



# **Electricity Distribution Business Pricing Methodology**

**31 March 2014**

## 1. GLOSSARY

<b>Commerce Commission (Commission)</b>	Responsible for the regulation of EDBs as provided for under Part 4 of the Commerce Act 1986
<b>EDB</b>	Electricity Distribution Business
<b>Electricity Authority (EA)</b>	Electricity Authority
<b>Code</b>	Electricity Industry Participation Code 2010
<b>ICP</b>	Installation Control Point: A point of connection on a local network which the distributor nominates as the point at which a retailer will be deemed to supply electricity to consumers
<b>IDD</b>	Electricity Distribution Information Disclosure Determination 2012, issued 1 October 2012 (Decision No. NZCC22)
<b>kVA</b>	Kilo Volt-Amp: Measure of apparent electrical power usage at a point in time
<b>kW</b>	Kilowatt: Measure of instantaneous real electrical power usage
<b>kWh</b>	Kilowatt hours: Measure of real electrical power usage per hour
<b>Low fixed charge regulations</b>	Electricity (Low Fixed Tariff Option for Domestic Consumers) Regulations 2004
<b>Part 4</b>	Part 4 of the Commerce Act 1986 governing the regulation of EDBs as administered by the Commerce Commission
<b>Transpower</b>	Owner and operator of the national transmission grid
<b>Qualifying Customers</b>	Redeemable Preference Shareholders in the MainPower Trust
<b>WACC</b>	Weighted Average Cost of Capital

## 2. INTRODUCTION

This pricing methodology describes the approach MainPower New Zealand Limited (“MainPower”) has adopted to determine prices for consumers connected to its electricity distribution network, effective from 1 April 2014.

The purpose of this document is to provide consumers and other interested stakeholders with relevant information on how prices have been set. This includes information on the price setting process and key inputs, assumptions, considerations, and decisions made in setting prices. We also seek to provide further detail on our ongoing pricing review as well as signalling potential changes which might result pending the outcome of this review.

The pricing methodology is structured as follows:

- Section 1 provides a glossary of common terms used throughout the document.
- Section 2 provides introductory comments and background information relevant to the development of prices. This includes a brief overview of MainPower, key pricing decisions, regulations applicable to this pricing methodology, and discussion of our current pricing review and strategy.
- Section 3 sets out the methodology we have used to determine prices as at 1 April 2014, including the key considerations made in regards to determining target revenues, consumer groups, tariff structures, and final charges. It also summarises the results of our recent consultation with consumers on prices and quality of supply.
- Appendix A details the extent to which our pricing methodology is consistent with the Electricity Authority’s (“EA”) electricity distribution pricing principles.
- Appendix B provides Directors Certification against the IDD disclosure requirements applicable to pricing methodologies, as required by section 2.9.1 of the IDD.
- Appendix C maps where in this document we have shown compliance against the Electricity Distribution Information Disclosure Determination 2012 (NZCC 22) (IDD) disclosure requirements applicable to pricing methodologies.
- Appendix D provides detailed information on tariffs, consumer statistics, and target revenues (by pricing region and tariff type).

### **Background to MainPower**

MainPower provides distribution lines services to approximately 36,506 consumers throughout the North Canterbury and Kaikoura regions. A number of rural towns, including Rangiora, Kaiapoi, Oxford and Kaikoura service these rural communities. Approximately 76% of our consumer base is residential, with the majority of the remaining being small commercial, farming or irrigation consumers. One large connection is offered non-standard pricing in recognition of its unique cost profile.

MainPower is one of a number of community-owned electricity distribution businesses (“EDBs”) in New Zealand. Consumers in the communities of North Canterbury and Kaikoura own MainPower through the MainPower Trust and elect its trustees. MainPower also serve consumers in the old borough of Kaiapoi and Wigram Airbase area (embedded in Orion New Zealand Ltd’s distribution network) who are non-Qualifying Customers of the Trust. Pricing regions are formed across the boundaries of these three areas.

## **2013 pricing decisions**

We typically reset prices each year as at 1 April, consistent with industry practice. In 2013 we did not change prices as we were part the way through a major review of our pricing and did not want to create further price variability for consumers that might be affected. This means that unit prices have remained unchanged for two years.

As we are still progressing several work streams under this review, we have decided that it is now necessary to increase prices as at 1 April 2014 in order to recover the underlying costs we face. These price changes will be applied to existing tariff structures.

Based on the final outcomes of our review, we are now planning to introduce new pricing structures from 1 April 2015 for some consumers. Further details regarding these potential changes and our pricing strategy are summarised below.

## **Regulatory requirements applicable to pricing methodologies**

MainPower's EDB is subject to regulation under Part 4 of the Commerce Act 1986 ("Part 4"), as administered by the Commerce Commission ("Commission"). Our consumer ownership means we are exempt from direct price control under Part 4. This is because consumer ownership and oversight provides the necessary incentives to set prices consistent with the purpose of regulation under Part 4, in the long term interests of our consumers. However, we remain subject to regulatory oversight in the form of information disclosures under the IDD, including being required to publish an annual pricing methodology.

MainPower is also subject to various industry regulations and guidance of relevance to pricing, as administered by the Electricity Authority ("EA"). In particular, the EA has developed a set of pricing principles and information disclosure guidelines to assist EDBs. Under the IDD, EDBs must disclose the extent to which their pricing methodology is consistent with these pricing principles.

The key regulatory requirements directly applicable to this pricing methodology are:

- Section 2.4.1 – 2.4.5 of the IDD regarding the disclosure of pricing methodologies
- the EA's electricity distribution pricing principles and information disclosure guidelines
- the 'Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004' (the "Low Fixed Charge Regulations")
- Schedule 6.4 of Part 6 of the Code, which sets out pricing principles for distributed generation.

This pricing methodology has been developed consistent with these requirements. Appendix A discusses the extent to which our prices are consistent with the EA's pricing principles. Appendix B provides Directors Certification against these requirements, as required by section 2.9.1 of the IDD. Appendix C provides a check list which maps where in this document we have shown compliance against the applicable IDD regulations.

## **Pricing review and pricing strategy**

In 2013 we initiated a comprehensive review of our pricing methodology. This section sets out the key matters currently being considered as part of this review as well as our current pricing strategy for the next five years. This pricing strategy has not materially changed since our 2013 pricing methodology, but may change pending the final outcomes of our review.

Several factors have influenced our decision to undertake a review of our pricing:

- new regulations and regulatory guidance regarding economically efficient distribution pricing (i.e. the IDD and pricing principles)
- significant growth in irrigation connections and demand across the North Canterbury region
- the impact of the Canterbury earthquakes on local demand. This includes significant growth in new sub-divisions in some areas but damage to communities and infrastructure in other areas
- the expected deployment of smart meters to the mass market and the potential pricing applications for this technology
- the potential increase in the connection of distributed generation to our network.
- the desire to review our long-serving pricing structures, which are in some cases over a decade old, with consideration of recent innovations in pricing in the sector.

The primary objective of the review is to investigate alternative pricing structures and price setting approaches which address some or all of these issues as well as our commercial and pricing objectives. In particular, we are investigating alternative approaches to align pricing more closely with:

- *Economic and regulatory principles and industry best practice.* This includes consideration of the regulatory guidance on pricing as well as innovative pricing approaches adopted across the sector. Our aim is to structure prices to promote more efficient usage of, and investment in, the network.
- *Network cost drivers.* We are progressing the development of a cost of supply model which allocates our annual target revenue requirement to regions, consumer load groups and tariffs based on appropriate cost-based allocators. This model will allow us to test different consumer group scenarios, tariff options (e.g. for fixed and variable combinations, peak/off-peak tariff structures) and cost allocators. It will also analyse price shock, helping us to formulate a plan to transition any price changes over time.
- *Our commercial and pricing objectives,* taking into account the current commercial conditions we face.

We have engaged PricewaterhouseCoopers (PwC) to assist with this review. They are providing advice on economic pricing frameworks, best practice distribution pricing approaches, and pricing regulation. They will also provide modelling expertise in regards to developing the cost of supply model.

Our review is still progressing. However, we are able to reveal some areas of change we are currently investigating, as set out the following table. These potential changes are only being considered as options and are subject to the completion of our review.

At this stage, it is not clear how individual consumers will be affected, apart from giving an indication of expected high-level impacts. We plan to consult with consumers, retailers, and other affected parties later this year to gain feedback on any proposed changes. As part of this, we will provide more detailed information on how consumers will be affected. Feedback received under this consultation will be considered prior to making a final decision on whether, or how, to amend prices. A new pricing methodology will be issued before prices take effect.

