Targeted Reform of Distribution Pricing

Submission on the Electricity Authority's Issues Paper

15 August 2023

Table of Contents

1. Introduction

1.1. Preliminary

1. We welcome the opportunity to submit our views in response to the Electricity Authority's (the Authority's) consultation – "Targeted Reform of Distribution Pricing - Issues Paper".

2. Section 2 of this document provides a summary of the key aspects of our feedback, with responses to the submission questions provided in appendix A.

3. No part of our submission is confidential.

1.2. Context

4. The electricity distribution industry is a key enabler of the energy transition required to meet New Zealand's goal of reaching net zero carbon emissions by 2050. The sheer scale of network investment required to meet electrification demands is challenging for distributors from both a financing and delivery perspective. This context provides a natural incentive for distributors to invest efficiently in their networks. Electricity distributors (EDBs) recognise the role that cost-reflective distribution pricing has to play in supporting efficient network investment.

5. While cost-reflective pricing will ultimately lead to lower consumer prices in the longer term, it is important that EDBs are cognisant of the impact pricing reform will have on their consumers in the short-term. If the transition to cost-reflective pricing is not managed at a considered pace there is a risk that the consumers who are less able to adapt to new technologies, or have less understanding of their electricity charges, will face greater price increases. In many cases these consumers facing greater increases will also be from lower socio-economic areas. A singular focus on cost-reflective pricing ignores the nuances of the trade-off between long-term consumer impacts and short-term consumer affordability.

6. EDBs are regionally based and are often accountable to the communities they serve through either direct, or indirect ownership. Therefore EDBs are well placed to understand the impacts and nuances pricing changes will have on their communities and can determine a pace of change that manages short-term affordability concerns with the longer-term objectives of cost-reflective pricing.

2. Specific Focus Areas

2.1. Connection Pricing

The trade-off between Capital Contributions and Ongoing Lines Charges

7. EDB's approaches to connection pricing are covered in their individual Capital Contribution Policies. It is important to recognise that these policies do not exist in isolation. There is a direct link between EDB's capital contributions, pricing methodologies, and the regulatory allowances determined in their individual price-quality paths. Each EDB has different pricing and regulatory allowances to reflect the individual characteristics of their networks and it is a natural consequence that each EDB will have individual capital contribution policies to complement these allowances.

8. The relationship between capital contributions, regulated asset base (RAB), and ongoing lines charges cannot be ignored when considering changes to connection policies. When an EDB contributes toward a new connection, this has a flow on increase to the EDB's RAB which is ultimately recovered from connected customers' lines charges. In other words, higher connection contributions from EDBs will lead to higher lines charges over time. It is important that EDBs maintain an approach that ensures this trade-off between new connection costs and ongoing lines charges is consistent over time to prevent intergenerational inequities between existing customers and new connecting customers.

Capital contributions are determined in a market context

9. The Authority needs to be cautious about any moves towards disclosure of capital contribution funding at an individual connection level. In some areas such as Queenstown, EDBs apply their Capital Contribution Policies in a market context, with two EDBs openly competing for new connections. We are concerned that regulator interference without a comprehensive understanding of the commercial environments faced by EDBs could lead to instances of uneconomic network bypass to the detriment of existing consumers.

Opportunities to improve consistency across the industry

10. The Authority's focus on connection pricing is a relatively new concern and we feel there would be benefit in the Authority providing more guidance of best practice through practice notes and workshops. In time, this could lead to the inclusion of connection policies in pricing scorecards.

While each EDB will have unique approaches to the funding of capital contributions, we think there are opportunities to standardise language and terminology across EDBs capital contributions policies to improve understanding for consumers.

2.2. Regulatory Options for Distribution Pricing Reform

11. The most recent published Distribution Pricing Scorecards were made by the Authority in 2021 and showed an improvement from the previous year, indicating that EDBs are moving in the right direction.

12. However, since 2021 the Authority's own approach towards Distribution Pricing Scorecards has been inconsistent. The expected annual scorecard update did not occur in 2022 and in 2023 the release of scorecards has been delayed several times. Furthermore, the measurement criteria has not always been applied consistently from year to year.

