More Efficient Distribution Prices: Response from Counties Power Consumer Trust

19 February 2019

As a consumer trust required to act in the best interests of our beneficiaries (i.e. electricity consumers), Counties Power Consumer Trust (CPCT) has several significant concerns about some of the proposed principles and changes, and the justifications for those changes, set out in the consultation paper. As we explain below, a number of those changes have the potential to either increase costs to consumers or to limit their capacity to invest in demand-side options that may deliver benefits to them, or to the environment.

Consumer Buy-In and Consumer Diversity

Our Trustees are strongly focused on their position as elected consumer representatives, and on the requirements of their consumer beneficiaries. While recognizing that the EA seeks *benefits-based* outcomes in pricing reform, CPCT believes it is vital to establish that consumers have similar views on what would benefit them and, actually want the changes being discussed.

The value of electricity distribution is, we believe, primarily based on the service that consumers receive, rather than on the distribution price component buried in their retail bill. Robust pricing reform should, accordingly, also include a careful analysis of the value that consumer groups place on the 'non-price' elements of distribution supply, such as outage abatement, recovery from extreme weather events, public safety enhancement, etc. This analysis would need to take account of consumer diversity, as different networks have different major consumer loads and consumer vulnerabilities.

We are aware that consumers frequently find billing information from competing retailers misleading, and see little point in trying to come to grips with signals it may contain. Changes that promote standardisation of terminology in retail billing seems overdue.

Information on the type and level of consultation that the Authority has

undertaken on consumer requirements, and on consumer diversity, would be useful.

Comment on underlying principles

First, and notwithstanding the comments in paras 3.21-3.25 of the consultation paper indicating that the EA "does not support mandated retail pass-through", a Rules amendment that ensures distribution pricing signals reach consumers through the final prices set by retailers is essential to establishment of a fair, effective pricing regime. If this doesn't happen then the strongest signal that retailers will receive is to 'pick winners' among consumers, keeping prices down to important mobile loads[1], and raising them disproportionately to others (typically to households).

In other words, targeting just one segment of the electricity pricing chain (i.e. distribution) is likely to lead to perverse outcomes, such as retailers loading distribution signals onto less mobile or more vulnerable consumers (who have little or no ability to respond positively to those signals) while favouring large customers (who are the parties who would otherwise be well placed to respond).

Second, the practice of retailers obscuring their own price increases by attributing them to changed distribution charges (that has become less evident recently) could well re-emerge if various consumers are exposed to distribution price changes designed to signal behavioral responses. Similarly, unless there is some mechanism for overseeing and correcting such behavior, retailers may simply pocked windfall gains resulting from distribution price reductions, while passing through higher costs, as new or stronger signals from EDBs lead to differential pricing outcomes. Mandatory distribution price pass-through would provide transparency to consumers while discouraging predatory behavior of this type.

Responses to specific points in the consultation paper

2.4 "In 2015, NZIER estimated that just in relation to solar

[1] Contact Energy's "Bach Plan" is a typical example https://contact.co.nz/residential/all-plans/bach-plans

> panels alone distribution charges could increase by up to 30 per cent over 10 years. This would add 10 per cent to the retail bills of consumers without solar panels. They effectively end up cross-subsidising others to over-invest in solar panels. The economic cost of this outcome occurring has been estimated to be in billions of dollars."

And paras 2.14 and 2.15 [box following para 2.15]:

> **"Because lower socio-economic households and renters are less likely to install solar panels, they actually end up subsidising the typically better-off households that do. This is because distributors will need to increase their kWh prices to recover the same total revenue from a decreasing number of kWh supplied from the network. Not reforming prices will thus cause a significant price impact for these consumers. This cost should be accounted for when assessing price reform."**

A pricing outcome that signals the desirability of switching to a clean, low-carbon technology, e.g. solar, is not necessarily undesirable. CPCT however, would certainly be concerned if such signals caused significant additional hardship for low-income consumers who lacked the ability to respond to them.

