PRICING METHODOLOGY DISCLOSURE 2016/17

23 February 2016

Revision Overview

Date	Version	Changes
28/2/13	1.0	Initial publication
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.
23/2/16	4.0	Revisions to section 6 to reflect the introduction of smart pricing and clarify the description of our price structure. Other minor revisions have been made throughout to adopt standard industry terms and improve readability.

EXECUTIVE SUMMARY

This Pricing Methodology sets out the approach used by WEL Networks Ltd (WEL) to formulate our price structure and set our prices for 2016/17. 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 prices WEL has also had regard to the requirements of the *Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004*, and the consultation requirements in the *Electricity Industry Participation Code 2010.*

WEL has set prices for the year beginning 1 April 2016 based on an allocation to customer groups of the costs of owning and operating its networks. The customer groups determined by WEL are based on the level of service received by the customer, which is in turn determined by their demand profile and associated asset requirements. WEL uses the following criteria to distinguish between levels of service received by our customers:

- The voltage at which the customer is connected;
- The customer's fuse capacity;
- For small customers (connected at 400V, with a fuse capacity of less than 110kVA) 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.

Our cost allocation model uses cost drivers such as annual energy consumption and measures of peak demand to allocate costs to customer groups. These allocators were chosen based on WEL's assessment of each customer group's influences on costs, such as investment, maintenance and transmission charges. WEL has focused on matching an allocator to each of the cost categories in a manner that best reflects the Electricity Authority's 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 excessive price shocks, ensuring revenue adequacy and maintaining logical relationships between price categories. WEL also has a small number of customers with individual pricing agreements, reflecting the cost of assets used specifically by those customers.

Overall the total price increase in 2016/17 is 2.8%. This price increase reflects an increase in Transpower's transmission charges, an increase in our own operating costs along with our continued investment to future-proof our 6,499 kilometre Waikato lines network. Price increases for individual customers and each customer group vary according to individual consumption profiles and different cost drivers for serving each customer group.

A number of changes have been made to the pricing methodology effective 1 April 2016. The changes are listed below; further information on the changes is detailed in section 4.

- Introduction of Time of Use (TOU) price categories, called Smart Pricing, for new ICPs connected to a WEL network (i.e. created on or after 1 April 2016). Smart Pricing charges different prices for peak, shoulder and off-peak consumption;
- Rebalanced prices for Large Customers;
- Addition of a fixed charge to the unmetered price category and reduction of the supply (kWh) price;
- Terminology changes to align with standards established by the Electricity Networks Association (ENA); and
- Implementation of a five year target return on investment (ROI) based on the 67th percentile estimate of WACC determined by the Commerce Commission for the default price-quality path.

CONTENTS

1. Background

The core business of WEL is the provision of electricity distribution services in the Waikato region. As an electricity distribution company, we own and maintain the electricity network of lines, cables, substations and associated infrastructure. Our network connects 88,300 customers (a small number of whom are generators) to the national transmission and generation facilities and includes more than 6,499 kilometres of lines and has an annual throughput of over 1,208GWh. WEL has assets totalling in excess of $676 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 townships 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 electricity distribution services in major subdivisions in New Zealand. We supply subdivisions in Auckland, Cambridge and Warkworth.

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.

This Pricing Methodology sets out the approach used by WEL to formulate our price structure and set our prices for distribution services for 2016/17. 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 prices 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 taken 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 prices for electricity distribution and transmission services. These prices form only a part of overall electricity prices paid by customers to their electricity retailer. Queries about customer prices should be addressed to your retailer.

2. Definitions

Term	Definition
ACOT	Avoided cost of transmission – a payment made by WEL to 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
DPP	Default Price Path – price-quality regulation set by the Commerce Commission for non-exempt suppliers of electricity lines services
EA	Electricity Authority
EDB	Electricity distribution business
External network	An electricity network owned by WEL located outside WEL's traditional network, they are located in Auckland, Cambridge and Warkworth.
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
Small scale distributed generation	Generation installation connected to the distribution network with a nameplate capacity of 10kW or less.
TOU	Time of Use – consumption of electricity based on the time of consumption

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 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 WEL's intention that through the pricing revision each year WEL's prices and pricing structure will approximate the modelled revenue allocation, over time, 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 of supply to customers 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 efficient conservation during peak times.
    c. WEL will reward customers for demand response through the use of peak time demand (for Large customers) and time of use (for Residential, Small Scale Distributed Generation and General Customers) prices.

