



## **Pricing Methodology Disclosure 2015/16**

**26 February 2015**

## Revision overview

<b>Date</b>	<b>Version</b>	<b>Changes</b>
28/2/13	1.0	
27/2/14	2.0	New section on tariff structure. Revisions to cost allocators; introduced new standard tariff for residential and small scale distributed generation customers; structural changes made to posted discount and merged customer groups for 400V customers with a fuse capacity above 160amps
19/1/15	3.0	Revision to 'Customer groups' section and associated illustration following changes in customer group terminology, criteria and structure; revision to cost allocators and associated tables in the 'Cost Model' section; Revision to 'Key Statistics and Assumptions', 'Price changes' and 'Consultation' section following 2015/16 price changes.

## Executive Summary

This Pricing Methodology sets out the approach used by WEL Networks Ltd (WEL) to formulate our tariff structure and set our tariff rates for 2015/16. It has been prepared to meet the requirements of the Commerce Commission's *Commerce Act (Electricity Distribution Services Information Disclosure) Determination 2012*, and it has been prepared in accordance with the Electricity Authority's *Distribution Pricing Principles and Information Disclosure Guidelines*. In determining our tariff rates WEL has also had regard to the requirements of the *Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 (as at 1 April 2009)*, and the consultation requirements in the *Electricity Industry Participation Code 2010*.

WEL has set tariffs for the year beginning on 1 April 2015 based on an allocation of the costs of owning and operating its networks to customer groups. The customer groups determined by WEL are based on the level of service received by the customer, which are in turn determined by their demand profiles and associated asset requirements. WEL uses the following criterion to distinguish between levels of service required by its customers –

- The voltage at which the customer is connected;
- Customer's fuse capacity;
- For small customers (400V, not more than 110 kVA) the principal use of their property and whether they have installed generation capable of exporting into WEL's network; and
- For a customer's principal place of residence, whether the customer has chosen their retailer's low user pricing plan.

The cost allocation model uses cost drivers such as annual energy consumption and measures of peak demand to allocate costs to customer groups. These allocators are chosen based on WEL's assessment of customer influences on costs, such as investment, maintenance and Transpower costs. WEL has focused on matching an allocator to each of its cost categories in a manner that best reflects the pricing principle 'Prices signal the economic costs of supply', subject to the availability of information and administrative simplicity.

While our cost allocation model is an important factor in setting prices, it is not simply a mechanical exercise of applying the model annually as this could lead to instability in prices. Other factors that influence our approach to pricing include ensuring customers do not experience price shocks, ensuring revenue adequacy (and mitigating revenue risk) for WEL, and maintaining logical relationships between price categories.

Overall the net price change, inclusive of refinements made, result in a 0% change in network charges to our customers from 1 April 2015. This price change reflects a decrease in Transpower's transmission costs, an increase in our own operating costs along with our continued investment to future-proof our 5,238 kilometre Waikato lines network.

A number of changes have been made to the pricing methodology effective 1 April 2015. These changes and the rationale for them are:

- Amalgamation of External Network customers with existing price groups available for Waikato domiciled customers. Consistent with the existing price group External Network customers will become eligible to receive WEL's annual customer discount. This change reduces complexity in the tariff structure and provides administrative simplicity to manage price changes in future.
- Reallocation of the metered street lights from the 'Non-domestic' price category 1200 to the 'Street lighting' price category 1293 and applying a consistent fixed charge tariff per light to

all streetlights. This change will eliminate the inconsistency in approach between metered and unmetered streetlights and reflects that WEL's cost to serve both metered and unmetered streetlights are the same.

- Intra group price changes for the mass market customer groups (price categories 1153, 1154, 1200 1250 and 1251) and the large customers (price categories 1360, 1354 and 1357) to better reflect the allocation of costs while maintaining an overall price change of 0%. These changes improve the cost reflective nature of WEL's prices for those customer groups.
- Minor terminology and customer group criterion changes to align with other EDBs supporting standardisation of price structure. Changes include change the term 'Residential' to 'Domestic', 'Business' to 'Non Domestic' and changing the current 'amp' criteria to an equivalent 'kVA' rating.
- Further refinement to WEL's cost allocation model by increasing the use of Coincident Maximum Demand (CMD) as the cost allocator. The cost allocator for operating expenditure has been changed from a weighted combination of energy and ICP count to the use of CMD as a cost allocator. As WEL's costs are largely fixed and related to installed network capacity, WEL considers it equitable to allocate costs based on each customer group's contribution to the network's peak demand since peak demand largely determines installed capacity. This change further improves the cost reflective nature of WEL's cost allocation model.

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## 1. Background

This Pricing Methodology sets out the approach used by WEL Networks Limited (WEL) to formulate our tariff structure and set our tariff rates for 2015/16.

The core business of WEL Networks is the provision of electricity distribution services to the Waikato. As an electricity distribution company, we own and maintain the electricity network of lines, cables, substations and associated infrastructure. Our network connects 86,700 customers (a small number of whom are generators) to the national transmission and generation facilities and includes more than 5,238 kilometres of lines and has an annual throughput of over 1,201 GWh. WEL has assets totalling in excess of \$612 million. Hamilton City is at the centre of our coverage area which extends to Maramarua in the north and across to the west coast. The towns of Huntly, Raglan, Te Kauwhata and Ngaruawahia are incorporated.

As well as providing a distribution service to our traditional network area WEL has competitively tendered for the electricity reticulation services in major subdivisions throughout New Zealand. These subdivisions are operational in Auckland, Cambridge, Christchurch and Warkworth. WEL is also constructing an ultrafast broadband network in several cities and towns throughout the central North Island.

