

23 December 2016

Electricity Networks Association
Via email: feedback@electricity.org.nz

Consultation Paper – New pricing options discussion paper

Summary

Mercury supports the aim of moving toward cost-reflective and service-based pricing in the longer term subject to an adequate safety net for the most vulnerable consumers being established. Our analysis indicates that, under all of the preferred pricing options discussed in the paper, low decile consumers on average would see their electricity bills increase versus the current status quo while higher deciles on average should see reductions.

In the longer term, it is plausible more cost-reflective and service-based pricing could offset the impact to low decile consumers by addressing inefficient investment in and operation of new technologies. However, the challenge is these benefits will not be tangible to consumers in the same way the costs of higher bills over peak periods will be. The recent experience with reforms to transmission pricing are instructive here and illustrate the challenges of communicating pricing reforms where impacts are differential and relatively immediate yet future benefits are uncertain.

As a result Mercury supports pricing structures that are simple to understand and easy to implement and will result in more equitable outcomes for consumers over time. We initially favour capacity charges, particularly where networks are not facing congestion, but acknowledge that, as all pricing options will likely result in impacts for the most vulnerable, the ENA and the wider industry should be advocating for appropriate and targeted financial assistance via the social welfare system before new pricing structures are introduced for all consumers.

Introduction

We support the ENA's initiative in looking at the impact that changes in distribution tariffs have in sending clear price signals to consumers and thank you for the opportunity to comment. The discussion paper provides a useful analysis of potential options for reform though we note the intent is not to identify a preferred pricing option as this decision is left to individual distributors based on the circumstances of their networks.

We agree in principle with the issues identified in the paper. From a purely economic perspective there is benefit in implementing distribution pricing that sends efficient price signals for future investment and avoids unintentional cross-subsidies between consumers. However, there are significant challenges in moving to more efficient pricing that are not addressed in the ENA's paper, such as the challenge of convincing consumers that any changes could be in their long-term benefit.



Customers favour simplicity and clarity

Mercury operates in a highly competitive retail environment and we are constantly engaging with our customers to get feedback on how we can provide services that meet their needs. The feedback we have received consistently is that our customers want us to make things as easy for them as possible and provide information that is understandable, simple and clear. This has led us to simplify our customer bills and reduce the previous complexity from detailing the various pricing components.

We have undertaken trials in the past of time-of-use style pricing and found that unless there is a significant variance in charges, most consumers do not respond to differentiated price signals. The added complexity can also quickly result in apathy, particularly where consumers have little discretionary consumption they can shift to off-peak periods.

There can also be the unintended outcome that a consumer's perception of cost-saving outweighs the actual value to them of shifting consumption. This is similar to the well-known 'rebound effect' effect in energy efficiency whereby consumers increase overall consumption when buying a more efficient appliance. In the extreme this can lead to increased bills overall, followed by customer dissatisfaction and perceptions that new pricing structures are disadvantaging them relative to the previous status quo.

Communication challenges from reform will be highly challenging

There are likely to be significant and in our view, potentially insurmountable, communications challenges associated with shifting toward more cost reflective pricing that signals the peak costs of the network, particularly where there are large increases in charges at periods when consumers most need electricity. This has been illustrated by the public response to The Lines Company's pricing structures from consumers which, while highly consistent with economic theory, demonstrates that impacts on consumers, particularly on the most vulnerable, cannot be ignored in pricing design.

The main effect of many of the more variable pricing options such as time-of-use and peak demand charging is that consumers will pay substantially more for electricity over the coldest periods in winter when they most need it (which reflects most of network peaks in New Zealand). Consumers should see lower costs in off-peak periods like summer. However, for the most vulnerable consumers these savings will potentially be absorbed by other necessities and will likely not be put aside to compensate for much higher bills in winter.

Analysis suggests short term impacts to vulnerable consumers

Mercury's initial analysis of applying the proposed ENA pricing structures to a cross-section of our consumer base from low to high income deciles illustrates that the average low decile consumer would experience higher annual bills across all pricing options. It is our view that low decile consumers are already highly responsive to the current status quo variable pricing and are already likely conserving electricity to the greatest extent possible.

Sending much stronger peak signals for electricity usage will simply serve to increase bills in the short term as low decile households will likely not have the capital to invest in energy efficiency technologies or, where they are living in rented accommodation, will face well-known split incentive barriers with the landlord.