13. Our preference would be for the Authority to place greater emphasis on the scorecards by committing to regular publication timeframes and being more transparent about their measurement criteria. This should be the Authority's first step before contemplating regulatory intervention. EDBs are transitioning towards cost-reflection pricing and if done well these scorecards can provide valuable feedback to EDBs on their transition. Our concern is that the introduction of more regulatory hurdles will slow the transition to more cost-reflective pricing.

2.3. Retailer Response

14. Aurora generally supports the Authority's approach to bill all retailers based on actual half-hourly usage. However, we note that there might be legitimate reasons why retailers are unable to achieve this such as smart meter uptake, smart meter communications, and internal retailer billing systems. Our view is that these reasons are primarily for the Authority and retailers to address. EDBs should not be responsible for assessing whether a retailer's reasons for non-reporting half-hourly usage are legitimate.

15. To support a higher uptake of actual half-hourly billing EDBs can either mandate Time-of-Use (ToU) tariffs, or provide market based pricing incentives to encourage uptake – i.e. opt-out tariffs may be set at a higher level than blended peak and off-peak ToU tariffs. Our concern that mandating ToU tariffs and policing exceptions places an additional administrative burden on EDBs. Furthermore, without visibility of metering data it may not be practically possible for an EDB to assess whether an ICP is capable of transmitting half-hourly consumption data. For these reasons our preference is to encourage ToU uptake through pricing incentives.

2.4. Peak period and Off-Peak price signals

16. Conceptually, Aurora Energy support the adoption of ToU prices based on Long-Run Marginal Costs (LRMC) as part of an EDBs suite of options for signalling network peaks. Our view is that ToU pricing should sit alongside traditional control tariffs and complement the adoption of flexibility services.

17. While ToU is the right option for right now, it is important to recognise that technology is evolving rapidly. As an industry we need to remain open-minded to ensure pricing structures support new ways of managing network demand. This may include concepts such as static and dynamic operating envelopes raised by the FlexForum, and emerging in Australia.

18. As the uptake of new technology enables demand flexibility to increase, a medium to long-term risk of static TOU prices is that new peaks emerge in the transition period from peak to off-peak prices. We already see early EV adopters taking advantage of night rate periods staring at 9pm, causing new peaks emerging at 9pm, and exacerbated by Retailer 'free hours of power' in some cases. This static price risk is real and it occurred in the 1990's in some parts of NZ when night-rate popularity grew significantly with the advent of night-store heaters and underfloor heating. This led to a re-design of night-rate products, and a key part of the success of the new approach was to de-couple the device control from the price signal, enabling demand to be smoothed within the night-rate period. The key learning was that price should not be the direct DER response signal but should be an enabler/supporter of DER/flexibility management.

19. Therefore, in our view, the static nature of TOU pricing (dynamic may be possible in the future but this is very complex across thousands of network nodes) will limit it's potential as a long term solution to the efficient use of DER/flexibility, and will therefore need to be supported flexibility service contracts including operating envelopes to ensure that new distribution peaks are not inadvertently created.

In addition, targeted procurement of flexibility services and associated payments can temporarily 'top up' customer LRMC based distribution price arbitrage benefits with SRMC based benefits. It is critical that distribution regulatory opex allowances are sufficient to support the procurement of flexibility services.

20. We agree with the Authority that off-peak charges should reduce over time. In practice, the timeline for the phase-out of Low Fixed-User Charges (LFC) also provides a sensible timeline for the tuning of peak and off-peak ToU signals.

2.5. Target Revenue Allocation

21. It is not clear to us what problem the Authority are trying to solve with the contemplated changes to target revenue allocation. While there may be economic merit in moving away from a traditional accounting Cost-of-Supply Model (CoSM), this needs to be weighed against the transparency benefit provided to consumers from a CoSM.

As part of our enhanced Customised Price-Quality Path reporting requirements, Aurora Energy is required to publish its CoSM. This is a valuable tool to give our consumers peace of mind that they are not subsidising other pricing areas, or other consumer groups. It is not clear what the customer benefits would be from moving away from this approach.

Appendix A. Consultation Questions

Distribution pricing regulatory options

Q.1 Are there other options that you think the Authority should consider?

