



C O U N T I E S P O W E R

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Mr John McLaren
Chief Advisor, Regulation Branch
c/o regulation.branch@comcom.govt.nz

Dear Sir

Counties Power Submission:

Proposed Default Price-Quality Paths for Electricity Distributors from 1 April 2015

1. Introduction

Counties Power Limited (Counties Power) appreciates the opportunity to make a submission on the Commerce Commission's draft decision "Proposed Default Price-Quality Paths for Electricity Distributors from 1 April 2015" (DPP Paper).

Counties Power is fully owned by the Counties Power Consumer Trust, with the company's power consumers being paid an annual discount via their retailers.

Counties Power operates the electricity distribution network in south rural Auckland and north Waikato. Its customer base has grown from 2,040 in 1927 to 38,476 in 2014. It services 3,075 km of lines and cables across 2,250 square kilometres.

Counties Power is exempt from the DPP Model because it is a consumer owned company. However, Counties Power tracks its price-quality path through modelling its price-quality path using the Commerce Commission's published models.

2. UK RIIO Model

Counties Power notes that the continuation of the current model may result in companies favouring capital investment over operating expenditure. This has a twofold impact:

- Higher overall industry costs because lower cost solutions that involve operational costs being favoured over capital investments. The higher capital costs are then passed on to the consumers through a higher price-quality path; and
- Innovation in operating solutions such as shared network management infrastructure or managed services being stifled in favour of capital investments.

Section 7 of the DPP Paper makes reference to this impact and goes on to suggest a number of incentive measures to send better investment signals. An alternative set of arrangements has been proposed by the UK regulator, who has sought to minimise this impact through their proposed RIIO¹ model.

¹ Revenues = innovation, incentives and outputs

The RIIO model removes capital incentives through redefining capital and operating expenditure. Firstly they define a new term 'totex' as total costs excluding business support costs and non-operational capex. The amount of capital expenditure is then set as a predefined percentage and classified as slow money, with the remaining percentage classified as fast money. Business support and non-operational capex are also treated as fast money. With the classic financial model the fast money replaces the opex and the slow money the new invested capex.

The regulator, as in New Zealand, still reviews the EDB's capital program. However, the mechanism for reclassifying capital and operating expenditure for determining the price-quality path removes the incentives for a higher capital model.

Counties Power believes that this approach would remove the capital investment incentive and provide the basis for more innovative industry solutions. However, these solutions do not necessarily result in improved energy efficiency, as our next section explains.

3. Energy efficient investments and demand side management

The Commerce Commission DPP Paper appears to assume a relationship between energy efficiency and cost savings to distribution companies through lower capital investments because of reduced peak demand. Counties Power questions this assumed link between energy efficient investments and lower peak demand. We would further note that current demand side management solutions provide little if any energy efficiency gains.

EECA on their website state define energy efficiency as follows: "Energy efficiency involves changing the results gained from the amount of energy use. This could be from inputting less energy to get the same outcome or inputting the same amount of energy for an increased result". Therefore, energy efficient may or may not result in a reduction in the total energy used. This can be seen through a home owner investing an energy investment (e.g. a heat pump or insulation) but then clawing back their energy saving through keeping a warmer house.

Similarly, our most effective form of demand side management through hot water load control does not result in any measurable increased energy efficiency. Rather the result is a difference in the timing of when electricity is used for water heating. This shifting of load from peak times does result in a cost savings to the distributor, which is passed on to the consumer through a lower line charge.

Seeking similar peak reductions from energy efficient programs may have little impact on peak demand reductions for a number of reasons, such as:

- Heat pumps being less efficient in colder temperatures, when most line companies incur their annual transmission peaks;
- The claw back of the energy savings through increased utility such as higher room temperatures (as mentioned above); and
- Heating patterns that require homes to be heated after work when peak loads occur. This will occur irrespective of the energy efficient insulation as this will only start working once the home is at a set temperature level.

In summary, Counties Power questions whether there would be any discernable benefit from distributors making energy efficiency as per the narrow definition in the DPP Paper. If the DPP Paper had a wider consideration of energy efficiency that can be obtained through energy switching of fuel (petroleum, gas and wood) to electricity then the financial incentives to distributors and the requirements of the Commerce Act 1986 would be aligned.

An example would be distributors promoting the use of energy efficient heat pumps to replace lower efficient space heat through burning fuel (e.g. LPG, natural gas and coal open fires). A second example would be electric vehicles being promoted over standard petroleum powered vehicles. Such energy substitutions would have secondary benefits including CO₂ emission savings and in some cases benefits from reduced reliance on petroleum imports.

4. Smart grid investments

Overseas distributors, particularly in the US and Australia, have and are making significant investments in smart meters and smart grids. This investment is resulting in improved customer service through reduced outages, consumers having access to accurate power usage data, and distribution companies being able to monitor consumer power quality. These improvements are expected to grow as the technology matures.

In comparison to the OECD New Zealand has a non-standard meter ownership arrangement, with most smart meters not owned by distributors but rather owned by metering companies. This arrangement is complicated with the distributors often having a mix of non-compatible smart meter types and owners on their network. Furthermore, the meters do not appear to have a cost effective path for use within a smart grid.

In the long-term this could significantly reduce the quality of service to customers and inhibit the uptake of new smart consumer technologies that is designed to shift load off of a peak demand periods and high energy priced periods. Therefore, it is concerning that not only is the investment in smart grids not being addressed by the Commerce Commission but that the DPP Paper makes no mention of smart grids.

Counties Power believes that the Commerce Commission should review this policy before finalising the Default Price-Quality Paths. We believe that the Commerce commission should be providing financial incentives for distributors to start investing in future smart grids, with a view of encouraging distributors to make direct smart grid investments for the benefit of their consumers and to further improve network quality and efficient energy utilisation.

5. Conclusion

The Commerce Commission DPP model drives investment decisions and so needs to ensure the correct long-term network investment signals. From the review of the current paper it appears that critical areas such as the development of the smart grids have been excluded along with international modelling advances.

In regard to energy efficiency, New Zealand has an existing advantage internationally with its high percentage of electricity generated from renewable resources. This high level of renewables supports a benefit for electricity being substituted for fuel as compared to other OECD countries. This would provide energy efficiency savings through energy substitution from fuel sources to electricity. This would align both the requirements of the Commerce Act, commercial imperatives, and environmental concerns.

This submission is from Counties Power Limited. Please address all communications to Andrew Toop, Commercial Manager, e-mail andrew.toop@countiespower.com, phone 027 522 6562.

Yours faithfully

A handwritten signature in blue ink that reads "Andrew Toop". The signature is written in a cursive style with a large initial 'A' and a long, sweeping underline.

Andrew Toop
Commercial Manager