



# **Disclosure of Pricing Methodology**

## **Requirement 22 and 23**

**1 April 2012**

**Pursuant to the Electricity Information Disclosure Requirements  
issued 31 March 2004**

**and**

**Pursuant to the Distribution Pricing Principles and Information  
Disclosure Guidelines, prepared by the Electricity Commission  
February 2010**

## Electricity Information Disclosure Requirements 22 and 23

### Introduction

MainPower New Zealand Limited (“MainPower”) provides distribution lines services to approximately 34,500 customers throughout the North Canterbury and Kaikoura regions. These regions are predominantly rural. A number of relatively small rural towns, including Rangiora, Kaiapoi, Oxford and Kaikoura service this rural community. The Company has only one “direct supply” customer. Approximately 80% of the Company’s customer base is residential; the majority of the remaining being small commercial, farming or irrigation customers.

Effective 1 April 2012, MainPower is required to disclose its distribution line services pricing in accordance with the Electricity Information Disclosure Requirements 2004, Sections 22 and 23, while at the same time complying with the Electricity Authority’s Distribution Pricing Principles and Information Disclosure Guidelines prepared by the Electricity Authority’s predecessor, the Electricity Commission.

Requirement 22 of Part 5 of the Electricity Information Disclosure Requirements requires MainPower to disclose its pricing methodology on at least an annual basis; i.e. as it applied at the beginning of the year (1 April), and following any change in methodology during the year to determine the line service charges payable or to be payable.

The content of the pricing methodology disclosure under Requirement 22 is detailed in Requirement 23 and must:

- (a) Describe the methodology used to calculate the prices charged or to be charged; and
- (b) Include the key components of the revenue required to cover costs and profits of the disclosing entity’s line business activities, including cost of capital and transmission charges, which must include the numerical value of each of the components; and
- (c) State the customer groups used to calculate the prices charged or to be charged, including:
  - (i) The rationale for the customer grouping; and
  - (ii) The method by which the disclosing entity determines which group customers are in; and
  - (iii) For each of these customer groups, the statistics relating to that group which were used in the methodology; and
- (d) Describe the method by which the disclosing entity allocated the components of the revenue required to cover the costs of its line business activities amongst customer groups, which must include the numerical values of the different components allocated to each customer group and the rationale for allocating it in this manner; and
- (e) Describe the method by which the disclosing entity determined the proportion of its charges which are fixed and the proportion which are variable, and the rationale for determining the proportions in this manner.

During February 2010, the Electricity Commission made available its Distribution Pricing Principles and Information Disclosure Guidelines. The Commission’s decision followed a comprehensive consultative process. More recently the Electricity Authority, the successor to the Electricity Commission, has adopted the Distribution Pricing Principles and Information Disclosure Guidelines promulgated by the Electricity Commission.

The Electricity Authority expects to begin a review of the extent that Distributors’ Pricing Methodologies align with the Pricing Principles and Information Disclosure Guidelines in September 2012.

These Pricing Principles and Guidelines are as follows and have been adopted by MainPower when determining and applying its Distribution Lines Services Pricing Methodology.

## **Pricing Principles**

- (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.
- (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.
- (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.
- (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.
- (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.

## **Distribution Pricing Information Disclosure Guidelines**

- (a) Prices should be based on a well-defined, clearly explained and published methodology, with any material revisions to the methodology notified and clearly marked.
- (b) The pricing methodology disclosed should demonstrate:
  - (i) how the methodology links to the pricing principles and any non-compliance;
  - (ii) the rationale for consumer groupings and the method for determining the allocation of consumers to the consumer groupings;
  - (iii) quantification of key components of costs and revenues;
  - (iv) an explanation of the cost allocation methodology and the rationale for the allocation to each consumer grouping;
  - (v) an explanation of the derivation of the tariffs to be charged to each consumer group and the rationale for the tariff design; and
  - (vi) pricing arrangements that will be used to share the value of any deferral of investment in distribution and transmission assets, with the investors in alternatives such as distributed generation or load management, where alternatives are practicable and where network economics warrant.

- (c) The pricing methodology should:
- (i) employ industry standard terminology, where possible; and
  - (ii) where a change to the previous pricing methodology is implemented, describe the impact on consumer classes and the transition arrangements implemented to introduce the new methodology.

### **Pricing Objectives - MainPower**

MainPower has, in addition to the application of the Pricing Principles and other Requirements, adopted a number of Pricing Objectives when determining its line services pricing methodology.

