

20 May 2024

OPEN LETTER TO DISTRIBUTORS

Distribution Pricing Reform

Increased electrification of our economy will lead to a substantial increase in electricity demand and is likely to require substantial investment in distribution networks.

The Electricity Authority Te Mana Hiko is committed to improving distribution pricing to help deliver better outcomes for consumers and help to manage how much traditional investment (such as poles and wires) will be required. Distribution pricing reform aims to maximise the consumer benefits from increased electric vehicle adoption, new technologies, and the building of distributed generation. Optimising investment is important to secure a more affordable transition for consumers and deliver our goals around a net-zero carbon future by 2050.

We want distributors to be able to respond accordingly to this dynamic environment, where distribution networks are increasingly becoming bi-directional systems. We want the right signals to be sent at the right time, and we want pricing distortions to be eliminated as much as possible.

Five new areas of focus for distributors

We appreciate distributors' time and effort in continuing to engage with the Authority on pricing reform, through last year's issues paper. This letter builds on our 19 September 2022 letter to each distributor where we highlighted our five main areas of focus for distribution pricing reform in 2023.

As distributors will soon begin considering their 2025/26 pricing methodologies, it is timely for us to clarify our expectations for further pricing reform – as signalled in our [next steps paper](#). While the five areas of focus noted in our 2022 letter remain important, we have also developed five new areas of focus for the Authority's assessment of the 2025/26 pricing methodologies. These are:

- 1 Allocate revenue transparently**
- 2 Assign all ICPs to time-varying distribution tariffs (limited exceptions only)**
- 3 Set peak rates based on a measure of Long-Run Marginal Cost**
- 4 Reduce off-peak and controlled rates**
- 5 Follow up on Asset Management Plan reporting on readiness for increased electrification**

The five new focus areas are additional to those communicated in 2022

In [2022](#) we outlined five key focus areas for distributors, which related to:

- distributors' roadmaps responding to future network congestion
- distributors' response to first mover disadvantage (FMD) issues
- pass-through of transmission charges
- the phase-out of the low fixed charge (LFC) tariff regulations
- moving away from recovery of fixed costs through use-based charges.

Distributors' responses to our focus areas were largely positive. Our 2024 focus areas build on our key aims for reforming distribution pricing. We are confident we are focusing on the right areas that will assist customers and the sector to make meaningful and beneficial change. We have included in this letter a new focus area on Asset Management Plans and flexibility, to reinforce the link between asset management, pricing, and the use of flexibility resources. This letter does not cover connection pricing, as the Authority has advised separately that we have decided to develop a proposed Code amendment on this topic for consultation later in 2024.¹

We appreciate your active engagement and insight

Improving our understanding of local issues and learning from the sector about innovation and new ways of achieving faster reform is critical. We appreciate distributors' active participation in understanding pricing issues and in engaging with our guidance – your feedback is useful and important to us.

Affordability

We are aware distributors are facing cost pressures, which are being assessed by the Commerce Commission as part of its current regulatory reset. It is widely expected this reset could result in material increases for many distributors' allowable revenues and distribution prices.

The Authority is concerned about the prospect of substantial price rises for consumers, from an affordability perspective. The Authority's pricing principles encourage distributors to have regard to consumer impacts when setting their pricing each year. The Authority will communicate further with the sector on these matters in the coming months.

We are open to further discussion

Please contact us if you want to discuss any aspect of this letter. In addition, we welcome any questions or comments you have on the focus areas – please contact me or Harpreet Singh in our Network Pricing team. We will publish this open letter on our website on 21 May 2024.

Yours sincerely



Tim Sparks

Director, Network Pricing

¹ [Distribution Pricing Reform: Next steps \(ea.govt.nz\)](https://www.ea.govt.nz/distribution-pricing-reform-next-steps)

Attachment: Five focus areas

Allocate revenue transparently

In our Update Paper, the Authority has identified that key concepts such as the subsidy-free range need further development to ensure they are fully understood by everyone in the industry before we start testing the efficiency of target revenue allocations.

