



Evaluation of Waipa 2013 Pricing Methodology

What we have been asked to do

The Electricity Authority engaged Castalia to carry out an independent evaluation of the pricing methodologies published by the 29 electricity distributors in New Zealand. This document provides our evaluation of Waipa's 2013 pricing methodology¹ against:

- The **Information Disclosure Guidelines** (Table 1). The guidelines set out the information that should be provided in distributor pricing methodologies.
- The **Pricing Principles** (Table 2). The principles contain economic benchmarks that should be reflected in pricing methodologies to the extent practicable.

The purpose of this review is to understand how distributors interpret the guidelines and principles, and to provide suggestions on how to improve distributor pricing methodologies. This review does not focus on ensuring compliance with the guidelines and principles.

Our understanding of Waipa's methodology

The table below summarises our understanding of the methodology that Waipa uses to determine prices for its domestic installations. The purpose of this example is to explain our understanding of Waipa's pricing methodology using the example of one consumer group (this is not a comprehensive summary of the pricing methodology that applies to all customers).

	Approach	Rationale
Customer categories	Consumers fall into this group if their connection is deemed to supply a permanent places of residence	This approach enables compliance with Electricity Regulations 2004
Cost allocation	Costs are allocated on the basis of assessed demand, value of the assets utilised, and consumption	No rationale provided
Charging basis	Variable and fixed tariffs are charged. The low fixed charge tariff option applies	Prices for all domestic consumers are set to comply with the Low Fixed Charge Tariff Option and to avoid the opportunity for arbitrage

¹ Waipa's 2013 pricing methodology is available online at:
http://www.waipanetworks.co.nz/user_uploads/files/122_073869200_1365624577.pdf

Overview of our evaluation of Waipa's methodology

The information contained in Waipa's methodology could be conveyed more effectively through the use of figures, charts and tables. The methodology could also be strengthened without much effort by having a cover page, numbering the pages, and ensuring that data tables provide units of measure. The presentation of the methodology is not core to the information disclosure guidelines or pricing principles, but would help to enhance the clarity and understanding of the document as a whole.

In terms of our evaluation of the methodology's content, we find that the cost allocation methodology could be improved to better follow the information disclosure guidelines. Although the methodology identifies the cost allocators used, it should also provide information about the specific variables chosen to assess each allocator. The methodology should also explain the reasons for allocating costs to particular customer groups. This would help to make the pricing approach more transparent and to explain why prices change over time.

The methodology should ensure that it is providing clear information that is sufficient to draw the conclusion that the approach is consistent with the pricing principles (stated in Appendix III). Other distributors that include sections on compliance with the principles explain how compliance is achieved, given their understanding of the principles. This can also be done through explicit references to passages in the methodology where compliance is shown or by using language that refers directly to the requirements of the principles.

Table 1: Evaluation of the Pricing Methodology against the Information Disclosure Guidelines

Guideline	What is done well?	What is missing?
<p>(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</p>	<ul style="list-style-type: none"> ▪ There have been no changes to the tariff structure over the last year ▪ The methodology is published on Waipa’s website 	<ul style="list-style-type: none"> ▪ The methodology could be better written in terms of sentence constructions ▪ The units of measure of table data should be mentioned and page numbers could be provided as well as a cover page
<p>(b) The pricing methodology disclosed should demonstrate:</p> <p>(i) How the methodology links to the pricing principles and any non-compliance</p> <p>(ii) The rationale for consumer groupings and the method for determining the allocation of consumers to the consumer groupings</p> <p>(iii) Quantification of key components of costs and revenues</p> <p>(iv) An explanation of the cost allocation methodology and the rationale for the allocation to each consumer grouping</p> <p>(v) An explanation of the derivation of the tariffs to be charged to each consumer group and the rationale for the tariff design</p>	<ul style="list-style-type: none"> ▪ Appendix III explicitly links to the pricing principles asserting that the methodology is consistent with the principles ▪ The factors and rationale for grouping consumers are presented ▪ Customer groups are clearly categorised ▪ A table showing the key components of costs and revenues per consumer group is provided ▪ The basis for allocating costs to customers is briefly described ▪ The cost allocators used are identified ▪ Appendix IV shows how tariffs recover target revenue ▪ A rationale is provided for the domestic tariff design ▪ The fixed and variable components of tariffs for each consumer group are provided 	<ul style="list-style-type: none"> ▪ Appendix III should explain how the methodology aligns with the principles ▪ We have found instances of non-alignment to the pricing principles and have noted them in our pricing principles review below ▪ The methodology should provide the specific variables used to allocate costs, e.g. transmission charges are based on assessed demand, but it is unclear what measure of demand is used (e.g. AMD, CMD or RCPD) ▪ The methodology should provide a rationale for the cost allocation ▪ Appendix IV should present a column with forecast demand to show how the costs allocated to customer groups are expected to recover costs ▪ The methodology should provide a rationale for its non-domestic tariff design