3. **Prices are Responsive to Stakeholders' Requirements and Circumstances**
    a. WEL's price design will 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 have access to clear information on WEL's pricing strategies, price design, cost allocation methodologies, and price changes well in advance of them applying.
    b. Our customers can identify the prices that apply to them.
    c. Customers do not experience excessive price shocks. This will be achieved through the adoption of a phased approach to price adjustments over a number of years.

5. **Prices are Non-discriminatory Across Retailers**
    a. All retailers are to be treated homogenously.
    b. WEL will consult with retailers and encourage alignment of retailer pricing plans that reflect WEL's prices.

4. Changes to the previous Pricing Methodology

A number of changes have been made to the pricing methodology effective 1 April 2016. These changes and the rationale for them, including an explanation of their consistency with the pricing principles are:

4.1. Introduction of TOU 'Smart Pricing' Categories

New ICPs connected (i.e. ICP created on or after 1 April 2016) to any WEL network will be allocated to a Smart Pricing Category (1153SP, 1154SP, 1200SP, 1250SP, or 1251SP) depending on the end use of the connection. Smart Pricing applies different prices for peak, shoulder and off-peak time periods. Distribution costs are driven primarily by the capacity available and peak demands on the network. Our Smart Pricing plans include a higher price during peak periods reflecting the costs associated with maintaining a network capable of serving customer during peak times. This is consistent with pricing principle (a) as it reflects the cost of service provision.

4.2. Rebalanced Prices for Large Customers

Prices for large customers (price categories 1360, 1354 and 1357) have been rebalanced to better reflect the allocation of costs within these price categories. The fixed monthly price has been increased with an offsetting supply (kWh) price decrease to more closely align our pricing with the cost structure of electricity distribution. This is consistent with pricing principle (a) as it reflects the cost of service provision.

4.3. Addition of a Fixed Price Element to the Unmetered Customers Price Category

Unmetered customers may use a relatively small amount of electricity. Previously, all revenue was based on consumption with the result that some customers were being charged less than the cost to serve them. The introduction of a fixed price component, and offsetting reduction in the supply (kWh) price, will ensure that each ICP covers the fixed costs associated with the provision of service to them. This is consistent with pricing principle (a) as it reflects the cost of service provision.

4.4. Alignment of WEL Pricing Terminology and Definitions to the ENA Distributors' Pricing Guidelines

A number of terms have been replaced to align with standards established by the ENA. For example:

- 'Domestic Customer' has become 'Residential Customers'
- 'Non-Domestic Customers' has become 'General Customers'
- 'Tariff' and 'Charge' have become 'Price'

4.5. Implement a Five Year Target ROI

Each year, the Commerce Commission determines the weighted average cost of capital (WACC) for purposes of establishing a benchmark against which an EDB's actual performance can be assessed through information disclosure publications[1]. In the past, WEL has attempted to manage its performance against this benchmark. However, our experience has proven the management of our performance against the Commission's annual benchmark to be a difficult task. Firstly, it is difficult because the benchmark WACC is not determined until well after WEL regulatory and contractual requirements to determine prices and notify these to retailers and customers. This timing introduces estimation variances. Secondly, the prescribed measure of WEL's ROI performance includes income attributed to inflation on WEL's assets. Small changes in inflation outcomes have material impact on the prescribed performance measure. WEL has adopted a new approach from 2016/17 to target more stable outcomes over the medium term (five years). Consistent with the Commerce Commission's approach with the default price-quality path (DPP) regime, WEL has adopted the 67th percentile estimate of WACC to determine for the DPP as our target ROI over the corresponding five year period.

