 12kWh and above and/or household battery systems of 4kWh capacity and above, who also have a smart meter, are eligible for the EV and battery price plans RLUEVB and RSUEVB. For electric vehicle eligibility, only private PHEV and private registered EVs qualify for this plan. Scooters or bikes do not qualify. RLUEVB and RSUEVB are optional plans and customers can choose to remain on the existing RLU and RSU price categories.

General Low Voltage Connection

The General Low Voltage Connection group is connected to the LV network with a connection capacity of up to 1500kVA, where the premises are a non-residential site used for business activity (e.g. a shop or a farm).

General Transformer Connection

The General Transformer Connection group includes consumers who receive supply from a transformer, owned by WELL and dedicated to supplying a single consumer, where the premises is a non-residential site used for business activity.

Voltage And Asset Distinctions

The following table depicts the relationship between consumer groups, load and asset utilisation characteristics.

Table 1 – Consumer Group And Load Characteristics

Connection Asset Characteristics	Unmetered	Residential	General Low Voltage	General Transformer	Non Standard
<1kVA	✓				
<=15kVA		✓	✓	✓	
>15kVA & <=69kVA			✓	✓	
>69kVA & <=138kVA			✓	✓	
>138kVA & <=300kVA			✓	✓	
>300kVA & <=1500kVA			✓	✓	

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

Connection Asset Characteristics	Unmetered	Residential	General Low Voltage	General Transformer	Non Standard
>1500kVA				✓	✓
Low voltage	✓	✓	✓		
Transformer	✓	✓	✓	✓	✓
High voltage				✓	✓
Dedicated assets	✓ ⁷			✓ ⁸	✓ ⁹

⁷ Streetlight circuits

⁸ Transformers

⁹ Dedicated network assets

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

Distributed Generation

WELL also has a distributed generation (DG) price. While not classified specifically as a consumer group in the Delivery Price Schedule, we have created a zero charge against each plan. The primary reason for these charges is to record the volume of generation on the network for market reconciliation purposes. This information is also used to monitor uptake of DG connections on the network to assess their impact on network infrastructure and operations.

Non-Standard Contracts

The non-standard contracts group is made up of consumers who have atypical connection characteristics. For non-standard consumers, a confidential agreement exists between WELL and the individual consumer which sets out the terms and conditions for the supply of the electricity lines services including the price.

In accordance with its Customer Contributions Policy¹⁰, WELL uses the following criteria to determine if a non-standard contract is appropriate:

- The consumer represents an unusual credit risk; or
- The consumer wants to reserve future network capacity; or
- There are unusual asset ownership or demarcation issues; or
- The consumer and/or WELL wishes to contract for additional services not covered in standard contracts; or
- The site to be connected has unusual locational or security issues; or
- Any other unusual circumstances that WELL, at its discretion, considers to warrant the use of a non-standard rather than standard contract.

Unmetered

The Unmetered consumer group includes consumers who do not have any metering because the cost of metering is prohibitive relative to their consumption. This includes streetlights, bus shelters, traffic lights etc.

¹⁰ Available at: <http://www.welectricity.co.nz/disclosures/customer-contributions/>

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

6 Target Revenue

The target revenue for the 2019/20 pricing year is \$168.8 million, reflecting the revenue WELL expects to earn from the provision of electricity lines services, based on prices that will apply for the period. Target revenue is determined in accordance with the input methodologies defined by the Commerce Commission. These methodologies outline the amount which WELL can collect through prices to cover costs and to provide the allowable return on investment.

The table below outlines key components of WELL's costs and the return on capital for the 2019/20 pricing year. Costs are based on expected actual costs for pricing year.

In recent years, WELL has over-recovered on pass-through and recoverable costs due to higher than expected volumes and differences between WELL's actual and forecast Pass-through and Recoverable Costs. WELL's forecast pass-through balance is expected to reduce over the 2019/20 regulatory year by \$3.7m in accordance with the requirements in the CPP determination.

Table 2 – Key Cost Components To Cover Provision Of Electricity Line Services¹¹

Cost Components	2019/20 (\$m)
Opex	35.0
Depreciation ¹²	31.0
Return on capital ¹³	38.1
Transpower charges	62.5
Avoided Costs of Transmission (ACOT)	1.8
Other recoverable costs	-3.1 ¹⁴
Pass-through costs	3.7
Target revenue	169.0

¹¹ Sourced from WELL's forecasts and notifications.

¹² Regulatory depreciation

¹³ Including tax, revaluations and other income

¹⁴ Amount includes pass-through balance pay back of \$3.7m, \$1.1m quality incentive penalty and \$2.3m for opex incentive

WELLINGTON ELECTRICITY LINES LIMITED

2019/20 PRICING METHODOLOGY DISCLOSURE

6.1 Cost Components

WELL uses the Input Methodologies¹⁵ to determine total the target revenue in each disclosure year. The following table describes the cost components of target revenue.