The correct outcome, in our view, would be a pricing structure that encouraged a competitive response to solar panels by the parties whose electrons are threatened with being displaced by solar conversions, i.e. transmission-dependant generators. While there will inevitably be some enthusiasts who adopt solar for non-commercial reasons, we would not expect unreasonable distribution price rises (and associated hardship) to result from widespread solar conversions if the electricity market responded rationally to the threat posed by solar.

Scope presumably exists for Rule changes that would give vulnerable consumers access to the most competitive energy prices as generators with sunk-cost plant respond to competition.

In due course, as electricity demand increases and the quantity of sunk cost hydro etc. available to respond to competition from increasingly cheap solar

declines, the outcome may be a reduced need for additional distribution capacity or even a decline in kWh moving through distribution lines. However, the reverse may also be the case, e.g. if large community or commercial solar arrays are sited in regions. It would be premature to intervene in distribution pricing to avoid "a decreasing number of kWh supplied by the network" until that emerges as a significant problem.

In situations where a network encounters a significant perverse price response , something similar to Transpower's 'Prudent Price Response' mechanism might be worth considering if this led to outcomes that were consistent with the Pricing principles that emerge after this consultation.

> **2.13 "Another problem is current standard distribution prices give consumers few incentives to pay attention to how their actions are affecting network power quality. For example, if a cluster of EVs are put on to charge at the same time this can create voltage problems and power cuts. Distributors would end up responding by installing extra capacity – that all consumers would pay for – or consumers would continue to experience poor service quality. The result is increased bills and dissatisfied customers."**

This view appears to overlook the likelihood that load from EVs and other new technologies, along with population growth, will also lead to increased flows of kWh through distribution systems, meaning increased revenue, assuming that the Commerce Commission's pending shift away from volume-based pricing is applied correctly. Consumers needing new distribution capacity should certainly be required to pay for it but storage options and other load-shifting investments may well mean that costs per consumer are not materially different.

This is another instance where it would be premature to modify distribution pricing purely on the assumption that the status quo may result in an uneconomic outcome.

[Again from box following para 2.15]:

> **"Distributor network costs are driven by periods of peak demand, such as network congestion during a cold**

winter evening. But current standard distribution practice is to charge consumers based on total electricity distributed (that is, c/kWh charges), not peak demand."

It would appear economically sound to have distribution prices rise in parallel with demand peaks, provided that this resulted in net overall benefits due, presumably, to consumers responding by reducing demand at those times. However, if the outcome is simply higher prices at such times and lower ones at other times, then consumers are likely to see no overall cost effect and might not change their behaviour. An exception might be very large consumers, such as pulp mills, that could see a net advantage in sometimes shifting their loads into off-peak periods but this would probably leave a requirement for the same overall line capacity, as factors such as periodic high pulp prices favouring a renewal of peak-time production could over-ride the relatively small signal they would receive from distribution cost volatility.

Given this uncertainty it would seem sensible to either trial peak charges in a typical region or, if that's not feasible, to look hard at outcomes in overseas situations where peak pricing is applied, before any change in pricing is considered.

Para 3.28 "**Proposed Distribution 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;"

Along with other consumer and community distribution trusts, CPCT is very aware of the potential strength that section 54Q of the Commerce Act offers to our beneficiaries as new and improved energy efficiency and demand-side options emerge:

54Q Energy efficiency

The Commission must promote incentives, and must avoid imposing disincentives, for suppliers of electricity lines services to invest in energy efficiency and demand side management, and to reduce energy losses, when applying this Part in relation to electricity lines services.

Accordingly, we consider that electricity lines services' pricing structures that ensure the adoption of economically viable solar and/or other demand-side or loss-reducing options, are consistent with current legislation.

Here we note that this section of the Commerce Act precedes the establishment of the Electricity Authority, and remains in place. We do not understand how the Authority can propose changes to distribution pricing in order to remove or reduce the incentives that current arrangements create *to invest in energy efficiency and demand side management, and to reduce energy losses.* Has the Authority the power to require changes that intrude into the clearly defined domain of the Commerce Act in this way? Also, is it Government policy to supress the incentives for solar power?

