

21/12/2016

Graeme Peters  
Chief Executive  
Electricity Networks Association  
PO Box 1017  
Wellington 6140

By Email

Dear Graeme,

**Re: New Pricing Options for Electricity Distributors**

Pulse Energy Alliance LLP (Pulse) appreciates the opportunity to comment on the Electricity Networks Association's (ENA) discussion paper (the Paper) and the effort that has been put in.

Pulse does not rebundle existing distribution charges, but passes them straight through to customers. We have however experienced some difficulties and complexities associated with this that are relevant to considering future pricing structures:

- GXP based distribution pricing cannot be passed through to the ICP level by very definition and this makes pricing complex and for consumers creates confusion
- Distributors that are pushing ahead with pricing reform ahead of retailer's systems are limiting customer choice of retailer or forcing 'pass through' retailers such as Pulse to consider rebundling

The Paper clearly identifies that theoretically 'optimal' pricing may not be achievable or sensible. As soon as the ability to achieve a pure pricing approach is relaxed, the assessment of potential approaches becomes subjective. This is not a criticism, but rather confirmation that the Paper's approach of assessing a range of 'features' against the range of pricing options is a sensible approach.

The desire for cost/service reflective pricing, whilst a noble objective needs to be considered against the cost of implementation, the complexity of pricing (that may or may not be passed to consumers, even if possible, warranted or desired), consumer's objectives and overall competition.

Pricing, systems and approaches need to facilitate innovation and simplicity, not dictate a view of the "optimal" outcome and the Paper's approach facilitates a discussion about what might be sensible and achievable, but needs to be tempered by what consumers may want or understand.

It is worth considering Alfred Kahn's book, "The Economics of Regulation: Principles and Institutions"<sup>1</sup>. In discussing the economic basis of marginal cost pricing he notes that,

*The outcome of this entire discussion about the problems of defining (as contrasted with actually measuring and applying) marginal cost is that neither the choice between short and long-run, nor the problem of defining the incremental unit of sale, nor the prevalence of common and joint costs raises any difficulties in principle about the economically efficient price. It is set at the short-run cost of the smallest possible additional unit of sale. Common costs do not preclude separable marginal production costs, and joint products have separate marginal opportunity costs.*

*But, as we have already suggested, short-run marginal costs (SRMC) are the place to begin. There are situations in which it is both efficient and practical to base rates on them, as we shall see. Typically, this is not the case; principle must be compromised in various ways in the interest of practicality.*

Kahn goes on to list a range of reasons why the economically pure approach may need to be tempered:

- Infeasibility or practicality of making the necessary fine calculations of SRMC
- Marginal costs can vary from one moment to the next, with buyers having to grapple with constantly changing prices and whose ability to plan intelligently for the future would be impaired.
- The practically achievable version of SRMC pricing is likely to be average variable cost, but more likely to be average total cost
- The prevalence of common costs can affect the ability to discretely price
- Long-run marginal cost is likely to be the preferred criterion, particularly in competitive situations

Overall, it can be argued that Kahn is presenting the challenge of pricing as one that cannot necessarily be tackled component by component and even if it can, it does not necessarily indicate that this is the best outcome.

This is particularly true in electricity where the actual cost of delivered energy can be clearly identified as being comprised of a variety of SRMC's which are both derived and varying independently. Added to this is the fact that consumers are seeking delivered energy and competition is the preferred method of delivering choice and pricing.

Consistent with this and included in our responses below, Pulse believes that for residential and small commercial consumers all distribution companies should ultimately offer the same standard structures of fixed and variable pricing (TOU), using the same at the meter charging methodology, as opposed to GXP pricing approaches and with common retailer charging and reconciliation requirements, notwithstanding that the level of prices may vary.

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<sup>1</sup> See pages 77 to 86

We commend the ENA for putting together a comprehensive discussion document and acknowledge this as an important step in the evolution of distribution pricing.

Your sincerely,

Neil Williams

**General Manager Energy Supply and Operations.**

## Response to 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?

The features are a sufficient list to develop pricing although the definitions are subject to debate.