We anticipate that certain price changes could take effect as early as 1 April 2015. It may also be necessary to transition some price changes over a longer time frame to avoid price shock to consumer bills. Retailers will be notified of any price changes within 45 business days consistent with our conveyance only use of system agreement. Consumers will be notified at least 20 business days prior to any changes taking effect.

**Figure 1: Potential changes to prices and impact on consumers**

<b>Potential area of change</b>	<b>Considerations</b>	<b>Potential impact on consumers</b>
<i>Aligning the calculation of the annual target revenue requirement with Part 4 regulation</i>	We have historically set our annual target revenue requirement to recover budgeted costs, including an appropriate commercial return on investment (as detailed in the next section). However, the Commission has now specified regulatory input methodologies for calculating EDB building block revenues, consistent with the purpose of Part 4 regulation. These are used in determining and monitoring EDB prices. While we are exempt from price regulation, we are required to disclose the components of our annual revenue consistent with the Commission’s building blocks methodology. These methodologies provide useful guidance on how to set the revenue requirement consistent with the purpose of Part 4 in the long-term interests of our consumers. We are therefore considering aligning the calculation of our annual target revenue requirement more closely to the Commission’s methodology and inputs.	Aggregate prices will be set with reference to a framework for determining efficient and cost-reflective prices, as determined by New Zealand’s independent economic regulator.  At this stage, it is not clear how individual consumers will be affected.
<i>Aligning pricing regions with the cost and consumer characteristics of different parts of the network</i>	Distinct pricing regions are being considered for the northern part of our network (including Kaikoura and Hamner Springs) and southern parts of our network (North Canterbury), with the Waipara River as the boundary. Our initial analysis suggests different cost and usage characteristics exist on these parts of the network. We are also considering the merits of merging the existing Kaiapoi pricing region into this southern region. Currently, Kaiapoi is treated as a separate pricing area given it represents non-Qualifying Consumers for the purpose of the MainPower Trust. Our existing Wigram pricing region will remain, given it is a separate embedded network not connected to our main network.	Prices will be set overtime to align more closely with the costs of supplying distribution services to consumers in the Northern and North Canterbury regions, respectively.  Prices in the Kaiapoi region will be the same as for other consumers in the Northern Canterbury region (gross of any rebate).  Prices in the Wigram region will continue to recover costs of providing distribution services in this region.
<i>Aligning consumer groups to load characteristics</i>	We are considering two main consumer load groups: a small group capturing the mass market; and a large load group capturing large users. These groups could replace the current residential and commercial load groups to align pricing more closely with network cost drivers. We will also retain our current irrigation and lighting consumer groups.	Connections that use relatively more of the available capacity in the network (as measured by installed capacity or demand) will be charged relatively more compared to smaller consumers.  These objectives may result in consumers being allocated to new tariff options.
<i>Aligning prices with</i>	As discussed above, we are developing a cost of supply model that allocates the components of target	Prices will be more reflective of the costs of providing

<i>network costs</i>	revenue to consumer groups. The key output will be a set of implied cost allocations for each consumer group and tariff option. This information will be used in making decisions on final prices and pricing structures.	distribution services to individual consumer groups.
<i>Revising our approach to fixed charges</i>	Currently all controlled residential consumers are charged a low fixed charge of 15c per day to comply with the low fixed charge regulations. As part of our review, we are investigating the merits of creating a distinct residential low fixed tariff option targeted at consumers using less than 8,000kWhs per annum. For remaining consumers we are investigating fixed charges which proportionally align with the capacity of the consumer's connection.	Consumers using 8,000kWhs per annum or more are likely to have a higher fixed component and lower variable component to their charges.  Consumers using less than 8,000 kWhs per annum will continue to receive 15 cents per day low fixed charge. Their variable charge will be higher but will be set so that they are better off than under the standard tariff option.
<i>Introducing a peak demand charge for the large load group and irrigators</i>	The main service a distributor provides is capacity in the network. This is also a key driver of network costs. In recognition of this, we are investigating the merits of introducing a peak demand charge which would align our pricing to the service we provide and our costs of providing that service. It is not currently feasible to charge mass market consumers on a time of use basis <sup>1</sup> , given the current meter fleet. However, we are investigating applying peak demand charges to larger consumers given many have time of use meters	Irrigators and consumers in the large consumer group will be charged based on peak usage characteristics in addition to consumption.

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<sup>1</sup> although we note the controlled tariff does partially permit this

### 3. PRICING METHODOLOGY

This section describes our methodology for setting prices effective from 1 April 2014. It provides information on our:

- pricing and commercial objects
- target revenue requirement
- approach to determining consumer groups
- approach to allocating costs to consumer groups
- approach to setting tariffs
- approach to pricing non-standard consumers
- approach to pricing distributed generation
- recent efforts to consult with consumers on their price and quality expectations.

This section sets out our current methodology relevant to this year. It does not take into account any of the proposed changes being investigated as part of our current pricing review.

#### Overview of pricing setting process

Our underlying pricing methodology is the same as that which applied from 1 April 2013. However, prices have increased to recoup our 2014/15 (2015) target revenue requirement, which has increased in line with our costs. Our pricing and commercial objectives, and decisions regarding consumer groups, tariffs and cost allocation approaches have not changed.

Accordingly, the key steps taken to set prices are:

- setting the annual target revenue requirement to be recovered through prices
- allocating target revenue to consumer groups and tariffs based on:
  - our existing cost allocation approach
  - our existing tariff structures
  - connections and volume forecasts.

#### Pricing and commercial objectives

The key commercial and pricing objectives that guide our pricing decisions are as follows:

- *Uniform variable pricing:* We have adopted a general objective of applying a uniform variable charge to all tariff options within a particular pricing region, irrespective of consumer density, location, network configuration, or other load characteristics. There are a several exceptions to this general objective relating to tariff options that cater for specific usage and cost profiles. These exceptions are detailed below.
- *Rebates:* Revenues collected from consumers that are considered surplus to our target revenue are returned to Redeemable Preference Shareholders (Qualifying Customers) of the MainPower Trust in the form of rebates. Rebates are credited to Qualifying Customers' accounts on a monthly basis.



Rebate decisions do not form part of this disclosure. Qualifying Consumers are advised in advance on an annual basis of the rebate levels that will apply for the coming year.

- *Uniform pricing across the MainPower and Kaiapoi pricing regions:* The total line service charge, net of Qualifying Customer rebates applicable to consumers within these pricing regions, are charged on a uniform basis. Charges after the disbursement of rebates are generally the same for consumers in both MainPower and Kaiapoi pricing regions.
- *Price certainty and stability:* Our pricing structure will provide a high level of certainty and understanding, while at the same time ensuring price stability without rate shock.
- *Return on investment:* Where the return on investment for MainPower is less than our Weighted Average Cost of Capital (WACC), any upward movement in charges will be calculated on the basis that the increase is applied equally across all groupings.
- *Regulatory compliance:* We will comply with all applicable regulations relating to pricing and pricing methodologies. We will also consider other regulatory guidance (i.e. the pricing principles) in our pricing decisions. In circumstances where there is a conflict between this guidance and our pricing objectives, priority is given to the pricing objectives.

## Target Revenue

We determine our target revenue requirement on the basis that revenue collected from prices will be sufficient to cover the operating and capital costs necessary to maintain capital and/or revenue reserves at a level considered appropriate by the Board.

Figure 2 sets out our target revenue requirement for the pricing year ending 31 March 2015 (2015), relative to that of the previous pricing year ending 31 March 2014 (2014). Prices have increased this year to recover an aggregate 5.7% increase in our target revenue requirement.

**Figure 2: Components of Target Revenue**

	<b>2015 (\$000)</b>	<b>2014 (\$000)</b>	<b>Change (%)</b>
<b>Administration and Overheads</b>	8,146	8,409	-3.1%
<b>Operations and Maintenance</b>	4,747	3,486	36.2%
<b>Transmission charges</b>	13,115	11,618	12.9%
<b>Depreciation</b>	10,976	9,891	11.0%
<b>Tax</b>	4,942	5,169	-4.4%
<b>Return on investment</b>	14,655	16,294	-10.1%
<b>Less Other Revenue</b>	-8,198	-9,085	-9.8%
<b>Target Revenue Requirement from Prices</b>	<b>48,384</b>	<b>45,781</b>	<b>5.7%</b>

Administration and Overheads include costs associated with managing the day to day business activities of our distribution business, such as management, accounting, finance and administration costs. This also includes local body rates and Electricity Act and Commerce Act levies.