[1] Electricity Distribution Information Disclosure Determination 2012

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;
- The customer's fuse capacity;
- For small customers (connected at 400V, with a fuse capacity of less 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 and regulatory constraints. WEL's rationale for distinguishing between residential, general and small-scale distributed generation customers, despite setting the same prices 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 illustrates the characteristics of each customer group. In addition, the following definitions apply:

A **residential customer** (price category 1153/1154, 1153SP/1154SP) is a customer with a fuse capacity less 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. These criteria reflect the typical characteristics of a household; customers with larger fuse capacity or higher connection voltage typically require electricity for some other purpose than residential use

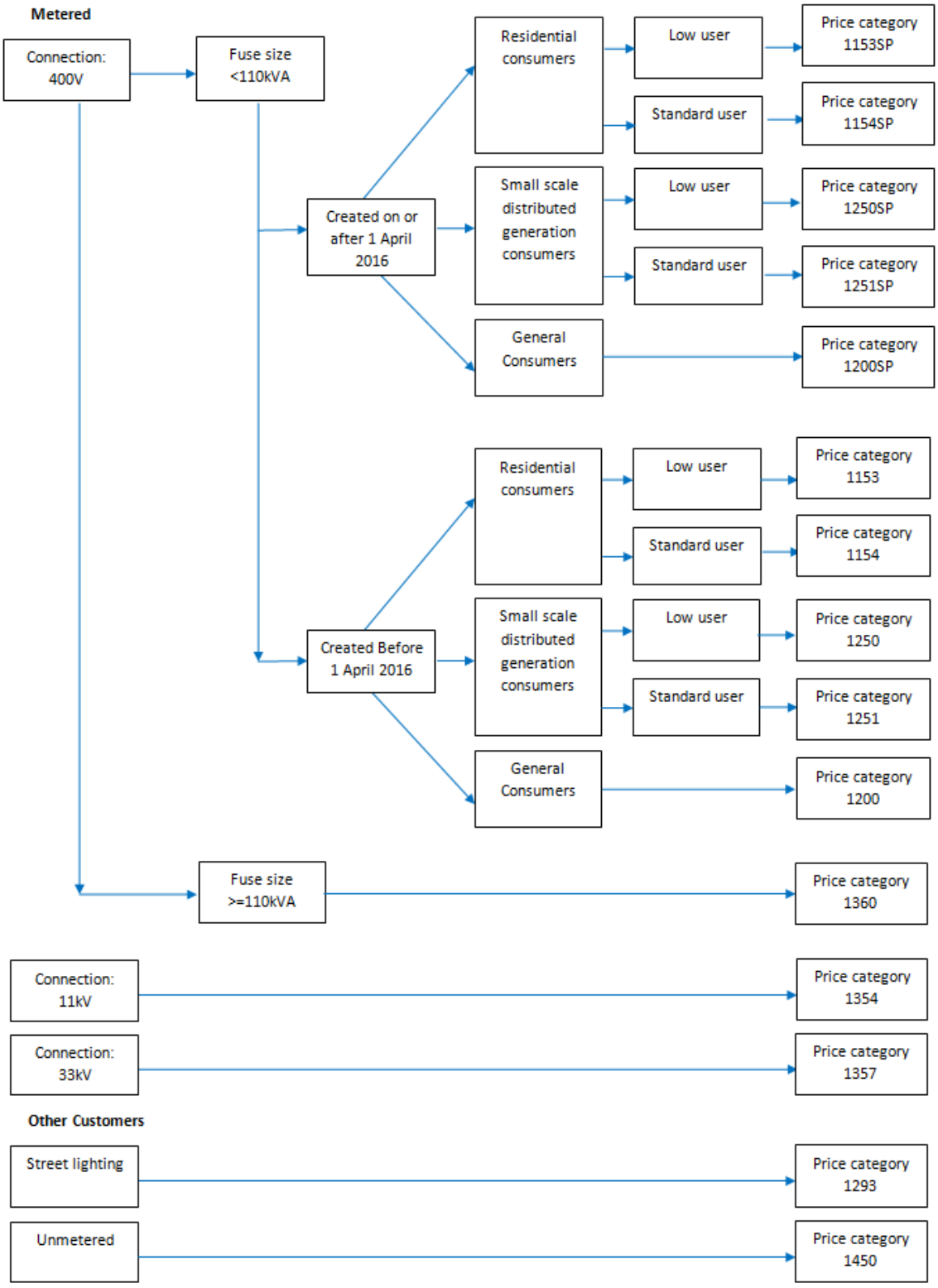
A **small scale distributed generation customer** (price category 1250/1251, 1250SP/1251SP) is a customer with a fuse capacity less than 110 kVA and connection voltage of 400V and that has a generation installation capable of exporting typically up to 10kW of electricity into WEL's Waikato network.

