15 August 2023

Electricity Authority

Wellington

By E-Mail: distribution.pricing@ea.govt.nz

Re: Issues Paper - Targeted Reform of Distribution Pricing

Counties Energy Limited (Counties Energy) commends the Electricity Authority (Authority) on the "Issues Paper—Targeted Reform of Distribution Pricing" (Paper) being well written and timely.

Counties Energy is committed to improving the efficiency of its distribution pricing to ensure better utilisation of the network that takes account of the impact rapidly changing technology is having on how electricity is produced and consumed. With this in mind, Counties Energy has have over the past 5 years carefully managed the transition of its pricing, which includes capital contribution or "connection charges", by the introduction of:

An updated capital contribution policy - Counties Energy is the fastest growing network in the country, with capital expenditure to accommodate these new connections budgeted to be $438m over the next 10 years. To ensure our existing customers are not required to bear an undue proportion of these costs, we have introduced an updated capital contribution policy. This policy means these future costs are funded by up-front capital contributions and future revenue from these new connections. This approach has contributed to the increase in annual capital contribution revenue from $9.1m in 2018/19 to approximately $24m in 2021/22.

Peak/off-peak pricing - Counties Energy has introduced optional mass-market Time of Use plans that provide consumers with the ability to consider shifting discretionary loads to low-priced times delaying the need for network reinforcements/upgrades that would otherwise be required.

A rebalancing of fixed and variable prices - Counties Energy has increased total revenue from Fixed Charges from 19% in FY2030 to 38% in FY2024.

An injection charge for all excess generation injected into the network – Even with relatively low numbers of residential solar array installations, Counties Energy is already experiencing over-voltage from solar arrays on rural feeders. Consequently, to encourage mass-market customers with photovoltaic solar array systems to align their consumption to their generation output, Counties Energy has introduced an injection charge for all excess generation injected into the network. By aligning usage to generation, customers with solar are encouraged to consume as much of the electricity generated as possible during generation times (e.g. to power washing machines, dishwashers, electric vehicle chargers), as opposed to using these items during peak times.

Counties Energy, like all distributors, has had to carefully manage a number of issues when updating prices over recent years, these include but are not limited to:

- TPM implementation
- Increase in DG connections.
- Retailer and consumer complaints
- Authority direction to maximise recovery of revenue via fixed charges.
- Implementation of TOU pricing
- LFC repeal
- Electricity Pricing Review
- Energy hardship
- Authority distribution pricing team whose position in very recent years is not necessarily consistent or complimentary to the position driven by their predecessors.

In addition to addressing these issues our pricing needs to be future proofed to ensure we are able to most appropriately address future consumer needs. These future needs include but are not limited to:

- Load associated with EV charging.
- Anticipated significant increase in transmission costs.
- The significant additional load introduced by retailer free hour(s) of power.
- The growing issues resulting from Part 6 of the Code no longer being fit for purpose.

Whilst Counties Energy is committed to continual improvement in distribution pricing, that can only be achieved where the end consumer is engaged in the process with their needs continuing to be met. Counties Energy is increasingly concerned at the Authority's apparent reluctance to engage with and seek input from the end consumer. Counties Energy would caution the Authority against from ignoring the growing energy hardship message and would underline the importance of making sure all consequences of the changes the Authority proposes to introduce/mandate are comprehensively considered, evaluated and addressed prior to implementation.

Questions

Q1. Are there other options that you think the Authority should consider?

Counties Energy considers the list of options as comprehensive, however we are concerned that the full consequences (unintended or otherwise) of some of the options have not been fully explored. As noted in this paper, distributors have undertaken significant reform in recent years (as noted, 23 of 29 distributors have adopted TOU pricing structures) in order to influence how consumers utilize the network and to ensure consumers make efficient investment decisions in emerging technologies. Despite distributor pricing reform to date, only a small portion of end consumers have opted to transition to a retail TOU price plan that comprehensively compliments the distributor TOU price plan and periods.

Q2. Do you have any comments on the options outlined?

Whilst it is commendable that the Authority works closely with other agencies, groups and associations that have an interest in distribution pricing, Counties Energy strongly believes that consumers views must be sought and sufficiently considered before the Authority seeks to implement/impose any further changes to distribution pricing. The roll out of distributor time of use pricing in Victoria, Australia from 2004 should present a cautionary tale of the mismanagement of mandating of new prices where consumers are not sufficiently engaged. The subsequent backlash around the mandatory rollout led the Victorian Government to introduce a moratorium on TOU pricing in 2010 after which adopting the TOU price was voluntary. In its first Tariff Structure Statement, Victorian-based United Energy was wary that consumers may not "have the time or interest to understand the complexity of energy pricing" therefore requiring that "the extent of change and the timeframes are manageable" when pursuing pricing reform.