The company is locally owned, with one shareholder: the WEL Energy Trust. The capital beneficiaries are the region's local councils: Hamilton City Council, Waikato District Council and Waipa District Council.

WEL has prepared this document to meet the requirements of the Commerce Commission's *Commerce Act (Electricity Distribution Services Information Disclosure) Determination 2012* (the ID Determination) and it has been prepared in accordance with the Electricity Authority's *Distribution Pricing Principles and Information Disclosure Guidelines*. In determining our tariff rates WEL has also had regard to the requirements of the *Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004* (as at 1 April 2009), and the consultation requirements in the *Electricity Industry Participation Code 2010*.

The Commerce Commission's ID Determination requires WEL to publicly disclose, before the start of each financial year, a pricing methodology which:

- Describes the methodology used to calculate the prices payable or to be payable (sections 6, 7 & 8);
- explains the rationale for customer groupings (section 5);
- describes any changes in prices and target revenues (sections 4, 8 & 9);
- explains the approach taken with respect to pricing in non-standard contracts and distributed generation (sections 10 & 11);
- describes the consistency of the approach with the pricing principles and explains WEL's pricing strategy (sections 12 & 13); and
- explains whether and if so how, the views of customers were sought, including their expectations in terms of price and quality, and reflected those views in calculating the prices payable or to be payable (section 14).

This document describes the allocation of costs, and the resulting structure and level of WEL's charges for electricity distribution and transmission. These charges form only a part of overall electricity prices paid by customers to their electricity retailer. Queries about customer tariffs should be addressed to your retailer.

## 2. Definitions

Term	Definition
ACOT	Avoided cost of transmission – a payment made by WEL to large distributed generators who are able to demonstrate they are assisting WEL to avoid additional transmission costs.
Advanced metering infrastructure	Meter that records electricity used in half-hourly values (rather than a cumulative record). Advanced meters have communication features, eliminating the need for physical meter reading. Also known as a ‘smart meter’.
AMD	Anytime maximum demand, the maximum demand of a customer or group of customers recorded at anytime.
CMD	Coincident maximum demand, a customer’s or group of customers’ demand at the time total demand on the network is at its peak.
Code	The Electricity Industry Participation Code
EA	Electricity Authority
EDB	Electricity distribution business
External network	A network outside WEL’s traditional footprint in the Waikato
GWh	Gigawatt hour
GXP	Grid exit point – a point of connection to the transmission network
ICP	Installation control point – the customer’s point of connection to WEL’s network. There is generally a meter at each ICP.
ID Determination	Commerce Act (Electricity Distribution Services Information Disclosure) Determination 2012
KWh	Kilowatt hour
MWh	Megawatt hour
Parent network	The distribution network (owned by another EDB) to which WEL’s external network is connected.
Pricing principles	The Electricity Authority’s Distribution Pricing Principles, which may be found at <a href="http://www.ea.govt.nz/dmsdocument/1944">www.ea.govt.nz/dmsdocument/1944</a>
Small scale distributed generation	Generation installation connected to the distribution network with a nameplate capacity of 10kW or less.

### 3. Overview of pricing influences

WEL's cost allocation model is an important factor in setting prices however, it is not simply a mechanical exercise of applying the modelled outcome annually as this could lead to instability in prices. Other factors that influence our approach to pricing include ensuring customers do not experience price shocks, ensuring revenue adequacy (and mitigating revenue risk) for WEL, and maintaining logical relationships between price categories.

Given these considerations the level of target revenue that is actually collected from a customer group will not necessarily be identical to the level of costs the model attributes to that group. It is however WEL's intention that through the pricing revision each year WEL's prices and pricing structure will move closer to the modelled revenue allocation in a way that is consistent with the pricing principles.

WEL has used the following interpretation and application of the pricing principles in its pricing methodology. In section 12 we describe the extent to which we consider the resulting pricing methodology is consistent with the pricing principles.

#### **1. Prices signal the economic costs of supply**

- a. Prices should reflect the level of service available, including the capacity of the customer's connection and the associated demand on the network as these are the primary drivers of WEL's costs.
- b. Prices should take into account present and future investment costs.
- c. Arbitrage opportunities are to be minimised.
- d. Notwithstanding the above, regulatory impediments to reflecting the economic costs will be fully complied with, i.e. low fixed charge regulations

#### **2. Prices encourage efficient demand response**

- a. WEL will continue to reward controllable load from customers.
- b. Prices should encourage conservation during peak times.

#### **3. Prices are responsive to stakeholders' requirements and circumstances**

- a. WEL's tariff design should include customised prices where appropriate, e.g. asset based pricing for a specific customer's requirements.

#### **4. Prices are transparent, stable and provide certainty**

- a. Our customers should know WEL's strategies, tariff design, cost allocation methodologies, and any price changes well in advance of them applying.
- b. Our customers should be able to identify the charges that apply to them.
- c. Customers should not experience price shocks – to be achieved through the adoption of targeted and glide path (phased) price adjustments.

#### **5. Prices are non-discriminatory across retailers**

- a. All retailers are to be treated homogeneously.
- b. WEL will work with retailers to encourage alignment of pricing structures and to ensure incentives are maintained rather than bundled and therefore possibly diluted.



## **4. Changes to the previous Pricing Methodology**

A number of changes have been made to the pricing methodology effective 1 April 2015. These changes and the rationale for them, including the link with the Electricity Authority's pricing principles are:

### **4.1. Amalgamation of External Networks**

Amalgamation of External Network customers with existing price groups available for Waikato domiciled customers including eligibility to receive WEL's annual customer discount. This change is consistent with pricing principle (e) as it reduces complexity in the tariff structure and provides administrative simplicity to manage price changes in future.