Operations and Maintenance captures costs associated with operating and maintaining the network, such as switching, planned and reactive maintenance and responding to faults.

Transmission costs are Transpower charges associated with:

- connection of MainPower's distribution network to the national grid (including interconnection, connection and new investment contract charges)
- the grid system operator function (a service which Transpower provides).

Depreciation represents the return of our original capital investment and is calculated based on the net book value of our distribution business.

Tax represents budgeted tax expenditure attributed to our distribution business.

Return on investment is calculated as a WACC return on average net book value. We use a post tax WACC estimate of 6.9% for this calculation. This estimate is derived using the Capital Asset Pricing Model and is based on the following assumptions:

- a risk-free rate of 5.0% (as per PwC's Appreciating Value cost of capital report, September 2013)
- a debt premium of 2.6
- an asset beta of 0.34 as the measure of non-diversifiable business risk based on the Commerce Commission's estimate
- a debt equity ratio of 40:60
- an investor tax rate of 28 cents
- a post tax market risk premium of 7.5%.

Other revenue attributable to our distribution business is subtracted to determine the target revenue to recover from electricity distribution charges.

## Consumer groups

Our standard tariffs are structured across 3 pricing regions and 6 consumer groups.

The 3 pricing regions were determined in order to recognise consumers in and outside of the MainPower Trust boundaries as well as the distinct cost characteristics of Wigram embedded network:

- **MainPower Region (MP):** includes all consumers connected to the distribution network that are not included in the Kaiapoi pricing region or Wigram pricing region. These are Qualifying Customers consistent with the MainPower Trust boundary.
- **Kaiapoi Region (KE):** All consumers connected to the electricity distribution network previously owned by Kaiapoi Electricity Limited, which was acquired by MainPower on 1 July 2004. These consumers are non-Qualifying Customers but have a similar cost profile to consumers in the MP region.
- **Wigram Region (WIG):** Includes all consumers connected to the distribution network located in the region previously known as the Wigram Air Base. This network is embedded in Orion New Zealand Limited's distribution network and has a distinct cost profile.

Within these pricing regions, we recognise 6 standard consumer groups:

- **Residential:** A residential consumer group has been adopted in order to show compliance with the low fixed charge regulations, which apply only to domestic consumers.
- **Non-residential and large users:** Non-residential and large users are treated as a separate consumer group in order to:
  - recognise the different connection load usage profiles of these consumers (e.g. lower weighted average load factor), relative to residential consumers
  - facilitate our approach to complying with the low fixed charge regulations (i.e. by separating residential and non-residential consumers)
- **Irrigation:** This group was added in response to significant growth in irrigation in North Canterbury, mainly resulting from dairy conversions. It recognises the unique summer demand peaking load profile of these consumers and incentivises efficient utilisation of available capacity in the network.
- **Lighting:** This group was established to recognise the distinct night-time only usage profile and dedicated assets attributable to lighting connections.
- **Council Pumping:** Council pumping is a separate consumer group in the MP and KE pricing region that recognises their high peak load but less frequent use.
- **Temporary supply:** This consumer group recognises the need for temporary supply connections (e.g. related to construction) as well as the additional costs associated with servicing this group.

Figure 3 summarises the tariffs offered for each pricing region and consumer group.

Key statistics for each pricing region and tariff option are presented in Appendix C. This includes information on:

- tariffs, including fixed and variable tariffs by distribution and transmission components
- target revenue and allocations of target revenue to pricing regions and tariffs
- pricing history
- ICPs, installed kVA consumer statistics, including delivered kWh consumption and chargeable peak demand.

**Figure 3: MainPower Tariff options**

<b>Tariff Option</b>	<b>Pricing Region</b>	<b>Consumer Group</b>	<b>Description and rationale</b>
<b>Residential Controlled Supply</b>	<b>All</b>	<b>Residential</b>	A tariff option offered to residential consumers that allows a portion of their load (i.e. hot water heating) to be interrupted for part of the day as required for network operations. This tariff is priced lower than the uncontrolled tariff option to incentivise consumers to offer controllable load. This lower price recognises the benefits to all consumers relating to timely management of faults and in reducing peak demand related costs. This tariff is offered as a low user and standard tariff option but both are priced the same to comply with the low fixed charge regulations.
<b>Residential Uncontrolled Supply</b>	<b>All</b>	<b>Residential</b>	A tariff option targeted to residential consumers that do not offer controllable load (i.e. hot water heat). The pricing of this option recognises the additional network costs created by not being able to interrupt supply to manage faults and peak demand. This tariff is offered as a low user and standard tariff option but both are priced the same to show compliance with the low fixed charge regulations.
<b>Residential Night Special</b>	<b>All</b>	<b>Residential</b>	A special discounted tariff option which applies to consumption during the off-peak night period between 9.30pm to 7.30am. This tariff incentivises consumers to shift load to the off-peak night period, recognising the associated benefits in reducing peak demand. This tariff is offered as a low user and standard tariff option.
<b>Non-Residential General Supply and Large User Group</b>	<b>All</b>	<b>Non-residential and Large Users</b>	This tariff option is offered to non-residential consumers, typically being large users. A higher daily fixed charge is applied to take into account the lower weighted average load factor of these consumers.
<b>Irrigation</b>	<b>MP/KE</b>	<b>Irrigation</b>	A tariff option targeted to irrigators in the MP and KE pricing regions. These consumers are charged a fixed daily charge per kW of installed motor capacity connected. This recognises the relationship between network capacity costs and the relatively size of irrigation motors connected to the network.

<b>Lighting</b>	<b>All</b>	<b>Lighting</b>	Various tariff options applying to Street Lighting, Right of Way Lighting, and Under Veranda Lighting (all priced the same).
<b>Council Pumping</b>	<b>MP/KE</b>	<b>Council Pumping</b>	A tariff offered in the MainPower and Kaiapoi pricing regions for connection of Council pumping facilities. Council pumping is priced based on the uniform pricing rule.
<b>Temporary supply</b>	<b>Temporary Supply</b>	<b>Temporary Supply</b>	A tariff option applying to temporary connections to the network. Priced higher than standard supply, this tariff option recognises the additional costs in managing temporary connections. It also appropriately incentivises consumers to shift to a standard tariff option as soon as is practical.

### Allocation of Costs to Consumer Groups

The allocation of costs to consumer and tariff groups recognises the predominant rural consumer base as well as consumers' continued confirmation and support for our uniform charging regime.

Operating costs are, wherever possible, directly attributed to consumer groups that solely create the need for these costs. Remaining shared operating costs are allocated to consumer groups using allocation rules based on key drivers of cost, as follows:

- **Administrative and Overhead costs** are allocated by consumption, based on a uniform cents per kWh basis. An allocator based on connections or consumption is considered appropriate, given these costs are broadly shared by all users. We have used consumption to recognise that larger consumers typically have a higher level of cost associated with them.
- **Operation and Maintenance costs** are allocated as a uniform percentage of net assets employed for each consumer group. While maintenance expenditure may arise for a variety of reasons (i.e planned versus reactive maintenance), over time these costs are typically proportional to the value of assets installed. Aligning maintenance costs to net assets employed recognises this cost relationship.
- **Rates** are allocated to consumer groups by the percentage of net assets employed. This recognises that rates are levied on the capital value of the network.
- **Levies** are allocated by consumption on a uniform cents per kWh basis. This partly recognises the basis upon which these costs are charged to MainPower. For example, electricity levies are calculated based on MWhs and ICPs.

Asset costs are directly attributed to pricing regions using asset register records and are allocated to tariff options by kWh consumption representing the relative utilisation of each network region.

Transmission charges are directly attributed to pricing regions based on the grid connections associated with each pricing region, as Transpower charge on this basis. Costs are then allocated to tariff options by kWh consumption representing the relative utilisation of the transmission grid.

## **Tariff Setting**

Tariffs are set to recover cost allocations to each consumer group using forecast volumes and current pricing structures. Appendix D sets out the tariffs applying to each tariff option including the expected target revenue to be recovered from each tariff.