Q3A. Do you agree that a combination of TOU tariffs and load control (appliance) tariffs would be useful for the smart management of peak demand?

Counties Energy is hopeful that, in addition to load control that is exclusively available to distributors, an increased uptake of TOU tariffs that compliment distribution price plans will progressively play a valuable role in the smart management of peak demand. Counties Energy is are concerned that the Authority's decision to allow traders and third parties to compete for load management services will prove to have significant unintended consequences for distributors. Counties Energy increasingly utilizes load control to reduce peak demand, balance the supply of electricity across the network, push out network investment which otherwise would be necessary to meet this increased peak demand and, most importantly, to maintain network reliability. A vital part of the load control process is judicious restoration management of available controlled load. When controlled load is restored too quickly, it creates large artificial peaks on the network. Traders or third parties who opt to mismanage load restoration and create artificial network peaks at the same time as EV owners are responding to retailer TOU/free hour(s) of power plans will introduce a significant risk of damage to vital network equipment and cause network outages.

Q3B. Do you consider that TOU pricing could have unintended consequences for congestion on the LV network?

Counties Energy recognises the potential network congestion risk introduced by artificial network peaks produced as an increasing number of consumers responding to the same off-peak pricing signal by switching on appliances as soon as the off-peak period starts. This is particularly relevant with the expected significant load associated with mass EV charging. Counties Energy concurs with the NERA report re the importance of smart managed load to help address this potential risk.

Q3C.Do you consider that use of shoulder pricing as part of the TOU price structure could be an effective way to mitigate this risk? What other ways could be effective?

Consumer feedback on network pricing indicates that flexibility, transparency and simplicity in pricing is vital to elicit the required demand response. Counties Energy is concerned that the introduction of shoulder pricing may introduce an unnecessary level of complexity that consumers are unlikely to respond to.

Q4. Do you agree with the assessment of the current situation and context for peak period pricing signals? What if any other significant factors should the Authority be considering?

Counties Energy is carefully rebalancing its pricing over time in order to minimize customer price shock, and we would encourage the Authority to carefully consider this additional factor prior to expediating price change.

Q5. Do you agree with the problem statement for peak period pricing signals?

Given that 23 of the 29 distributors have introduced/made available TOU pricing, it is not reasoned or reasonable to criticize distributor tariffs for not sending peak price signals. It should also be noted that distributors have very limited influence on whether consumers opt to remain on “uniform usage tariffs” or how the price signals that are introduced are “rebundled” by retailers. Consumers appear to have a very limited appetite for TOU pricing, despite it being actively encouraged by distributors and made available by the majority of retailers.

Q6. Do you have any comments on the Authority’s preferred pricing for peak periods?

Counties Energy would encourage the Authority to seriously consider, evaluate and address all unintended consequences, including the potential to exacerbate energy hardship that higher peak prices would introduce, prior to mandating further pricing reform that could ultimately prove not to be fit for purpose.

Q7. Are there other options you think the Authority should consider for improving peak period pricing?

Counties Energy would encourage the Authority to consult with consumers to ensure the pricing they are seeking to encourage/mandate is fit for purpose and meets the needs of the end consumer. The slow uptake of retailer TOU pricing would suggest simplicity, convenience, reliability and affordability is their primary drivers.

Q8. Which if any of the above options do you consider would best support distribution pricing reform around peak pricing signals and why?

Counties Energy would encourage the Authority EA to initially directly engage with “high risk distributors” in order to fully understand and help address the constraints that have prevented these distributors from transitioning more fully to peak period pricing.

Q9. Do you agree with the assessment of the current situation and context for off-peak pricing signals? What if any other significant factors should the Authority be considering?

Counties Energy has been on a path to minimize off-peak pricing, principally by increasing fixed and peak prices, to encourage consumers to maximise usage at off-peak periods. However, we do not agree that AMD is not a useful tool to manage a customer’s contribution towards network peaks. It should be noted that Counties Energy only measures AMD from 7am to 11pm in order to encourage large commercial customers to maximise their business peaks during overnight periods.

Q10. Do you agree with the problem statement for off-peak pricing signals?

Counties Energy agrees that managed off-peak usage will incentivize consumers to shift discretionary load to off-peak periods when there is spare capacity available in the network. As previously indicated, there remains the concern that the impact of potential network congestion introduced by an increasing number of consumers responding to the same off-peak pricing signal has not been fully analysed and considered.

Q11. Do you have any comments on the Authority's preferred pricing for off-peak usage?

As previously indicated, Counties Energy believes that, when appropriately measured and applied, AMD remains a useful tool to encourage large consumers to manage their peak demand, particularly during periods of potential network constraints. For context, AMD on the Counties Energy network is only charged to Large Commercial/Industrial customers, is calculated/charged monthly (average of the top 3 peaks measured on separate days) and only measured from 0700 to 2300.