Guideline	What is done well?	What is missing?	
<p>(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.</p>	<ul style="list-style-type: none"> ▪ A very brief description of the pricing arrangements for distributed generation is presented 	<ul style="list-style-type: none"> ▪ The methodology should provide more complete information of these arrangements, e.g. whether ACOT is paid out and on what terms 	
<p>(c) The pricing methodology should:</p> <p>(i) Employ industry standard terminology, where possible</p> <p>(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.</p>	<p>The methodology uses industry standard terminology</p> <hr/> <ul style="list-style-type: none"> ▪ The tariff structure has seen no changes since 2001 		
Key to evaluation	Does not follow guidelines	Partially follows guidelines	Follows guidelines

Table 2: Evaluation of the Pricing Methodology against the Pricing Principles

Pricing principles	What is done well	What is missing
<p>(a) Prices are to signal the economic costs of service provision by:</p> <p>(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>	<ul style="list-style-type: none"> ▪ The methodology states that it is consistent with this principle 	<ul style="list-style-type: none"> ▪ We would expect to see and approach to defining and estimating incremental costs to show that prices recover at least incremental cost for all consumer groups, i.e. prices are subsidy free
<p>(ii) having regard, to the extent practicable, to the level of available service capacity</p>	<ul style="list-style-type: none"> ▪ Physical network statistics such as transformer kVA and 11 kV demand are provided in Appendix I 	<ul style="list-style-type: none"> ▪ It is not clear what these statistics refer to nor how they show when service capacity is available ▪ The methodology should identify the relationship between prices and available service capacity
<p>(iii) signalling, to the extent practicable, the impact of additional usage on future investment costs</p>	<ul style="list-style-type: none"> ▪ The methodology describes an investment project (TMU0111) and will use consumer feedback to plan its funding 	<ul style="list-style-type: none"> ▪ We would expect to see how much TMU0111 is expected to cost and how this will be reflected in prices. The methodology should also state whether TMU0111 is the only investment being made by Waipa
<p>(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</p>	<ul style="list-style-type: none"> ▪ Domestic users are charged a higher proportion of variable charges which recognizes the assumption that these consumers have a lower price-demand elasticity 	<ul style="list-style-type: none"> ▪ It is not clear from the methodology whether this principle applies ▪ The methodology should show how fixed costs are recovered from different consumer groups reflecting their demand responsiveness
<p>(c) Provided that prices satisfy (a) above, prices should be responsive to the requirements and circumstances of stakeholders in order to:</p> <p>(i) discourage uneconomic bypass</p>	<ul style="list-style-type: none"> ▪ The methodology states that prices are set below standalone costs and therefore discourage uneconomic bypass 	<ul style="list-style-type: none"> ▪ The methodology should identify where it expects uneconomic bypass to be likely and should provide standalone cost estimates. Prices that fall below standalone cost can still encourage uneconomic bypass if the recovery of network fixed costs leads customers to adopt an alternative supply option that would cost more than the incremental cost of providing network services

Pricing principles	What is done well	What is missing	
(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	<ul style="list-style-type: none"> ▪ Annual surveys consult on price/quality trade-offs ▪ A specific project to improve reliability was put to customer consideration ▪ Waipa’s approach to non-standard arrangements is described 		
(iii) where network economics warrant, and to the extent practicable, encourage investment in transmission and distribution alternatives and technology innovation	<ul style="list-style-type: none"> ▪ Waipa does not charge for inputting distributed generation into the network 	<ul style="list-style-type: none"> ▪ The methodology should outline the future changes it expects to undertake as uncertainty about future distributed generation charges discourages potential investors in distributed generation 	
(d) Development of prices should be transparent, promote price stability and certainty for stakeholders, and changes to prices should have regard to the impact to stakeholders	<ul style="list-style-type: none"> ▪ The tariff structure has remained the same for several years ▪ Waipa limits its price increases to pass through costs plus CPI 		
(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	<ul style="list-style-type: none"> ▪ Economical equivalence is maintained across retailers ▪ The pricing structure is simple 		
Key to Assessment	Does not align with principles	Partially aligns with principles	Aligns with principles