[….para 3.28]

"(a) (iii) "[Prices] being time and location-specific;"

We are unclear about the meaning and impacts of the 'location-specific' requirement. Large parts of most networks supply remote, low-density areas, where – despite increased pricing realism as the government requirements on supply to remote users have been relaxed - exposing consumers to the true cost of supply could create significant price shocks. Has the Authority done work to quantify the impacts of this? Also, strict application of a location-specific principle would be likely to lead to a proliferation of supply tariffs, causing additional confusion.

We recognise that locational realities tend to reflect historical 'accidents' rather than current consumer needs. For example, the location of GXPs in a network tend to be driven by Transpower's past priorities, and network investment downstream of those GXP's has occurred based on their existence.

Perhaps load density, rather than location, would be a more useful pricing input?

It would be helpful if the EA could elaborate on these points.

[….para 3.28]

> "(b) If prices satisfy (a) above, they should be responsive to the requirements and circumstances of users and potential users, including by reflecting services provided by users and to users:
>
> (i) where prices based on efficient incremental costs would under-recover allowed revenues, the shortfall should be made up by prices that least distort network use and reflect the value that users derive from the network; □
>
> (ii) allowing 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, encourage investment in transmission and distribution alternatives (e.g. distributed generation or demand response) and technology innovation. "□

Unless it becomes mandatory for distribution price signals to be passed through to consumers by retailers, it is those retailers – rather than consumers – whose "requirements and circumstances" that will be being met. If a retailer feels that passing through a time-of-use or other signal to a particular large customer might cost it that customer then it will be incentivised to send the signal elsewhere.

As distributors are seldom in a situation where they can undertake the "negotiation" referred to in (ii) above, it is the retailers who will do this, leading to the problem alluded to above.

The comment in (iii) about encouraging investment in transmission and distribution alternatives and demand responses overlooks the far larger impediments to efficient signals created by the wider electricity pricing regime. For example:

- Nodal pricing signals evaporate when a local response occurs, discouraging such responses
- Exempting remote generators from the bulk of the transmission costs (and passing those costs on to consumers via distributors) discourages investment in transmission alternatives.
- Given the Authority's concerns about investment in solar being subsidised by avoidance of distribution costs, it is surprising that it disregards the extent to which investment in remote generation may be being subsidised by remote generation's avoidance of transmission costs.

[….para 3.28]

. **"d) Prices should not place unreasonable costs and requirements, including transaction costs, on retailers or other consumer agents and should be economically equivalent across retailers and other consumer agents."**

While we recognise the useful intent of this principle, we believe that a statement such as '**... taking into account any unreasonable additional supply risks that a retailer or consumer agent may impose on consumers.'** should be added. Here our concern is that a retailer or consumer agent might do any of a number of things (overload systems, create fire or other safety risks, etc.) that have an unreasonable impact on consumers that are dependent on a safe, reliable power supply.

The appropriate response could be for the distributor to require some form of insurance cover or other support mechanism, as part of the connection arrangements with such a customer. However, it would not be efficient to require all retailers and consumer agents to face such an impost.

[….para 3.28]

. **"(e) Consumers should be able to know or predict prices they will face when making decisions to connect to or use the network."**

We support this principle but stress that useful consumer awareness requires information from retailers on how they may change or re-bundle distribution charges. Again, this underlines the need for mandated retail pass-through of distribution costs.

. [para 4.20] **"Q7. Can you illustrate how and to what extent the LFC regulation hinders price reform?"** □

In contrast with the legislation apparently requiring distribution incentives for solar etc. (i.e. s54Q of the Commerce Act, as explained above) the LFC regulations are clearly not working to produce the benefits to consumers opting to reduce their load that were sought when those regulations were introduced. We recommend that the Authority continues to make that point in its distribution pricing principles, and seeks mechanisms to reform the LFC regulations in a way that meets their original justification.

We appreciate the opportunity to discuss these issues. Other matters covered in the consultation paper are also of concern to CPCT but will be best covered in submissions from RETNZ, EDBs and others.

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