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Electricity Authority
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By email: submissions@ea.govt.nz

Submission on More Efficient Distribution Prices

Introduction

1. This is Vector's submission on the Electricity Authority's (the Authority's) Consultation Paper on More Efficient Distribution Prices (the Consultation Paper). It may be publicly disclosed. Vector's contact for this submission is:

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Summary

2. The emergence of new energy technologies such as electric vehicles, rooftop solar, smart meters and batteries are changing the way customers use the distribution system. Under the traditional electricity supply model customers were largely passive one-way users of the grid, but increasingly they will play a much more active role – managing peak demand via demand response, exporting power to the grid, and engaging in peer-to-peer trading. Vector is committed to enabling this new energy future.

3. Distribution price reform is needed to facilitate the ongoing evolution of the "grid edge" in a way that is equitable, economically efficient, and sustainable for the utility and its customers. Vector recognises that current distribution pricing structures, which recover the majority of revenue via flat volumetric tariffs need to change.

4. Vector is committed to developing innovative customer-focused tariffs that can provide customers with more choice and flexibility, as well as incentives to reduce their energy and network costs. As set out in our Pricing Roadmap, we have already engaged with our customers to assess their preferences for new pricing options. We have also engaged the Brattle Group to provide expert advice and an international perspective on best practice as we move forward with tariff reform.

5. However, for pricing reform to be durable, customers need to be at the centre of the process. Pricing structures that satisfy textbook economic theory may not be acceptable to consumers. For example, they may be complex and difficult to understand and respond to, or they may lead to significant adverse bill impacts on particular customer groups.

6. The challenge for EDBs is therefore to implement pricing structures that send the right price signals, while ensuring that those signals are well understood by consumers and do not lead to excessive "bill shock". Structural price changes should be gradual, with common and sunk costs being recovered over a broad base, and attention given to bill impacts particularly on vulnerable customer groups.

7. To assess the potential impacts of new distribution pricing models on customers, it is essential that Vector and other EDBs have access to half-hourly customer usage data at the ICP level ("half-hourly data"). As Vector does not own the meters on its network, we are reliant on retailers to provide half-hourly data. Despite clear contractual rights entitling us to such data for network planning and management purposes, all of the large retailers continue to refuse to provide it. We would welcome action from the Authority on this matter.

8. Vector is also concerned that pricing reform efforts may be distorted by retailers' efforts to re-bundle prices. It is essential that retailers ensure that price signals are passed through to end-consumers so that those signals are not lost or diluted. Vector's experience with its residential time-of-use pricing (that only one retailer makes available to consumers) and mandated price reductions suggests that the Authority's confidence in the retail sector to reflect service-based prices may be misplaced. Intervention, for example in the form of

mandatory itemising of distribution prices on consumer bills, may be required.

9. The Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 (the LFC regulations) are another potential barrier to price reform. These regulations have introduced inefficiencies and inequities, and should be repealed. We do not share the Authority's view that the LFC regulations are not a barrier to reform – particularly since the majority of EDBs' costs are fixed, and hence would be most efficiently recovered via some form of fixed charge.

10. Finally, although we accept the need for reform, we question the Authority's view that EDBs need to act urgently to avoid significant costs to consumers. The Authority relies heavily on figures from NZIER regarding the potential economic cost of accelerated solar uptake, which appear to be significantly overstated and based on unrealistic forecasts.[1] We also note that the Authority itself has been slow in progressing its proposals for distribution pricing reform – it first published a framework for assessing distribution pricing options in 2012, which to our knowledge has never been used to assess EDBs' prices. The repeated delays on the transmission pricing methodology (TPM) review are a further source of uncertainty for EDBs and consumers. It would be far better to move forward with distribution pricing reform at a steady pace, ensuring buy-in from customers and other stakeholders along the way, than to rush the process and risk poor outcomes.

[1] Neil Walbran Consulting submission on the Authority's distribution pricing consultation.

Response to questions

Q1 Do you agree that distributors need to reform their prices? What is the reason for your answer?

We agree that distribution pricing reform is needed to facilitate the transition to a new energy future. The reform process needs to be customer-centred, taking account of customer preferences (e.g. for simplicity over complexity) and the potential for significant short-term bill impacts.

Q2 How important and urgent are the issues identified by the Authority?

We agree that the issues identified by the Authority are important. However, the Authority's estimates of the potential economic cost of existing pricing structures (based on NZIER analysis from 2015) appear to be significantly overstated. The Authority needs to learn the lessons from the TPM review and ensure that any cost-benefit assessments of the impact of price reform are robust and up-to-date.

It is also disappointing that the Authority has made no attempt to assess the acceptability of its proposed pricing models to customers. There is considerable evidence that the Authority could draw on in this respect, including the experience of distributors in New Zealand and overseas, customer research by Vector (which is summarised in the Pricing Roadmap on our website), and the ENA's recent modelling of potential bill impacts under different pricing models using data from Counties Power.