**In circumstances where there is a conflict between the Pricing Principles and MainPower's Pricing Objectives, priority is given to the Pricing Objectives.**

**MainPower has reviewed its pricing methodology against the Pricing Principles and is of the view that its prices signal the economic costs of service provision although it is recognised that costs on a per customer basis are not subsidy free even after taking into account the requirement to comply with the Low User Regulations. MainPower is of the view that the level of cross subsidy is not material, more so given the make up of MainPower's customer base, customers' load characteristics and the configuration of MainPower's electricity network.**

MainPower's Pricing Objectives in terms of its pricing methodology, are as follows:

(a) Uniform Pricing

MainPower has adopted uniform line service charges for all customer categories within a particular customer group irrespective of customer density, the location of the nearest Transpower point of supply, the configuration of and investment in MainPower's subtransmission and distribution network, or other load characteristics.

Fixed distribution line service charges are charged by way of a uniform cents per day. A maximum of 15 cents per day applies to all residential customers, irrespective of volume; i.e. consistent across all residential customers as if they were a low user customer and charged in accordance with the low user regulations.

Variable distribution and variable transmission line services are charged by way of a uniform per kilowatthour charge within each customer group.

Variations to this Objective are detailed below.

(b) Revenue Requirement

MainPower determines its revenue requirement and therefore its line service charges on the basis that lines revenue collected from its customers by way of these charges will be sufficient to cover its operating costs and capital development, and to maintain its capital and/or revenue reserves at a level considered appropriate by the Board without recourse to term debt.

(c) Rebates

Revenues, collected from customers, that are considered surplus to MainPower's revenue requirement are returned to Redeemable Preference Shareholders (Qualifying Customers) in the form of rebates. Rebates are credited to Qualifying Customers' accounts on a monthly basis. Customers are advised in advance on an annual basis of the Rebate levels that will apply for the coming year. Rebates do not form part of this Disclosure.

(d) Uniform Pricing - MainPower Region Customer Group and Kaiapoi Region Customer Group

The total line service charge, inclusive of any Transpower transmission charge and Qualifying Customer rebate applicable to customers within these two customer groups are, for each customer category, charged on a uniform basis.

(e) Low User Options

MainPower's Residential Controlled, Residential Uncontrolled and Residential Night Special supply and their equivalent low user options are charged on the basis that the charges for each low user option will be the same given 8,000 kilowatthours are consumed for both standard and low user supply on an annual basis.

(f) Price Certainty and Stability

MainPower's line services pricing structure will provide a high level of certainty and understanding, while at the same time ensuring price stability without the need for rate shock.

(g) Rate of Return

Where the rate of return on net equity is less than MainPower's lines business Weighted Average Cost of Capital, then any upward movement in charges will be calculated on the basis that the increase is uniform across all groupings other than the Company's direct supply customer which is passed on on an actual cost basis.

## **Pricing Methodology**

Appendix 1 is made available in support of Requirement 23, and details the following:

- Customer groupings and categories
- Schedule of line service charges including detail of both fixed and variable distribution and transmission charges by category, for each customer group.
- Pricing history by customer group/category including introduction date.
- Customer statistics by customer group/category including number of customers taking line services under each category, installed kVA of capacity, kilowatthours delivered and chargeable peak demand.
- Forecast revenue requirement for the financial year commencing 1 April 2012 by customer group/category including detail of fixed distribution line charges, distribution and transmission variable charges and other revenues.
- Targeted revenue to cover MainPower's lines business operating costs by customer group, including transmission costs, administrative and operating overheads, operation and maintenance costs, other operational expenditure, depreciation and taxation.
- Targeted return including forecast percentage return on assets.
- Maximum return based on MainPower's weighted average cost of capital.

## Customer Groups

- MainPower Region ICPs - MP Customer Group  
All customers connected to the distribution network owned by MainPower, who are not Direct Supply Customers or who do not form part of the KE Customer Group or WIG Customer Group.

- MainPower Region ICPs - Direct Supply Customers  
All customers who take direct supply from a Transpower New Zealand Limited point-of-supply.
- Kaiapoi Region ICPs - KE Customer Group  
All customers connected to the electricity distribution network previously owned by Kaiapoi Electricity limited and which was acquired by MainPower on 1 July 2004.
- Wigram Region ICPs - WIG Customer Group  
Includes all customers connected to the electricity distribution network owned by MainPower, located in the region previously known as the Wigram Air Base and which is embedded in the Orion Limited network.

#### Allocation of Costs to Customer Groups

The allocation of costs to customer groups complies with the Requirements of the Pricing Principles where applicable but subject to MainPower's Pricing Objectives. This approach recognises the predominantly rural nature of MainPower's customer base and the customers' continued confirmation and support for the Company's uniform charging regime, and the expectation that disclosed pricing will be clear and understandable.

Costs of supply to MainPower's only "direct supply" customer are on an actual cost basis.

Lines business operating costs detailed in Appendix 1 are, wherever possible, allocated on an actual cost-incurred basis.