### **4.2. Moving metered street light customers to Street lighting price category**

Reallocation of the metered street lights from the 'Non-domestic' price category 1200 to the 'Street lighting' price category 1293 and applying a consistent fixed charge tariff per light to all street lights. This change will eliminate the inconsistency in approach between metered and unmetered streetlights and reflects that WEL's cost to serve both metered and unmetered streetlights are the same. This change is consistent with pricing principle (a) prices are to signal the economic costs of service provision.

### **4.3. Intra group price changes maintaining an overall net price change of 0%**

Intra group price changes have been made within the mass market customer groups (price categories 1153, 1154, 1200 1250 and 1251) and the large customer groups (price categories 1360, 1354 and 1357) to better reflect the allocation of costs while maintaining an overall price change of 0%. These changes are consistent with pricing principle (a) prices are to signal the economic costs of service provision. Changes include:

- An increase in Mass Market 'Standard user' fixed charge and corresponding offset in variable charges;
- Refinement of the price differentials between time periods of 'Advanced' tariffs;
- Reduction in Mass Market controlled-uncontrolled price differential;
- An increase in the 'Generation Export' charge;
- An increase in 'Large Customer' fixed price along with adjustments to the variable charges reducing the intra group pricing differential.

### **4.4. Changes to price schedule terminology**

Minor terminology and customer group criterion changes to improve the consistency of terminology used by EDBs, supporting the standardisation of pricing structures. Changes include:

- 'Residential Customers' to 'Domestic customers'
- 'Business Customers' to 'Non Domestic customers'
- 'Unmetered Customers' to 'Street lighting'
- 'Other (phone cabinets, bus shelters, pay phones etc)' to 'Unmetered Customers'
- Change of criterion for distinguishing between small and large commercial customers from 'Amp' size to 'kVA' rating.

#### **4.5. Change to the choice of cost allocator**

WEL's choice of cost allocator for operating expenditure has been changed from a weighted combination of energy and ICP count to the use of Coincident Maximum Demand (CMD) as a cost allocator. WEL's costs are largely fixed and relate to the level of installed capacity, which is largely determined by peak demand. Each customer group's contribution towards the network's peak demand is captured by the proportion of CMD at a GXP contributed by that customer group. WEL considers the more extensive use of CMD in its cost allocation model better reflects the economic cost of serving each customer group, consistent with pricing principle (a). WEL considers the change from the ICP and energy weighted combination to CMD is also easier for customers to understand, meaning the development of prices is more transparent consistent with pricing principle (d).

While the majority of WEL's costs are allocated using CMD, some of WEL's costs continue to be allocated on AMD. This is described in section 7 where the cost allocation model is detailed.

## 5. Customer groups

WEL determines customer groups based on the level of service received by the customer. The criteria used for allocating customers to these groups are chosen as proxies for the service level and reflect groupings with distinct demand profiles and associated asset requirements:

- The voltage at which the customer is connected;
- Customer's fuse capacity;
- For small customers (400V, not more than 110 kVA) the principal use of their property and whether they have installed generation capable of exporting into WEL's network; and
- For a customer's principal place of residence, whether the customer has chosen their retailer's low user pricing plan.

WEL considers that these criteria reflect its cost drivers. WEL's rationale for distinguishing between domestic, non-domestic and small-scale distributed generation customers, despite setting the same tariff for these, is to prepare for a future when these groups may need to be priced differently because of differences in load profile, services and customer legislation or regulation. This is consistent with the pricing principles of prices signalling the economic costs of supply (principle a) and prices being transparent, stable and providing certainty (principle d).

The diagram below sets out the criteria for each customer group. In addition, the following definitions apply:

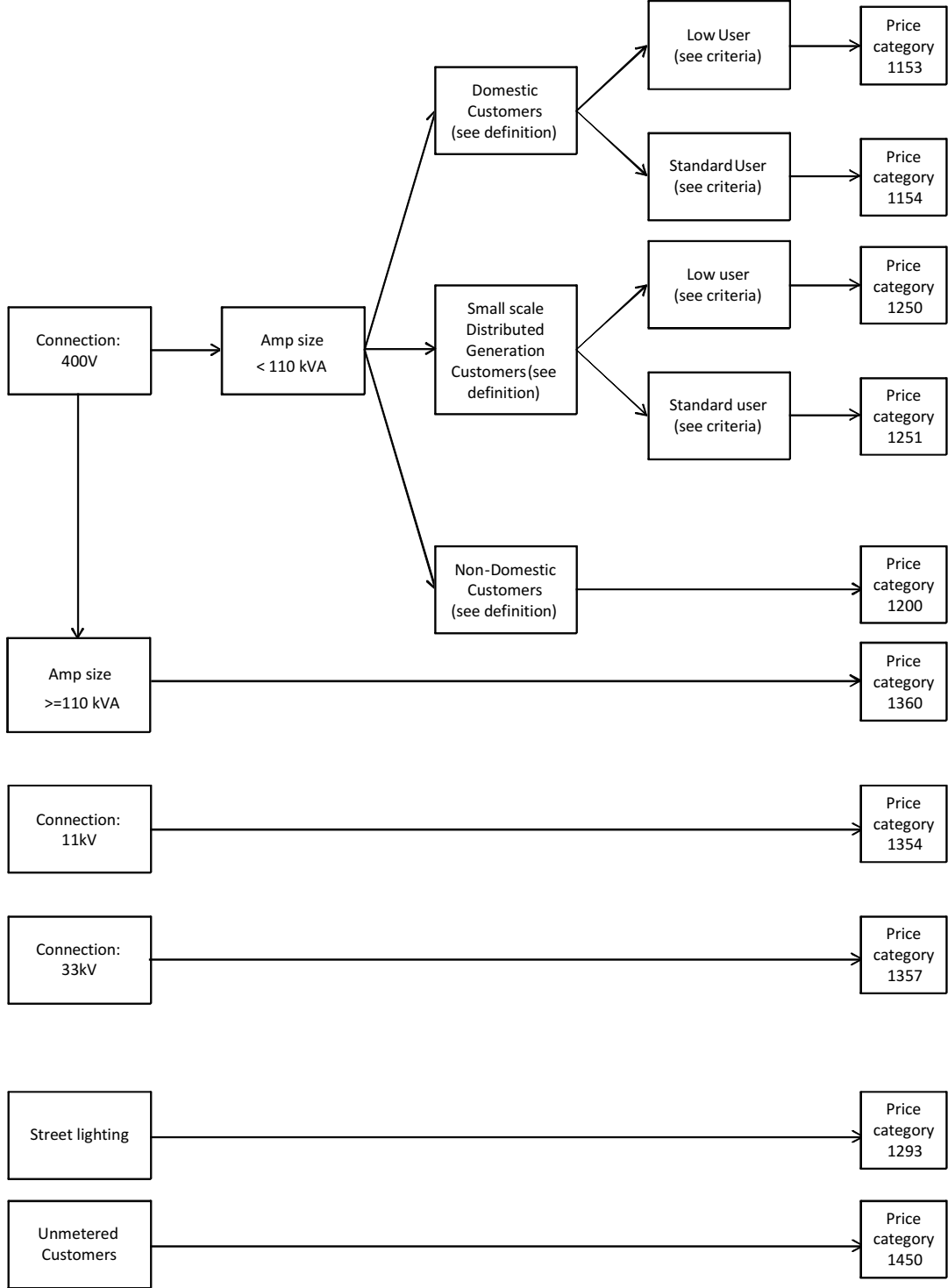
A **domestic customer** (price category 1153/1154) is a customer with a fuse capacity not more than 110 kVA and connection voltage of 400V and that the connection is for the purpose of supplying electricity to premises that are used or intended for occupation principally as a place of residence, and excludes those premises described in paragraphs (a) to (i) of section 90 of the Electricity Industry Reform Act 1998.

A **non-domestic customer** (price category 1200) is a customer with a fuse capacity less than 110 kVA, connection voltage of 400V and is not a domestic customer or a small scale distributed generation customer.

A **small scale distributed generation customer** (price category 1250/1251) is a customer with a fuse capacity less than 110 kVA and connection voltage of 400V and has a generation installation capable of exporting up to 10kW of electricity into WEL's Waikato network.

A **low user customer** (price category 1250/1153) is a domestic or small scale distributed generation customer who has nominated the retailer's low user pricing plan and the premises must be the customer's principal place of residence. For the avoidance of doubt, eligibility for low user pricing options excludes holiday homes and buildings that are ancillary to a customer's principal place of residence. A **standard user** plan applies to all other domestic and small scale distributed generation customers.

Figure 1 Customer group criteria



### **5.1. Low fixed charge tariff regulations**

The Low Fixed Charge Tariff Regulations require that electricity distributors provide a domestic tariff of not more than 15 cents per day (excluding GST)<sup>1</sup>. WEL has implemented a standard fixed charge option this year in addition to the low fixed charge option. The variable charge for customers on the low user tariff option is such that a customer who consumes 8,000kWh pays no more on this tariff than the same customer would on any alternative tariff option that is available to them.

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<sup>1</sup> Regulation 14 (1) (b) Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004.

## 6. Tariff structure

WEL's tariff structure is designed to reflect the economic costs of providing services to its customers, recognising the varying patterns of consumption from each of the different groups of customers within the network. Some of the costs are fixed, that is they do not vary with the level of output in the short term, and are based on the level of installed capacity; some costs vary depending on consumption patterns.

WEL's tariff structure is similarly split into fixed and variable charges. The fixed charge is levied on either a per day or per month basis. All customer groups except 'Unmetered customers' (Phone Cabinets, Bus Shelters and Pay Phones) pay a fixed charge. Variable charges are typically based on the volume of electricity used by the customer and for the large customers their highest demand each month during peak time periods. These charges reflect the economic costs pertaining to the customer's time of consumption and demand profile in terms of level of consumption. WEL's advanced and peak demand charges reward behaviour (through lower charges) that will help reduce network costs.

WEL uses a selection of variable charges for each customer group based on the characteristics of the group that create network costs:

