



23 December 2016

Graeme Peters
Chief Executive
Electricity Networks Association (ENA)
Wellington

By email: graeme.peters@ena.org.nz

Dear Graeme

Distribution Pricing: New Pricing Options for Electricity Distributors

We appreciate the opportunity to respond to ENA's discussion paper "New Pricing Options for Electricity Distributors", November 2016.

Our principal comments are provided in the main body of this submission, while responses to the consultation questions are included in the Appendix. Our submission to the Electricity Authority, "Distribution pricing review", 2 February 2016,¹ should also be treated as part of this submission.

Overview

In this submission we make the following key points:

1. **This is a valuable contribution to distribution pricing reform:** containing helpful information and analysis. The next step is planning for a timely and smooth transition to new pricing models.
2. **We encourage a broader role for the ENA:** To aid that transition, developing standardised tariff options, communications and planning tools and supporting networks' actual transitions.
3. **Direct involvement from regulators and government:** Possibly via a pan-industry steering, will provide stakeholder confidence, help ensure alignment and provide a 'clearing house' for difficult or multilateral issues.
4. **Coherence between network pricing is desirable:** Price signals will be more efficient and actionable if transmission, distribution pricing and derivatives² are coherent and complimentary.
5. **A tremendous opportunity the sector, and economy:** well managed price reform will help realise tremendous benefits for this sector and New Zealand; but success depends on the cooperation of industry participants, regulators and government.

We provide some introductory comments then expand on these points below.

¹ Available at: <http://www.ea.govt.nz/dmsdocument/20467>

² Such as distributed generation pricing principles and price signals to other potentially responsive parties.

Introduction

We found the discussion paper very accessible and easy to read. It has a clear focus on managing network costs and investment requirements, and avoided getting bogged down by economic theory or jargon. As with the Electricity Authority's distribution pricing consultation last year, the provision of 'user-friendly' summary documents is a useful addition. Not all stakeholders will want or need to get into the full detail of a lengthy discussion paper.

Although we are not directly impacted by reform to distribution pricing, we have a strong long-term interest in ensuring consumers receive efficient price signals. This will promote efficient utilisation of transmission and distribution networks (and other supply chain elements) and improve the cost effectiveness and competitiveness of the services we collectively provide. In addition, the bulk of our own costs are recovered via distributors, through distribution charges.

Process and decision-making framework

This consultation is a valuable contribution to distribution pricing reform. It contains helpful information and analysis.

We agree with ENA's views on the importance of getting process right, including that "A robust process for developing new pricing structures will involve several iterations of consultation ... Although this takes time it is important for all electricity consumers that we get our pricing right",³ and "effective consultation" requires approaching the matter "with an open mind", and being "prepared to change or even start a process afresh".⁴ This is at the forefront of our mind as we do our planning for a process to convert potential new TPM Guidelines, next year, into a new TPM.

We also agree "Future pricing of distribution services should be:

1. Cost-reflective – fair and free of inefficiencies and cross-subsidies between consumers as far as possible
2. Service-based – reflect the services being provided
3. Actionable – provide price signals that consumers can choose to respond to
4. Durable/effective in the long term – independent of market, technology and policy changes
5. Compliant – meet regulatory requirements
6. Simple – transparent and easy to understand
7. Stable and predictable – avoid volatility"⁵
8. These are sound principles for any form of network pricing.

More specifically, we agree:

- consumer buy-in is important for durability. As ENA note what might be the theoretically-efficient pricing methodology, may not be the best and consumer buy-in is needed;
- in terms of prices that are "Actionable" our view is that "Network pricing should send pricing signals that are 'useful and usable'. Clear and simple tariffs that are straight forward for retailers to manage will likely better enable and encourage the transfer of price signals to consumers. Consistent with this, we agree with the Authority that "It is not necessary for distributors to set prices that perfectly reflect the cost of the services provided"⁶;

³ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 3.

⁴ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 29.

⁵ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 3.

⁶ Transpower, submission to the Electricity Authority, Distribution pricing review, 2 February 2016.