Q12. Are there other options you think the Authority should consider for improving off-peak pricing?

Counties Energy would encourage the Authority EA to initially directly engage with "high risk distributors" in order to fully understand and help address the constraints that have prevented these distributors from transitioning more fully to off-peak period pricing.

Q13. Which if any of the above options do you consider would best support distribution pricing reform around off-peak pricing signals and why?

Counties Energy recommends that the practice note approach is extended until the Authority has increased their consumer engagement and comprehensively considered, evaluated and addressed all unintended consequences that aggressive off-peak/TOU pricing may introduce.

Q14. Do you agree with the assessment of the current situation and context for target revenue allocation? What if any other significant factors should the Authority be considering?

Counties Energy agrees with the principle that efficient pricing is met where unallocated **(or residual)** costs are allocated to parties least likely to alter their usage or investment decisions as a result. We would add that the most important issue to consider in all pricing is whether the needs and expectations of the end consumer are being met.

Q15. Do you agree with the problem statement for target revenue allocation?

Counties Energy would accept that there is no utopia when it comes to distribution pricing. Counties Energy apportions charges to consumers for the network assets they actually use. For example, customers taking supply at a high voltage, which is 11kV and above, should not be charged for the low voltage network that they do not use. This approach balances complexity and applicability, and can be readily communicated to stakeholders including consumers and regulators.

Q16. Do you have any comments on the Authority's preferred pricing?

For pricing to work efficiently, Counties Energy's position is that the pricing aims of all parties involved in the pricing process (transmission, distribution and retail) should compliment each other and be moving in the same direction at the same time. The Authority has implemented the

TPM which has a guiding non-distortionary principle (prices should not influence the ongoing use of the grid) and has removed the incentive to load control. The Authority also indicate that their preferred distribution pricing will have “the aim of promoting efficiency by least influencing usage decisions.” This appears to be entirely inconsistent with the Authority’s promotion of efficient distribution pricing that encourages peak price signals, increasingly incentivised controlled rates and where distributors are criticized for the majority of consumers continuing to be invoiced on uniform usage tariffs.

Q17. Are there other options you think the Authority should consider for improving target revenue allocation?

Please refer to the response to Q16

Q18. Which if any of the above options do you consider would best support distribution pricing reform around targeted revenue allocation?

Counties Energy would encourage the Authority to work with all parties (including consumers) to land on a position for industry wide electricity pricing that is consistent, flexible, transparent and simple.

Q19. Do you agree with the assessment of the current situation and context for connection pricing? What if any other significant factors should the Authority be considering?

Counties Energy would encourage the Authority to understand the driver for distributors to calculate connection pricing. For context, Counties Energy is the one of the fastest growing networks in the country, with capital expenditure to accommodate these new connections budgeted to be $438m over the next 10 years (and a further $450m in the proceeding 10 years). For context, these circa $900m costs will triple the value of our network in the next 15 -20 years. To ensure our existing customers are not fully burdened with these costs, we introduced an updated capital contribution policy. This means these future costs are funded by up-front capital contributions and future revenue from these new connections. The key aim of our policy is to ensure that the addition of a new connection should not make existing customers worse off, either now or in the future. Ideally, the addition of a new connection should benefit existing customers as the new connection should contribute to shared costs and assets. It should be noted that Counties Energy have had no residential or industrial developer capital contribution complaints that have necessitated the need for escalation since the updated capital contribution has been implemented.

Q20. Do you agree with the problem statement for connection pricing?

Counties Energy would encourage the Authority to work with “high risk distributors” in order to fully understand the challenges prior to implementing a uniform connection cost methodology. Counties Energy has high connection costs to fund the build of new substations to accommodate the demand from new connections. Counties Energy has built 2 new substations (Pokeno & Barber Rd, Bombay) in the past 3 years, with land secured for a further 4 substations (Drury South, Glenbrook, Kingseat & Pukekohe North) to be constructed in the next 10-15 years. For context, a small semi-rural town on the Counties Energy network is earmarked to expand to a city the size of Napier over the next 30 years. To accommodate the $2.3b infrastructure costs, Auckland Council has increased the residential development cost from $22,564 to $74,142 per lot for this area of their network. Counties Energy are 100% consumer owned and do not believe it is fair, reasoned or reasonable to burden existing consumers (either fully or in part) with these significant future infrastructure costs.

Q21. Do you agree with the Authority's preferred pricing approach for connection charges?

Counties Energy has implemented a capital contribution policy that has enabled us to fund the cost of 2 new substations by increasing capital contributions from $9.1m in 2018/19 to approximately $24m in 2021/22. This has been achieved by proactively working alongside developers to communicate the need for these increased costs. Whilst the Authority's preferred pricing approach for connection charges may be suitable for some distributors, it is not a case of one size fits all.