- *Continuous Supply charge* – This charge is based on the volume of electricity used, measured in kilowatt hours (kWh) for customers who require a continuous supply at all times, i.e. the charge does not depend on when the electricity is consumed and WEL does not actively control supply.
- *Controlled Supply charge* – The ability for WEL to reduce peaks by controlling load (i.e. switching off supply) is valuable to WEL, and this is reflected in lower charges for supply to controllable load. This supply is typically connected to hot water cylinders and other appliances nominated by the customer for whom continuous supply is not critical.
- *Advanced (Continuous & Mixed) charge* – These charges were introduced in April 2013 and are designed to reflect differences in the cost of supply during specific times of the day - called Peak, Off Peak and Shoulder periods. It offers a lower price for consumption during times when there is spare network capacity (i.e. off peak). The mixed tariff includes a rate for controllable load. All Advanced charges are measured in kilowatt hours (kWh).
- *Generation export charge* – Small-scale distributed generation customers are expected to drive long-run incremental costs in WEL's network through increased demand for capacity in the low voltage network. This is reflected in a small charge for these exports. To minimise transaction costs for retailers and customers, and allow customers to understand the charge more readily, this is currently structured as a kWh charge.
- *Reactive Energy charge* – The reactive energy charge is applied to low, medium and high voltage customers and non-standard contracts. It is charged on the volume of reactive energy (kVARh) used when the customer's power factor is less than 0.95 within a half hour time period. A low power factor requires a greater supply of reactive energy, which increases the need for network capacity.
- *Transformer Rebate* – A transformer rebate is paid to medium and high voltage customers who own their own transformer to reflect the reduced cost to WEL to supply that customer. This rebate is applied to demand recorded in a meter and is represented as a rebate (\$) per kW per month.

## 7. Cost model

The key purpose of the cost allocation and design model is to ensure that the tariffs for each customer group reflect the economic cost of serving that group. This section outlines this allocation process and the rationale for the choice of cost allocators.

The model allocates each cost category (Table 3) to customer groups based on the chosen allocator (Table 2). These costs are aggregated to give modelled revenue for each customer group. This is used to derive a set of model prices for each customer group (comprising fixed and variable charges). WEL uses these prices as the basis for final prices.

WEL reviews the price changes as indicated by the cost model against the pricing principles taking into account the undesirability of price shocks, the need to ensure revenue adequacy (and mitigate revenue risk) for WEL, and the desire to maintain logical relationships between price categories prior to settling on the final price changes.

The final prices and forecast volumes are then combined to derive target revenue for each customer group (Table 4).

### 7.1. Method of cost allocation

The choice and application of cost allocators involves a degree of judgment. The cost allocation and tariff design model allocates costs to customer groups based on WEL's assessment of customer influences on investment, maintenance, service and Transpower costs. WEL also monitors tariffs of other EDBs to ensure that WEL's tariffs are broadly aligned with industry norms.

Utilisation of assets provides a useful basis for allocating many of our costs. Assets are allocated to different customer groups depending on their point of connection to the network. So, for example the low voltage asset costs are not allocated to high voltage customers.

WEL focuses on matching an allocator to each of its cost categories in a manner that best reflects the pricing principle that prices should reflect the economic costs of supply, subject to the availability of information and administrative simplicity.

The table below describes the allocators that WEL uses in its cost allocation and design model. Anytime maximum demand (AMD) and coincident maximum demand (CMD) are both measures of asset utilisation. AMD provides information about the capacity of assets required by a specific customer group at any time, while CMD measures the customer group's contribution to the network peak – it is this coincident peak demand that typically drives investment in capacity.

**Table 1 Description of cost allocators**

Allocator	Description	Formula
Energy	The annual consumption of all customers in that group as a proportion of the total.	$\frac{MWh_c}{MWh_{total}}$
AMD	Anytime maximum demand (AMD) is based on the design capacity of the network for each customer group as a proportion of the total capacity.	$\frac{AMD_c}{AMD_{total}}$
CMD	The proportion of total demand for groups of customers at times of coincident maximum demand (CMD). CMD is based on the average of the 12	$\frac{CMD_c}{CMD_{total}}$

	highest total demands within a half hour time period on the network over one year. Contribution to CMD is measured for large and asset specific customers at each GXP and the residual measured demand at each GXP is allocated to mass market and unmetered customers.	
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Note: c = customer group

The table below outlines each cost category, the allocator used by WEL to allocate that cost to customer groups and the rationale for choosing that allocator. The allocator with the strongest relationship to cost causation has been used.

Table 2 Rationale for the choice of cost allocator for each key component of revenue

Key component	Allocator used in cost model	Rationale
Net profit after tax	CMD	Net profit after tax is allocated on the basis of the investment caused by each customer group (their contribution to the network peak). This reflects the significance of the assets on which a return is sought.
Maintenance	AMD	WEL considers that the incidence of maintenance costs is best represented through customers' contribution towards the assets' overall utilisation. Maintenance costs are first attributed to the low, medium and high voltage network, then the cost of each part of the network is allocated based on AMD.
Depreciation	CMD	Depreciation accounts for the cost of assets. These costs are therefore allocated based on the investment driven by each customer group (their contribution to the network peak). Depreciation costs are first attributed to the low, medium and high voltage network. Then the cost of each part of the network is allocated based on CMD.
Operating expenditure	CMD	WEL's operating expenditure includes staff and lease costs, printing postage, rates and motor vehicle expenses. These costs are allocated based on CMD.
Tax & Interest	CMD	Allocated on the same basis as net profit after tax, as tax is directly related to profit.
Electricity Authority and Commerce Commission levies	Energy	These levies are based on the volume of energy distributed; this allocator therefore reflects the basis of the charge.
Transpower – interconnection and avoided transmission	CMD	Allocating this cost based on the share of coincident peak demand is similar to the basis on which Transpower sets its interconnection costs – which is regional coincident peaks.
Transpower – excl. interconnection and avoided transmission	AMD	Transpower levies connection charges on the basis of anytime maximum demand at a connection location. WEL has chosen to use the same allocator.



## **7.2 Posted discount**

WEL operates a customer discount scheme. In terms of the ID Determination, a posted discount is considered to be part of WEL's prices, and therefore part of the pricing methodology.