The exceptions are as follows:

- Administrative and overhead costs are allocated on a uniform cents per kilowatthour basis. Allocation to direct supply customers is on an actual basis.
- Operation and maintenance costs are allocated as a uniform percentage of net assets employed for each customer group. Allocation to direct supply customers is on an actual basis.
- Pass-through costs; i.e. rates are allocated as a percentage of net assets employed.
- Pass-through costs; i.e. Electricity Commission levies are allocated on a uniform cents per kilowatthour basis.
- All other costs are allocated on an actual basis.

#### Variations to the Uniform Pricing Objective are as follows:

- The Residential Night Special variable distribution line service charge for each Customer Group is calculated at approximately 80% of the Residential Controlled Supply variable distribution line charge and approximately 10% of the Residential Controlled Supply variable Transmission Line Charge recovery. This pricing structure provides an incentive for customers to shift load to the off peak period 9.30pm to 7.30am.
- The Residential Uncontrolled Supply Low User Option total variable line service charge for each Customer Group, is calculated at approximately 125% of the Residential Controlled Supply total variable line charge and recognises that no system control capability is available. The Residential Uncontrolled Supply fixed distribution line charge has been determined at 60 cents per day.
- The fixed distribution line service charge for Non-Residential General Supply has been determined at 50 cents per day to take into account the lower weighted average load factor of this Customer Group.

- Revenue, across all Customer Groups, collected by way of fixed Distribution Line Service Charges, has been calculated on the basis that revenue from this source will not exceed 10% of the total fixed and variable distribution line service revenue. Actual percentages will vary year on year and between Customer Groups as a result of changes in load factor and other load characteristics.
- Distribution line services charges applicable to MainPower's Direct Supply Customer Group are recovered in full on an actual cost basis; i.e. no variable distribution line charge applies. Transpower's transmission charge for Direct Supply Customers is recovered on an actual cost basis.
- The variable distribution line services charge applicable to the Temporary Supply Customer Group is maintained at approximately the same rate as the Residential Uncontrolled Supply Low User Option Variable Distribution Line Service Charge. In addition, Temporary Supply Customers pay a fixed charge of \$1.00 per day.
- The fixed charge applicable to the irrigation customer category is 2 cents per day per kilowatthour of motor size connected; i.e. based on the weighted average connected motor size, or 50 cents per day for a motor size of 25 kilowatts.
- No fixed distribution line charge is applicable to Street Lighting customers, Right-of-Way Lighting or Under Verandah Lighting Customers.
- The variable distribution line service charge applicable to General Supply Customers within the MP Customer Group where consumption exceeds 500,000 kilowatthours per annum, is discounted on a straight line basis between 500,000 kilowatthours per annum and 1,000,000 kilowatthours from 6.652 cents per kilowatthour to 1.525 cents per kilowatthour and at 1.525 cents per kilowatthour for all kilowatthours above 1,000,000 kilowatthours.
- The variable distribution line service charge applicable to General Supply Customers within the KE Customer Group where consumption exceeds 500,000 kilowatthours per annum, is discounted on a straight line basis between 500,000 kilowatthours per annum and 1,000,000 kilowatthours from 3.381 cents per kilowatthour to 1.451 cents per kilowatthour and at 1.451 cents per kilowatthour for all kilowatthours above 1,000,000 kilowatthours.

MainPower's Weighted Average Cost of Capital - refer table

MainPower's cost of capital (post-tax) is calculated at 6.9% and is derived using the Capital Asset Pricing Model based on a risk-free rate of 5.0% (as per PricewaterhouseCoopers Cost of Capital Report 31 March 2011), an asset beta as the measure of a lines business systematic risk of 0.45, a debt equity ratio of 40:60, an investor tax rate of 28 cents in the dollar and a post tax market risk premium for equity of 7.5%.

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**STATUTORY DECLARATION IN RESPECT OF STATEMENTS AND INFORMATION  
SUPPLIED TO THE COMMERCE COMMISSION  
PURSUANT TO REQUIREMENT 57 (U) OF THE COMMERCE ACT  
(ELECTRICITY INFORMATION DISCLOSURE REQUIREMENTS) NOTICE 2004**

I, ALLAN BERGE, of 23 Belmont Avenue, Rangiora, being a director of MainPower New Zealand Limited, solemnly and sincerely declare that having made all reasonable enquiry, to the best of my knowledge, the information attached to this declaration is a true copy of information made available to the public by MainPower New Zealand Limited under the Commerce Commission's Electricity Information Disclosure Requirements 2004.

And I made this solemn declaration conscientiously believing the same to be true and by virtue of the Oaths and Declarations Act 1957.



**Managing Director**

Declared at Rangiora this 17th day of April 2012

before:  .....

**B. R. HASSALL**  
RANGIORA  
JUSTICE OF THE PEACE  
FOR NEW ZEALAND