A key component that is missing in much of the discussion is whether the pricing is intended to achieve existing and future revenue requirements including the recovery of sunk costs. As this is not explicitly covered it is not clear what the implication of consumer responses to pricing signals will be through time. Consequently, the analysis seems somewhat static other than the assumed avoidance of some future costs that are as yet undefined.

This concern is further reinforced by recent Commerce Commission decisions around revenue caps. If Distribution companies are going to rearrange pricing as consumers respond, so as to stay at the revenue cap, then consumers may face ever rising prices notwithstanding any response to prices.

Durable has been defined as a stakeholder outcome for networks<sup>2</sup>, where as for consumers it is defined as fair. If pricing is intended to change current and future behaviour then this is likely to affect durability. If durability is certainty of sunk cost recovery etc., this will then affect stability and predictability. The ENA and distributors need to be clearer about their underlying assumptions about sunk cost recovery and the pricing dynamics of ongoing consumption changes.

On a similar vein, cost reflective is not well defined. Economics of pricing is generally concerned with some variant of SRMC, LRMC of LRAC. When these concepts are combined with capacity type goods or services (within regulated industries) consideration is usually given to peak type pricing or derivatives (as discussed within the technical paper). It should be noted that many products in competitive markets also face high sunk costs (electricity generation, telecommunications, smelters, large scale production facilities in the automotive sector including developing new vehicles) but utilise variable based pricing with the risk of through time utilisation and returns falling on the shareholders/asset owners. It is not clear where the ENA sees the interplay between cost/service reflective pricing and sunk cost recovery.

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<sup>2</sup> See page 3 of technical paper

Of the features identified, compliant and actionable can be taken as absolute requirements. This leaves the other five features:

- cost-reflective;
- effective in the long term (durable);
- service-based;
- simple;
- stable and predictable.

From a consumer perspective, simple, stable and predictable are likely to rank as key features. Service based and cost reflective are aspects that are unlikely to be top of mind for a consumer (currently) and not necessarily relevant to a consumer, dependent upon any given retailer's choice of pricing structures. Additionally, consumers are purchasing delivered energy which by definition is the sum of the supply components, rather than a suit of discrete services<sup>3</sup>. Durability appears to a network desired characteristic, as from a consumer perspective stable and predictable is likely to be equivalent to durable.

However, cost reflective/ serviced based are relevant from a distributors perspective in setting their prices for retailers (subject to further clarification of sunk cost recovery) and with some significant education may attain some relevance to consumers.

**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.

The five pricing types are appropriate for consideration. Critical peak and real time should be avoided as they are unlikely to be easily communicate to or understood by consumers (real time is not possible at a household level as metering, while logging in real time is not currently available in real time).

TOU and installed/booked capacity appear to have the best trade-offs between the described feature set. It should be noted that there is no 'optimal' price choice as the assessment is qualitative.

**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. Competition will ensure that any price/margin opportunities will be identified and competed for.

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<sup>3</sup> This is further complicated in electricity as the electricity is a function of a derived demand i.e. consumers are seeking a service other than electricity itself.

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

To the extent that consumers understand, there is value. Consumers are always likely to accept price/quality/supply trade-offs where both the adverse service effect and the need for the consumer to act is low.

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

Distributors should engage with consumers in conjunction with retailers. Ultimately the customer/contractual relationship is between the consumer and the retailer and the retailer and distributor (in most circumstances) but the distributor's pricing decisions can have large redistributive/allocative effects on consumers<sup>4</sup> and it would be useful for the messaging to be coordinated or at the minimum for distributors to notify retailers prior to communicating.

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

It would be useful for ERANZ and the ENA to help coordinate communications.

**Question 7** How should distributors balance feedback from different stakeholders?

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

As identified in the paper there is a trade-off between different pricing structures and complexity. If there are practical service/system based reasons for TOU pricing to be three rather than two rate then the relevant distributors should explain this within their pricing methodology.

From an economy wide perspective it would be better if distributors used the same definitions and time periods.

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<sup>4</sup> Just as the EA's TPM pricing considerations do.