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

A **low user customer** (price category 1153/1153SP/1250/1250SP) is a residential 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 (price category 1154/1154SP/1250/1250SP) applies to all other residential and small scale distributed generation customers.

Figure 1 Customer groups



5.1. Low Fixed Charge Tariff Regulations

The Low Fixed Charge Tariff Regulations require that electricity distributors provide a residential fixed price of not more than 15 cents per day (excluding GST)[2]. WEL has standard fixed price options in addition to the low fixed price options. The variable price for customers on a low user option is such that a customer who consumes 8,000kWh pays no more in total per year on this option than the same customer would on any alternative option that is available to them.

It is a requirement of WEL's price group category criteria that an ICP must be a principle place of residence and the customer must also have nominated the retailer's corresponding low user price plan to be eligible for the WEL low user price category.

6. Price Structure

WEL's price 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 price structure is similarly split into fixed and variable prices. The fixed price is levied on either a per day or per month basis. Variable prices are typically based on the volume of electricity used by the customer and for large customers their highest demand each month during peak time periods. These prices reflect the economic costs pertaining to the customer's time of consumption and demand profile in terms of level of consumption. WEL's smart, advanced, and peak demand prices reward behaviour (through lower prices at off-peak times) that will help reduce network costs.

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

- **Uncontrolled Supply Prices:** are prices that apply to electricity supply that is continuously available under normal operating circumstances. Prices may be time of day dependent. The price is multiplied by the volume of energy used, measured in kilowatt hours (kWh), in the corresponding time periods. This is applicable to anytime or across peak, shoulder and off-peak prices. Where prices are applied based on peak, shoulder and off-peak time periods, WEL offers lower prices for consumption when there is expected to be spare capacity on the network (i.e. off-peak).
- **Controlled Supply Prices:** are prices that apply to the electricity supply that is capable of being interrupted (switched off) by WEL using remote technology for up to seven hours a day. The price is multiplied by the volume of energy used, measured in kilowatt hours (kWh). 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 prices for supply to controllable load. This type of supply is typically connected to hot water cylinders and other appliances nominated by the customer. To be eligible, this supply must be metered separately from any uncontrolled supply. Combined metered supplies (uncontrolled and controlled) will be charged at the uncontrolled price.
- **Generation Export Price:** Small-scale distributed generation customers are expected to drive long-run incremental costs in WEL's network through increased demand for capacity (to export surplus generation) in the low voltage network. This is reflected in a small price for these exports. To minimise transaction costs for retailers and customers, and allow customers to understand the price more readily, this is currently structured as a kWh price.
- **Peak Demand Price:** A price that is applied based on the highest rate of consumption (kW) recorded by the customer in a single half hour during WEL's peak hours each month. There is a price for the winter months (1 May to 30 September) and a price for the summer months (1 October to 30 April).

[2] Regulation 14 (1) (b) Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004.