- there can be trade-offs between the principles, including “between pricing that is cost-reflective but is still simple and understandable”, and that “It is important to clearly identify and assess trade-offs of this type”⁷. We consider there is a pressing need to simplify distribution pricing;
- consistent with this, ENA has previously noted: “Given that consumers prefer simple flat rate prices, it may be that competitive pressures will reward retailers that retain flat rate pricing structures even if distributors move to introduce more cost-reflective charges”.⁸ If consumers prefer simpler tariffs, even if it means they “forgo possible cost savings”,⁹ then this may be the most efficient outcome;
- in terms of trade-offs, we also agree cost reflectivity should not be given “absolute priority ... over stability and certainty”,¹⁰ and
- pricing stability is important if price signals are to be effective: We agree “Prices for electricity need to be stable in the long term to provide the right signals to consumers about their investment and consumption decisions”.¹¹

We also agree that “The optimal pricing method may vary by distribution network because of the unique characteristics of each distributor’s environment”.¹² For example, consistent with comments the Electricity Authority has made,¹³ there may be little value in adopting TOU or peak-usage prices in network areas where there is ample distribution and transmission network capacity to meet demand, and limited or no need for capacity upgrades e.g. the LRMC of both distribution and transmission is low or zero. The circumstances could be very different for an EDB in a region facing rapid growth and substantial expected investment needs.

Impact of emerging or evolving technology

The electricity sector is transitioning from a world where demand for electricity had predictably grown with population and GDP, to one where demand is less certain. This was evident from submissions made by EDBs on the demand growth assumptions the Commission applied to the 2015 DPP draft determination, and in relation to the Commission’s Input Methodologies review, including consideration of price versus revenue caps and accelerated depreciation.

While there has been a lot of debate about the regulatory implications of emerging technology, there has been less debate that it has the potential to mean investments made today won’t necessarily be needed, in the same way, in the future. We consider that emerging technology provides potentially large opportunities, but also risks and the key to managing these is sensible price signals.

One of the implications of this, in our view, is that it strengthens the justification for the types of LRMC-based peak-usage, capacity or time-of-use pricing advocated in the ENA discussion paper. Emerging technology, whether thought of as a material change in circumstances or not, has implications for optimal pricing at all levels of the electricity supply chain.

Distribution and transmission pricing should operate in a joined up and complementary manner

⁷ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 4.

⁸ ENA, Submission on Implications of evolving technologies for pricing of distribution services, 2 February 2016, page 15.

⁹ ENA, Submission on Implications of evolving technologies for pricing of distribution services, 2 February 2016, page 16.

¹⁰ ENA, Submission on Implications of evolving technologies for pricing of distribution services, 2 February 2016, paragraph 46.

¹¹ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 6.

¹² ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, pages 3 and 4

¹³ Electricity Authority, Implications of Evolving Technologies for Distribution Pricing, September 2015, page F.

In our view, the justification ENA has provided for LRMC-based peak-usage charges, and the like, are equally valid for transmission. An end-user making decisions about whether to consume peak or off-peak should face price signals which reflect the cost of both the distribution and transmission networks, with distribution and transmission pricing complementing each other. Our position is reinforced by the data ENA references which show a strong correlation between transmission and distribution network peak demand periods.¹⁴

The types of tariff reform ENA is considering could complement and support the approach to peak-usage pricing currently in the TPM with RCPD charges, and extend the extent to which EDBs reflect the RCPD peak-usage charges in their own prices. RCPD charges are, for example, a component of Vector’s time-of-use (TOU) tariffs, but use of TOU or peak-usage pricing is not as prevalent amongst EDBs as the current ENA consultation signals it could be in the future.

This indicates the potential for EDB TOU tariffs and current TPM RCPD (or alternative LRMC-based peak-usage charges) to work in a complementary and self-reinforcing manner.