We acknowledge that in theory implementing stronger peak signals could have positive long term impacts for low decile consumers by addressing inefficient investment in solar and operation of charging for electric vehicles as indicated by the Electricity Authority. However, the size of these benefits is likely to be highly uncertain and based upon a range of assumptions about the uptake of new technologies and consumer behaviour.

Communicating to consumers, particularly vulnerable consumers that potentially substantial bill increases in winter will be of benefit to them in the long term against a long term outcome that they will never actually observe or experience directly is likely to be an insurmountable communications challenge in our view.

There is evidence for this in the current reforms to transmission pricing where retailers and consumer electricity trusts have raised concerns and opposition to price increase impacts to consumers from the reallocation of charges, despite four years of consultation attempting to establish the relative long term benefits from reform. Given distribution charges in percentage terms are around three times that of transmission, the impacts from distribution pricing reform will be even more amplified.

Support for trialling and phasing in pricing reform over time

We consider options for pricing reform therefore need to be carefully considered and preferably subject to trials and demonstration before being phased in over time. Given the feedback we've had from our customers Mercury favours pricing structures that are simple to understand and easy to implement and will result in more equitable outcomes for consumers over time.

We agree with the ENA paper that a significant proportion of a distribution businesses' cost base is fixed (e.g. the low voltage network). We see potential benefit from considering greater implementation of capacity-type charging, particularly for those networks not facing significant capacity constraints. This would have the effect of smoothing energy bills through the course of the year and avoiding winter bill shock from more variable peak demand pricing structures, while longer term also reducing incentives to more affluent households to invest in or operate new technologies to the detriment of low deciles.

Currently two-thirds of residential consumers are subject to highly variable distribution charges (around 93% of total distribution charges are variable) due to the effect of the Low Fixed Charge Tariff Regulations (LFCT). We consider the effect of the LFCT is sending much stronger signals than necessary to conserve electricity usage in winter with negative health and wellbeing outcomes for the most vulnerable consumers. In addition, it is poorly targeted as many vulnerable households will not necessarily have low consumption.

Greater protections need for the most vulnerable

Irrespective of what pricing structures are adopted, Mercury considers greater protections should be introduced to protect vulnerable consumers. Many overseas jurisdictions have specific social welfare grants specifically to compensate vulnerable consumers for the higher energy costs over peak periods.

The transition to more cost reflective network pricing in these jurisdictions therefore has included an appropriate safety net for vulnerable consumers. We appreciate the ENA is not responsible for social policy outcomes but we would encourage greater advocacy to the relevant government agencies around the potential vulnerable consumer impacts from pricing reform and the need for adequate protections.



We are keen to engage in these discussions going forward and look forward to working with the ENA and other stakeholders on developing practical solutions.

If you have any questions please contact Nick Wilson, Manager Regulatory and Government Affairs, 09 580 3623 or nick.wilson@mercury.co.nz

Yours sincerely

A handwritten signature in black ink, appearing to read 'Nick Wilson', with a horizontal line drawn above it.

Nick Wilson
Manager Regulatory and Government Affairs



Appendix: Consultation questions

Question 1 The following features of efficient and effective distribution pricing have been identified: (1) actionable; (2) compliant; (3) cost-reflective; (4) effective in the long term (durable); (5) service-based; (6) simple; (7) stable and predictable.

- (a) Are there any features which you consider should be added, removed or changed in the above list? Please explain your reasons.
- (b) Which of the above features are the most important in determining future distribution pricing?

Effective in the long term, simple and stable. Mercury operates in a highly competitive retail environment and we are constantly engaging with our customers to get feedback on how we can provide services that meet their needs. The feedback we have received consistently is that our customers want us to make things as easy for them as possible and provided information that is understandable, simple and clear. This has led us to simplify our consumer bills and reduce the previous complexity from detailing the various pricing components.

One aspect not identified as important is standardisation across the EDB networks. Mercury considers there is significant opportunity for the ENA to provide a view on an optimal or default distribution tariff that it would recommend for networks facing specific challenges. For example, if a group of networks were not facing constraints, a capacity-type tariff could be appropriate. If there were peak demand issues, a ToU tariff may be suggested with timings standardise across distributors experiencing this issue on a consistent basis. There is opportunity for the ENA to lead out in a number of areas of distribution pricing.

It is also very important that accurate signals are sent. It would be inefficient from our perspective to send a price signal when no constraint exists (e.g. a summer weekend ToU peak). It would benefit the Networks to encourage / incentivise customers to utilise their network during periods of low demand and in general take an incentive rather than a penalty approach.

