Evaluation of Counties Power 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 Counties Power's 2013 pricing methodology[1] against:

- The **Information Disclosure Guidelines** (see Table 1 below). The guidelines set out the information that should be provided in distributor pricing methodologies.
- The **Pricing Principles** (see Table 2 below). 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 Counties Power's methodology

The table below summarises our understanding of the methodology that Counties Power's uses to determine prices for two consumer groups—General Connection Domestic (low user) and General Connection Domestic—which we understand are both mass market consumer groups. The purpose of this example is to explain our understanding of Counties Power's pricing methodology, using the example of one type of customers.

	Approach	Rationale
Customer categories	Categorised based on the type of metering installed, the capacity of the connection, the nature of the activity carried out at the site, and the number of kilowatt hours used annually	The rationale for consumer grouping is to (i) match consumers to the network assets used, and (ii)group consumers with similar load profiles together
Cost allocation	Costs are grouped into five components: consumer-specific costs, load-dependent costs, load-independent costs, transmission costs (load dependent), and transmission costs (load independent). The allocators used for these components are: optimized replacement cost (ORC), AMD, RCPD and number of ICPs. This approach is applied to all consumer groups	The methodology does not provide a rationale for the approach used to allocate costs—which we presume to be based on some link between cost components and allocators (for example, load-independent costs and asset values)
Charging basis	Charges comprise of a fixed daily charge and a variable, cents per kWh charge	The fixed daily charge recovers the transmission and distribution load independent costs. The variable charge recovers the transmission and distribution load dependent costs.

[1] Counties Power's 2013 pricing methodology is available online at: http://www.countiespower.com/documents/pricing-discounts/Pricing_Methodology_2013-2014.pdf

Overview of our evaluation of Counties Power's methodology

One concern arising from our evaluation is that the methodology implies cases of cross subsidisation within the network, yet does clearly define where these cases exist. Where the incremental costs of serving a customer or customer group are not being recovered through prices, the methodology should be explicit about why the situation occurs. We would also expect to see either an approach to remove the cross-subsidies, or a description of how prices are recovering the shortfall from consumers that are the least price-responsive (pricing principle b). In order to properly identify those cases where incremental costs are not being fully recovered, an estimate of incremental costs per customer group is required. The methodology does not provide incremental cost estimates, or estimates for standalone costs.

Overall, the Counties methodology is concise and does not include unnecessary information (which cannot be said for all pricing methodologies). However, we found that the methodology did lack detail in some areas. For example, we would expect to see a section showing how Counties identifies relevant transaction costs to stakeholders (retailers and consumers), and how transaction costs are minimised. Such information would help to show how economical equivalence across retailers has been achieved, for example by ensuring that small retailers are able to compete equally with larger retailers.

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

Guideline	What is done well	What is missing
(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	▪ The pricing methodology has not changed but prices have. These two facts are acknowledged and the price changes are explained ▪ The document is available on the Counties Power website ▪ The methodology follows a logical structure, the document reads well and does not contain any unnecessary information	▪ We would expect to see an indicative timeline for when the pricing methodology for smart pricing will be available
(b) The pricing methodology disclosed should demonstrate:		
(i) How the methodology links to the pricing principles and any non-compliance		▪ The methodology states that it has made its best attempts to adhere to the pricing principles but no explicit links are identified ▪ The methodology implies cases of cross-subsidisation (top of page 7 and bottom of page 10) but does not identify and describe these cross-subsidies
(ii) The rationale for consumer groupings and the method for determining the allocation of consumers to the consumer groupings	▪ Seven consumer groups are clearly identified ▪ A brief, but clear, explanation of the rationale for consumer groupings is provided ▪ The methodology identifies the factors that determine group membership	▪ The methodology should show how the factors which determine group membership are applied to consumer groups, e.g. by explicitly describing the types of metering installations that apply to each group
(iii) Quantification of key components of costs and revenues	▪ Table 1 on page 6 identifies the key components of target revenue required to cover costs and a return on investment	▪ The labels on table 1 could be more intuitive, e.g. operating expenditure. Also, it is not clear where depreciation costs fall.
(iv) An explanation of the cost allocation methodology and the rationale for the allocation to each consumer grouping	▪ Page 5 provides a clear explanation of the cost allocation methodology	▪ The methodology should provide a rationale for the cost allocation methodology. If any, the methodology should identify the relationship between costs and consumer groups, and between allocators and costs ▪ It would be useful to have values of the allocators, e.g. number of ICPs per consumer group