Table 3 – Key Cost Components To Cover Provision Of Electricity Line Services

Cost component	Description
Opex	Opex includes forecast costs associated with operating and maintaining the network and managing day to day business activities.
Depreciation	Reduction in the value of WELL's asset base over time, due in particular to wear and tear.
Return On Capital	A pre-tax return on WELL's regulatory asset base.
Transpower Charges	Charges payable to the national electricity grid operator, Transpower, to transport energy from generators to WELL's network. This includes connection charges, interconnection charges and new investment agreement charges. WELL passes these charges onto its consumers at cost.
ACOT	ACOT payments are payable to large distributed generators in recognition that local generation may cause WELL to avoid Transpower charges. See section 8 for further detail on how ACOT is calculated.
Other Recoverable Costs	Other recoverable costs include the recovery of capex wash up adjustments, incentives and pass-through balances, as allowed under the CPP.
Pass-Through Costs	This includes Local Council rates, Commerce Commission levies, Electricity Authority levies and Utilities Disputes Limited levies. WELL passes on these charges to consumers at cost.

¹⁵ IM Determination 2012

7 Cost Allocation

WELL has a Cost of Supply Model (COSM), which is used to allocate distribution costs between different consumer groups.

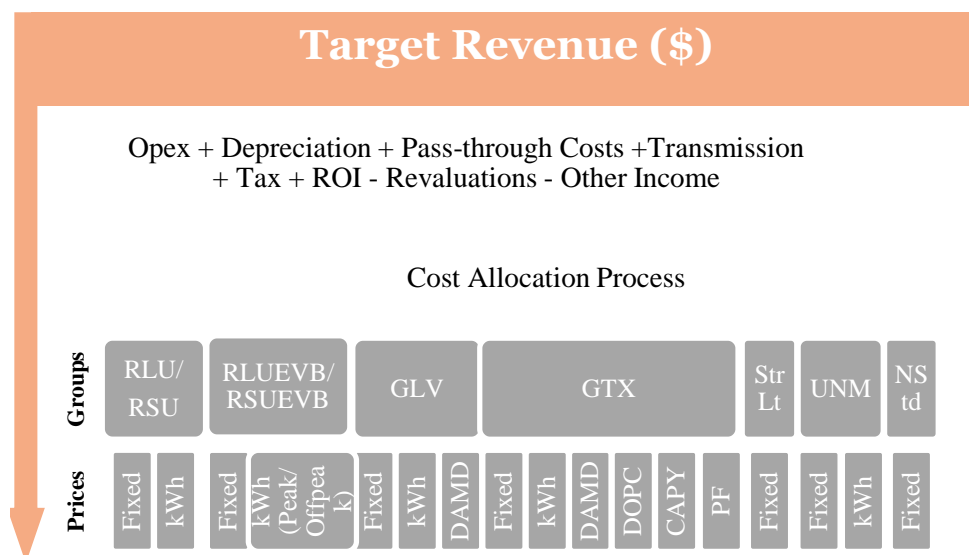
Transmission costs have historically been reflected in prices based on the relative demand of each consumer group.

We have undertaken stand-alone and incremental cost analysis to check that prices are free from economic cross-subsidy¹⁶ (as discussed in Appendix B).

7.1 COSM Summary

The COSM allocates the various expenditure components of WELL’s target revenue to consumer groups and pricing categories.

Figure 1 - COSM Model Illustration



Revenue from non-standard consumers is initially removed from target revenue, as these consumers are typically priced based on recovery of actual costs. Allocators and other inputs are also adjusted to remove non-standard consumers.

The remaining cost components of target revenue are allocated to consumer groups as follows:

- Costs are directly attributed to consumer groups where known (e.g. streetlight maintenance)
- Any remaining shared costs are allocated as set out in the following table.

¹⁶ Except where subsidies arise from compliance with other regulations such as the LFC.

WELLINGTON ELECTRICITY LINES LIMITED

2019/20 PRICING METHODOLOGY DISCLOSURE

Table 4 – Key Cost Components To Cover Provision Of Electricity Line Services

Consumer Group Cost Allocator		Cost Components	Rationale
Demand	Coincident maximum demand is calculated based on an average of WELL’s highest half-hourly peaks which generally aligns to Transpower’s RCPD peaks. Actual TOU meter records are used where available. For groups with limited meter data, analysis of feeder demand and sampling of consumers with TOU meters is undertaken.	<ul style="list-style-type: none"> • Transpower charges • ACOT 	This recognises that Transpower charges and ACOT payments are based on providing supply capacity, determined by the capacity of the GXP and core grid assets.
RAB	<p>A composite RAB allocator is created by allocating regulatory asset base values to consumer groups as follows:</p> <ul style="list-style-type: none"> • Connection assets: by ICPs • Streetlight assets: directly attributed to streetlights • LV network assets are allocated to non-metered, residential, LV and streetlights by proportion of their demand • All other assets: demand <p>This seeks to directly attribute asset costs to consumers where possible</p>	<ul style="list-style-type: none"> • ROI • Network Depreciation • Revaluations • Tax • Opex (Routine and asset replacement) 	RAB costs are allocated to consumer groups based on that consumer group’s utilisation (share of demand) of the network assets.
ICPs	Consumer connections	<ul style="list-style-type: none"> • Opex (Service interruptions and emergencies & vegetation management) 	A general allocator that recognises that all consumers benefit from expenditure to prevent and respond to interruptions to supply.
kWh	kWh consumption	<ul style="list-style-type: none"> • Opex (System operations and 	A general allocator to recognise that consumers benefit from operation

WELLINGTON ELECTRICITY LINES LIMITED

2019/20 PRICING METHODOLOGY DISCLOSURE

Consumer Group Cost Allocator		Cost Components	Rationale
		network support) • Non-network depreciation	of the network in proportion to their use of the network.
ICPs:kWh	A 50:50 weighting of ICPs and kWhs	• Opex (Business Support) • Pass-through costs	This weighting recognises that larger consumers create relatively higher costs per connection, and that levies are incurred in proportion to ICPs and kWhs.