The views ENA express about the link between cost-reflectivity, the role of pricing in managing future investment requirements, and how LRMC-based pricing promotes dynamic efficiency, reflect the same kind of reasoning which sits behind our views on transmission pricing. We agree, for example, with the following statements in the ENA discussion paper:

<ul style="list-style-type: none"> • Link between cost-reflectivity and peak-usage pricing 	<p>“The types of pricing that best reflect costs will signal the “critical peaks” which determine network investments. These peaks often occur on the coldest days of the year, for example, when consumers’ use of electricity for heating pushes demand to its highest.</p> <p>“Pricing according to critical peaks would reflect cost drivers. But most consumers may not understand or like this form of pricing. The need for pricing that reflects critical peaks will depend on how congested the distribution network is. For example, distributors with significant excess network capacity may not need to give consumers a strong peak pricing signal.</p> <p>“Several types of pricing indicate when network peaks occur or are likely to occur, so that consumers can choose to respond by shifting their use and receive the reward of lower off-peak pricing.”¹⁵</p>
<ul style="list-style-type: none"> • Role of pricing in managing future investment requirements 	<p>“It is largely ... peaks in demand that determine the required capacity of the lines’ network. Networks have to be built with the capability of reliably supplying consumers with the electricity they require for those few hours per day when demand is at its highest ... it is this peak capacity requirement, rather than the amount of energy consumed, that largely governs the cost of building and maintaining the electricity distribution networks.</p> <p>“If growth in peak demand can be managed or limited, a distribution company may be able to avoid costly infrastructure upgrades, and the subsequent need to pass these costs on to consumers.”¹⁶</p> <p>“The peak demand, rather than the amount of energy consumed, largely dictates network configuration and cost for distributors. This</p>

¹⁴ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 39.

¹⁵ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, pages 20 and 21.

¹⁶ ENA, Charging Matters – Considering new ways to pay for electricity networks, undated, page 4.

	<p>is especially so in the transmission network and the high-voltage part of the distribution networks.”¹⁷</p> <p>“The smoothing of network peaks through hot water load management can avoid, or at least defer, millions of dollars of investment in distribution and transmission networks. Consumers benefit from offering up interruptible load through lower network prices over time.”¹⁸</p>
<ul style="list-style-type: none"> • Role of LRMC for dynamic-efficiency 	<p>“Efficient distribution pricing has the benefit of signalling to consumers the long-run cost of capacity upgrades. This is often referred to as long run marginal cost (LRMC) pricing.” [footnote removed]¹⁹</p> <p>“It is generally accepted in economic theory that efficient pricing occurs when prices are based on the long run marginal costs of providing network capacity to consumers. When prices are based on LRMC consumers will adjust consumption (capacity) to a level that benefits them the most in the long run (optimises welfare).”²⁰</p>

Potential next steps

Our comments on potential next steps for distribution pricing reform relate to:

- Possible evidence ENA could develop to support individual EDB tariff reform;
- How far ENA should go in developing tariff options that individual EDBs could adopt;
- Work that could be undertaken on determining which version of LRMC to apply (potentially for both distribution and transmission); and
- Transition risks and issues in view of potential TPM changes.

Ensuring evidence-based decision-making that does not unnecessarily rely on judgement

One of the network pricing principles ENA advocates is that prices be “Actionable” and “provide price signals that consumers can choose to respond to”.²¹ We have referred to this previously as pricing that is ‘useful and usable’.²²

It may be useful, through consumer engagement and other analysis, to test the extent to which consumers could be expected to respond to different types of tariffs and pricing signals.

The discussion paper notes that “Pricing that reflects costs will result in lower prices in the long term”²³ which we agree with as a general statement. However, the paper does not evidence this statement. We consider the Australian ENA distribution pricing review provides useful precedent which could be replicated for New Zealand circumstances. It included analysis which detailed expected overall downward pricing impacts for end-users.

¹⁷ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 11.

¹⁸ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 20.

¹⁹ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 20.

²⁰ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 20, footnote 17.

²¹ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 20, footnote 21.

²² Transpower, submission to the Electricity Authority, Distribution pricing review, 2 February 2016.

²³ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 6.