However, we do expect distributors to display transparently both their allocation methods, and their subsidy-free range calculations in their pricing methodologies for the pricing year beginning 1 April 2025. This will allow the Authority to approach this issue in a more evidence-based manner.

Assign all ICPs to time-varying distribution tariffs (limited exceptions only)

For cost-reflective distribution price signals to be effective, distributors must not only offer time-varying (peak/off-peak) distribution tariffs, but also assign as many ICPs as practical to these time-varying distribution tariffs. This will encourage electricity retailers to either pass these cost signals through to their customers by offering their own time varying retail tariff, or to manage their customers consumption more actively. The more retailers are exposed to these price signals, the more they are expected to respond to them. A great many distributors have already done this. However, some distributors still have a material number of residential ICPs on their network assigned to standard tariffs. This may be due to overly permissive assignment policies.

The Authority expects each distributor to transition all ICPs on its network to time-varying distribution tariffs, with very limited exceptions, ie, ICPs that lack suitable smart meters. This means distributors do not permit retailers to opt out of time-varying distribution tariffs unless there is a sound justification for this.

The Authority will continue to monitor tariff assignment and engage with individual distributors to understand their circumstances and to encourage increased assignment. To assist the sector, we are considering providing guidance on tariff assignment and using tariff assignment as a measure for future distribution pricing scorecards.

Set peak rates based on a measure of Long-Run Marginal Cost

We note many distributors are forecasting significant capital expenditure over the next ten years.

As per the Distribution Pricing Practice Note, a well-designed price signal provides a cost-reflective measure of the impact that an additional marginal unit of energy has on the network and can signal the opportunity cost of future necessary investments to accommodate increasing demand.

Cost-reflective peak signals are important for encouraging optimisation between network investment and decisions by users (regarding their usage and investment choices). With projections of over \$20 billion of distribution service-related investment in each of the next three decades, providing efficient signals around the cost consequences of usage is crucial for helping direct users toward lowest-cost usage and investment choices.

It is important to set peak signals at the right level. We don't want to over- or under-signal the cost of future investment. For networks with anticipated congestion due to demand growth, it can be relatively efficient to set peak signals with reference to the long-run marginal cost (LRMC) of network capacity. The LRMC of additional peak demand can be measured in different ways. The different methods will be appropriate in different situations, for example Turvey perturbation will be more appropriate in networks signalling large single investments (such as sub-transmission upgrades). We expect distributors to consider which is appropriate for their networks, and whether different parts of their networks have different LRMCs. We note 15 out of 29 distributors have some discussion of LRMC calculation in their 2024 pricing methodologies.

We note many distributors have day/night tariffs (which have a uniform rate during the day) instead of peak/off-peak tariffs (which target morning and evening peaks for a higher usage rate, with lower off-peak charges for other times of the day, including in between the peaks). Some distributors retain day/night arrangements due to use of legacy meters and legacy arrangements.

The Authority's general preference is that day/night tariffs should be phased out and replaced by more targeted peak/off-peak tariffs, as the latter more cost-reflective prices would generally encourage more efficient investment and network use (eg shifting network use to off-peak periods). However, it's possible this might not be the case for all networks. We are open to discussions if an individual distributor considers day/night tariffs continue to provide efficient signals in its case.

We expect distributors to ensure that price signals remain appropriate to network circumstances as circumstances change.

Reduce off-peak and controlled rates

Our understanding is that the LRMC of off-peak usage is typically near zero. This is because additional units of usage at off-peak times do not typically create additional investment by distributors. We expect standard residential customer tariffs (for those customers not on a low fixed charge (LFC) tariff) should be moving towards zero for off-peak and controlled loads. This will encourage energy use at times when the network has spare capacity (eg, off-peak EV charging) and encourage take-up of load control (increasing flexibility). Distributors should monitor their networks to ensure additional peaks are not created at the peak/off-peak transition. If this looks like the case, shoulder rates are a reasonable solution.

We note some distributors have reported issues with a lack of diversity in parts of their networks causing localised peaks, and understand some distributors are discussing operating protocols with retailers in an effort to manage this issue. We are open to discussions if a distributor considers this issue may need to be taken into consideration in setting off-peak rates.