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

The resulting allocators are applied as follows to each consumer group:

Table 5 - COSM Allocators By Consumer Group¹⁷

Consumer Group	Demand (%)	RAB (%)	ICPs (%)	kWh (%)	Weighted ICPs & kWh (%)
Residential	63.2	64.6	84.5	45.2	64.8
General Low Voltage	24.1	23.7	9.0	28.3	18.6
General Transformer	11.7	9.2	0.2	25.4	12.8
Non-metered	0.2	0.2	0.3	0.2	0.3
Streetlights	0.8	2.3	6.0	0.9	3.5
Total	100.0	100.0	100.0	100.0	100.0

The key COSM outputs at the consumer group level are detailed below, showing the cost of supply for each consumer group as a proportion of costs.

Table 6 - COSM Allocations Of Costs To Consumer Groups

Consumer Group	% Of Target Revenue (1 April 2019 To 31 March 2020)		
	Transmission	Distribution	Total
Residential	63.1	64.5	64.1
General Low Voltage	24.1	22.5	23.0
General Transformer	11.7	9.9	10.6
Non-metered	0.2	0.2	0.2
Streetlights	0.9	2.9	2.1
Total	100.0	100.0	100.0

7.2 Application To Prices

WELL intends to continue to move towards aligning distribution prices to the distribution component of the cost of supply. WELL will consider alignment of transmission prices to the transmission component of the cost of supply in the future.

The focus of our COSM analysis for the majority of Consumer Groups is on the proportion of target revenue to recover from each consumer group, rather than the dollar amount to recover. This reflects the inherent volatility in some allocator metrics (e.g. demand) and costs (e.g. maintenance). We have also not sought to apply the

¹⁷ COSM allocators are calculated for the full regulatory year 1 April 2019 to 31 March 2020.

WELLINGTON ELECTRICITY LINES LIMITED

2019/20 PRICING METHODOLOGY DISCLOSURE

COSM at the price level as there is significant complexity in doing so. The chance of volatility and/or mis-specification in the COSM outputs also rises at this level.

The following table shows the extent of alignment between distribution prices and the distribution cost of supply for the regulatory year 1 April 2019 to 31 March 2020. The difference represents the under/(over) recovery of costs. WELL intends to continue to progressively move to align current prices to the cost of supply to mitigate the risk of price shocks occurring.

Table 7 – Revenue From Prices Relative To Cost Of Supply (Excl. Non-Standard) -

	% Of Target Revenue (1 April 2018 To 31 March 2019)		
Consumer Group	Implied COSM Allocation	2019/20 Pricing (Applied)	Difference
Residential	64.50	64.60	-0.10
General Low Voltage	22.50	20.83	1.67
General Transformer	9.90	11.96	-2.06
Non-metered	0.20	0.47	-0.27
Streetlights	2.90	2.14	0.76
Total	100.00	100.00	0.00

8 Impact Of 2019/20 Price Changes

Prices for all consumers are set in accordance with the input methodologies defined by the Commerce Commission in relation to the CPP Determination. These allow WELL to recover a net allowable revenue for the 1 April 2019 to 31 March 2020 assessment period of \$107.4 million. They also define how pass-through and recoverable costs are treated.

2019/20 prices are based on 2018/19 prices adjusted for the impact of changes in:

- The Consumer Price Index (CPI)¹⁸;
- Transpower Transmission Costs¹⁹;
- Pass Through Costs²⁰;
- Other Recoverable Costs²¹; and
- Cost of supply allocations.

Prices for residential consumers are also adjusted to comply with the LFC Regulations.

¹⁸ As defined in the CPP Determination 2018

¹⁹ As defined in the CPP Determination 2018

²⁰ As defined in the CPP Determination 2018

²¹ As defined in the CPP Determination 2018

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

The impact of these changes is explained further below.

8.1 Changes To Standard Prices

Consumer Price Index (CPI) Adjustment:

The distribution component of prices has increased in line with CPI inflation of 2.03%. CPI is calculated in line with the CPP Determination 2018.

Transpower Transmission Charges

Transpower charges have decreased by 0.70%. WELL passes these charges on to consumers at cost.

ACOT

WELL pays Avoided Cost of Transmission (ACOT) charges to large distributed generators within WELL's network in recognition that these generators may cause WELL to avoid Transpower charges. These distributed generators reduce WELL's reliance on Transpower's transmission grid at peak times as peak demand is partly served through these distributed generators. WELL recognises these Transpower savings by paying an ACOT payment to the local distributed generator and WELL in turn pass these charges on to consumers at cost.

ACOT charges can fluctuate significantly depending on how much the distributed generation contributes to reducing coincident demand on the network in line with the lower North Island transmission peaks.

