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Via email distribution.pricing@ea.govt.nz

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## Feedback on Distribution Pricing Practice Note (2021)

Powerco welcomes the Electricity Authority's updated practice note. We agree with the Authority that that pricing is an essential part of good asset management and part of the solution-set for managing network investment. It also needs to be practical given the realities and uncertainties that are involved in planning and operating infrastructure.

Powerco supports and has contributed to the submission from the Energy Networks Association. There are a few points we'd like to emphasise:

- **Timing** If a "burning platform" is the balance of fixed and variable charges for residential customers, we think the practicalities of the low fixed charge regulations over 2022-2027 should be drawn out and explained. It's a matter strongly affecting putting any theory into practice.
- Quantify efficiency/harm If there are costs involved for retailers, distributors, and other parties to
  implement the desired changes to pricing, a quantification of the benefits/harm directly attributable to
  pricing structures/levels would be helpful of explaining to consumers why incurring those costs is in
  their long-term interests.

Our approach to this consultation at this point has been to comment on the practice note content with a view to these informing its next iteration (along with other submissions). We look forward to engaging on this and the topics raised by the consultation paper too, probably in some focussed workshops with concrete examples. If you have any questions about this submission, please contact me at Andrew.Kerr@powerco.co.nz.

Yours sincerely

Andrew Kerr

Head of Policy, Regulation, and Markets

## Questions and thoughts on the practice note and consultation paper

The consultation paper and practice note reflect a useful step in the Authority's journey to articulate its expectations in a way which are meaningful and relevant for the various audiences.

In the spirit of supporting the evolution of the Authority's thinking, we have summarised a range of comments and questions we had as we read the paper. We have no expectations for the Authority to address or respond to these comments.

| Practice note ref | Comment   |
|-------------------|---|
| 4                 | "the primary role of "cost reflective pricing". Should it be ",of efficient pricing" and align with the text box on page 5 (noting that it's probably "fed to and from homes" rather than "fed to homes").  |
| 5                 | 'Cost-reflective pricing' (crp) should be replaced by 'efficient'. Para 5 makes it clear that crp means economic pricing signals plus least distortionary allocation. Para 28 talks about crp and price signalling – as two different concepts but pricing signalling is part of crp. Para 28 goes on to say the shorthand for the outcome being sought is efficiency.  |
|                   | Perhaps just call it efficient pricing, then refer to cost-reflective at the points in the process where it's relevant?   |
| 11                | Example box: there's an interaction with trading off willingness to pay with quality of supply. A proxy like the collective value of lost load can reflect the willingness to pay or justify an upgrade. Alternatively, while we are "sharpening the signal" or "removing the barriers to passing on the price signal" to see if this works, we could be putting excessive load at risk, which has other regulatory and customer implications.                                      |
|                   | From a network planning perspective   |
|                   | <ul> <li>pragmatic triggers are used to initiate a response to manage the constraint – hence the need for security of supply standards (which can be probabilistic or deterministic), particularly for mass market customers.</li> </ul>  |
|                   | <ul> <li>Upgrades usually require forward planning and commitment for years ahead of<br/>the actual work.</li> </ul>  |
|                   | Balancing the timing/resource practicalities of infrastructure management with load/pricing dynamics/practicalities is going to be a challenge. Try we must.  |
|                   | Footnote 3. Given the focus on the role of network congestion, a clearer definition for pricing purposes will be useful. For example, we need to plan with a sufficient degree of redundancy to ensure supply can be maintained when a network component fails. That means that on much of the network the capacity has to be larger than peak demand. Capacity does not only refer to a network asset's capacity, it can include arrangements for load shedding during peak times. |
| 12                | "Fixed daily charge". Is there a rationale for why the charge is daily and how that fixed charge is derived (=fixed cost allocated between customers)?  |
| 13                | Do the benefits in "those who stand to benefit should shoulder the bulk of the cost" need to be defined? Is there a link to the benefits-based-charge for transmission pricing?   |
| 14                | One of the issues is how to get a price signal through to customers in sufficient time and magnitude to actually achieve something material. Mass market customers are quality-takers off a common supply (no ability to differentiate), so a variety of different price signals to reflect different network constraints or supply trade-offs is unlikely to be practical.   |
|                   | "using prices to balance the system". Keen for more explanation about what "balance the system" means.  |