MainPower has adopted the following uniform charges that apply to most consumers in each pricing region:

- The 15 cent per day low fixed charge applies to all controlled residential consumers irrespective of use. This approach complies with the low fixed charge regulations.
- Variable distribution and transmission line services are charged by way of a uniform consumption charge within each pricing region. KE variable charges are set to equal MP variable charges net of rebates. Wigram variable charges are set to recover costs associated with this region.

This structure is adopted to set a baseline tariff for the majority of consumers. A number of exceptions to these general pricing rules are made to recognise specific costs attributes or consumer profiles as well as to encourage specific usage behaviours:

- The Residential Night Special variable charge is calculated for each pricing region at approximately 85% of the Residential Controlled Supply variable distribution charge and approximately 10% of the Residential Controlled Supply transmission charge. These discounted prices are set to provide an incentive for consumers to shift load to the off peak night period between 9.30pm to 7.30am, thereby reducing utilisation of available service capacity during the day.
- The total variable charge for the Residential Uncontrolled Supply - Low User Option is calculated at approximately 125% of the Residential Controlled Supply total variable charge. The Residential Uncontrolled Supply fixed distribution charge has also been determined at 60 cents per day. These higher charges incentivise consumers to shift to the Residential Controlled Supply tariff option and offer controllable load.
- The fixed distribution charge for Non-Residential General Supply and Large User tariff options has been determined at 50 cents per day. This takes into account the higher costs associated with connection assets for these consumers and the lower weighted average load factor of this consumer group.
- Revenue collected from all consumer groups by way of fixed distribution charges is limited to 10% of the total fixed and variable distribution revenue. Actual percentages will vary year on year and between consumer groups as a result of changes in load factor and other load characteristics.
- The variable distribution charge applicable to Temporary Supply tariffs is maintained at approximately the same rate as the Residential Uncontrolled Supply - Low User Option variable distribution charge. A fixed charge of \$1.00 per day also applies. This structure recognises the additional costs we face in managing temporary supply connections and appropriately incentivises consumers to shift to a standard tariff option.
- The fixed charge applicable to Irrigation consumers is 2 cents per day per kW of motor size connected (i.e. 50 cents per day for a motor size of 25 kilowatts) in recognition of capacity related costs.

- No fixed daily charge is applicable to Street Lighting, Right-of-Way Lighting or Under Veranda Lighting tariff options. Costs are recovered through a variable charge.
- The variable distribution charge applicable to General Supply consumers within the MP pricing region is discounted on a sliding scale basis where consumption exceeds 500,000 kWhs per annum. For consumption between 500,000 kWhs per annum and 1,000,000 kWhs a discount of between 6.965 cents per kWh to 1.613 cents per kWh is applied on a straight line basis. A discount of 1.613 cents per kWh applies for all consumption above 1,000,000 kWhs.
- The variable distribution line service charge applicable to General Supply consumers within the KE pricing region where consumption exceeds 500,000 kWhs per annum, is also discounted on a sliding scale basis. For consumption between 500,000 kWhs per annum and 1,000,000 kWhs a discount of between 3.610 cents per kWh to 1.532 cents per kWh is applied on a straight line basis. A discount of 1.532 cents per kWh applies for all consumption above 1,000,000 kWhs.

### **Non-Standard Pricing**

Only 1 non-standard consumer is connected to our distribution network. The consumer is situated close to a Transpower GXP and takes direct supply from the grid through MainPower's connection assets and equipment.

Prices are set for this consumer to recover the actual costs we incur as follows:

- Transmission charges are passed on directly to the consumer as billed by Transpower. This is possible as the consumer is the only significant connection at the GXP they are connected to. Transmission charges account for 86% of lines charges, given their limited usage of distribution assets.
- Distribution asset and equipment costs deployed at the connection (which have not already been recovered through capital contributions) are recovered fully through prices. This includes depreciation and a return on investment.
- Operations and Maintenance costs incurred in relation to the connection are directly recovered each year in prices.
- Administration costs are recovered based on actual costs incurred.

Distribution costs are recouped through a daily fixed distribution charge. Transmission charges are recouped on the same basis that Transpower bills MainPower (although this is expressed on a cents per kWh basis in our pricing schedule).

Prices have been determined on this basis to discourage uneconomic bypass to the transmission grid. The fixed price seeks to minimise price volatility for both parties. Target revenues expected to be recovered from non-standard prices are detailed in Appendix D.

Our obligations and responsibilities in the event of an interruption to this consumer are no different to that of other large standard consumers connected to our network. The consumer does have a higher level of circuit redundancy built into their connection that could result in quicker restoration times but the obligations and responsibilities to restore supply are no different. This level of redundancy is reflected in prices through the higher associated cost of the connection assets and equipment.

We will consider all requests for non-standard contracts on application based on the commercial merits of the proposal. Criteria by which we typically might decide to enter into a non-standard contract include:

- the consumer is at risk of bypassing the network to an alternative network or energy source
- the consumer has requested a non-standard connection or specialist equipment which cannot be accommodated into our standard pricing structures or capital contributions policy
- the consumer requests non-standard pricing structures to mitigate risk which might otherwise impair their decision to connect to the network.

### **Distributed Generation Pricing**

There are a limited number of small scale distributed generators connected to our network. These generation units are less than 10kW, generally under 2kW, and are typically associated with an existing ICP (i.e. photovoltaic solar panels supplementing distributed electricity supply). These connections rarely export electricity into the network.

We do not charge for small scale distributed generation connected to the network or make payments in regards to avoided costs. This decision reflects the following considerations:

- the low number of connections of this type
- the low cost to connect small scale distributed generation to the network
- the low volumes of electricity exported to the network from these connections
- the avoided costs (both in relation to transmission and distribution costs) which are associated with the reduced peak demand these generation units provide.

While we do not typically incur costs associated with the physical connection of small scale distributed generation, where we do, these costs will be met via contributions consistent with our capital contributions policy.

We have had a several enquiries in regards to the connection of larger scale distributed generation and are also considering our own investments in an embedded wind farm near Mt Cass. Despite this, discussions have not progressed to a stage where distribution charges have been discussed. We plan to develop a distributed generation pricing methodology for large scale generation as required.

### **Consumer Expectations on Price and Quality**

We consult with our customers on an annual basis to gauge their general level of satisfaction with the distribution services we provide as well as on price and quality expectations.

More recently, we have engaged SIL Research to undertake a comprehensive consumer survey in support of this. 605 consumers were surveyed during the period September- October. This included a representative sample of residential, commercial and large use consumers. The research showed very high levels of satisfaction across all consumer groups in terms of both reliability and quality of supply. The survey also confirmed high levels of consumer service. 86% of all consumers surveyed were satisfied with the quality of their supply and 84% of consumers stated that they would definitely not be willing to accept poorer levels of power quality and reliability in exchange for a lower price or discount. 82% stated that any increase in price would be too much when asked as to their willingness to pay for increased power quality. A further 16% stated that they would be willing to pay an extra \$50 per year.

The survey results confirm a high level of satisfaction with respect to quality, reliability and price. We therefore conclude that no adjustments to the current balance of prices and quality are necessary.



MainPower will continue to undertake these surveys. During 2014/15, survey questions will focus on consumer acceptance of changes resulting from our pricing review, including in relation to their price-quality expectations.

## APPENDIX A: ELECTRICITY AUTHORITY PRICING PRINCIPLES

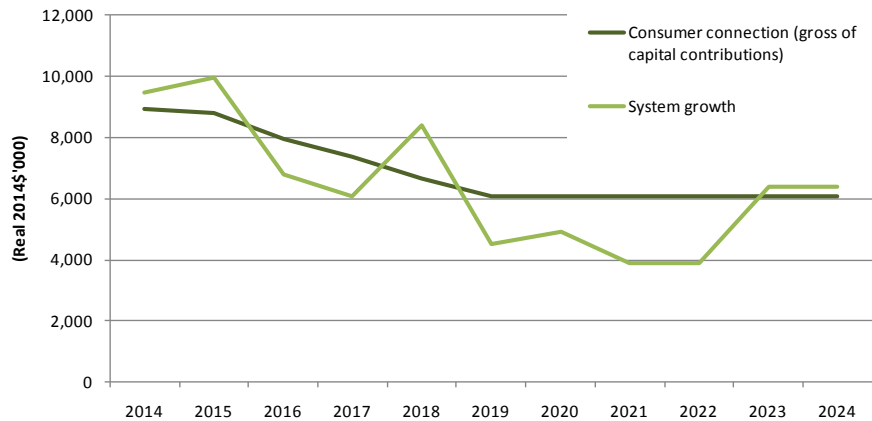
This appendix describes the extent to which our pricing methodology is consistent with the EA's pricing principles, pursuant to section 2.4.3(2) of the IDD.