Pass Through Costs

Pass-through costs have decreased by 2.61%. Pass-through costs comprises of council rates and industry levies. Pass through costs are charged on to consumers at cost.

Other Recoverable Costs

Other recoverable costs include capex and opex wash-ups and quality incentives as well as movements in the pass-through balance. The pass-through balance is the cumulative difference between the revenue from transmission and pass-through prices and the sum of transmission, pass-through and other recoverable costs. There has been a significant movement in the opex wash-up due to WELL moving off the DPP and onto a CPP. These adjustments are made in line with the IM Determination. The wash-ups, incentives and pass-through balance are provided for in the CPP Determination 2018.

Balance Between Fixed And Variable Prices For Users

Residential standard users have a higher fixed daily price to reflect the increased capacity used by these consumers. As at 1 April 2017, the fixed daily price for residential standard users is \$1.10 per day, consistent with the prior year. Whilst these consumers will have a higher fixed daily price, they will generally have lower variable prices (\$/kWh) than residential low users.

The total weighted average change in overall delivery charges for the 1 April 2019 to 31 March 2020 regulatory year compared to the previous year is shown below.

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

Table 8 – Change In Delivery Charge

Price Change Element	Contribution To Total Average Change In Delivery Charges
Consumer Price Index (CPI)	1.65%
Transpower transmission charges	-0.26%
ACOT charges	-0.56%
Pass-through costs (rates, levies, etc)	0.19%
Other recoverable costs (incl. wash-ups, incentives and pass-through balance movement)	-2.68%
Volume changes	-0.10%
Total weighted average price change	-1.76%

Our delivery charges represent around 30-40% of the total electricity bill paid by consumers. However, consumers should be aware that energy retailers will package up our prices into their own retail offerings and the actual impact on consumer electricity bills will vary according to price plans, consumption and the extent to which energy retailers pass through WELL's network prices. Consumers should check with their energy retailer if they wish to further understand the actual impact on their total electricity bill.

8.2 Non-Standard Contracts

For consumers on non-standard contracts WELL changed the distribution price component from 1 April 2019 in accordance with the conditions of the non-standard contracts. Total delivery charges are the sum of the distribution and transmission prices.

For non-standard contracts established prior to the transfer of ownership of the network in 2009, WELL continued previously agreed connection policies and prices (reviewed annually). For non-standard contracts established under WELL's ownership, WELL has applied the methodology in accordance with WELL's Customer Contributions Policy.²²

The following table shows the number of contracts and connections covered under non-standard agreements.

²² Available at: <http://www.welectricity.co.nz/disclosures/customer-contributions/>

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

Table 9 – Non Standard Contract Statistics²³

Non Standard Contract Statistics	Total
Number of Non Standard Contracts	6
Number of ICPs	14
Target Revenue	\$2.0m

8.3 Obligations And Responsibilities To Consumers On Non Standard Contracts

All of WELL’s non-standard contracts contain the same commitments to supply security or restoration priority as WELL’s standard Use of Network Agreement, with some special conditions:

- One non-standard contract commits WELL to contract specific communications protocols in the event of supply disruption;
- None of WELL’s non-standard pricing is affected by supply disruptions; and
- WELL has one non-standard contract where certain types of supply disruptions impose financial obligations on WELL.

As noted above, where WELL’s non-standard contracts were established prior to 2009, WELL will honour the previously agreed connection policy and price.

8.4 Distributed Generation

Distributed generators may be on either standard or non-standard contracts depending on the circumstances.

A \$0.00/kWh-injection price applies for standard DG connections. This is done so that billing information can be recorded for these connections for monitoring purposes.

For further information on connection of distributed generation refer to our website: <http://www.welectricity.co.nz/getting-connected/generating-your-own-electricity/>

WELL may also pay a distributed generator that injects into its network an ACOT payment if the distributed generator:

- Has an injection capacity of 200kVA or greater; and
- Is deemed by WELL to be supporting its network during the 100 Transmission peaks on a pro-rata basis.

The benefit to WELL’s network which arises as a result of distributed generators supplying into its network is approximated by the direct avoidance of Transpower interconnection transmission charges (interconnection charges) during peak demand periods. In determining the magnitude of any ACOT payment to a distributed generator, WELL considers that:

²³ Target Revenue includes transmission and pass through cost recovery

WELLINGTON ELECTRICITY LINES LIMITED

2019/20 PRICING METHODOLOGY DISCLOSURE

- The distributed generator must generate in a way that reduces interconnection charges incurred by WELL in accordance with the applicable Transmission Pricing Methodology (TPM);
- WELL and its consumers should be no worse off than had the distributed generation investment not occurred; and
- No potential long term transmission connection or interconnection benefits are payable to the distributed generator²⁴

The distributed generator must invoice WELL on a monthly basis from 1 April following submission of the data.

The Electricity Authority is currently reviewing the Distributed Generation Pricing Principles (DGPP). One of the main items of the review is to determine if distributed generators who do not efficiently reduce the cost of transmission should be paid ACOT.

WELL calculates the ACOT payment based on Transpower's current TPM approved by the Electricity Authority. WELL will amend the calculation of the ACOT payment if Transpower's TPM is amended or where the DGPP are amended.