| 15  | "appropriate price signals better manage usage of the network". There's an assumed               |
|-----|--|
|     | attribution of price levels and behavioural response here, and it seems to misalign with the     |
|     | comment in [34] which refers to pricing signalling a cost but consumers making the value         |
|     | decision and [9] which refers to "incentivises rather than instructs".                           |
| 40  |  |
| 16  | Continuing the "pragmatic" point, an LV feeder will often have only a few (<10) consumers        |
|     | on it. Does the Authority have a view or expectation about how many different price              |
|     | signals will be expected to send and respond to for the suggested piecemeal upgrades?            |
| 18  | "our concern is that pricing signals need to sharpen". Some guidance on how sharp could          |
|     | be useful, and what the baseline assumptions about how blunt prices are now.                     |
| 19  |  |
| 19  | This sounds good, though worth checking it aligns with the box on page 5 of the                  |
|     | consultation paper? There can be equity issues to manage on the journey towards this             |
|     | outcome given current network configurations have evolved over decades.                          |
| 22  | Is the idea something like   |
|     | - Year 1:  |
|     | <ul> <li>Zone A: 100 customers paying \$1000/year via some mechanism and reflects</li> </ul>     |
|     |  |
|     | costs (so gross revenue from prices = \$100,000). No congestion expected.                        |
|     | <ul> <li>Zone B: 100 customers paying \$1000/year via some mechanism and reflects</li> </ul>     |
|     | costs (so gross revenue from prices = \$100,000). Future congestion expected                     |
|     | in medium-term and implies a deferral price of \$100/kW per annum. A                             |
|     | decision about resolving constraint if no response required by year 4                            |
|     | - Year 2:  |
|     |  |
|     | o Zone A: No change  |
|     | <ul> <li>Zone B: Pricing scheme derived to signal \$100/kW at useful times ('peak').</li> </ul>  |
|     | Forecast 'peak' revenue impact \$10,000.   |
|     | <ul> <li>Zone B Fixed cost allocated for remaining \$90,000.</li> </ul>                          |
|     | <ul> <li>Behavioural response: everyone responds so forecast 'peak revenue is \$0.</li> </ul>    |
|     | Fixed revenue is \$90k.  |
|     | · ·  |
|     | - Year 3:  |
|     | o Zone A: no change.   |
|     | o Zone B: Washup under-recovered \$10,000  |
|     | <ul> <li>Zone B: Pricing scheme continues to signal \$100/kW at useful times ('peak')</li> </ul> |
|     | just in case. Forecast 'peak' revenue impact \$0 (assume behaviour change                        |
|     | locked in).  |
|     |  |
|     | <ul> <li>Zone B: Fixed cost \$100k allocated (100k+10k = 110k)</li> </ul>                        |
|     | <ul> <li>Zone B: Behavioural response: everyone responds so forecast 'peak revenue</li> </ul>    |
|     | is \$0. Fixed revenue is \$110k.   |
|     | - Year 4+  |
|     | o Zone A: no change  |
|     | <ul> <li>Zone B: As for year 0. Future congestion avoided. Everything in equilibrium</li> </ul>  |
|     |  |
|     | except future investment has been avoided due to behaviour change.                               |
| 23  | Keen to know more about what "implemented well" means and who does it apply to? Can              |
|     | the Authority point to examples where pricing reform was implanted well or not well?             |
| 24  | " if pricing is to avoid cross subsidies".   |
|     |  |
|     | Is this "revenue from pricing" and potentially with a time dimension eg "annual revenue          |
|     |  |
| 0.5 | from pricing"?   |
| 25  | Keen for more explanation about the comment " if these [distribution pricing structure]          |
|     | promote the 'wrong' patterns of use or incentivise an inefficient direction of investment".      |
|     | What is wrong use and right use, an inefficient direction of investment? What evidence           |
|     | does the Authority have about how attributable is a distribution pricing structure to            |
|     | consumer use/investment?   |
| 26  | "the 'burning platform of inefficient pricing structures". Does that Authority have a way        |
| 20  |  |
|     | to quantify this burning platform? It could be quantifying the avoided investment (text box      |
|     | on page 5 of the consultation paper).  |
|     |  |
|     | 26a "no congestion is evident". Does this mean no congestion expected in the long-term?          |
|     | Keen to understand the link to [22a] which refers to signalling for future congestion.           |
|     | Troom to understand the link to [22a] which refers to signalling for future congestion.          |
|     | 00 # male made at TOLL 1 and 1   |
|     | 26c "implementing TOU when there is no regular discernible congestion". The paper also           |
|     | refers to beneficiary-pays concepts in [35], which might support a variable or TOU charge        |
|     | to approximate utilisation and/or benefit of different customers.                                |
|     |  |