We have reviewed our pricing methodology against the pricing principles and are of the view that our pricing methodology is broadly consistent with the principles. We also signal how alignment with the principles may be refined and improved following our pricing review.

Pricing Principle	Extent of consistency
(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;	<p>The incremental costs of connecting an additional consumer to the network include the costs of connection assets specific to the consumer, incremental operating and maintenance costs, and upstream reinforcement costs required to accommodate the additional connection.</p> <p>MainPower's 'Network Extensions and Upgrades and Capital Contributions Policy' is the primary mechanism by which we ensure that prices recover incremental capital cost. We seek capital contributions for new connections and asset upgrades when the expected distribution revenue from a connection is less than the incremental capital costs (including a share of any upfront or future network augmentation costs). Distribution prices will therefore be in excess of incremental capital costs. A copy of this policy can be found on our website at:</p> <p><a href="http://www.mainpower.co.nz/index.cfm/3,515,655/enp010_network-ext-upgradespolicy010313.pdf">http://www.mainpower.co.nz/index.cfm/3,515,655/enp010_network-ext-upgradespolicy010313.pdf</a></p> <p>The remaining incremental operational expenditure is recovered in distribution prices. Simple regression analysis shows us that over the last 10 years new connections have on average increased operating costs by \$268 per annum (real \$2013), across all connection sizes. This estimate is likely to overstate incremental costs as it includes non-consumer related cost increases, such as recent regulatory and safety compliance costs. Our fixed charge will recover a proportion of these costs regardless of the level of consumption (\$54 per annum in the case of controlled residential, and \$182 per annum for non-residential). This will likely recover incremental costs for smaller connection sizes, which would usually contribute less towards operational costs. Revenue received from variable charges, which broadly increases proportional to the size of the connection and associated costs, will in most cases recover remaining incremental costs. For example, a consumer on the Residential Controlled Supply tariff would only need to use 2,294kWh per annum to recoup the average incremental cost identified above. This also highlights that cross-subsidies may exist at very low levels of usage due to the application of the low fixed charge regulations.</p> <p>Prices are also likely to be less than stand alone cost. We understand stand alone cost to mean the cost to the consumer of bypassing the network with alternative supply arrangements (e.g. connection to the grid through its own distribution assets, or alternative fuel or generation sources). For most mass market consumers the costs of moving "off-grid" to a standalone energy solution is currently priced at a</p>

	<p>premium to distributed electricity supply. This is because the large economies of scale associated with network investments mean distribution networks currently remain competitive on price. Large consumers are likely to be better placed to bypass the network at a lower overall stand alone cost. As an example, our largest connection is on a non-standard contract to discourage bypass of our network to the transmission grid. The non-standard arrangements ensure it is economic for this consumer to remain connected to the network by pricing below the stand alone cost of connecting directly to the grid.</p> <p>We are looking to estimate stand alone costs for different pricing regions and consumer groups as part of our cost of supply modelling project. These will hopefully be provided in our next pricing methodology.</p>
<p>(ii) having regard, to the extent practicable, to the level of available service capacity; and</p>	<p>The primary service distributors provide is access to capacity. This principle sets out that distributors should recognise this primary driver in setting prices and pricing structures.</p> <p>The recent Canterbury earthquakes triggered a significant population shift north from the city of Christchurch to the surrounding areas of Rangiora and Kaiapoi. In 2013 alone, the number of connections on our network increased by 6%. In addition, irrigation demand is also rising as a result of numerous dairy farm conversions. This growth is putting pressure on available network capacity across our network. For instance, our peak load in 2013 was 99MVA, compared to installed zone substation capacity of 118MVA. Signalling available service capacity in our prices is therefore important and a significant focus of our pricing review.</p> <p>We currently do not explicitly define consumer groups by the level of available service capacity. However, the distinction made between low users, residential, non-residential, and large users does proxy different consumer capacity profiles.</p> <p>Similarly, Residential Controlled and Night Special tariff options are designed to incentivise behaviours that reduce demand at the peak or during fault events. This reduces the pressure on available service capacity as well as defers investments in new capacity.</p> <p>The Irrigation tariff is priced based on the installed kW capacity of irrigation motors and is designed to signal limited capacity in the high voltage distribution system. We are continuing to upgrade our 11kV circuits to 22kV to support the substantial growth in irrigation demand. This tariff option, as well as capital contributions sought from irrigators, signals that upstream capacity is limited.</p> <p>One area being investigated as part of our pricing review that might improve alignment with this principle is the potential introduction of consumer groups defined by load characteristics. As discussed above, we are investigating a small and large load group aligned to the typical load profiles of consumers connected to our network.</p>
<p>(iii) signalling, to the extent practicable, the impact of additional usage on future investment costs.</p>	<p>This principle asserts that behaviour which creates additional investment costs for distributors should be recognised in pricing, and that costs should accordingly be recouped from those consumers that create them. The key drivers of future network investment costs relates to new connections and system capacity growth. Over the next 5 years capex is expected to remain high before reducing to more normal levels (see graph below). These investments stem mainly from growth in the residential population and use of irrigation.</p>

### Forecast Growth Related Capex (2014-2024)



We ensure we recoup incremental connection and upstream reinforcement costs through our capital contributions policy, as discussed above.

The use of a consumption based variable charge is another pricing approach which recognises additional usage of capacity. While kWh consumption is only a proxy for capacity utilisation, it provides a strong signal that additional usage of the network creates additional costs overtime. As part of our review, we are considering the merits of peak time pricing, particularly for the large load group. This may align pricing more closely with this principle. Large consumers typically have time of use meters making it practical to charge on peak usage. By contrast, it is impractical to price the mass market other than on consumption given the current fleet of non time-of-use meters. Mass market pricing more closely aligned with peak capacity usage may be investigated as new smart meters are deployed on our network.

The Residential Night Special tariff option provides incentives for consumers who take up this option to shift their demand to the off-peak night period. The Residential Controlled Tariff signal provides incentives to consumers that offer up interruptible load which can be used to manage faults and reduce peak demand. In combination, these tariff options appropriately signal the impact of additional usage on investment costs.

As discussed above, the Irrigation tariff signals capacity constraints on the 11kV network attributable to this fast growing consumer group by levying a higher fixed daily charge on relatively larger irrigation motors.

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

This principle sets out the economic principle of "Ramsey Pricing". This principle asserts it is economically efficient to charge more to those consumers that have a higher willingness to pay and less to those with a lower willingness to pay.

As a practical example, this principle suggests that a business that must operate or face significant shutdown costs would pay relatively more than a consumer who is willing to have their supply interrupted. This is considered economically efficient as those consumers that demand a service the most, pay the most. In competitive markets, consumers that pay more will typically demand a higher level of service.

In practice, it is difficult to apply willingness to pay considerations explicitly given the difficulty in measuring consumer demand responsiveness. However, our recent consumer surveys confirm that over 80% of consumers would not be willing to pay more for a higher quality of supply. Only 17% of consumers would be willing to pay more for higher quality of service. This suggests, in general, a low willingness to pay