The rationale for the discount scheme is that WEL Energy Trust (the owner of WEL Networks) asked WEL to investigate options for reducing the cost of electricity for customers in its area (the Waikato Network area). The discount scheme was the selected option and applies to every metered and lived-in connection within the Waikato Network area.

The discount is paid on the basis of the charges for the connection, regardless of whether the account holder changed during the year. The electricity account holder for that metered connection at 5pm on 31 March is eligible for the discount; this timing corresponds to the end of WEL's financial year. The discount appears as a credit on the power bill of the electricity account holder for each metered connection annually in April, May or June depending on the billing cycle of the account.

The posted discount is a percentage discount on the total annual lines charges for each eligible customer. This is set based on the total target annual discount and the total target revenue.

A cap of \$1,650 is also applied to the total discount to which each individual customer is eligible for.

## 8. Key statistics and assumptions

The tables below represent the breakdown of WELs Target Revenue for 2015/16 into key cost components, distribution of the Target Revenue by customer groups and by each of the price components as published in the 2015/16 price schedule.

Note – The data in the tables below represents the information used at the time of setting the prices for 2015/16 pricing year.

**Table 3 Target Revenue by key cost components (\$000)**

<b>Key Cost Component</b>	<b>\$ 000</b>
Net profit after tax <sup>3</sup>	19,192
Tax	5,835
Interest	1,536
Maintenance	8,501
Depreciation	26,788
Operating expenditure	25,633
Transmission – interconnection	17,758
Transmission – connection	5,256
Avoided transmission	6,392
Electricity Authority and Commerce Commission levy	502
<b>Gross Revenue</b>	<b>117,393</b>
Posted Discount	-19,479
<b>Total Target Revenue</b>	<b>97,914</b>

**Table 4 Target Revenue by customer group (\$000)**

<b>Customer group</b>	<b>\$000</b>
Domestic	48,974
Non-domestic	19,296
Small Scale Distributed Generation	224
Low Voltage	10,861
Medium Voltage	14,769
High Voltage	925
Unmetered Streetlights	1,183
Other Unmetered Customers	22
Asset Specific Customers (Non-standard contracts)	1,659
<b>Total Target Revenue</b>	<b>97,914</b>

<sup>3</sup> NPAT is the net profit after the payment of interest and tax

**Table 5 Target Revenue by price component**

<b>Price Component</b>	<b>Domestic</b>	<b>Non domestic</b>	<b>SSDG</b>	<b>Low voltage</b>	<b>Medium voltage</b>	<b>High voltage</b>	<b>Street lights</b>	<b>Unmetered</b>	<b>Non standard contracts</b>	<b>Total Target Revenue (\$000)</b>
Fixed	14,656	4,702	66	519	176	3	1,196	0	235	<b>21,554</b>
Continuous Supply	42,336	19,358	193	3,850	5,432	391	0	29	683	<b>72,271</b>
Controlled Supply	5,000	365	17	0	0	0	0	0	0	<b>5,382</b>
Off Peak	0	0	0	0	0	0	0	0	0	<b>0</b>
Shoulder	0	0	0	0	0	0	0	0	0	<b>0</b>
Peak	0	0	0	0	0	0	0	0	0	<b>0</b>
Generation Export	0	0	7	0	0	0	0	0	0	<b>7</b>
Summer Peak	0	0	0	3,192	4,414	285	0	0	379	<b>8,270</b>
Winter Peak	0	0	0	3,803	4,626	251	0	0	373	<b>9,053</b>
Reactive	0	0	0	430	438	8	0	0	0.2	<b>875</b>
Transformer rebate	0	0	0	0	-12	-8	0	0	0	<b>-20</b>
Posted discount	-13,018	-5,129	-60	-932	-305	-5	-13	-6	-10	<b>-19,479</b>
<b>Total</b>	<b>48,974</b>	<b>19,296</b>	<b>224</b>	<b>10,861</b>	<b>14,769</b>	<b>925</b>	<b>1,183</b>	<b>22</b>	<b>1,659</b>	<b>97,914</b>

## **9. Price changes**

This section describes the key changes to prices between those that were applied from 1 April 2014 and those that will apply from 1 April 2015. The rationale for these changes is provided along with a measure of the significance of the change.

Effective 1 April 2015, the net price change, inclusive of refinements made, result in a 0% change in network charges to our customers. This price change reflects a decrease in Transpower's transmission costs and an increase in our own operating costs.

### **9.1. Change in Target Revenue**

WEL is forecasting its 2015/16 target revenue to increase by 0.5% approximately compared to the forecast for the pricing year 2014/15. This change incorporates the 0% price increase in network charges as mentioned above along with our assumptions on growth – ICP count, consumption and demand across its entire network along with changes to the posted discount over the 2015/16 pricing year.

## **10. Non-standard contracts**

Asset-specific pricing is available to large customers on a case-by-case basis. We currently have three customers (6 ICPs) which have asset-specific pricing agreements. The agreements are generally established when a customer approaches WEL to connect to the network. Where a large capital contribution would be required to install the connection, WEL may negotiate with the individual customer to determine a price (such as a monthly fixed price) that is economically equivalent to the capital contribution that would otherwise be required. This approach allows the customer to pay for the asset over a longer period that better reflects the value that they derive from it. Also, where there is a risk of an uneconomic bypass, a customer's price (such as a monthly fixed price) will be set lower than the standard charges for that customer group.

This approach is consistent with the pricing principles as the price reflects both the economic cost of service (principle a), the economic value of the service (principle b) and is responsive to the requirements and circumstances of stakeholders (principle c).

WEL does not offer non-standard terms on service interruption to any customers.