No

Q.2 Do you have any comments on the options outlined?

Option (a) – extending practice notes and pricing scorecards – seems most beneficial for addressing Authority's distribution pricing concerns. By expanding the practice note and scorecards, the Authority can provide clearer guidance and benchmarks for EDBs, fostering greater consistency in pricing decisions without necessitating amendments to the Code.

Option (b) – the control approach – likely to divert focus from broader cost-reflective pricing goals. Regulating pricing methods could limit EDBs' adaptability to unique circumstances and customer needs.

Option (c) – the call-in approach – adds unnecessary complexity. EDBs could face uncertainty on which pricing approaches require review, leading to unequal treatment. This mechanism could also delay decision-making, hindering timely cost-reflective pricing implementation.

Peak period price signals

Q.3A Do you agree that a combination of TOU tariffs and load control (appliance) tariffs would be useful for the smart management of peak demand?

We agree that ToU and load control tariffs are useful for managing peak demand. However, these are not the only options available to EDBs to manage peak demand. As technology evolves ToU and load control tariffs are likely to be complemented by flexibility services and operating envelopes.

ToU and load control tariffs work well as a broad based incentive across an entire pricing area, but we believe flexibility services and operating envelopes will evolve to be a more effective tool for managing specific network constraints.

Q.3B Do you consider that ToU pricing could have unintended consequences for congestion on the LV network?

Yes, there is a risk that relying on ToU pricing as the sole tool for managing network demand may lead to new network peaks at the start of off-peak periods as consumer devices come online all at once.

Q.3C 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?

As outlined in our responses above, we believe that ToU pricing is just one tool in an EDB's toolkit for managing peak demand. The addition of shoulder pricing may help in some instances, but ultimately flexibility services will be required to complement ToU pricing.

Q.4 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?

The Authority's current assessment is broadly fair.

We encourage the Authority to consider the practical challenges of implementing LRMC based tariffs in a real-world setting. In our view, the accuracy of LRMC is not critical and the calculation should be relatively simple with regulator agreed assumptions for some inputs, and should be stable over time. Flexibility service payments provide an opportunity to demonstrate at a sub-region level the short to medium value of shifting demand into off-peak periods. The development of a practice note and some working examples would be beneficial.

Q.5 Do you agree with the problem statement for peak period pricing signals?

The Authority's problem statement is fair. Noting that unwinding legacy tariffs and transitioning to cost-reflective peak signals will need to be carefully managed to allow consumer education and mitigate price shocks.

Q.6 Do you have any comments on the Authority's preferred pricing for peak periods?

Aurora agrees that the Authority should work with retailers to phase out the deemed and residual profiles. The Authority should play a significant role in driving this change.

While LRMC-based pricing signals may theoretically incentivise consumers to adjust their usage patterns during peak periods, sudden and substantial price changes could create affordability challenges for vulnerable households and businesses. A gradual and balanced approach to incorporating LRMC principles into pricing structures, alongside proper consumer education by the Authority and assistance programs, is essential to ensure that any transition to such a model is equitable and does not cause undue financial strain on consumers. The Authority's role in leading education is considered essential as an independent electricity sector voice that consumers can trust.

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

We encourage the Authority to enhance and extend the practice notes including comprehensive guidance on LRMC to EDBs.

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

Aurora supports the option of refining the practice note and extending the scorecards, while it does not support the call-in and mandate options.

Before looking at other options to improve pricing, the Authority should take a close look at why the scorecards haven't been producing the desired results. This could be because the updates to the scorecards aren't done on regular basis and the criteria for scoring changes every year. It's possible that if the Authority adopts a more steady and regular approach, the Authority might see better outcomes in the future.

Off-peak price signals

Q.9 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?

Aurora agrees with the Authority that the LFC regulations apply a cap to fixed charges that in turn has an impact on the off-peak pricing.

Q.10 Do you agree with the problem statement for off-peak pricing signals?

There is a relationship between off-peak charges LFC restrictions. Off-Peak charges will decrease as the LFC is phased-out.

Q.11 Do you have any comments on the Authority's preferred pricing for off-peak usage?