Similarly, it may be useful to back up the assertion that “prices that reflect cost are important in the short term because they remove cross-subsidies between consumers, meaning everyone pays a fair price”²⁴ with quantified evidence of the extent to which cross-subsidies presently exist.²⁵

We think that most of these statements are reasonable but, absent evidence to support them, it is hard to judge how important the issues are, or how strong a justification they provide for change (particularly substantive changes). Put another way, what is the size of the problem with distribution pricing the review is trying to address?

The stronger the evidential basis ENA can provide for tariff reform the easier it could be for EDBs to justify their tariff reform proposals and get consumer buy-in (another key element of the ENA pricing principles). We see evidence-based decision-making as much broader than simply proving some form of Cost Benefit Analysis at the tail end of the review.

The role of ENA versus individual EDBs

While any tariff reforms are a decision for each individual EDB to make, we think that ENA has and could continue to provide an important role in aiding the transition, developing standardised tariff options, communications and planning tools and supporting networks’ actual transitions.

There are clearly substantial synergies for EDBs from use of ENA as a vehicle for dealing with matters of common interest, and to minimise the extent to which individual EDBs have to replicate each other’s processes and work.

LRMC options

The discussion paper makes clear LRMC would form the basis of the options for peak-usage, capacity-based or time-of-use pricing, but steers clear of an discussion about the different options for defining or determining LRMC. This is reasonable given the consultation is effectively a combined Problem Definition and high-level Options Working Paper.

We think it could be a good idea, if the proposals are to be taken further, for ENA to develop views on how LRMC would be determined (effectively an LRMC working paper, which could build on the Electricity Authority’s on consultation on this matter).

Transpower may have to go through the same exercise, once the Electricity Authority makes a decision on the TPM Guidelines (and potentially in relation to the DGPPs), so we should all consider how best to co-ordinate this work.

Setting over-all optimal distribution and transmission charges requires that the methodologies used are complementary e.g. transmission peak-charges which can readily flow through into the distribution peak-charges. Our starting presumption is that the optimal approach to LRMC is likely to be the same for all EDBs and Transpower – though the form of peak charge may differ e.g. an LRMC-based RCPD charge may be optimal for transmission pricing but may not be suitable for, or liked by, end-users.

²⁴ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 6.

²⁵ There is sometimes looseness around the use of the term cross-subsidy, but ENA capture the definition appropriately: “In order to ensure that one group of consumers is not subsidising another, and that some consumers do not have incentives to bypass the network, prices need to be set at a level such that all consumers face prices that at least cover the incremental costs of supplying them, and no consumer faces prices in excess of the standalone cost of supplying them” [ENA, Submission on Implications of evolving technologies for pricing of distribution services, 2 February 2016, paragraph 17].

Managing a smooth and non-disruptive transition

The Authority's proposed TPM changes could result in substantial distribution tariff upheaval. It could be a good time to 'kill two birds with one stone' and also implement distribution pricing reform.

This would require careful consideration of how the changes tie in together.

By way of illustration, for example, the prices an EDB might produce, for a distribution pricing methodology based on peak-usage or TOU charges could look very different if:

- The current TPM with RCPD charges is in place (see Vector's pricing),
- A new TPM based on AoB (lump sum) and Residual (capacity) charges is introduced with no peak transmission charge to pass-through into distribution charges, or
- The new TPM also includes a peak-usage charge based on LRMC – potentially moderated peak transmission charges to pass-through.

If the new distribution prices are introduced before changes to the TPM it could result in initially high peak distribution charges, which would then be lowered when the new TPM was put in place.

Please do not hesitate to contact me if you have any queries or would like to discuss the content of this follow-up letter.

Yours sincerely

A handwritten signature in black ink, appearing to be 'JC' followed by a long horizontal line.

Jeremy Cain
Regulatory Affairs & Pricing Manager

Appendix: Responses to ENA 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?

We support these principles. They are sound for any form of network pricing.