Based on Transpower's current TPM the calculation of the gross ACOT payment to a distributed generator will be determined as follows:

$$RCPD_G * IR_{CF} - (RCPD_{WELL} * (IR_A - IR_{CF})) * (1 - Admin)$$

Where: $RCPD_G$	Average of the generation (kW) injected by the distributed generator coincident with the 100 Lower North Island Peaks for the measurement period relating to each 12 month period commencing 1 April.
IR_A	The interconnection rate published by Transpower for the relevant 12 month period commencing 1 April.
IR_{CF}	The counterfactual interconnection rate (IR_{CF}) is calculated as: $= IC \text{ Revenue} / (RCPD_{TP} + RCPD_G)$
$RCPD_{WELL}$	The average of the sum of demand across all Wellington Electricity GXPs coincident with the 100 Lower North Island Peaks for the relevant 12 month period commencing 1 April.
$RCPD_{TP}$	Sum of the average of the RCPD for each consumer at a connection location for all consumers at all connection locations for all regions (excluding $RCPD_{WELL}$) for the relevant 12 month period commencing 1 April.
Admin	A percentage recovery of the benefits attributable to the Generator reflecting the incremental costs incurred by WELL.

²⁴ Any potential long term benefits of avoided transmission cannot be ascertained by Wellington Electricity nor ascribed to individual distributed generators. Any potential benefits should be negotiated with Transpower directly by the Generator.

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

This percentage is determined on a case by case basis.

8.5 Service Charges (Previously Other Charges)

A service charge relates to work performed for a consumer by WELL’s approved contractors. These charges are set to recover incremental costs which include external contractor rates and a margin to recover WELL’s processing costs (e.g. updating network records and registry information etc.). The table below sets out the charges applicable for the 2019/20 year.

Table 10 – Service Charges

Description	Unit	Charge Effective 1 July 2018	Charge Effective 1 April 2019
New connection fee – single phase connection	per connection	\$164	\$167
New connection fee – two or three phase connection	per connection	\$408	\$416
Site visit fee	per site visit	\$164	\$167
Permanent disconnection fee	per disconnection	\$306	\$312
General Administration fee - to cover costs such as late, incorrect or incomplete consumption data, administering Embedded Networks, etc	per hour	\$124	\$127

WELL’s Network Pricing Schedule²⁵ provides further descriptions of these charges.

8.6 Consumer Views On Pricing

Since November 2017 WELL has been regularly surveying consumers recently impacted by outages to better understand consumers’ expectations of price and quality. As at November 2018, 1,488 consumers had provided responses to those questions with the results to date displayed in Table 11 below.

WELL also conducted a similar survey of randomly selected consumers in 2018, to act as a control group and to determine whether frequency of outage experience had any impact on the survey results.

For question 1 the results differ between the two survey groups for the ‘No’ and ‘Maybe’ responses but still consistent in indicating that consumers are comfortable with the current price/quality balance. It is worth mentioning however that the running total average for the Monthly Sample’s ‘No’ response has decreased from 85% in 2017 to 55% in the current year. Further analysis is required to determine the reasons for this change.

²⁵ Available at: <http://www.welectricity.co.nz/disclosures/pricing/2019-pricing/>

WELLINGTON ELECTRICITY LINES LIMITED

2019/20 PRICING METHODOLOGY DISCLOSURE

The results for question 2 are more consistent between the two groups and in combination with Q1 suggest that consumers are broadly satisfied with their current level of reliability and the price of delivering that service.

Though the results for the ‘Yes’ response in question 3 differ significantly between the two sample groups, the ‘No’ responses are still small enough to indicate consumer support for our investment in earthquake readiness.

We do not believe that the survey results provide any compelling reasons to adjust our approach to calculating base prices from prior years.

Table 11 – Monthly Cost/Quality Trade-off Survey Questions

No.	Question	Yes		No		Maybe	
		Mthly	2018 Control Group	Mthly	2018 Control Group	Mthly	2018 Control Group
1	Would you be prepared to pay a bit more for your power if it meant fewer power cuts?	7%	14%	55%	16%	38%	70%
2	Would you be prepared to have slightly more power cuts if it meant prices were a bit cheaper?	7%	9%	76%	68%	17%	23%
3	Would you be prepared to pay \$2 on top of your monthly electricity bill if it meant that the Wellington region was better prepared for a major natural disaster?	52%	10%	19%	10%	29%	80%

WELLINGTON ELECTRICITY LINES LIMITED

2019/20 PRICING METHODOLOGY DISCLOSURE

Proportion Of Target Revenue By Price Component For Year 1 April 2019 To 31 March 2020

Clause 2.4.3(8) of the ID Determination 2012 requires that the proportion of target revenue collected through each price component is noted. This is shown for the regulatory year 1 April 2019 to 31 March 2020 below.