## 11. Distributed generation

WEL has a range of distributed generation connected to its Network. Applications to connect distributed generation are treated in accordance with Part 6 of the Electricity Industry Participants Code.

WEL does not charge the prescribed fee (as allowed under the Code) for distributed generation connection applications.

WEL does charge the incremental cost of any initial connection to the owner of the distributed generation. For small scale distribution (defined as generation with a name plate of 10kW or less) WEL also levies an export charge that is designed to recover the long term incremental cost impacts on WEL's Network. WEL anticipates that the increasing prevalence of exporting distributed generation will drive long run incremental costs in its network. The primary cost driver is expected to be the demand for additional capacity in the low voltage network. Overseas experience with higher density small-scale distributed generation indicates that this will be the case.

WEL has chosen to apply this charge on a kWh basis rather than a capacity basis at this stage, because it was apparent in discussion with retailers that this would impose much lower transaction costs on them and be more readily understood. This is consistent with the pricing principles that prices signal the economic costs of supply (a) and are transparent, stable and provide certainty (d).

Larger distributed generation is considered on a case by case basis. WEL rewards large scale generators who are able to demonstrate on an annual basis that they are assisting WEL to avoid additional transmission costs. The compensation paid is equal to the costs avoided and is commonly referred to as an avoided cost of transmission payment (ACOT). There are currently only three connections that are consistently entitled to payments under this scheme. The compensation is calculated using Transpower's current connection charges, but is based on the generator's performance in the immediately preceding year. During 2015/16 payments of approximately \$6 million (excluding GST) are forecast.

## 12. Consistency with the Electricity Authority's Distribution Pricing Principles

WEL's pricing methodology is based on its interpretation of the Authority's pricing principles and other factors outlined in section 3. We have highlighted through the methodology, where and how the pricing principles have influenced the choices WEL has made. This section sets out the Authority's principles (in the boxes), reiterates WEL's interpretation and application of them, and outlines the extent to which the tariff design and cost allocation methodology are consistent with the pricing principles. WEL's purpose in simplifying the pricing principles is to aid our customers' understanding. This simplified statement of the principles is not intended to reduce their scope in any way.

- (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 legislation and/or other regulation;
  - 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.

WEL has simplified this principle to 'prices signal economic costs of supply'. We interpret this to mean that:

- WEL's prices should reflect the level of service available, including capacity of the customer's connection and the associated demand on the network which are the primary drivers of WEL's costs. The cost allocators have been chosen on the basis that they are a good reflection of this pricing principle. WEL uses capacity and demand measures as cost allocators (see section 7.1) and these (capacity/kW, plus throughput/kWh) are the basis of WEL's variable tariffs.
- Prices should take into account both present and future investment costs. WEL applies a charge to exports of distributed generation. The purpose of this charge is to signal to customers considering installing small scale distributed generation that as the density of this increases it will create costs for WEL and that these will be passed onto users.
- Arbitrage opportunities are to be minimised.
- Current regulatory impediments to reflecting the economic costs will be complied with, i.e. the low fixed charge tariff requirements.

The incremental cost of a customer group is the cost of the additional capacity required to serve that group given that all other customers on the network are already being served. Incremental costs provide a lower bound to prices as WEL would be better off to stop supplying customers who are not meeting their incremental cost. A price below incremental cost also encourages an inefficiently high level of consumption. In times of spare capacity on the network short run average incremental cost is close to zero.

Standalone costs provide the upper bound to prices as this is the total cost of providing a service to a customer group assuming no other customers are being served. If prices exceed standalone costs the customers would be better off bypassing the network. The incentives attached to pricing outside these bounds (uneconomic supply on one hand and loss of customers who bypass the network on the other) ensure that WEL's prices remain between these costs.

(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 customers' demand responsiveness, to the extent practicable.

WEL has simplified this principle to 'prices encourage efficient demand response'. In meeting this principle, WEL will continue to reward controllable load from customers and provide advanced pricing for mass market customers. The structure of prices for industrial and commercial customers is such that it rewards conservation during peak times, through the use of peak pricing.

(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 and distribution alternatives (e.g. distributed generation or demand response) and technology innovation

WEL's simplified statement of this principle is that 'prices should be responsive to stakeholder requirements and circumstances'. Where a new connection requires a large capital investment, WEL may negotiate an asset-specific price with the customer. This non-standard arrangement allows the customer to pay for the asset over a period that reflects the value they derive from it, and is consistent with this pricing principle. WEL's tariff structure also reflects the economic costs of small customers' actions (e.g. through the use of an export charge for small scale distributed generation and advanced pricing) as well as the economic costs for larger commercial and industrial users through the use of peak demand tariffs.

(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.

WEL considers that to achieve "prices that are transparent, stable and provide certainty" customers should know WEL's strategies, tariff design, cost allocation methodologies, and any price changes in advance of them applying, and should be able to identify the tariff(s) that apply to them. WEL considers that the publication of this document and our price schedules contributes to this. WEL is committed to continuing to improve our communication of our pricing design to customers.

A notable aspect of this pricing methodology is the adoption of targeted and glide path (i.e. phased) adjustments. WEL considers this approach to be consistent with (d), as it provides customers both clarity as to the direction of charges over time and time to adjust to any changes. For example:

- The separation of non-domestic and domestic customers transparently signals to stakeholders our intention to separately price these in future to reflect their different economic costs;
- the price for export from small scale distributed generators provides transparency and signals to customers that there are network costs associated with these activities;



WEL has chosen to unbundle its costs into broad categories, and use a limited number of allocators to allocate the cost categories to customer groups. This ensures that our approach is relatively easy to understand, and administrative costs are kept in check, reflecting this principle.

