Rewiring Aotearoa submission on Joint open letter to EDBs

About Rewiring Aotearoa

Rewiring Aotearoa is an independent non-partisan non-profit, funded by New Zealand philanthropy. It is a registered charity working on energy, climate, and electrification research, advocacy, and supporting communities through the energy transition. The team consists of New Zealand energy, policy, and community outreach experts who have demonstrated experience both locally and internationally. We're always fighting for the New Zealanders who use the energy system, and our goal is to help build a low cost, low emissions, high resilience electrified economy for Aotearoa NZ.

Key messages

Rewiring Aotearoa is strongly supportive of the high level outcomes this letter is seeking, for distributors to actively consider non-network solutions and support their use to improve network efficiency and reduce costs.

However we have concerns about aspects of proposed implementation that bake in a role for third-party aggregators. We think proactively putting in place price signals that reflect network costs and the value consumers create for the network should be a key first step, and that trials to test the reliability of direct price led approaches should be prioritised.

Utilising incentives that go directly to customers avoids an additional profit seeking layer and ensures greater direct benefits to consumers and overall system efficiency. It allows more efficient cost reflective price signals to reach customers who are making the investment decisions.

We hear concerns from the sector that they need to contract for sources of flexibility so they are reliable. What this would lead to is that only homes and businesses who are signed up to a third-party aggregator to control their devices are rewarded for the flexibility value they provide to networks.

These concerns are misplaced and untested. For example if appropriate price signals and export tariffs are provided by EDBs and passed through as effective incentives to customers through retail tariffs well ahead of network constraints,

this could signal investment and operation of a diverse fleet of consumer energy resources that would provide predictable flexibility services at an aggregate level.

This could provide a lower risk option than through a small number of third party managed services controlling a subset of these devices. There is a risk third party aggregators could go out of business and default on contractual arrangements. Likewise relying on investment in larger batteries provides a single point of failure creating a risk that is not there when relying on a large number of smaller sources of flexibility in homes and businesses.

Trials to test how consumer energy resources respond on average in aggregate to price signals and export tariffs is needed to build confidence and develop data sets that can predict response.

In addition to feedback on the letter we consider there is the need for the joint signatories to this letter to take a more active and stronger leadership role. While EDBs can do a lot more voluntarily, regulators can and should do more to encourage such action and, when action is not forthcoming, quickly undertake work to deliver what is in the best interest for consumers. For example, regulators themselves should:

- require non-network solutions be fully and fairly considered in network planning
- require pricing (and export tariffs) the cost of network use or value from appropriately timed exports
- continue to coordinate between yourselves on non-network solutions and the progress of EDBs .

Ensuring non-network solutions are considered in network planning

We also strongly agree that EDBs should act to ensure both non-network and network solutions are considered in network planning.

We support the development of network planning processes to deliver this and a standardised approach across EDBs. We have recently seen examples where battery alternatives were not accurately considered in EDB analysis. Having processes that ensure non-network solutions are not just considered but considered fairly and fully is important.

There should be a common transparent, easily modellable way to compare network investments against flexibility alternatives like solar and batteries. Not compare against "contracted services" which are an infinite rabbit hole of complexity and cost, but compare against the fundamental economics of solar and batteries, regardless of who owns them. The cost residentially, at community scale, and at grid scale are all easily obtainable numbers. The amount of sunlight that hits any region of New Zealand is an easily obtainable number through decades of satellite and weather data made public. Today networks get to make up their own justification for why solar and batteries don't work. We have clearly witnessed disingenuous behaviour in this respect that bias against solar and batteries to favour building more network assets, in turn creating higher bills than necessary.

It is critical that these evaluations are done transparently, and with fair modelling approaches. Regulators should have a standardised "sense check" modelling approach to all network investments, that they must provide evidence they have checked against.

Pricing as the key enabler of flexibility

We strongly agree that pricing is a critical lever for making better use of the electricity network and lowering costs for consumers.

And agree we should move to a future where electricity use (and battery and V2G export) is price-responsive rather than being directly controlled by distributors.

This process will be automated for consumers and in some cases this could include retailers or other customer agents responding to network price signals on their behalf, using automation and smart technology to manage assets such as EV chargers, batteries and hot water systems.

However this kind of third party asset management is unlikely to be the norm in the future - unless regulators and policy makers force this to be the case in New Zealand. Consumers can and should be enabled to unlock the vast majority of the value from their flexibility through direct automated price responses using smart technology in their homes or businesses. The technology already exists for consumers to directly automate, but what is lacking in New Zealand is the network price signals. This does not involve third party or retailer management of assets. These simply add an additional profit seeking layer and reduce consumer benefits.

Parts of New Zealand's electricity industry, including EECA, have become to some degree obsessed with third party "control" of consumer devices with minimal openness to pragmatic reality. Some EDBs have even proposed that flexibility doesn't benefit them unless it is controlled and guaranteed by a third party. As we note in our 'Key messages' section, this obsession is not grounded in first principles thinking or ensuring the best outcome for consumers, and risks creating significantly higher bills for consumers in the long run through unnecessary inefficiency.

Government agencies should be looking at how technology is evolving internationally and avoid prescribing any technology requirements that unnecessarily add to the cost. Open communication standards are useful if they add value. Enforcement or "baking in" of third party control of consumer devices is not.

As we note above in our 'Key messages' section we are strongly supportive of the need for EDBs to actively test, monitor and refine pricing structures so they can understand how demand responds and how those responses can increasingly be incorporated into system operation and network planning. Trials should not just include contracted flexibility or third party management, they should also explore how consumers can automate response to pricing directly using existing technology.