Question 2 The ENA has identified five pricing types that it considers in detail in this paper: time of use consumption; customer demand; network demand; booked capacity and installed capacity. Do you agree that these are the five best types of pricing to consider now? Do you agree that other cutting edge pricing options (such as critical peak and real-time pricing) should be left for consideration later? Please provide your reasons.

As per our response to question 1. It is dependent on the network and some of the suggested pricing mechanisms may not have the data or technology to support them (e.g. real time pricing). There may also need to be a default tariff for sites which do not have metering capability to support a proposed



structure.

Question 3 Do you consider that retail competition can be relied upon to ensure consumers face appropriate distribution price signals? Please explain why or why not.

Yes. We agree with the view of the Electricity Authority as presented at the industry forum that retail competition will ultimately determine pass through of new pricing structures for the reasons outlined there.

Question 4 Do consumers see value in load control and ripple control, and is this likely to change in future?

Not currently as these services are not contestable and are generally controlled by the distributor. In the future Mercury considers it is the customer that should see some benefit where third parties are able to offer services to allow consumers the ability to manage their own demand and this will be enabled by new communications technologies. This goes to Mercury's previous submissions to the EA and the Commerce Commission that these services should be of a contestable nature where the customer will realise benefits.

Question 5 Do you agree that distributors should engage with end consumers about distribution pricing? Why/ Why not? Please provide your reasons.

Distributors seeking feedback on the impacts and acceptability of different pricing structures from end consumers is not unreasonable and it is important consumers understand the potential impacts regarding how their charges might change. Our preference is that distributors notify retailers of their intent to consult with consumers and that any communications do not imply that pricing structures will be adopted by any retailers as this could be misleading in the short term.

Question 6 Is there additional information that should be included in this paper about stakeholder engagement? If so, please explain what should be addressed.

The ENA should be concerned as to how vulnerable consumers may be impacted by some pricing options. As per our covering letter, Communicating to consumers, particularly vulnerable consumers, that potentially substantial bill increases in winter will be of benefit to them in the long term against a scenario that they will never actually observe or experience directly is likely to be an insurmountable communications challenge in our view. Given these concerns we consider options for pricing reform need to be carefully considered and preferably subject to trials and demonstration before phasing in over time.

In addition Mercury questions how medically dependant consumers have been engaged in this process.



Question 7 How should distributors balance feedback from different stakeholders?

Distributors should place greatest weight on evidence and feedback on the impacts of pricing reform on the most vulnerable consumers. There are numerous examples (e.g. TPM and the Lines Company) of economically pure approaches being taken without any consideration to actual consumer acceptability or ability to manage the impacts. We should learn from these approaches.

Question 8 Do you prefer two rate or three rate ToU pricing plans (or any other alternative)? Please provide your reasons.

We don't have a specific view on detail design of particular pricing options at this stage beyond that they should reflect the network's particular situation and that we favour simplicity, predictability and the ability to be communicated effectively to consumers. Individual retailers will likely take decisions as to how they package up network tariffs in their competitive offers to consumers.

Question 9 (a) Do you prefer ToU pricing plans that apply peak prices across the entire week (Mon-Sun) or ToU pricing plans that have peaks that apply over weekday (Mon-Fri) only? Please provide your reasons.

(b) If you prefer peak prices to apply over weekdays (Mon-Fri) only, do you prefer the definition of weekdays for peak prices to include or exclude public holidays? Please provide your reasons.

See below our response to Question 10.

Question 10 Should peak prices apply throughout the entire year or should they apply only during clearly defined peak months (such as the winter months of May-Sept)? Please provide your reasons.

While our initial preference is for more capacity based charges as a principle we consider any ToU charges should be aligned more to the periods during the year where peak demands occur. Sending price signals at periods of low system congestion would appear to be inefficient as it would curb use of the system for no efficiency gain. Setting peak periods in advance and making consumers aware of this is consistent with our principle of predictability, though we still see significant communications challenges from higher bills during these periods from ToU charging.

Question 11 Do you agree with the ToU consumption pricing template? Please explain why/why not.

As the ENA notes, a Network doesn't have to use this template. As an overview of a tariff the template appears useful however when combinations of tariffs are contemplated it is likely to become quite busy and complex. As also noted by the ENA it will differ between Networks.



Question 12 Do you agree with the Customer Demand template?
Please explain why/why not.

No comment

Question 13 If Network Demand pricing is used, should it be based on fixed or dynamic network peak pricing? Please provide your reasons.