	<p>for higher value services.</p> <p>We consider the willingness to pay principle can be practically applied by allowing consumers to self-select tariffs that balance their willingness to pay with the quality of supply they receive. For instance, the Residential Uncontrolled Tariff option is priced higher recognising a higher willingness to pay for consumers that do not want their hot-water load interrupted. Similarly, the Residential Night Special tariff is targeted to consumers who are willing to limit their demand at the peak in preference for a lower off peak charge. Our non-standard pricing also partially recognises willingness to pay considerations by consumers that are readily able to bypass the network.</p>
(c) Provided that prices satisfy (a) above, prices should be responsive to the requirements and circumstances of stakeholders in order to:	This suggests Principle A takes priority over these considerations.
(i) discourage uneconomic bypass;	<p>This allows for a discount on price or other incentives being offered to consumers at risk of bypassing our network. As discussed above, bypass options are likely to be more applicable to larger consumers that have options over where they locate their business or which have access to alternative energy supply (e.g. gas, generation, the transmission grid).</p> <p>We have one consumer that is directly supplied from Transpower's national grid, using MainPower's equipment. This consumer could readily bypass the distribution network in favour of a direct connection to the grid. To recognise this risk, we have entered into a non-standard contract with this consumer and prices are set with reference to the actual (or incremental cost) of offering these services. This discourages uneconomic bypass to the transmission grid.</p>
(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	<p>This principle allows for negotiation over price in recognition of different levels of service (e.g. redundancy) or non-standard arrangements (greater fixed charge component to reduce risk).</p> <p>As discussed above, MainPower has one non-standard contract and is willing to negotiate on price and quality outcomes and non-standard arrangements with other consumers where necessary. In addition to incremental cost pricing, a flat fixed charge is applied which reduces price variability for this consumer.</p> <p>Price and quality trade-offs are also sometimes addressed as part of our capital contributions policy. For instance, if a consumer requires specialist equipment or connection redundancy then a contribution is typically sought from the consumer to recover costs associated with this investment.</p>
(iii) where network economics warrant, and to the extent practicable, encourage investment in transmission and distribution alternatives (eg distributed generation or demand response) and technology innovation.	<p>This principle seeks to encourage the development of distributed generation, load control, and technological innovation.</p> <p>We do not levy annual charges on the connection of small scale distributed generation to the network. This provides appropriate incentives for consumers to invest in distributed generation as they do not face any additional distribution costs beyond that related to their standard ICP connection. Furthermore, distributed generation will usually lower a consumer's variable distribution charge resulting in lower annual charges. This further provides incentives to invest in this technology.</p> <p>Where there are upfront costs in relation to connecting distributed generation, which</p>

	<p>is unlikely, this will be dealt with as part of our capital contributions policy.</p> <p>Currently there is no large scale distributed generation connected to our network, although we are considering our own distributed generation investments at Mt Cass. We will develop a pricing methodology for this type of distributed generation as required.</p> <p>Demand response measures are encouraged through the use of our Residential Controlled and Residential Night Special tariff options, which are priced attractively to incentivise consumers to offer up interruptible load or reduce their demand at the day time peak, respectively.</p>
<p>(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.</p>	<p>This principle requires distributors to consider the impact of pricing structure changes on consumers (e.g. to be cognisant of price shock).</p> <p>MainPower's pricing structures have not changed materially since 2001, resulting in a stable pricing framework over the last decade. As part of our current review of pricing, we will consider the need to transition consumers to new tariffs over time to avoid price shock.</p> <p>The principle also requires the development of prices to be transparent. We consider that the information provided in this pricing methodology provides appropriate explanations of how we have set prices and the rationale for doing so.</p>
<p>(e) Development of prices should have regard to the impact of transaction costs on retailers, consumers and other stakeholders and should be economically equivalent across retailers.</p>	<p>This principle was added by the EA out of concern that some distribution tariff structures were overly complex, creating transaction costs for retailers and consumers. It also sought to minimise the potential for prices to be structured in a way which might favour certain retailers over others, the objective of this being to enhance retail competition on distribution networks.</p> <p>MainPower has a conveyance form of contractual relationship with our consumers. We directly bill consumers through our contractual arrangements with the retailer, but retailers are not charged directly. This reduces transaction costs for retailers as retailers do not need to rebundle tariffs to align with their own pricing.</p> <p>Our current prices are not overly complex, align with industry standard pricing, and do not favour one retailer over another.</p>

## APPENDIX B: DIRECTORS CERTIFICATION



**MainPower New Zealand Limited**  
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www.mainpower.co.nz

### CERTIFICATE FOR YEAR-BEGINNING DISCLOSURE Pursuant to Clause 2.9.1 of section 2.9

We, WYNTON GILL COX and ALLAN BERGE, being Directors of MainPower New Zealand Limited, certify that, having made all reasonable enquiry, to the best of our knowledge:

- a) The following attached information of MainPower New Zealand Limited prepared for the purposes of clause 2.4.1 of the Electricity Information Disclosure Determination 2012 in all material respects complies with that determination; and
- 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.

Wynton Gill Cox

1 April 2014

Allan Berge

1 April 2014



## APPENDIX C: REGULATORY COMPLIANCE CHECKLIST

IDD Clause	Disclosure Requirement	Pricing Methodology Reference
2.4.1	Every EDB must publicly disclose, before the start of each disclosure year, a pricing methodology which-	This Pricing Methodology will be published on our website prior to 1 April 2014.
2.4.1(1)	Describes the methodology, in accordance with clause 2.4.3 below, used to calculate the prices payable or to be payable;	See below for document references to compliance against clause 2.4.3.
2.4.1(2)	Describes any changes in prices and target revenues;	Prices have increased to recover a 5.7% increase in costs.  Changes in target revenues are described in Section 3, pages 8-9 under the heading 'Target Revenue' and in Figure 2. The component costs of target revenue have changed to reflect revised budgets.
2.4.1(3)	Explains, in accordance with clause 2.4.5 below, the approach taken with respect to pricing in non-standard contracts and distributed generation (if any);	See below for document references to compliance against clause 2.4.5.
2.4.1(4)	Explains whether, and if so how, the EDB has sought the views of consumers, including their expectations in terms of price and quality, and reflected those views in calculating the prices payable or to be payable. If the EDB has not sought the views of consumers, the reasons for not doing so must be disclosed.	The details of our previous consultation with consumers on their price and quality expectations is discussed in section 3, pages 15-16 under the heading 'Consumer Expectations on Price and Quality.'
2.4.2	Any change in the pricing methodology or adoption of a different pricing methodology, must be publicly disclosed at least 20 working days before prices determined in accordance with the change or the different pricing methodology take effect.	Not applicable. We have not changed our pricing methodology. This document has been updated from our 2013 pricing methodology incorporating changes to reflect feedback from the EA's review of our pricing methodology. Prices have increased to reflect our new target revenue requirement based on the existing pricing methodology.
2.4.3	Every disclosure under clause 2.4.1 above must-	



2.4.3(1)	Include sufficient information and commentary to enable interested persons to understand how prices were set for each consumer group, including the assumptions and statistics used to determine prices for each consumer group;	<p>We consider this document provides information on how prices have been set.</p> <p>A glossary is provided in section 1 of terms commonly used in this document. Section 2 provides relevant context to our pricing decisions and signals potential outcomes of our current pricing review. Section 3 sets out the key inputs, assumptions, considerations and decisions made in respect of our pricing, consistent with the IDD disclosure requirements. Appendix A details the extent to which our pricing methodology is consistent with the EA's pricing principles. Appendix C summarises where in the document we have shown compliance with the pricing regulations. Appendix D details final tariffs, consumer statistics and target revenue information.</p>
2.4.3(2)	Demonstrate the extent to which the pricing methodology is consistent with the pricing principles and explain the reasons for any inconsistency between the pricing methodology and the pricing principles;	<p>See Appendix A.</p> <p>We consider that our pricing is consistent with the pricing principles. We also discuss how potential changes to our pricing, signalled as part of our pricing review, may align more closely with these principles.</p>
2.4.3(3)	State the target revenue expected to be collected for the disclosure year to which the pricing methodology applies;	See Section 3, Figure 2 on page 8 and Appendix D. Figure 1 compares this year's target revenue to our previous year's target revenue by cost component. Appendix D details the breakdown of target revenue by tariff and cost component.
2.4.3(4)	Where applicable, identify the key components of target revenue required to cover the costs and return on investment associated with the EDB's provision of electricity lines services. Disclosure must include the numerical value of each of the components;	See section 3, page 8-9 under the heading 'Target Revenue'. Figure 2 on page 8 and Appendix D provides numerical values for each cost component.
2.4.3(5)	<p>State the consumer groups for whom prices have been set, and describe-</p> <p>a) the rationale for grouping consumers in this way;</p>	See Section 3, page 9 – 13 under the heading 'Consumer Groups'.