Table 12 – Proportion Of Target Revenue By Price Component

Consumer group	Consumer plan code	Fixed (FIXD) per day \$	Demand (DAMD) kVA/month \$	Capacity (CAPY) kVA/day \$	On-pk Demand (DOPC) kW/month \$	Pwr Factor (PWRP) kVAr/month \$	Uncontrolled (24UC) kWh \$	Night (NITE) kWh \$	Controlled (CTRL) kWh \$	All Inclusive (AICO) kWh \$	Peak (PEAK) kWh \$	Off-peak (OFFPEAK) kWh \$	Non standard contracts (IC) \$	Total Revenue pa Regulatory year \$
Residential low user	RLU	5,037,845	0	0	0	0	25,922,214	46,052	944,949	20,582,335	18,246	21,539	0	52,573,179
Residential standard user	RSU	23,465,105	0	0	0	0	18,009,478	75,165	539,713	13,081,702	30,944	17,307	0	55,219,415
General low voltage	GLV15	1,136,581	0	0	0	0	2,440,903	0	0	0	0	0	0	3,577,484
General low voltage	GLV69	5,505,133					11,685,369	0	0	0	0	0	0	17,190,502
General low voltage	GLV138	1,206,349					2,349,433	0	0	0	0	0	0	3,555,781
General low voltage	GLV300	1,543,889					1,876,384	0	0	0	0	0	0	3,420,273
General low voltage	GLV1500	2,468,025	3,331,872				1,206,889	0	0	0	0	0	0	7,006,785
General transformer	GTX15	372					2,178	0	0	0	0	0	0	2,550
General transformer	GTX69	8,817					19,178	0	0	0	0	0	0	27,995
General transformer	GTX138	47,248					120,866	0	0	0	0	0	0	168,114
General transformer	GTX300	399,209					862,831	0	0	0	0	0	0	1,262,041
General transformer	GTX1500	2,245,697	6,377,109	1,178,760			2,507,181	0	0	0	0	0	0	12,308,746
General transformer	GTX1501	761		942,294	4,760,426	229,834	251,686	0	0	0	0	0	0	6,185,001
Unmetered - non-street lighting	G001	24,004					765,464	0	0	0	0	0	0	789,468
Unmetered - street lighting	G002	3,572,546					0	0	0	0	0	0	0	3,572,546
Non-standard Contracts	IC	0	0	0	0	0	0	0	0	0	0	0	2,036,282	2,036,282
Total Network Revenue		46,661,580	9,708,981	2,121,054	4,760,426	229,834	68,020,054	121,217	1,484,662	33,664,037	49,190	38,846	2,036,282	168,896,163

Appendix A: Pricing Methodology - Information Disclosure Requirements

- 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 below, used to calculate the prices payable or to be payable;
 - (2) Describes any changes in prices and target revenues;
 - (3) Explains, in accordance with clause 2.4.5 below, the approach taken with respect to pricing in non-standard contracts and distributed generation (if any);
 - (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.
- 2.4.2 Any change in the pricing methodology or adoption of a different pricing methodology, must be publicly disclosed at least 20 working days before prices determined in accordance with the change or the different pricing methodology take effect.
- 2.4.3 Every disclosure under clause 2.4.1 above 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;
 - (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;
 - (3) State the target revenue expected to be collected for the disclosure year to which the pricing methodology applies;
 - (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;
 - (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;
 - (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;
 - (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

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

revenue allocated to each consumer group, and the rationale for allocating it in this way;

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

2.4.4 Every disclosure under clause 2.4.1 above 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;
- (2) Explain how and why prices for each consumer group are expected to change as a result of the pricing strategy;
- (3) If the pricing strategy has changed from the preceding disclosure year, identify the changes and explain the reasons for the changes.

2.4.5 Every disclosure under clause 2.4.1 above 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 non-standard contracts;
 - (b) how the EDB determines whether to use a non-standard contract, including any criteria used;
 - (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;
- (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;
 - (b) any implications of this approach for determining prices for consumers subject to non-standard contracts;
- (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.

Appendix B: Consistency With Pricing Principles

The Electricity Authority’s Pricing Principles are contained in the Distribution Pricing Principles and Information Disclosure Guidelines 2010. WELL understands that the Pricing Principles consist of well accepted, high level principles and were introduced on a voluntary compliance basis.