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

WEL considers transaction costs in the process of price development. As noted in section 4 the amalgamation of External Network customers with the existing price groups available for WEL Network customers simplifies the price schedule and contributes to this principle.

WEL is committed to ensuring that its prices are non-discriminatory across retailers. WEL works with retailers to ensure alignment of pricing structures and incentives are maintained.

### 13. Pricing strategy

WEL's pricing strategy (developed in 2012) reflects WEL's commitment to innovation and improving our tariff design to reflect the economic value of services and create customer benefits; it is:

Future prices and tariff design innovations are to be signalled in advance, introduced gradually and provide highly predictable and stable revenues creating benefits for WEL and its community. Prices should provide customers with options, including conservation and the efficient utilisation of the electricity system, to reduce customers' total electricity costs where this also enables WEL and retailers to avoid current and future costs. All changes should be transparent and only made where it is equitable to do so with customer and stakeholder support.

WEL's Board has committed to seven actions to implement its pricing strategy. These actions are consistent with the pricing principles.

1. Improve customer groupings to remove arbitrage opportunities and further differentiate between and better align customer groupings with the costs to supply that group. This action will improve the signal of the economic cost of service provision (pricing principle a).
2. Improve the tariff design to reflect the cost drivers of supply e.g. moderately increase the utilisation of capacity and demand based charges over time subject to public education and communication plans. This action will improve the signal of the economic cost of service provision (principle a) and is consistent with setting prices in a way that has regard to customers' demand responsiveness (principle b).
3. Utilise advanced metering technologies to increase the accuracy and assessment methods of network utilisation e.g. the introduction of time-based charges to the domestic and non-domestic customers. This is consistent with setting prices in a way that encourages efficient demand response (principle b) and signalling the economic costs of supply (principle a).
4. Increase the attractiveness of controlled load to customers, e.g. low priced off-peak usage. This is consistent with setting prices in a way that encourages demand response (principle b) and signalling the economic costs of supply (principle a).
5. Introduce asset based pricing, i.e. tailor pricing and design to our larger customers. This action discourages uneconomic bypass, and allows for negotiation to better reflect the economic cost of services (principle c).
6. Implement transitional measures to manage changes over time enabling customers to adjust and manage their electricity costs. This action reflects principles (d) and (e) – providing transparent price development, with regard given to the impact on stakeholders.
7. Gain stakeholder feedback and support by conducting consultation and providing appropriate education and communication programmes. This action reflects principles (d) and (e) – providing transparent price development, with regard given to the impact on stakeholders.

## 14. Consultation

### 14.1. Customer consultation

WEL has a strong customer focus as it is owned 100% by the WEL Energy Trust, on behalf of the community. In addition to the WEL Energy Trust representing the views and interests of customers, WEL regularly consults with major customers and periodically (biennially) conducts surveys of customers' expectations on its pricing and quality of service. The survey results are a key input into both WEL's Asset Management Plan (AMP) and Pricing Methodology.

A key finding from the most recent customer survey undertaken in February 2014 was that the majority of the customers (99%) are satisfied with the current level of reliability of current supply. Only a small number (22%) of customers would like to see further improvement in reliability of supply with a much smaller proportion (21% of that 22%) being prepared to pay slightly more. A full summary of the survey is included in WEL's AMP published on its website. Noting the findings of this survey WEL has decided not to include any amount for further quality improvements in the pricing for 2015/16.

### 14.2. Retailer consultation

Clause 12A.7 of the Code requires WEL to consult with traders prior to making a change to its tariff structure. WEL consulted retailers on its proposed tariff structure changes in October-December 2014.

The Code does not specify when consultation must commence or how long it should take, but the Electricity Authority has prepared *Guidelines for Consulting on Distributor Tariff Structure Changes* (2012) that set out a recommended approach. WEL was guided by this document in determining its process. Key features of our process consistent with the guidelines were:

- WEL provided opportunities for both oral and written feedback on its proposals, presenting the proposal in a workshop in early October 2014, and in a written consultation paper.
- Three weeks were allowed for feedback on the proposals, and a timeline for the process was provided to all retailers with key dates.
- WEL outlined the rationale for its proposed tariff design changes including the extent to which they were consistent with the Electricity Authority's pricing principles both in the workshop and the written consultation paper.
- WEL approached the consultation with an open mind, prepared to make changes to its proposed tariff structure.

Feedback was received from several retailers. This feedback was generally supportive. One proposed change (moving metered street lights to the unmetered street light category) was opposed by couple of retailers due to potential implementation issues. However, WEL has decided that overall it is highly important to align its cost structure to better reflect the cost to serve these street light ICP's and to create consistency in the treatment of the metered and unmetered street light ICP's which outweighs the potential implementation issues.

WEL released its final price schedule effective from 1 April 2015 to retailers in December 2014. This is consistent with pricing principle (d) by promoting transparency and certainty for stakeholders.



## 15. Certification

### SCHEDULE 17 - CERTIFICATION FOR YEAR-BEGINNING DISCLOSURES

(Pursuant to section 2.9.1 of the Electricity Distribution Information Disclosure Determination 2012)

We, Margaret Patricia Devlin and Barry Spence Harris, being Directors of WEL Networks Limited, certify that, having made all reasonable enquiry, to the best of our knowledge-

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

  
\_\_\_\_\_  
Margaret Patricia Devlin  
Director  
  
\_\_\_\_\_  
Barry Spence Harris  
Director

Date: 26 February 2015