Guideline	What is done well	What is missing
(v) An explanation of the derivation of the tariffs to be charged to each consumer group and the rationale for the tariff design	▪ The methodology provides a reasonable rationale for the tariff design where fixed costs are recovered through fixed charges and variable costs through variable charges	▪ The methodology should provide a link between costs and tariff design to show *how* tariffs are derived from these costs. For example, the fixed daily charges (that are driven by load independent costs) could be calculated for a consumer group by taking its total revenue requirement owed to load independent costs and dividing it by the number of ICPs in the consumer group, and then dividing by the number of days in a year. This would then be weighted with the consumer group's AMD. ▪ Table 3 does not maintain the same consumer groups as presented earlier in the methodology.
(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.	▪ Counties does not charge small distributed generators for energy they inject into its lines. Counties does pay ACOT annually to its sole large generator	▪ The methodology should provide an idea of what constitutes a small distributed generator and what constitutes a large one
(c) The pricing methodology should: **(i)** Employ industry standard terminology, where possible	▪ The methodology employs industry standard terminology	▪ The terminology 'load dependent costs' and 'load independent costs' is not used by other distributors
(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.	▪ Changes to prices have occurred due to changes in costs yet the methodology remains the same. The impact on consumer groups is explained	

Key to Assessment	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
(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	▪ The methodology implies that cross subsidy exits between customer groups, and between customers within a customer group. Counties maintains that its pricing strategy is to remove cross subsidisation	▪ We would expect to see an explanation of the approach to defining and calculating incremental and standalone costs. This is useful to see where and by how much cross subsidisation occurs, and what changes would be required to remove cross-subsidies ▪ The methodology should point out those consumer groups in the network where current prices do not recover incremental costs, and what impact that has on other customers
(ii) having regard, to the extent practicable, to the level of available service capacity		▪ We would expect to see a description of current service capacities (kVA) and how much is used to meet demand ▪ Although load-dependent costs are assigned based on the weighted combination of AMD and RCPD (which explains which consumers use which assets), the methodology should explain how the spare capacity of these assets is reflected through the level of the fixed and variable prices charged to different users
(iii) signalling, to the extent practicable, the impact of additional usage on future investment costs	▪ The document states that the average remaining life of the network assets in aggregate is approximately 30 years, providing a sense of replacement needs ▪ Counties Power plans to rollout smart meters which will encourage reduced peak demand in the future as well as planning to implement smart pricing to reflect the efficiencies and investment cost of smart meters	▪ The methodology should present: – Forecasts of investment needs with clearly justified growth assumptions – An analysis of peak demand growth by consumer group to illustrate the relationship between prices and future investment ▪ The methodology states that a smart meter rollout will begin in mid-2013 and that smart pricing is due to begin in January 2014. Given the proximity of these events, we would expect to see indicative estimates of the costs of the rollout
(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		▪ From the methodology it is not obvious if this pricing principle applies. The methodology should explain how it has attempted to gauge demand responsiveness of different consumers

Pricing principles	What is done well	What is missing
(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		▪ The methodology should describe when it expects uneconomic bypass to occur and how it would mitigate it
(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	▪ Counties conducts consumer surveys annually to ascertain the level of consumer satisfaction of price and quality ▪ The methodology clearly describes how charges for non-standard arrangements are calculated, and provides an idea of the size and number of connections under these types of arrangements	
(iii) where network economics warrant, and to the extent practicable, encourage investment in transmission and distribution alternatives and technology innovation	▪ Counties does not charge distributed generators line service charges for injected energy ▪ ACOT is paid to the single large embedded generator	▪ The methodology should show how new distributed generation opportunities and innovative technologies are encouraged within the network, above and beyond recompensing existing generators
(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	▪ A good description of price changes is given on page 7 ▪ Consumers' opinions are gauged through annual surveys ▪ Counties has planned a transparent development of smart prices by consultation with retailers	▪ Although the methodology tries to limit price shocks it should describe the transition approaches to price changes that are designed to minimise the impact on customers. This includes an analysis of the costs and benefits of the transition approaches, and a time frame for implementing price changes
(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		▪ Point 7 of section 2.2 states that Counties Power does its best efforts to "have regard to the impact of transaction costs and limit complexity" however these efforts should be described. The methodology can do this by describing the most relevant transaction costs, for example responding to retailer queries on pricing. ▪ The methodology should also explain how it has considered economical equivalence across retailers, i.e. whether or not all retailers across the network are charged the same prices

Key to Assessment	Does not align with principles	Partially aligns with principles	Aligns with principles