We do not support demand based charging at this stage on the basis it is complex to communicate, can be less predictable (depending on design) and can be more challenging to implement in the short term.

Question 14 Are annual or monthly resets for demand pricing more appropriate?
Please provide your reasons.

We do not support demand based charging at this stage on the basis it is complex to communicate, can be less predictable (depending on design) and can be more challenging to implement in the short term.

Question 15 What tools might consumers need access to be aware of Network Demand pricing signals?

We do not support demand based charging at this stage on the basis it is complex to communicate, can be less predictable (depending on design) and can be more challenging to implement in the short term.

Question 16 Do you agree with the Network Demand template?
Please explain why/why not?

We do not support demand based charging at this stage on the basis it is complex to communicate, can be less predictable (depending on design) and can be more challenging to implement in the short term.

Question 17 When consumers are moved to a booked capacity plan for the first time, who should choose their plan?

- a. The consumer, in all circumstances
- b. The distributor, in all circumstances
- c. The distributor, but only if the consumer is unsure of, or does not nominate, their preferred plan

Please provide your reasons.

The consumer with default booked capacity options outlined. This would also have to be cascading in nature as booked would we presume need to be less than installed capacity. Mercury is also keen to understand how the Distributor would intend to educate customers in assessing what their booked capacity assessment should look like in order to avoid customers simply selecting the cheapest option.



Mercury notes this is similar to historical mobile phones pricing which has now moved to more fixed price components.

Question 18 Distributors could offer several Booked Capacity price plans (or bands) to choose from. What is a reasonable number of plans to choose from?
Please provide your reasons.

No more than 3. Each tranche then increases the pricing complexity by the number of brackets. Assuming 3 penalty brackets, this creates 12 potential pricing components per property with each additional tranche adding 4 more pricing components. This compares to installed capacity having 1 component and ToU having 3.

Question 19 Assuming it comes at no cost to the consumers, how often should a consumer be allowed to change Booked Capacity plans?
a. Never
b. Once per year
c. Twice per year
d. Three times per year
e. As often as they want
Please provide your reasons.

As often as they want at no cost to the consumer (assuming this is done directly with the EDB). Mercury is keen to understand how a distributor will communicate with the retailer the changes to booked capacity if this is relevant to the pricing offered to customers. In addition how would customers changing premises be handled at the distribution level?

Question 20 Sometimes consumers will choose a Booked Capacity plan that is not most suitable or they have a period of high usage meaning that they go over the capacity of the plan they have chosen. What should happen if the consumer breaches their plan?
a. Pay a higher rate for the usage above the plan
b. Receive a rebate if they stay within plan
c. Automatically moved up to a higher plan
Please provide your reasons.

Mercury prefers a carrot rather than a stick approach so b. would be appropriate. Once again this is dependent upon the price plan a retailer offers.

Question 21 Do you agree with the Booked Capacity template?
Please explain why/why not.



No comment

Question 22 Do you agree with the list of pricing assessment criteria presented in Section 9.2?

- a. If not, what criteria should be considered?
- b. What are the most important assessment criteria and why?

Vulnerable and medically dependant customers appear to be excluded.

Question 23 Do you agree with the ENA's high level assessment of each pricing option against the assessment criteria (presented in Section 9.2)? What in your view are the relative benefits, costs, or challenges associated with each pricing option?

Please refer to our covering letter. We consider more variable pricing structures like ToU and peak demand charges while come with potentially insurmountable communication challenges and significant seasonal bill impacts for vulnerable consumers which is why we initially favour capacity-based charges.

Question 24 What do you consider is the optimal combination of pricing components?

Recover costs on a fixed capacity basis as much as possible. There could be scope to introduce a variable component which only reflects the true network peak period (e.g. limited to a 3 month winter peak demand using ToU) but this would need to be tested further for consumer impact.

Question 25 Do you foresee any challenges to obtain and supply required data for implementation of preferred price structures? Please provide your reasons.

Retailers should have aggregated data available which would likely would be provided to networks for billing purposes anyway and should be sufficient for new tariff structures without going to half hourly data. As discussed at the ENA pricing discussion, a significant number of networks cannot process and do not want to manage half hourly data. There are no impediments to networks obtaining half hourly data commercially if they wish to. Currently under the terms of use of system agreement data is provided for network planning purposes only and we would be concerned if distributors were using it for any other purpose

Question 26 What is your view on the use of data estimates / profiles for implementation of preferred price structures? How should gaps in information in half hour data be addressed?