Our preference is to use installed capacity as the prime means of allocating residual charges to individual consumers in a non-distortionary manner. Installed capacity is a well understood and transparent metric for allocating charges.

Q.12 Are there other options you think the Authority should consider for improving off-peak pricing?

We also consider there may be merit in differentiating residual peak charges based on security of supply, for example a higher residual charge for customers who receive an 'n-1 security of supply' compared to an 'n security of supply'.

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

Option A of "do nothing" should be adopted until the phaseout of LFC regulations.

Target revenue allocation

Q.14 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?

It appears that the Authority are concerned with weighing the relative merits of economic efficiency and transparency. The Authority should also considering the value of consistency as part of its thinking. Applying allocations consistently and transparently over time gives consumers time to understand and respond to pricing.

Q.15 Do you agree with the problem statement for target revenue allocation?

No. It is not clear that the economic approach of applying subsidy-free ranges is any less complex than a traditional Cost-of-Supply Model. The complexity of an economic approach versus an accounting approach is somewhat subjective and the problem statement possibly reflects the Authority's economic bias.

We would encourage the Authority to seek consumer feedback and provide evidence target revenue allocation is a real issue before taking any further steps in this area.

Q.16 Do you have any comments on the Authority's preferred pricing approach?

Subsidy-free range calculations are useful for providing additional consumer peace of mind to complement a traditional CoSM approach.

Q.17 Are there other options you think the Authority should consider for improving target revenue allocation?

The Authority's perceived problem may be better solved by ensuring that consumer groups are better aligned to their unique cost drivers in a CoSM context, rather than distinctions based on connection sizes. For example, pricing categories should align to truly unique customer types such as streetlighting and HV connections.

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

As outlined in question 15 above, the first step should be for the Authority to determine whether this is a material issue worthy of diverting attention away from other pricing areas identified in the Issues Paper.

Connection pricing

Q.19 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?

We agree with the Authority that there is a wide range of connection pricing practices across New Zealand.

Q.20 Do you agree with the problem statement for connection pricing?

No. In our view, the diverse connection pricing approaches is appropriate to reflect each EDB's unique network characteristics and funding parameters.

Q.21 Do you agree with the Authority's preferred pricing approach for connection charges?

Aurora agrees with the Authority with the adoption of uniform terminology across all networks for connection pricing, however, Aurora does not agree with the standardisation of connection pricing across all networks.

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?

Although the idea of providing access seekers with details regarding asset locations and network capacity, might appear advantageous, it's important to consider that some EDBs such as Aurora Energy are operating in a competitive environment. The sharing of such information could be commercially sensitive and may ultimately disadvantage existing consumers if new connections are lost to a competitor.

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

No

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

We support the extension of practice notes and scorecards to include specific guidance on connection pricing.

Retailer response

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?

Aurora agrees moving away from deemed or residual profiles to actual data would ensure greater accuracy in billing. Most EDBs have introduced ToU tariffs into their pricing. It now falls under the Authority's purview to ensure that retailers likewise incorporate ToU tariffs into their price offerings.

Q25B [for retailers]: What plans do you have for responding to distribution price signals as distributors reform their price structures? What barriers do you see to responding efficiently?

Not Applicable.

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)?

Aurora preference is continuing with opt-in tariffs while introducing a pricing incentive for retailers that choose to adopt these tariff structures voluntarily. Under this approach, retailers who opt for ToU tariffs would be rewarded with a pricing incentive, where the opt-out tariff (the non-ToU tariff) is set at a higher rate than the blended peak and off-peak rates offered under ToU plans.

It is not efficient or appropriate for EDBs to police retailers operating in a market environment, especially where the mandate may limit innovation that could achieve an equal or greater aligned benefit.

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

Aurora generally supports the Authority's approach to non-uniform tariffs, acknowledging that there might be legitimate reasons why retailers face difficulties in complying with the new tariff structures.

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

We would prefer to use pricing incentives to encourage opt-in by retailers.

Q27B [for retailers]: What use do you make of deemed and residual profiles? Please explain the reasons for this. What barriers do you see to phasing out use of deemed and residual profiles?

Not Applicable.

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

No.

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

Aurora supports the Authority's approach to encourage billing based on actual data.