We agree that:

- consumer buy-in is important for durability. As ENA note what might be the theoretically-efficient pricing methodology, may not be the best and consumer buy-in is needed;
- in terms of prices that are “Actionable” we reiterate our view “Network pricing should send pricing signals that are ‘useful and usable’. Clear and simple tariffs that are straight forward for retailers to manage will likely better enable and encourage the transfer of price signals to consumers. Consistent with this, we agree the Authority that “It is not necessary for distributors to set prices that perfectly reflect the cost of the services provided”²⁶.
- there can be trade-offs between the principles, including “between pricing that is cost-reflective but is still simple and understandable”, and that “It is important to clearly identify and assess trade-offs of this type”²⁷ – we have previously commented that “We consider there is a pressing need to simplify distribution pricing ...”;²⁸
- consistent with this, ENA has previously noted: “Given that consumers prefer simple flat rate prices, it may be that competitive pressures will reward retailers that retain flat rate pricing structures even if distributors move to introduce more cost-reflective charges”.²⁹ If consumers prefer simpler tariffs, even if it means they “forgo possible cost savings”,³⁰ then this may be the most efficient outcome;
- in terms of trade-offs, we also agree cost-reflectivity should not be given “absolute priority ... over stability and certainty”;³¹ and
- pricing stability is important if price signals are to be effective: We agree with ENA that “Prices for electricity need to be stable in the long term to provide the right signals to consumers about their investment and consumption decisions”.³²

In response to some of the other ENA questions we also suggest that consistency with workably competitive market outcomes may also be relevant, particularly in relation to the extent and nature of consumer choice the potential distribution tariff reforms would provide. As Ken Sutherland, Chair of the ENA, notes, part of “Improving the way we price to consumers” is “to ensure that we provide them with choice”.³³

²⁶ Transpower, submission to the Electricity Authority, Distribution pricing review, 2 February 2016.

²⁷ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 4.

²⁸ Transpower, submission to the Electricity Authority, Distribution pricing review, 2 February 2016.

²⁹ ENA, Submission on Implications of evolving technologies for pricing of distribution services, 2 February 2016, page 15.

³⁰ ENA, Submission on Implications of evolving technologies for pricing of distribution services, 2 February 2016, page 16.

³¹ ENA, Submission on Implications of evolving technologies for pricing of distribution services, 2 February 2016, paragraph 46.

³² ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 6.

³³ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page iv.

This may be captured by the “service-based” principle depending on how it is interpreted and applied. Concepts like “service-based” are a bit nebulous and can mean different things to different people (which ENA intimated in its submission to the Electricity Authority, on the evolving technology and distribution pricing consultation, in February). We consider that service-based, customer-focussed and replicating workably competitive outcomes are similar and overlapping concepts.

We note the pricing criteria also contained in the discussion paper goes into more detail about what efficient pricing is. The two sets of criteria overlap, but don’t use the same set of wording. It would be good to clarify the alignment between the two, as well as the Electricity Authority’s distribution pricing principles and decision-making and economic framework.³⁴

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.

We strongly support LRM-based, or LRM-like, charging that provides effective and explicit ex ante signals about the cost and impact of the use of electricity networks (transmission and distribution) during peaks.

We consider the question of what particular form this may take for distribution pricing, including adoption of “cutting edge pricing options”, to largely be a matter between EDBs, retailers and consumers. We do note, though, that the options aren’t necessarily either or e.g. an EDB could offer more than one type of pricing option, providing retailers and consumers greater choice. This may be beneficial if, say, an option like real-time pricing has potential for greater network management benefits but would only suit a minority of consumers/niche retailers.

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.

With respect, we consider that the discussion paper may be asking the wrong question.

The starting point, as articulated by Ken Sutherland, Chair of the ENA, is that “Any changes must be supported by consumers, and other important stakeholders such as electricity retailers”.³⁵

We suggest ENA, and EDBs should be considering what price signals retailers and consumers would consider to be ‘useful and usable’. How do we need to reform distribution tariff options such that retailers will be able to, and be willing to, pass-through the distribution pricing signals?

³⁴ The discussion on LRM on the Electricity Authority’s LRM working paper usefully sets out well that LRM pricing is dynamically-efficient, and scores highly on the Authority’s decision-making and economic framework. The Authority, however, seems to have moved away from these positions in its more recent TPM review consultation.

³⁵ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page iv.

Much of the discussion paper goes directly to the heart of this reconfigured question.