For commercial/industrial customers, we acknowledge that use of a flat kWh charge or capacity charge may still have a role, as a measure of size, although we would emphasise that distributors should give careful consideration to designing their charges in order to reduce distortion to incentives for network use.

We wish to note the significant progress many distributors have made in this area, with several distributors having \$0/kWh off-peak rates, and off-peak rates as a whole having reduced to a weighted average of 1.9c/kWh in 2024.

Follow up on Asset Management Plan reporting on readiness for increased electrification due to decarbonisation

In November 2021 the Commerce Commission published its findings having reviewed electricity distribution business' (EDB) Asset Management Plans (AMPs) reporting related to their readiness for increased electrification due to decarbonisation.² The report found that all EDBs recognised that decarbonisation would impact their business. EDBs acknowledged that consumer sentiment and government policy on decarbonisation would likely result in increased electrification and a corresponding increase in demand for electricity and a change in the way electricity is produced and transported around networks (i.e., two-way power flows). However, there were a range of views across EDBs on the how quickly the effects would be felt.

EDBs reported in their AMPs policy decisions and actions to address decarbonisation trends. EDBs reported making a range of policy decisions to address decarbonisation (eg adjusting forecasts to account for increased electrification, conducting surveys to understand consumer

² Review of Electricity Distribution Businesses' 2021 Asset Management Plans in relation to decarbonisation, 18 November 2021, Commerce Commission, ISBN: 978-1-869459-48-2

preferences regarding electric vehicles or distributed energy resources). A few EDBs embedded decarbonisation into their overriding AMP strategic objectives. Nearly all EDBs reported at least one action point they had undertaken or were planning to undertake in preparation for decarbonisation.

The most common actions reported were in relation to increasing and improving their monitoring of the LV parts of their networks in light of the expectation that increased uptake of electric vehicles and distributed energy resources could lead to capacity constraints on these parts of the network.

To assist us to develop a baseline understanding, for our project looking at EDB progress toward increased electrification, we would like each EDB to report on any actions taken, any findings or results arising from the policy decision and actions to address decarbonisation trends that were first reported in their 2021 AMPs. The reason for this request is that while some initiatives reported in AMPs clearly relate to greater electrification, others may not be obvious to us. It is also useful for us to understand initiatives mentioned in the 2021 AMP were discontinued following further development or trialling. The later may not be reported in AMPs. We are also open to receiving information relating to decisions and actions to address decarbonisation trends not reported in AMPs

To keep costs to a minimum for EDBs, we are asking EDBs to only provide us with information that already exists (eg progress and outcome reports, or in AMPs). The following are two examples of initiatives that have been progressed since the 2021 AMPs.

Network Waitaki, in their 2021 AMP provided information on their two-pronged approach to improve the visibility of their LV network. The first approach was trialling ten distribution transformer monitoring units. The second approach was to work with Metering Equipment Providers to gain access to customer smart meter data with an expectation that limited non-real time data may be available as soon as FY22. Their 2024 progress update, they report that they are now monitoring 123 low voltage feeders in real time and are on track to reach their target of 280 low voltage feeders (40% of our customers) by the end of FY23. They also report this monitoring has allowed them to identify and rebalance loading on three overloaded low voltage feeders. They have also been receiving historic smart meter consumption data from a retailer and have trialled receiving historic power quality data from a metering equipment provider. They are now working with companies who can extract value from this data and will look to evaluate their service in FY25.

Another example comes from Vector. In their 2021 AMP they reported a focus on the development of self-service congestion maps, with the expressed aim of enabling customers to calculate spare capacity on the network for the connection of new load or new generation (e.g. additional solar/PV). Vector's 2023 – 2033 AMP includes a case study on its interactive maps. Vector now publishes key network information on its open data portal where users can access detailed geospatial information of the network but also download the raw information for use in their own systems or more detailed analysis in expert tools. The information available includes location of assets (ZSS and 11 kV feeders), the boundary of our coverage area and ongoing and future works for network projects (within next 2 years). It would be useful to understand what has been learnt about how this information has been received/used.

Please email your update to us at distribution.feedback@ea.govt.nz by the end of August.