	b) the method and the criteria used by the EDB to allocate consumers to each of the consumer groups;	
2.4.3(6)	If prices have changed from prices disclosed for the immediately preceding disclosure year, explain the reasons for changes, and quantify the difference in respect of each of those reasons;	See Section 3.
2.4.3(7)	Where applicable, describe the method used by the EDB to allocate the target revenue among consumer groups, including the numerical values of the target revenue allocated to each consumer group, and the rationale for allocating it in this way;	See Section 3, page 12 under the heading 'Allocation of Costs to Consumer Groups'. Costs are directly attributed to consumer groups and tariffs where possible. Shared costs are allocated using appropriate cost allocators reflective of key network drivers.  Appendix D provides the numerical values of target revenue allocated to each consumer group.
2.4.3(8)	State the proportion of target revenue (if applicable) that is collected through each price component as publicly disclosed under clause 2.4.18.	Appendix D details the proportion of target revenue to be collected from each consumer group consistent with how tariffs are published in our pricing schedules.
2.4.4	Every disclosure under clause 2.4.1 above must, if the EDB has a pricing strategy-	
2.4.4(1)	Explain the pricing strategy for the next 5 disclosure years (or as close to 5 years as the pricing strategy allows), including the current disclosure year for which prices are set;	Our pricing strategy is discussed in section 2, page 3-6 under the heading 'Pricing Review and Pricing Strategy'. This strategy is subject to the outcomes of our review.
2.4.4(2)	Explain how and why prices for each consumer group are expected to change as a result of the pricing strategy;	See Section 2, Figure 1 under the heading 'Pricing Review and Pricing Strategy'. We are unable to describe how prices will change as a result of applying our pricing strategy as the details of our pricing review have yet to be finalised.  We plan to consult extensively with consumers, retailers, and other affected parties to gain feedback on any proposed changes later this year. As part of this, we will provide information on how different

		consumer groups will be affected.
2.4.4(3)	If the pricing strategy has changed from the preceding disclosure year, identify the changes and explain the reasons for the changes.	See Section 2, page 3 under the heading 'Pricing Review and Pricing Strategy'. This pricing strategy is unchanged from last year. Our current strategy may also change pending the outcomes of our pricing review.
2.4.5	Every disclosure under clause 2.4.1 above must-	
2.4.5(1)(a) and (b)	Describe the approach to setting prices for non-standard contracts, including- <ul style="list-style-type: none"> <li>a) the extent of non-standard contract use, including the number of ICPs represented by non-standard contracts and the value of target revenue expected to be collected from consumers subject to non-standard contracts;</li> <li>b) how the EDB determines whether to use a non-standard contract, including any criteria used;</li> <li>c) any specific criteria or methodology used for determining prices for consumers subject to non-standard contracts and the extent to which these criteria or that methodology are consistent with the pricing principles;</li> </ul>	See Section 3, pages 14-15 under the heading 'Non-Standard Pricing'.  We seek to recover actual costs incurred from this consumer, reflective of the incremental costs of the assets and costs to operate and maintain the connection.  See Appendix A for a discussion of the extent to which our non-standard pricing aligns with the pricing principles. Prices are greater than incremental costs associated with the consumer and are priced to discourage bypass to the transmission grid.
2.4.5(2)	Describe the EDB's obligations and responsibilities (if any) to consumers subject to non-standard contracts in the event that the supply of electricity lines services to the consumer is interrupted. This description must explain- <ul style="list-style-type: none"> <li>a) the extent of the differences in the relevant terms between standard contracts and non-standard contracts;</li> <li>b) any implications of this approach for determining prices for consumers subject to non-standard contracts;</li> </ul>	See Section 3, pages 14-15 under the heading 'Non-Standard Pricing'.  Our obligations and responsibilities in the event of an interruption to supply are no different to that of any other standard large user. However, our sole non-standard consumer does have a higher level of circuit redundancy which might result in quicker restorations time. This is reflected in charges through the higher value of assets associated with these circuits.
2.4.5(3)	Describe the EDB's approach to developing prices for electricity distribution services provided to consumers that own distributed generation, including any payments made by the EDB to the	See Section 3, page 15 under the heading 'Distributed Generation Pricing'. We do not currently charge for distributed generation

	<p>owner of any distributed generation, and including the-</p> <p>(a) prices; and</p> <p>(b) value, structure and rationale for any payments to the owner of the distributed generation.</p>	<p>connections. Physical connections costs are usually immaterial and are dealt with under our normal capital contributions policy.</p> <p>We do not make payments to distributed generation connections. Avoided costs are recognised in our decision not to charge distributed generators for conveyance of electricity.</p>
2.9.1	<p>Where an EDB is required to publicly disclose any information under clause 2.4.1, clause 2.6.1 and subclauses 2.6.3(4) and 2.6.5(3), the EDB must at that time publicly disclose a certificate in the form set out in Schedule 17 in respect of that information, duly signed by 2 directors of the EDB.</p>	<p>See Appendix B for Directors Certification</p>