| "cost reflective prices are an enabler of"  |
|---|
| Is it "efficient prices" instead?   |
| "shoulder the burden". We're excited about delivering decarbonisation in an efficient way.  |
| It's not a burden.  |
| "There are options available for distributors to mitigate this impact". What are they?  |
| "provide customers with the ability to respond in their most valued manner". Agree – though worth reviewing how the link between pricing and response is portrayed in other parts of the practice note  |
| "we expect those who benefit directly by increased electrification are required to pay the related costs".  |
| Variable charges are one way to allocate charges to customers within a category because 30minute kWh consumption used for reconciliation is not equal to peak demand. In the absence of narrow peak demand bands/contracts, a c/kWh charge captures different usages as a proxy for network utilisation / more benefit (aligns with beneficiary pays approach). |
| Is there a link to the transmission pricing methodology here too?   |
| "Good price signalling". Suggest the idea of good and bad pricing be removed.   |
| This description of congestion aligns with the longer-term definition of congestion, as opposed to in real-time.  |
| "Ample opportunity for pricing to be more localised". Agree, although some investments aren't related to peak demand.   |
| "we believe that most are surmountable if the will exists to find workable solutions". What evidence is this belief based on?   |
| The sentiment of this section implies more granularity. What is the reference point for this? This could be a useful topic for retailers to comment on.   |
| "the need to improve granularity is now clear". It would be helpful to know how granular the EA expects pricing to become. How are they seeing the pros and cons? And is it pricing signalling that needs more granularity or cost-allocation, or both?   |
| Do interruptible tariffs (e.g. HW ripple) warrant discussion/guidance as a category separate to other pricing signals? Reason: they are a static price/quality trade-off rather than a signal that customers can respond to.  |
| "reform may simply mean moving to higher fixed charges and reducing variable charges, once LFC regulations allow". It could be confusing to consumers if they see this change and try to reconcile it with the Authority's "more and faster progress towards efficient pricing is possible now" and also see low scorecard ratings.                             |
| "Economic price signalling". Keen to check what this means relative to other definitions used in the paper.   |
| "making headway in reaching agreements". Keen to learn about the information that supports this comment. For dynamic pricing signals – as proposed throughout the paper – dynamic consumption data would be needed.   |
| "segmentation of a network is likely to be achievable at a zone substation level". Is this the baseline level of pricing expected. If so, are retailers expecting this too?   |
| Many retail pricing plans are addressing this already based on a range of distribution tariffs.   |
| "a simple price signal could achieve a shift in charging". This implies an attribution of a distribution price signal and behavioural response. Keen to understand how this aligns with the definitive description of 'bad pricing' scenarios in [26] given [56b] reflects risks and unknowns.  |
| "create a worse outcome". Keen to understand what better/worse outcomes look like and how they could be measured and attributed to a distribution price level/structure.  |
|   |