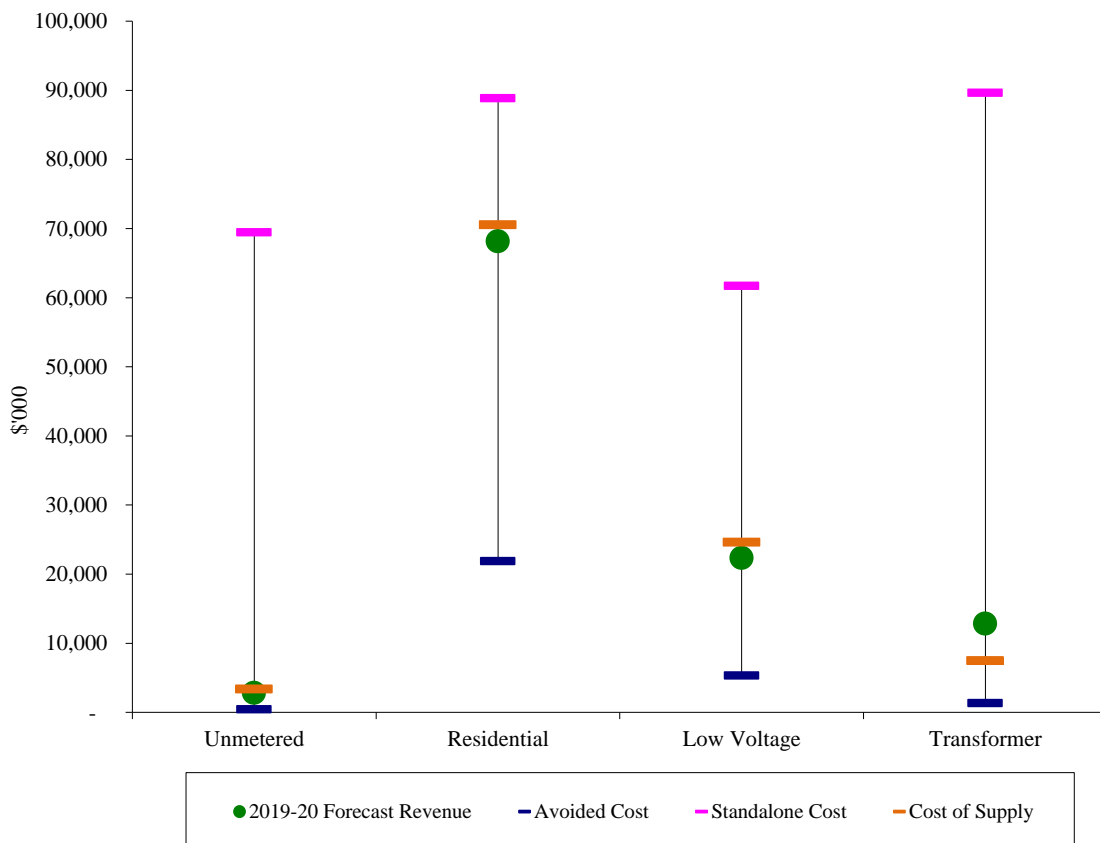
Pricing Principle (a) (i)

- (a) *Prices are to signal the economic costs of service provision, by:*
 - (i) *being subsidy free (equal to or greater than incremental costs, and less than or equal to standalone costs), except where subsidies arise from compliance with legislative and/or other regulations and/or the Government Policy Statement;*

It can be observed that the revenue for each consumer group is within the range established by stand-alone and incremental costs, hence they are subsidy free.

This is shown in the figure below, alongside our COSM outputs:

Figure 2 - Comparison Of Distribution Avoided Costs, Standalone Costs, COSM Outputs, And Prices By Consumer Group²⁶



²⁶ Excludes Pass through and Recoverable costs, including transmission charges.

Definition Of Stand-Alone And Incremental Cost

WELL's definition of stand-alone cost and incremental cost is as follows:

The *Stand-alone cost* of providing services to a consumer group is the cost of developing and operating distribution infrastructure which benefits that consumer group. Stand-alone cost considers the costs of entry based on current market conditions and technology. Where the network business recovers more revenue than the stand-alone cost of serving a consumer class, this means that an alternative supplier may enter the market and supply that particular consumer group. Prices above the stand-alone cost could not be sustained in a competitive market (due to the threat of undercutting prices) and may create the possibility of efficient bypass of the existing infrastructure; and

The *incremental cost* for a consumer group is the cost that would be incurred, should the distribution business no longer serve that specific consumer group (whilst supplying all other groups). If a consumer group were to be charged below the incremental cost, it would be economically beneficial for the business to stop supplying that consumer group as revenue obtained from the consumer would not cover costs. Further, where incremental costs are higher than revenue recovered, the associated tariff levels may also result in inefficient levels of consumption, hence the rationale for having incremental costs as a lower bound.

Methodology Of Calculating Stand-Alone And Incremental Costs

Stand-Alone Costs

Stand-alone costs include both the capital and operating costs of service provision. The stand-alone network capital cost for each consumer group was derived from an estimate of the cost of providing network infrastructure required to service their corresponding load, if the other tariff classes were no longer required to be supplied. The stand-alone operating costs for a consumer class have been estimated as the total of all operating cost less the incremental operating costs of serving all the other tariff classes.

Incremental Costs

The incremental costs associated with each of the consumer groups were derived from an estimate of the long run average incremental cost (LRAIC).

Pricing Principles (a)(ii)(iii)

- (a) *Prices are to signal the economic costs of service provision, by:*
 - (ii) *having regard, to the extent practicable, to the level of available service capacity; and*
 - (iii) *signalling, to the extent practicable, the impact of additional usage on future investment costs.*

WELL has regard to the available service capacity and signals capacity constraints through its price structure as follows:

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

Load Management

WELL provides discounted pricing to domestic consumers that offer up dedicated controllable loads. This price differential signals to consumers the benefits of shifting use away from network peak or other congestion periods. Typically these opportunities are taken up through electric hot-water cylinders offering interruptible load.

WELL has a nite boost option ('NITE') which is a separately metered supply to permanently wired appliances, such as night store heaters, which are switched on and off at specific times. This controlled option will be switched on during the night period (11pm to 7am) and for a minimum "boost period" during the day of two hours generally between 1pm and 3pm. This supply is only available to load permanently wired to a separate meter.

WELL has replaced its EV options ('EVNITE' and 'EVDMDND') with dedicated time of use EV price plans for residential consumers ('RLUEVB' and 'RSUEVB'). The change in the price offer makes it easier for retailers to implement and the structure makes it simpler for consumers to understand and respond to. The plan creates an incentive for private EV owners to charge their vehicle during off-peak periods and encourages the uptake of electric vehicles by providing a cheaper rate for the household during off-peak periods.