- **Reactive Energy Price:** The reactive energy price is applied to large customers with low, medium and high voltage connections 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 prices 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 prices). 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 price 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 prices of other EDBs to ensure that WEL's prices 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 price 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	Measures the anytime maximum demand (AMD) of a customer group as a proportion of the total. AMD may occur in different time periods for different customer groups. An allocation is made to customer groups based on the design capacity of the network.	$\frac{AMD_C}{AMD_{total}}$
CMD	The proportion of total demand related to a group of customers at times of coincident maximum demand (CMD). CMD is based on the average of the 12 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.	$\frac{CMD_C}{CMD_{total}}$

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 as WEL's cost structure is largely fixed and related to network capacity. Costs are then allocated based on the customer group's contribution to the annual maximum demand on the network.
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	CMD	Allocating this cost based on the share of coincident peak demand is similar to the basis on which Transpower sets its

avoided transmission		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 active connection to a WEL network (including our Auckland based networks).

The discount is paid on the basis of the total price charged for the connection in a 12 month period, regardless of whether the account holder changed during the year. The electricity account holder for that 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 or May 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 as determined by WEL's Board.

A cap of $1,650 (excl. GST) is also applied to the total discount to which each individual customer is eligible.

8. Key Statistics and Assumptions

The tables below represent the breakdown of WEL's Target Revenue for 2016/17 into key cost components, by customer groups and by each of the price components as published in the 2016/17 price schedule.

WEL's target revenue is based on achieving a return on investment over the medium term (five years) that is based on the 67th percentile estimate of WACC determined by the Commerce Commission for the default price-quality path.

Note – The data in the tables below represents the information used at the time of setting the prices for 2016/17 pricing year.

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

Key Cost Component	**$000**
Net profit after tax (before discount)[3]	28,360
Tax	7,003
Interest	1,255
Maintenance	1,543
Depreciation	23,135
Operating expenditure	28,081
Transmission – interconnection	22,333
Transmission – connection	5,174
Avoided transmission	3,162
Electricity Authority and Commerce Commission levy	320
Gross Revenue	**120,365**
Discount	-17,391
Total Target Revenue	**102,974**

[3] NPAT is the net profit after the payment of interest and tax

TABLE 4 TARGET REVENUE BY PRICE COMPONENT AND CUSTOMER GROUP ($000)

Price Component ($000)	Smart Pricing					Traditional and Advanced Pricing					Low Voltage	Medium Voltage	High Voltage	Street lights	Unmetered	Non-standard contacts	Total Target Revenue
	Residential Low User	Residential Standard User	General	SSDG Low User	SSDG Standard User	Residential Low User	Residential Standard User	General	SSDG Low User	SSDG Standard User							
Fixed	20	60	44	0.1	1	2,528	12,048	5,092	17	123	852	292	6	1,294	24	238	22,639
Uncontrolled Supply	-	-	-	-	-	25,139	18,860	18,921	122	169	3,512	5,062	274	-	5	528	72,591
Controlled Supply	36	8	5	0.1	0.0	3,672	1,618	379	13	9	-	-	-	-	-	-	5,740
Off Peak	26	11	28	0.2	0.1	-	-	10	-	-	-	-	-	-	-	-	76
Shoulder	86	36	90	0.4	0.3	-	-	15	-	-	-	-	-	-	-	-	228
Peak	55	23	58	0.3	0.2	-	-	7	-	-	-	-	-	-	-	-	144
Generation Export	-	-	-	0.0	0.0	-	-	-	9	5	-	-	-	-	-	-	14
Summer Peak	-	-	-	-	-	-	-	-	-	-	3,165	4,579	222	-	-	403	8,369
Winter Peak	-	-	-	-	-	-	-	-	-	-	3,927	5,016	183	-	-	409	9,536
Reactive	-	-	-	-	-	-	-	-	-	-	495	551	-	-	-	0.4	1,046
Transformer rebate	-	-	-	-	-	-	-	-	-	-	-	-13	-6	-	-	-	-19
Posted discount	-57	-22	-42	-0.2	-0.3	-5,737	-5,876	-4,350	-27	-50	-893	-305	-4	-24	-6	-10	-17,391
Total Target Revenue	**167**	**116**	**182**	**1**	**1**	**25,601**	**26,651**	**20,074**	**133**	**256**	**11,057**	**15,181**	**676**	**1,270**	**36**	**1,570**	**102,973**

9. Price Changes

This section describes the key changes to prices between those that were applied from 1 April 2015 and those that will apply from 1 April 2016. The rationale for these changes is provided along with a measure of the significance of the change.