The discussion paper, for example, recognises a general retailer preference for simplicity.

Meeting retailer needs and preferences is also recognised in statements such as:³⁶

When designing a new ToU pricing plan, a distributor should consider whether to align to an existing ToU-based pricing offer across neighbouring distribution regions. Retailers are much more likely to pass through ToU-based pricing if they can package together pricing offers from multiple distributors. ToU offers that are aligned across distributors also minimise the transaction and administrative costs for retail marketing and system changes, which encourages retailer participation and subsequent consumer take-up of the new pricing offer.

Electricity retailers are likely to be reluctant to pass-through forms of pricing that consumers would consider unpalatable, or consumers would be unwilling or unable to understand or respond to.

If EDBs set ‘useful and usable’ pricing signals this will create opportunities for retailers to offer tariffs which can save their customers money. Other retailers which do not follow suit may find themselves at a competitive disadvantage. For example, consumers that do not consume high amounts of electricity during peak periods, or are able to shift their load, will tend to gravitate towards retailers that pass-through peak-usage price signals. Retailers that do not pass-through these signals could end up with higher cost/less profitable customers.

ENA has also explained previously that, even with competition, retailers may not pass-through distribution pricing signals if the pricing does not reflect consumer preferences. If, for example, consumers value simplicity over “possible cost savings”:³⁷

“Given that consumers prefer simple flat rate prices, it may be that competitive pressures will reward retailers that retain flat rate pricing structures even if distributors move to introduce more cost-reflective charges.

...

“Hence, while we agree that distributors should aim to set more cost-reflective prices, we need to be aware that consumers’ ultimate consumption choices are driven by multiple factors and that consumers typically prefer simple flat rate charges and are often willing to forgo possible cost savings in order to retain a simple and familiar pricing structure.”

If consumers prefer simpler tariffs, even if it means they “forgo possible cost savings”, then this may be the most efficient outcome; consumer welfare may be maximised, even if productive efficiency is not. Ultimately whether, or the extent to which, retailers pass-through distribution pricing signals depends on the extent to which EDBs understand, and respond to, retailer and consumer preferences.

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

³⁶ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 44.

³⁷ ENA, Submission on Implications of evolving technologies for pricing of distribution services, 2 February 2016, pages 15 and 16.

The preliminary analysis Transpower has undertaken suggests there is substantial benefit from demand-side management, including load control and ripple control, responding to RCPD signals.

The analysis we undertook, for our response to the Electricity Authority's TPM 2nd Issues Paper indicates that the combination of Demand Reduction and Distributed Generation, as a proportion of peak demand, in each region is:

- Upper North Island: 9-12%
- Lower North Island: 22-28%
- Upper South Island: 17-30%
- Lower South Island: 15-18%

The significance of this is that the combination of DR and DG equates represents many years' organic demand growth in all four regions.

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

Yes.

It is important for EDBs to engage with both retailers and end-consumers.

Electricity retailers, as the direct-customers of EDBs and as the parties that will ultimately determine how distribution prices are passed-through to end-consumers, have an important role to play in any tariff reform or review.

Different retailers will inevitably, and appropriately, have different interests and preferences, depending on their business models. For example, retailers that offer tariffs which expose end-consumers to half-hourly spot market prices may be more open to complex and more dynamic distribution tariff reforms. This reflects that the consumers they target are likely to be more progressive, and open to adapting their electricity usage to respond to pricing signals.

Understanding consumer preferences and how they would respond to potential new pricing signals is important for successful tariff reform, and ensuring evidence-based decision-making. The form of engagement can take any number of forms, such as use of consumer-focus groups, conferences, social media (including EDB facebook pages) etc.

We agree with ENA that "Successful pricing discussions need to focus on the end consumer. Consumer engagement delivers better outcomes for consumers and supports the success of any change".³⁸ We also agree with the Electricity Authority that "distribution pricing structures around the country will best promote the long-

³⁸ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 27.

term benefit of consumers when design is informed by local knowledge. Distributors can achieve this by actively and effectively engaging with the consumers and retailers on their networks when developing distribution pricing structures”.³⁹

We note that EDBs are expected to engage directly with consumers on matters such as CPP applications.