# APPENDIX D: KEY TARIFF, CONSUMER STATISTICS AND TARGET REVENUE

## MainPower New Zealand Limited

Line Service Charges and Revenue Exclude GST and Prompt Payment Discounts

Appendix D

Customer Groupings and Categories	Line Services Charging Schedule at 1 April 2014								Pricing History at 1 April 2014				Customer Statistics 2014-2015				Revenue Requirement 2014-2015					Line Business Operating Costs (Targeted Revenue) 2014-2015					Return (Targeted)		Return (Maximum)							
	Distribution		Transmission		Total		Date Introduced		Previous Charge		Customer Numbers	Installed Capacity	kWhs Delivered	Chargeable Demand	Distribution		Trans Variable	Total Lines	Other Revenue*	Total Revenue	Trans Costs	Operational Expenditure		Depreciation	Taxation*	Total Costs	Surplus After Tax	Return on Assets	Return at WACC	WACC						
	Fixed Charge	Variable Charge	Variable	Variable	Fixed	Variable	Fixed	Variable	Fixed	Variable					Fixed	Variable						Fixed	Variable								Admin & O/Hs	Ops & Mtce				
	Code	cents/day	Code	c/kWh	Code	c/kWh	Code	c/kWh	Date	Date	cents/day	c/kWh	Nos	kVA	kWhs	kWs	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	%	\$	%							
<b>MainPower Region ICPs - MP Consumer Group</b>																																				
<b>Net Equity 2013-2014 \$251,119,627</b>																																				
<b>General Supply</b>																																				
<b>General Supply Fixed Charge - cents per Day</b>																																				
Residential Controlled Supply	101	0	15,000	101	1	6,965	101	5	2,333	101	9	9,298	01-Sep-01	01-Mar-12	15,000	8,849	25,939																			
Residential Controlled Supply Low User Option	111	0	15,000	111	1	6,965	111	5	2,333	111	9	9,298	01-Oct-04	01-Mar-12	15,000	8,849	0																			
Residential Uncontrolled Supply	102	0	60,000	102	1	6,965	102	5	2,333	102	9	9,298	01-Sep-01	01-Mar-12	60,000	8,849	950																			
Residential Night Special Low User Option	113	0	0.000	113	1	6,965	113	5	2,333	113	9	9,298	01-Oct-04	01-Mar-12	0.000	8,849	0																			
Non Residential - General supply	121	0	50,000	121	1	6,965	121	5	2,333	121	9	9,298	01-Sep-01	01-Mar-12	50,000	8,849	5,095																			
Irrigation kW Connected Charge (47,500 kW)	124	0	2,000	124	1	6,965	124	5	2,333	124	9	9,298	01-Sep-01	01-Mar-12	2,000	8,849	1,075																			
Council Pumping	125	0	15,000	125	1	6,965	125	5	2,333	125	9	9,298	01-Sep-01	01-Mar-12	15,000	8,849	180																			
Street Lighting	126	0	0.000	126	1	6,965	126	5	2,333	126	9	9,298	01-Sep-01	01-Mar-12	0.000	8,849	175																			
Right of Way Lighting	127	0	0.000	127	1	6,965	127	5	2,333	127	9	9,298	01-Sep-01	01-Mar-12	0.000	8,849	50																			
Under Verandah Lighting	128	0	0.000	128	1	6,965	128	5	2,333	128	9	9,298	01-Sep-01	01-Mar-12	0.000	8,849	30																			
Large User Group	130	0	50,000	130	1	6,965	130	5	2,333	130	9	9,298	01-Sep-01	01-Mar-12	50,000	8,849	21																			
<b>General Supply Variable Charge - cents per kWh</b>																																				
Variable Charge - all Units						6,965		2,333				9,298	01-Sep-01	01-Mar-12	NA	8,849																				
Variable Charge - Volume Discount																																				
<b>Total General Supply</b>													<b>33,515</b>	<b>449,524,569</b>			<b>2,918,557</b>	<b>30,272,641</b>	<b>10,487,408</b>	<b>43,678,606</b>																
<b>Other Supply Fixed and Variable Charge</b>																																				
Residential Night Special	103	0	15,000	103	1	5,552	103	5	0,233	103	9	5,785	01-Oct-04	01-Mar-12	15,000	5,364	1,940																			
Residential Night Special - Low User Option	113	0	0.000	113	1	6,189	113	5	2,333	113	9	8,522	01-Sep-01	01-Mar-12	0.000	8,101	0																			
Residential Uncontrolled Supply Low User Option	112	0	15,000	112	1	9,294	112	5	2,333	112	9	11,627	01-Sep-01	01-Mar-12	15,000	11,063	600																			
Temporary Supply	122	0	100,000	122	1	9,153	122	5	2,333	122	9	11,486	01-Feb-10	01-Mar-12	100,000	10,928	210																			
<b>Total MainPower Region Consumer Group</b>													<b>34,325</b>	<b>451.5</b>	<b>456,489,569</b>	<b>74,079</b>	<b>3,134,272</b>	<b>30,707,285</b>	<b>10,541,752</b>	<b>44,383,309</b>	<b>8,125,616</b>	<b>52,508,925</b>	<b>10,542,153</b>	<b>7,578,812</b>	<b>4,496,009</b>	<b>10,574,407</b>	<b>4,871,871</b>	<b>38,063,252</b>	<b>14,445,673</b>	<b>5.75</b>	<b>17,327,254</b>	<b>6.90</b>				
Other Revenue = Customer Capital Contributions \$5,274,600 Sundry \$2,851,016 * Includes both Actual and Notional Taxation																																				
<b>MainPower ICPs - Direct Supply</b>																																				
<b>Net Equity 2013-2014 \$1,420,100</b>																																				
<b>Total Direct Supply Consumer Group</b>	140	0	60,625	140	1	0,000	140	5	1,975	140	9	1,975	01-Sep-01	01-Apr-13	01-Sep-01	1,694	1	6.5	67,500,000	6,433	221,280	0	1,327,512	1,548,792	0	1,548,792	1,327,512	45,000	71,771	59,799	11,276	1,515,358	33,434	2.35	97,987	6.90
<b>Kaipoi Region ICPs - KE Consumer Group</b>																																				
<b>Net Equity 2013-2014 \$6,723,451</b>																																				
<b>General Supply</b>																																				
<b>General Supply Fixed Charge - cents per Day</b>																																				
Residential Controlled Supply	201	0	15,000	201	1	3,610	201	5	3,783	201	3	7,393	01-Nov-05	01-Mar-12	15,000	6,944	1,600																			
Residential Controlled Supply Low User Option	211	0	15,000	211	1	3,610	211	5	3,783	211	3	7,393	01-Nov-05	01-Mar-12	15,000	6,944	0																			
Residential Uncontrolled Supply	202	0	60,000	202	1	3,610	202	5	3,783	202	3	7,393	01-Nov-05	01-Mar-12	60,000	6,944	8																			
Residential Night Special Low User Option	213	0	0.000	213	1	3,610	213	5	3,783	213	3	7,393	01-Nov-05	01-Mar-12	0.000	6,944	0																			
Non Residential - General supply	221	0	50,000	221	1	3,610	221	5	3,783	221	3	7,393	01-Nov-05	01-Mar-12	50,000	6,944	194																			
Council Pumping	225	0	15,000	225	1	3,610	225	5	3,783	225	3	7,393	01-Nov-05	01-Mar-12	15,000	6,944	16																			
Street Lighting	226	0	0.000	226	1	3,610	226	5	3,783	226	3	7,393	01-Nov-05	01-Mar-12	0.000	6,944	5																			
Right of Way Lighting	227	0	0.000	227	1	3,610	227	5	3,783	227	3	7,393	01-Nov-05	01-Mar-12	0.000	6,944	20																			
Under Verandah Lighting	228	0	0.000	228	1	3,610	228	5	3,783	228	3	7,393	01-Nov-05	01-Mar-12	0.000	6,944	56																			
Large User Group	230	0	50,000	230	1	3,610	230	5	3,783	230	3	7,393	01-Nov-05	01-Mar-12	50,000	6,944	6																			
<b>General Supply Variable Charge - cents per kWh</b>																																				
Variable Charge - all Units						3,610		3,783				7,393	01-Nov-05	01-Mar-12	6,944																					
Variable Charge - Volume Discount																																				
<b>Total General Supply</b>													<b>1,905</b>	<b>26,430,875</b>			<b>126,737</b>	<b>860,057</b>	<b>999,880</b>	<b>1,986,674</b>																
<b>Other Supply Fixed and Variable Charge</b>																																				
Residential Night Special	203	0	15,000	203	1	3,502	203	5	0,378	203	3	3,880	01-Nov-05	01-Mar-12	15,000	3,459	150																			
Residential Night Special - Low User Option	213	0	0.000	213	1	2,834	213	5	3,783	213	3	6,617	01-Nov-05	01-Mar-12	0.000	6,196	0																			
Residential Uncontrolled Supply Low User Option	212	0	15,000	212	1	5,939	212	5	3,783	212	3	9,722	01-Nov-05	01-Mar-12	15,000	9,158	0																			
Temporary Supply	222	0	100,000	222	1	9,153	222	5	2,333	222	3	11,486	01-Feb-10	01-Mar-12	100,000	10,928	5																			
<b>Total Kaipoi Region Consumer Group</b>													<b>1,910</b>	<b>19.7</b>	<b>26,810,625</b>	<b>6,391</b>	<b>136,829</b>	<b>874,232</b>	<b>1,003,770</b>	<b>2,014,831</b>	<b>62,032</b>	<b>2,076,863</b>	<b>1,003,196</b>	<b>445,120</b>	<b>149,893</b>	<b>283,118</b>	<b>49,314</b>	<b>1,930,641</b>	<b>146,222</b>	<b>2.17</b>	<b>463,918</b>	<b>6.90</b>				

Wigram Region ICPS - WIG Consumer Group																																		
Net Equity 2013-2014 \$1,403,688																																		
	Code	cents/day	Code	c/kWh	Code	c/kWh	Code	c/kWh	Date	Date	cents/day	c/kWh	Nos	kVA	kWhs	kWs	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	%	\$	%					
<b>General Supply</b>																																		
<b>General Supply Fixed Charge - cents per Day</b>																																		
Residential Controlled Supply	301	0	15.000	301	1	3.788	301	5	5.228	301	3	9.016	01-Sep-01	01-Mar-12	15.000	8.261	244																	
Residential Controlled Supply Low User Option	311	0	15.000	311	1	3.788	311	5	5.228	311	3	9.016	01-Oct-04	01-Mar-12	15.000	8.261																		
Residential Uncontrolled Supply	302	0	60.000	302	1	3.788	302	5	5.228	302	3	9.016	01-Sep-01	01-Mar-12	60.000	8.261	3																	
Residential Night Special Low User Option	313	0	15.000	313	1	3.788	313	5	5.228	313	3	9.016	01-Oct-04	01-Mar-12	15.000	8.261	0																	
Non Residential - General supply	321	0	50.000	321	1	3.788	321	5	5.228	321	3	9.016	01-Sep-01	01-Mar-12	50.000	8.261	20																	
Street Lighting	326	0	0.000	326	1	3.788	326	5	5.228	326	3	9.016	01-Sep-01	01-Mar-12	0.000	8.261	3																	
<b>General Supply Variable Charge - cents per kWh</b>																																		
Variable Charge - all Units						3.788			5.228			9.016	01-Sep-01	01-Mar-12		8.261																		
Variable Charge - Volume Discount																																		
<b>Total General Supply</b>																																		
<b>Other Supply Fixed and Variable Charge</b>																																		
Residential Night Special	303	0	20.000	303	1	4.266	303	5	0.522	303	3	4.788	01-Nov-01	01-Mar-12	20.000	4.233	10																	
Residential Night Special - Low User Option	313	0	0.000	313	1	3.210	313	5	5.228	313	3	8.438	01-Nov-01	01-Mar-12	0.000	7.883																		
Residential Uncontrolled Supply Low User Option	312	0	15.000	312	1	6.002	312	5	5.228	312	3	11.230	01-Oct-04	01-Mar-12	15.000	10.475	0																	
Temporary Supply	322	0	100.000	322	1	9.153	322	5	2.333	322	3	11.486	01-Feb-10	01-Mar-12	100.000	10.928	0																	
<b>Total Wigram Region Consumer Group</b>																																		
1,403,688																																		
<b>Net Equity 2012-2013 \$260,666,866</b>																																		
<b>Total all Consumer Groups</b>																																		
260,666,866																																		