Consumers with battery storage capability are incentivised through cheaper off-peak prices to store electricity during cheaper off-peak periods, for use during peak periods. This reduces congestion on the network during times when the network is traditionally congested. Price signals for efficient use of new technologies are an important aspect of forward looking pricing methodologies.

Demand (kW)

The demand charge applied to GTX1500 and GTX1501 pricing plans will provide a price signal by incentivising larger consumers to reduce their demand at high network congestion periods. Growth in demand can result in higher charges to the consumer.

Power Factor Charge

To encourage power factor management, a power factor charge is applied to General Transformer Connections greater than 1500 kVA (GTX1501) who fail to correct inductive loads. This signals to the consumer the need to manage power factor and mis-management will result in a charge to them.

Looking Forward

WELL is also considering further demand or TOU based pricing options that incentivise efficient use of network capacity. WELL has already commenced TOU pricing with the EVB plan introduced in July. This will align prices more closely to the cost of investing in service capacity.

Pricing Principle (b)

- (b) *Where prices based on 'efficient' incremental costs would under-recover allowed revenues, the shortfall should be made up by setting prices in a manner that has regard to consumers' demand responsiveness, to the extent practicable.*

This principle sets out the economic concept of "Ramsey Pricing". This asserts it is economically efficient to charge higher prices to those consumers that have a higher

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

willingness to pay, relative to the LRMC of each consumer group. This is considered economically efficient as consumers that demand a service the most, pay the most.

There are a number of issues associated with developing Ramsey based pricing which makes it impractical for us to apply. In particular, there is a lack of information on price elasticities (i.e. a measure of willingness to pay) specific to different consumer groups in the New Zealand electricity sector.

However, WELL consider this willingness to pay principle can be practically applied by offering consumers price plans that balance their willingness to pay with the quality of supply they receive. For instance, uncontrolled pricing plans have higher prices recognising the higher willingness to pay for consumers that do not want their hot-water load interrupted. Similarly, the night and controlled prices are targeted to consumers that are willing to shift their demand to the off peak. Demand/TOU pricing will also allow consumers to self-select the capacity service they require, consistent with their willingness to pay.

Pricing Principles (c)(i)(ii)(iii)

- (c) *Provided that prices satisfy (a) above, prices should be responsive to the requirements and circumstances of stakeholders in order to:*
 - (i) *discourage uneconomic bypass;*
 - (ii) *allow for negotiation to better reflect the economic value of services and enable stakeholders to make price/quality trade-offs or non-standard arrangements for services; and*
 - (iii) *where network economics warrant, and to the extent practicable, encourage investment in transmission distribution alternatives (e.g. distributed generation or demand response) and technology innovation.*

As noted above, prices above the standalone cost could not be sustained in a competitive market and may create the possibility of efficient bypass of the existing infrastructure. As WELL's prices are below the stand alone costs, bypassing the network is discouraged.

WELL utilises standard charges but has in place a policy to negotiate connection costs and pricing with non-standard consumers (see table 2). WELL considers this policy to better reflect consumer opportunities to vary service and price standards and enable consumers to make efficient decisions between transmission and distribution alternatives.

WELL operates under a regulatory framework that requires ongoing information disclosure including the Asset Management Plan. The Asset Management Plan sets out capital and operating requirements for the Network, which imposes a discipline on the network businesses to design their networks efficiently.

Pricing Principle (d)

- (d) *Development of prices should be transparent, promote price stability and certainty for stakeholders, and changes to prices should have regard to the impact on stakeholders.*

All prices are developed in a systematic approach that broadly reflects the consumer profile and connection characteristics. For example, connection characteristics for large consumers such as power factor, play a large part in network costs and therefore this cost driver is

WELLINGTON ELECTRICITY LINES LIMITED
2019/20 PRICING METHODOLOGY DISCLOSURE

separately charged. All of these prices are published in public documents providing transparency of prices charged.

Prices have been set within the constraints of the CPP determination. WELL continues to move towards better alignment of its individual tariff prices with the cost of supply.

Pricing Principle (e)

- (e) *Development of prices should have regard to the impact of transaction costs on retailers, consumers and other stakeholders and should be economically equivalent across retailers.*

WELL has control over the transaction costs arising from its network charges, by limiting the complexity of charges and structures and the number of charging parameters within each charge. WELL applies the same charging structure to all retailers, excluding any non-standard contracts. A separate contractual agreement is negotiated with non-standard consumers as they have unusual connection characteristics making the tariff structure to all retailers inappropriate.

Appendix C – Directors’ Certification

Schedule 17 Certification for Year-beginning Disclosures

Clause 2.9.1

We, Richard Pearson and Andrew Hunter, being directors of Wellington Electricity Lines Limited certify that, having made all reasonable enquiry, to the best of our knowledge-

a) the following attached information of Wellington Electricity Lines Limited 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.

b) the prospective financial or non-financial information included in the attached information has been measured on the basis consistent with regulatory requirements or recognised industry standards.



Richard Pearson
Chairman



Andrew Hunter
Director

30 January 2019