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

We consider that the current consultation is a valuable contribution to distribution pricing reform. It contains helpful information and analysis.

The next step is planning for a timely and smooth transition to new pricing models.

We encourage a broader role for the ENA to help aid that transition, developing standardised tariff options, communications and planning tools and supporting networks’ actual transitions. It may also be useful for direct involvement from regulators and government: Possibly via a pan-industry steering, will provide stakeholder confidence, help ensure alignment and provide a ‘clearing house’ for difficult or multilateral issues.

It is stated in the discussion paper that “A robust process for developing new pricing structures will involve several iterations of consultation by the ENA and distributors”.⁴⁰ We agree but would like to see a clearer road-map of what these iterations will involve and what the next steps are. It could be useful if this included clarification around the expected boundary between the work ENA will do and EDBs will undertake individually. See discussion on “Potential next steps” in the main body of the submission.

Question 7 How should distributors balance feedback from different stakeholders?

While we trust that our submission is helpful, and want to see distribution and transmission pricing methodologies that work in a complementary and reinforcing manner, the specific commercial arrangements in relation to distribution pricing are ultimately a matter for EDBs and their customers (at both the retail and consumer levels).

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

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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.

³⁹ Electricity Authority, Implications for evolving technologies for pricing of distribution services – consultation paper, November 2015, page 3.

⁴⁰ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 3.

(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.

In terms of the operation of the transmission grid, we note that most of the RCPDs occur in the evenings, during the week, and in winter.⁴¹ We recognise there may be a trade-off between trying to target the peaks, and producing tariffs that are simple for consumers to understand and respond to. Whether this balance, means there should or should not be seasonal tariff differentiation, or differentiation between weekdays and weekends, is a matter we consider stakeholders directly affected by these proposals (electricity retailers and consumers) should principally to respond to. It depends on consumer preferences and how they would respond to the different options.

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.

See response to Question 9.

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

We have not reviewed the template. We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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

We have not reviewed the template. We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to. We note the type of peak-usage pricing that may be suitable for transmission services, such as RCPD, may not necessarily be suitable or preferred by retailers or consumers.

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

⁴¹ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, Figures 24 – 26.

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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

We have not reviewed the template. We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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

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

Please provide your reasons.

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to. Consistency with workably competitive market outcomes may be a relevant consideration. Also relevant is the comment from Ken Sutherland, Chair of the ENA, that part of “Improving the way we price to consumers” is “to ensure that we provide them with choice”.⁴² Ditto the statement in the discussion paper that “Ultimately, any change in pricing structures will need to be informed by consumer preferences”.⁴³ In many ways the discussion paper answers its own question.

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.

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

Question 19 Assuming it comes at no cost to the consumers, how often should a consumer be allowed to change Booked Capacity plans?

- Never
- Once per year
- Twice per year

⁴² ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page iv.

⁴³ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page vi.

- d. Three times per year
- e. As often as they want

Please provide your reasons.

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to. Consistency with workably competitive market outcomes and the ENA pricing principle of simplicity may be relevant considerations. Also relevant is the comment from Ken Sutherland, Chair of the ENA, that part of “Improving the way we price to consumers” is “to ensure that we provide them with choice”.⁴⁴

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.

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to. There is precedent for this type of issue in terms of residential consumer choice of low or high fixed charge tariffs, and the advise retailers are required to provide residential consumers about what tariff would best suit their circumstances.

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

We have not reviewed the template. We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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?

Refer to our response to Question 1. We note that the discussion paper contains two overlapping, but distinct, sets of pricing criteria or principles.

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?

⁴⁴ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page iv.

We have not reviewed the assessment in detail. An open question we have is what level of evidence (including, potentially, quantified CBA), does ENA and individual EDBs consider is needed to justify substantive network tariff reform, particularly if there is potential for price shocks?