Effective 1 April 2016, WEL will pass on an increase in network charges of on average 2.8% to our customers. Our price reset reflects increases in Transpower's transmission charges, and increases in our own operating costs along with our continued investment to future-proof our 6,499 kilometre lines network. The total increase is comprised of:

- 2.0% increase in prices due to an increase in transmission charges by Transpower; and
- 0.8% increase in prices due to an increase in WEL's underlying costs, driven principally by inflation.

9.1. Change in Target Revenue

WEL is forecasting its target revenue to increase by 2.1% in 2016/17 compared to the forecast for the 2015/16 pricing year. This reflects the 2.8% increase in network prices described above, along with our forecasts for growth and changes to the posted discount over the 2016/17 pricing year. WEL is forecasting a decline in total consumption for electricity supply primarily due to increasing investment in energy efficient technology.

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) who 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, WEL will negotiate pricing arrangements that reflect the customer-specific cost of supply.

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 Participation 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 price 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 price 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 two 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 2016/17 payments of approximately $3 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 price 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 the 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 demand and consumption measures as cost allocators (see section 7.1) and these (demand in kW, and consumption in kWh) are the basis of WEL's variable prices.

- Prices should take into account both present and future investment costs. WEL applies a price to exports of distributed generation. The purpose of this price 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'. This principle is intended to direct the recovery of WEL's fixed costs toward the least price responsive customers. In meeting this principle, WEL will continue to reward controllable load from customers and provide advanced pricing for mass market customers. These initiatives will tend to result in lower prices for more price sensitive customers.

(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 price structure also reflects the economic costs of small customers' actions (e.g. through the use of an export price 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 prices.

(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, price design, cost allocation methodologies, and any price changes in advance of them applying, and should be able to identify the price(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 prices over time and time to adjust to any changes. For example:

- The separation of general and residential 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 11, WEL applies the SSDG export price on a kWh basis to lower transaction costs to retailers.

WEL is committed to ensuring that its prices are non-discriminatory across retailers. WEL is working 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).
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 residential and general customers. This is consistent with setting prices in a way that encourages efficient demand response 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 reflects customers' demand responsiveness (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 value 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 our Pricing Methodology.

A key finding from the most recent customer survey undertaken in June 2015 was that the majority of the customers (99%) are satisfied with the current level of reliability of supply. Only a small number (22%) of customers would like to see further improvement in reliability of supply with relatively few (8% of that 22%) being prepared to pay slightly more. A full summary of the survey will be included in WEL's 2016 -2026 AMP which will be published on our website[3] on 1 April 2016.

14.2. Retailer Consultation

Clause 12A.7 of the Code requires WEL to consult with traders prior to making a change to its price structure. WEL consulted retailers on its proposed price structure changes in September-December 2015.

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 September 2015, and in a written consultation paper.
- Two 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 price 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 price structure.

Feedback was received from several retailers. The feedback was generally supportive of all the proposals. Retailers preferred Smart Pricing to other methods of time of use/demand pricing – specifically the prospect of kW pricing. The main issue that some retailers had was of implementation, that their systems are not ready to cope with this pricing system. Due to this, we have provided a weighted average price (from Peak, Shoulder, and Off-Peak prices) to be applied across all half hour periods in the day which can be used until 30 September 2016. Retailers were supportive of refinements to Advanced Prices, the introduction of a fixed price to the unmetered customer group, and to terminology standardisation.

WEL released its final price schedule effective from 1 April 2016 to retailers in December 2015. This is consistent with pricing principle (d) by promoting transparency and certainty for stakeholders.

[3] www.wel.co.nz

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 Devlin and Paul McGilvary, 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 Devlin
Director

Paul McGilvary
Director

Date: 23 February 2016