Finally, pricing reform is not the sole solution to the challenges identified by the Authority. Technology can also play an important role, for example via remote hot water load control or controlled EV charging. We do not accept the Authority's view that such "restrictions" are necessarily a "recipe for inefficiency". Many customers do not have the time or information to respond to complex price signals, and may prefer the simplicity and convenience of allowing remote control of their loads (perhaps in exchange for a discount on their electricity bills). Providing customers with better information and improving communications to customers can also go a long way to addressing the challenges identified.

Q3 Do you agree with the proposed Distribution Pricing Principles?

The proposed Pricing Principles are a step backwards. They appear to place even greater weight on a purist model of economic efficiency, and less weight on customer preferences, than the previous version of the Principles. In particular:

- we do not agree with the removal of the phrase "to the extent practicable" from principle (a). It is important to acknowledge that there may be practical and/or technical limitations on the ability to provide perfectly cost-reflective price signals
- The addition of statement (a) (iii) that prices should be time and location-specific is unnecessary, given the previous statement that prices should signal the effect of network use on avoidable costs. We also note that the Authority has now published a report by Sapere that concludes that implementing full locational marginal prices (LMPs) at a distribution level is impractical at this time
- we do not agree with the replacement of principle (d) with the revised principle (c), in particular the removal of the statement that "changes to prices should have regard to the impact on stakeholders". This statement should be retained and clarified to specifically refer to impacts on consumers, including equity impacts and the potential for "bill shock".

Q4 What if any changes would you recommend are made to the proposed Distribution Pricing Principles, and why?

See our response to Q3 above. We would also support inclusion of a more general principle setting out the high-level goals of distribution pricing – for example, minimising overall network costs, facilitating the uptake of new technology, ensuring revenue stability, and meeting customer preferences. The current wording of the Principles treats economic cost-reflectivity as an end, rather than a means to the end of improving outcomes for customers and "NZ Inc".

Q5 What if any changes would you propose to the star-ratings to better reflect the relative efficiency of distribution prices?

We are not convinced of the merits of a star-rating system. The monitoring regime will impose additional compliance costs and could distract from EDBs' efforts to review their pricing arrangements.

The star-ratings may also encourage certain types of pricing to be introduced that do not meet the preferences of customers. Asking customers would be a fair better approach to assessing the suitability of an EDB's pricing.

That aside, the key issue with the proposed star ratings is the Authority's exclusive focus on economic efficiency. A balanced approach would also include an assessment of prices against criteria such as simplicity, impact on technology uptake, and revenue stability for EDBs.

Q6 How long do you think distributors would reasonably need to introduce the different price structures discussed above?

Vector is provisionally targeting April 2020 for the introduction of new pricing options. However, this timeline is ambitious given the need to design new tariffs, assess their likely impacts (which requires access to data currently held by retailers), consult with customers and retailers, and address technical issues such as data transfer and billing. If the more complex options proposed by the EA are adopted, this would add to lead times, which reinforces the case for pursuing simple options that are more likely to receive buy-in from stakeholders.

Q7 Can you illustrate how and to what extent the LFC regulation hinders price reform?

The LFC regulations are a significant barrier to pricing reform. As the Authority itself acknowledges, EDBs' access and common costs are fixed, and hence would be most efficiently recovered via some form of fixed charge. However, approximately 50% of the customers on Vector's network are currently on LFC tariffs, which significantly limits the scope for modifying the fixed component of our charges.

We note that the Authority has proposed a legal 'work-around' to the LFC regulations whereby capacity charges (for example, based on fuse size) are treated as variable. Even if the Authority's legal advice is sound, this approach is clearly inconsistent with the original intent of the regulations. As such is likely to attract considerable criticism from stakeholders.

Q8 How accurately has the Authority categorised distributor revenues and costs? How could this be done more accurately?

The methodology identified by the Authority to categorise revenues and costs is simplistic. The assessment that the majority of costs are fixed, is one we agree with. However, as noted in our response to Q7, the LFC regulations are a significant barrier to pricing reform as they would only allow a small portion of the costs to be recovered via fixed charges.

Q9 What if any would be better indicators of the efficiency of distribution prices, or the ambition of and progress being made by distributors on their price reforms?

As noted in our response to Q5, we disagree with the Authority's narrow focus on economic efficiency. A broader perspective is needed to assess the merits of different distribution pricing options.

Q10 What assistance could the Authority (or other stakeholders) offer distributors in order to speed up the reform process, or help to remove or reduce barriers to distribution price reform?

As noted above, access to half-hourly data is currently a barrier to the development and assessment of new pricing models. At a minimum, the Authority should make a public statement emphasising the importance of retailers making half-hourly data available to EDBs for the purposes of pricing redesign (especially important for assessing the bill impact for individual customers from transitioning to the new prices).

Yours sincerely
For and on behalf of Vector Limited

Richard Sharp
Head of Regulatory & Pricing