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

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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

This is a matter ENA and EDBs should consider as part of the review process. We understand some EDBs consider that they need additional consumer information to make well informed decisions. We have encountered analogous type issues with the level of uncertainty about the extent to which RCPD signals are responded to e.g. by distributed generators and through EDB demand reduction, and the impact removal of these signals would have on parts of the existing transmission grid to meet peak demand, and on future transmission investment requirements.

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?

We have no comments on this question.

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

We have no comments on this question. It is not applicable to Transpower.

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

We have no comments on this question. It is not applicable to Transpower.

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

We have no comments on this question. It is not applicable to Transpower.

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

We have no comments on this question. It is not applicable to Transpower.

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?

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

Ken Sutherland, Chair of the ENA, set out that a “key goal” of “Improving the way we price to consumers” is “to ensure that we provide them with choice, opportunities to take advantage of new technology and ways to save money”.⁴⁵ If EDBs succeed in setting prices that offer choice, better opportunities for use of new technology, and the opportunity to save money this should help encourage greater uptake.

It may also be worth considering outcomes in workably competitive markets. Some consumers, for example, may not be able to or want to respond to more sophisticated tariffs and pricing signals. They may be willing to pay a premium for greater certainty about the cost of electricity usage.

The telecommunications sector potentially provides useful precedent – with retail service providers providing a range of pricing choices targeted against different consumer needs e.g. ‘all you can eat’ options for high-use consumers, and pre-pay options which give consumers greater discretion which may suit lower-usage consumers, or consumers with less certain and more variable demand profiles.

An example of the impact of limits on choice or tariff options can be seen with consumers that take-up LPG tank supply for their home, even though there is gas distribution network supply available. It is likely that these consumers prefer to be able to select an, effectively, fully variablised tariff option, rather than relatively high fixed/low variable tariffs on offer through the gas network. A more flexible approach to pricing, in such circumstances, could mean greater uptake of gas reticulation, and (if the tariff enables at least recovery of incremental cost) contribution to the fixed and common costs of the network by a greater number of costs. EDBs and Transpower are somewhat insulated from some of these dynamics because electricity is, at least for the time being, less of a discretionary service than gas or telecommunications.

We think a particular lesson from the telecommunications sector is the importance of choice and ‘one size does not fit all’.

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

It is not clear how this question could be answered without specific information on the actual proposed new tariffs and how far they depart from existing tariffs, including potential for rate shock. For example, it is noted in the discussion paper that “Moving from a pure consumption-based to a pure capacity-based pricing structure will create the largest price changes of all the cost-reflective pricing structures in this discussion paper”.⁴⁶

While we consider this question to be premature it is one EDBs should keep in mind as they progress their individual tariff reforms (where applicable).

⁴⁵ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page iv.

⁴⁶ ENA, New Pricing Options for Electricity Distributors, A discussion paper for industry feedback, November 2016, page 67.

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 consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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?

We consider this to be a matter for stakeholders directly affected by these proposals (electricity retailers and consumers) to principally respond to.

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?

An additional transition issue that EDBs may want to consider is how to best manage potentially overlapping distribution and transmission pricing reform. We discuss this in the main body of the submission under “Potential next steps”.

Some of the potential issues are not resolvable at this stage of the respective distribution and transmission pricing methodology reviews, as both the outcome and timing of any changes is not yet known. It would not be known, for example, when a new TPM would be implemented until after Transpower had completed the development of any new or revised TPM Guidelines into a fully developed (and approved) TPM.

Some of the issues worth considering are:

- The impact of two consecutive tariff reforms (one for changes to distribution pricing methodologies, and the other for the TPM) versus managing the changes concurrently;
- The implications of potential TPM changes for the type of LRMC pricing signals ENA is advocating. For example, the optimal distribution peak-usage pricing signal would be higher if RCPD or some form of peak-usage price is retained in the TPM, compared to the Authority’s current proposal to remove transmission peak-usage signals (with LRMC a discretionary component that would only be introduced if both Transpower and the Electricity Authority agreed).

Any such issues would be easier to manage if the distribution and transmission pricing changes work in the same direction, and are consistent.

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

Please refer to the main body of our submission; including the section on “Potential next steps”.