|     | "good price signalling"trends that could see congestion arising". This reflects (rightly) a degree of uncertainty about the future, whereas the definitions of bad pricing in [26] appear to suggest this would be 'bad', because it would not be evident or discernable.  |
|-----|--|
| 58  | " a distributor risks reducing the welfare of customers". Keen to know more about this risk  |
|     | " causing harm to all parties". Keen to know who the parties are and the nature and scale of harm attributable to "a link between congestion and increased prices". For example, if there is no link between congestion and pricing now, what is the current state of harm being caused to all parties?  |
| 60  | This "rapidly growing and "actual or imminent congestion" would is probably beyond the scope for annually set pricing to respond to or be relied on to generate a response. Keen to explore this scenario with the Authority in more detail with a practical lens applied along with the potential outcomes for consumers of different approaches.   |
| 61  | "TOU can be a blunt and often inefficient method of cost allocation". Keen to understand more about how the Authority assesses efficiency.   |
| 62  | This expectation assumes load changes are attributable to the distribution pricing. The consumer may assess the options and behave in the same way (as mentioned in [34] "provide consumers with the ability to respond to price signals in their most valued manner".   |
| 63  | "This is detrimental to customers' acceptance and risks creating a backlash to reform".  Keen to know more about the evidence that underpins this statement.   |
| 64  | "TOU can have the undesirable effect of shifting congestion out". Keen to understand more about why moving demand away from peak times to avoid an upgrade is undesirable.   |
| 65  | A range of factors that can affect the link between pricing and consumption (eg, weather, Covid/working from home, moving house, retail price plans, TPM changes, retailer market changes, LFC changes, other factors affecting prices customer face eg wholesale prices).   |
|     | Analysing this impact over a short period of time (assuming the data is available) is unlikely to deliver a robust assessment of the effectiveness of TOU pricing.   |
| 74  | If a distributor has more than one customer, an allocation of transmission charges is required. The Electricity Authority designed the TPM and has put considerable effort into the analysis and approach to be efficient. Are there views about the allocation and form of transmission prices seen by consumers? Eg is there an expectation that  • the form and level of prices align with the locational aspect of beneficiary pays calculations?  |
|     | <ul> <li>The allocation of the residual component aligns with the methodology used to derive<br/>the % shares?</li> </ul>  |
|     | This is most simply conceptualised by considering a scenario where distribution prices are zero, so the action of a distributor is to translate their transmission charge into a price passed to retailers.  |
| 87e | "where a network faces congestion".  |
|     | Could be helpful to clarify the time dimension applicable here eg is it relating to future investment that is far enough away that pricing could be a useful tool to manage? This approach would align with the definitions of efficient pricing earlier in the document, but seems inconsistent with the comment "such a network is currently insufficient to meet customers' demand at times of peak demand". An alternative could be "such a network is currently forecasting future capacity is insufficient to meet customers' demand at times of forecast peak demand" |
| 95  | "Controlled loadcan be zero-rated". Keen to understand this given the controlled load is deferring investment.   |
| 131 | "Pricing can assist in relieving pressure". See earlier comments in the practice note and our comments on attribution, and the difference between incentives and control.  |
| 139 | "having a signal that shifts the load". As for 131 and earlier comments about the causal link between a distribution price and systemic consumer behavioural change.   |
| 180 | The clarity and direction in the current paper was not evident in prior versions, but this paragraph suggests distributors have been developing analysis and data capability, and had the data to do so with advanced knowledge of the Authority's current views. For example, the new DDA has been decided between practice notes, along with the proposals to amend Appendix C relating to data use.   |

|          | A more realistic approach is that distributors assess and respond to the Authority's current paper (and likewise, do not pre-empt what it's next iteration or position on pricing will be).  |
|----------|--|
| 184      | Might benefit from adding a time dimension eg in the title: <b>As LFC is being phased out from 2023-2027.</b> This might be useful for other stakeholders to have a sense of what the timeframes are.  |
| 185      | "increased customer engagement". What is this relative to?   |
| 186      | The idea of linking pricing reform to scorecard ratings is desirable, though this is a little difficult given the subjectivity and qualitative nature of the scorecards, and the current state where the Authority carries out the assessment. |
| glossary | Suggest adding definitions of  "cost reflective pricing means"  "efficient pricing means"  "efficient cost reflective pricing means"  "network congestion means"   |

## Comments on the Consultation paper

| Consultation paper ref | Comment  |
|------------------------|--|
| 57                     | Footnote 6 – are there any real-life examples of this? Other, potentially more effective, options, involve a distributor being able to directly signal its constraint or contracting directly for flexibility services to address the constraint |