This presumes HHR data is needed for a tariff. A hierarchical estimation methodology similar to Australia could be utilised.

Question 27 What are the potential changes that could be required by Registry because of moving to service-based price structures?



No change. As ENA points out, all Networks are different and so why would you effect a registry change when only a small number may utilise the change. In addition there is still no proof of concept here. Mercury would suggest we see the results of the network and retailer trials which should be initiated prior to suggesting changes be made to the registry.

Question 28 What are the potential challenges to Electricity Information Exchange Protocols (EIEPs) because of moving to service-based price structures?

No challenges. The challenge will be for the retailers to send 29 different files. The EDB's will then have to somehow integrate these files. There is also the ability to provide information outside the EIEP protocols.

Question 29 What are the potential challenges for your data management and billing systems in implementing service-based price structures?

These are not material impediments to the implementation of new tariff structures longer term in our view. We support the view that retail competition will determine whether there is consumer support for new tariffs or not making systems issues second order.

Question 30 What other technical implementation challenges do you foresee that can impact on implementation of service-based price structures?

That networks may need to make significant changes to their systems to support some of these pricing structures.

Question 31 How can distributors encourage greater uptake of cost reflective types of pricing? Do you prefer mandatory or voluntary adoption approaches, or a combination of both (eg see figures 43 and 44)? What other matters do distributors need to consider under each?

Our view is that greater consideration should be given to how consumers can be rewarded for positive behaviour rather than penalised for negative behaviour. The latter approach will only add to the already significant challenges of implementing new pricing structures. We favour approaches that introduce pricing component progressively and test acceptability so we have a preference for voluntary approaches initially and subject charges to iteration. In our view the focus should be on implementing more capacity based charges initially then considering the value of sending a defined peak signals over time.

Question 32 What is a reasonable timeframe over which to shift to cost reflective pricing?

We do not have a preference for timeframes as this will be driven by each networks systems and the need to test and iterate pricing approaches over time. We support EBDs providing a roadmap of how



they intend to transition over time.

Question 33 What are your preferred approaches to managing adverse price changes (eg see types of pricing presented in pages 72 to 74) and why? What other approaches should be considered?

We have offer support for capacity pricing on the basis it should smooth impact to consumers and reduce winter bill shock. We think this is particularly important for vulnerable consumers whose savings from more variable pricing in summers will potential be absorbed by other necessities and will likely not be put aside to compensate for much higher bills in winter. We consider the ENA and wider industry could support the need for policy makers to consider more targeted welfare assistance while the industry transitions to new pricing structures.

Question 34 What transition issues or challenges do consumers face in the move to cost reflective pricing?

See our cover letter – the impact to vulnerable consumers is in our view paramount.

Question 35 What can distributors do to effectively communicate and engage with consumers during the transition period? What information is most important to provide to consumers during this transition period?

It would be useful for distributors to work with retailers on understanding and communicating the potential impacts from pricing reforms to consumers. Consumers will most want to understand how their bills will change, particularly the most vulnerable. The concept of potentially much high winter bills being offset by savings in summers for more variable peak pricing for example will need careful communication. As noted in our cover letter we have considerable doubts the longer term benefits from pricing reform will be able to be effectively communicated as short term impacts will dominate.

Question 36 What issues or challenges arise for other stakeholders (ie non-consumers) during the transition period? How would you prefer for distributors to communicate and engage with you during the transition period? What information would you like distributors to provide you during this transition period?

Mercury would like to see the ENA take a greater role here and guide their members on best implementation practices along a consistent road map. This would ensure a more consistent message and implementation approach and would also reduce the need for 29 distributors to communicate individually to some 20 odd retailers.

Question 37 Are there any matters not covered in this paper that the industry needs to consider in relation to distribution pricing?

Mercury has undertaken trials in the past of time-of-use style pricing and found that unless there is a



significant variance in charges, most consumers do not respond to differentiated price signals. The added complexity can also quickly result in apathy, particularly where consumers have little discretionary consumption they can shift to off-peak periods.

There can also be the unintended outcome that a consumer's perception of cost-saving outweighs the actual value to them of shifting consumption. This is similar to the well-known 'rebound effect' effect in energy efficiency whereby consumers increase overall consumption when buying a more efficient appliance. In the extreme this can lead to increased bills overall, followed by customer dissatisfaction and perceptions that new pricing structures are disadvantaging them relative to the previous status quo.