Q22. Do you have any thoughts on the complementary measures mentioned above and to what extent work on these issues could lead to more efficient outcomes for access seekers?

In response to the two issues raised Counties Energy would request that the Authority considers the following:

- Determining network capacity is complex and requires load flow analysis and changes continuously as customers demand patterns change and new customers are connected. In addition, there are thermal constraints and voltage constraints with most capacity asset information only looking at thermal constraints. This is particularly true for DG connections where complex analysis is required on every location to determine if sufficient capacity exists. For these reasons, Counties Energy believes that where distributors have published capacity maps that they are likely to be misleading.
- Allowing contract workers to connect would create significant long-term issues for distributors because distributors need to maintain the assets for their 50-to-60-year life and non-standard or poor construction will increase equipment faults leading to long-term increased outages and high costs for the customers. For these reasons Counties Energy ensures the reliability and quality of the network by limiting 3rd party contractors undertaking vital work on the network.

In addition, Counties Energy's previous experience is that the Health & Safety standards we mandate to our employees are not typically consistent with the standards exhibited from 3rd parties or "approved providers."

Q23. Are there other options you think the Authority should consider for connection pricing?

Counties Energy would recommend that rather than enforcing lower public EV charger capital contribution charges on distributors that the Authority encourage more economic solutions. For instance, distributors could work with EV charger providers to build EV charging hubs where multiple EV charger providers could locate dedicated EV charging stations. This would provide the economies of scale for distributors to spread infrastructure costs across multiple customers and the lifetime of the EV charger stations would be greater than the lifetime of a single EV ultra-fast charger. For instance, Counties Energy has a location at the State Highway off-ramp at Bombay that is close to a 40MW Counties Energy substation that would be ideal for a large-scale EV charging station hub.

Q24. Which if any of the above options do you consider would best support distribution pricing reform in the area of connection pricing?

As mentioned, fast growing EDBs like Counties Energy are facing significant infrastructure costs and if capital contributions for back-haul infrastructure is not recovered from developers then

Counties Energy will need to increase line charges. Developers sell based on the maximum market price they can receive for their residential and industrial lots so they do not pass any savings from lower capital contributions on to the final homeowner or business that buys the lot. Consequently, if the Authority enforces lower capital contribution charges it will result in higher developer profits with homes and businesses facing higher electricity charges including families in energy hardship. This is clearly unequitable.

Q25A. Do you agree with the assessment of the current situation and context for retailer response? What if any other significant factors should the Authority be considering?

As previously stated, Counties Energy would encourage the Authority to engage with consumers to ensure they are fully engaged in this process, and that their voices and preferences for electricity pricing are properly heard. We would remind the Authority that the industry is here to provide a service to consumers, not the opposite way around.

Q25C. [for distributors]: What plans do you have to increase the proportion of your customers that face time-varying charges (for example, making TOU plans mandatory for retailers whose end-users have an AMI meter installed)?

Counties Energy does not believe it is appropriate for distributors to mandate TOU plans to retailers. Counties Energy's updated pricing in recent years followed a good faith retailer consultation process. This good faith consultation process has enabled Counties Energy to complement retailer offerings and achieve the best outcome for our consumers. TOU plans are available for those consumers who opt to have a retailer TOU plan.

Q26. Do you agree with the problem statement for retailer response?

Counties Energy believes there is a limited consumer appetite for TOU plans. TOU does not meet the consumer need for flexibility, transparency and simplicity in pricing. Counties Energy encourages the Authority to support further investigation into the potential value of flexibility services and "smart managed load."

Q27A. Do you have any comments on the Authority's preferred pricing?

Counties Energy believes retailers will continue to "rebundle" distributor charges as consumer demand dictates. TOU pricing has the sole aim of eliciting a demand response from the end consumer, this demand response cannot be achieved where the consumer does not see the price incentive to shift discretionary load. Invoicing retailers on half hour usage where the consumer is not billed on an equivalent TOU retail plan will only result in additional costs to retailers and distributors. These additional costs will ultimately be passed on to the end consumer via higher prices.

Q28. Are there other options you think the Authority should consider for retailer response?

Counties Energy would encourage the Authority to work with all parties (including consumers) to land on a position for industry wide electricity pricing that is consistent, flexible, transparent and simple.

Q29. Which if any of the above options do you consider would best support distribution pricing reform in the area of retailer response?

Counties Energy would encourage the Authority to work with all parties (including consumers) to land on a position for industry wide electricity pricing that is consistent, flexible, transparent and simple.

Counties Energy would be happy to discuss any aspect of this submission.

Yours sincerely

Allen Sneddon

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