**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.

As the pricing is intended to be cost/service reflective it should be structured based on the cost/service rather than a 'preference'. As noted in the introduction as soon pricing moves away from a purely theoretical (and generally unachieved basis) a broad range of qualitative decisions and considerations come into play, as illustrated by the 'features' the ENA is consulting on. Consequently, it will be a value judgement by distributors that will answer the above questions.

**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.

This is dependent upon what the 'service' is. For example, if the service is defined as connected capacity, which is not time dependent (unless changed), then the structuring of the 'costs' associated with this service should not be time dependent. If the cost recovery was via a single connection charge, then this could be a daily/monthly charge (per kW/kVa or similar) or if TOU based would be constant for the specified time zone across the year.

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

It seems appropriate as a template.

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

It seems appropriate as a template.

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

In the absence of a method to communicate peak pricing periods a fixed approach would satisfy the key 'features' better.

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

It is not clear how annual or monthly resets would handle switching (if priced and measured at the ICP level). It should be noted that Orion's approach is extremely difficult for retailers to translate in a consistent manner and requires retailers and their consumers to take the estimation risk.

'Allocations' of demand based on aggregate GXP data should be avoided as should GXP based pricing in general.

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

If distributors chose this type of pricing do not provide free access to timely and actionable information then this pricing approach is likely to fail, unless the demand charge is so low or the number of peaks it is averaged across are so many as to be indistinguishable from kWh charging. Failure to provide actionable information would be akin to fining people for breaking the speed limit where you only told them what the limit was after the fact.

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

It seems appropriate as a template.

**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.

Absent pricing and confirmed methods for charging and adjustment it is difficult to answer this question. The greater the charge and the bigger the impact relative to current pricing, the greater consumer engagement is required.

**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.

In isolation of the total price plan and structure this is difficult to answer. For example if a distributor had only booked capacity pricing, then a small number of plans for residential (two to six) covering the expected range of demand (given connection fuse limits) would likely suffice. However, if distributors combine this pricing with say a daily charge and some TOU pricing then the number of potential price plans expands considerably.

For example, six different capacities, plus two TOU rates and a Low and Standard user daily charge would yield 24 different price plans. While the key discussion with a customer would most likely be about booked capacity and low/standard user it would make price plan selection complicated.

In addition to the above, customers would require significant education on booked capacity to allow them to understand the interplay between different appliances and their potential coincident usage. Retailer billing system would potentially need to be developed or modified to provide rebates or charge for excesses etc.

Booked capacity is likely to be a frustrating and confusing concept to most consumers.

**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.

Absent a specific example of what the implication may or may not be, the relative size of the charge and any other charges this is an impossible question to answer.

**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.

See the answer to Question 19 above.

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

It seems appropriate as a template, but is a very complex product/pricing to explain.

**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?

**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?

There are a few areas where we have a different perspective, but these can be discussed at a later date when the pricing choices are narrowed down.

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

There can be no 'optimal' combination of pricing components. The proposed range of pricing options and their assessment against the 'features' is by very definition qualitative.

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

As not all ICPs have or will have advanced meters, not all pricing options will be possible without some rules around exception management. Billing systems may need changing for the proposed approaches.

**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?

If the data is not available for a price structure it is difficult to see how it satisfies the specified feature set and therefore why it would be implemented. As noted in our Question 25 answer some rules will need to be developed for exception management.

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

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

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

Our existing system cannot handle the majority of the proposed pricing.

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

Adoption should be voluntary. To argue that a mandatory approach is more successful than a voluntary one is tautological.

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

Absent proposed prices it is difficult to answer, as the degree of transition required for consumers will impact the ability to implement. In addition, system changes that may be necessary could take from weeks to months/years.

**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?

Absent proposed prices it is difficult to answer.

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

Absent proposed prices and structures it is difficult to answer.

**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?

Ultimately consumers will want to know what their total cost will be. If this cannot be explained clearly and why their price has changed then consumers will be unhappy.

**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?

Communication should be ongoing and unaffected by transition periods. Many distributors only form of current engagement is to send the annual price change notifications. Any advancement on that will be an improvement.

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