The obsession with open communication protocols is based on the premise that consumers need a third party or retailers to manage their assets. One of the questions that comes up is whether technology like home batteries, smart devices or home and business energy management systems can be relied on by the customer to respond to price signals. The functionality required for these devices to respond to price signals and provide most of the value from customer flexibility, whilst minimising customer bills can be fairly simple.

Engaging with the market

Right now there is not significant existing uptake of consumer energy resources that can provide flexibility. To get to a point where there is sufficient supply of flexibility for EDBs to utilise as non-network alternatives, there needs to be price signals and export tariffs in place for long enough to incentivise investment in technology in homes and businesses to provide consumer based flexibility options.

Issuing Request for Provision of flexibility services only a few years in advance of needing to have contracted access to flexibility to defer network investment, may be more likely to provide non-network solutions from large batteries or EDB own provision of batteries. Appropriate pricing and export tariffs that signal constraints should be in place with time to deliver efficient consumer investment and evolve demand shape that offsets investment efficiently through time.

We agree there will be a role for contracted flexibility services, however this should not be needed to access the vast majority of value from flexibility services which can be accessed through proactively provided and efficient distribution pricing and export tariffs.

Feedback on actions regulators could take to support the efficient utilisation of non-network services

There are a lot of actions that are needed by regulators to support the efficient use of non-network services by EDBs. Many of these are summarised in Rewiring Aotearoa's Policy Manifesto which can be found at https://www.rewiring.nz/manifesto

A subset of priority actions are highlighted below and Rewiring welcomes further conversations on these areas to explain our thinking and rationale.

Electricity Authority

The Electricity Authority has a key role to play in regulation of distribution pricing including export tariffs offered. Markets thrive on efficient price signals to drive the right level of investment in any given technology. And this is no different for behind-the-meter batteries and their ability to reduce the need for network investment. However, recent decisions by the Authority that dramatically intervened in the price formation process for distribution export tariffs, almost guaranteeing that the uptake of batteries in 2026/27 will be inefficiently low as a result of the suppressed pricing.

It was disappointing to see the implementation of default export tariffs in the 2026/2027 network charges.

In July 2025 the Authority published its decision paper which "*requires distributors' negative charges to be based on "the long-run marginal cost of peak demand that can, on average and over time, be avoided by injection that occurs at the times identified.....Distributors should already calculate this LRMC*

figure for the purpose of setting their peak consumption charges."[1] In the first year the Authority's regime allows distributors to alternatively use the differential between their peak and offpeak consumption tariffs. We do not agree with the need for this (given the Authority's assertion above that distributors should already calculate the LRMC).

We are particularly concerned by the direction in the October 2025 update to Chapter 6 of the distribution pricing practice note. This explicitly asked EDBs to heavily discount the calculations they had made about the network value of peak-based battery exports as follows:

- The Authority encouraged distributors to apply an "adjustment factor" against the peak or off-peak differential or LRMC price[2], where the only adjustment the Authority contemplated was to *reduce* the export payment, suggesting the Authority itself internalised the downward bias expressed by distributors in its consultation process.
- The Authority provided distributors with twelve matters to consider when setting this adjustment factor[3], many of which would serve to justify distributors reducing the export payment and - based on our review of pricing methodologies so far - without any robust evidence.
- **Critically, the Authority explicitly stated that "*We consider it prudent to begin with a relatively high adjustment factor (and therefore lower negative charge) at the outset**, and to fine-tune it over time as better data and consumer feedback become available. It is much easier to strengthen incentives later than to scale them back once consumer expectations and investment decisions have been shaped. It also reduces the risk of over-incentivising injection, while allowing stronger signals to develop over time.*"[4] We are astounded by this reasoning, because - as outlined in our previous submissions - the risk of triggering a wave of battery investments that disrupt networks in the first year of the scheme is vanishingly small - and if it did happen would come with numerous benefits to the electricity system as a whole. The Authority essentially handed distributors an excuse to be extremely conservative on a silver platter.
- The directive issued by the Authority risks lessening competition. EDBs are regulated as monopolies, but the reality of customer energy resources means that EDBs are, for the first time in history, facing genuine

[1] Decision paper, para 5.4 https://www.ea.govt.nz/documents/7774/2A_Requiring_distributors_to_pay_a_rebate_when_consumers_supply_electricity_at_hYzYEsJ.pdf
[2] Distribution Pricing: Practice Note Second Edition, paras 285-293
[3] Distribution Pricing: Practice Note Second Edition, paras 287-288
[4] Distribution Pricing: Practice Note Second Edition, para 291

> competition for network services. The Authority's directive, however, substantially lessens the ability of CER to compete for these services.

The Authority should correct the regime in time for the 2027/28 pricing year, beginning with a review of export tariffs as a matter of urgency. To correct this process the Authority must immediately rescind its direction in the practice note (that EDBs should apply a high adjustment factor) until such time that the Authority honours good regulatory practice and provides evidence this directive is warranted. This evidence would necessarily include quantitative modelling of the risk of significant and chaotic near-term battery uptake resulting from the use of the LRMC-based charge as it is, as well as requiring EDBs to submit modelling that evidences any other reasons they proffer to reduce the LRMC price.

Commerce Commission

Rewiring Aotearoa through its work with EDBs and Transpower has identified a real world example where the cost of non-network alternatives have been over reported and not fairly considered, including by being excluded from community consultation on options. We consider the Commerce Commission should take a much stronger approach to requiring EDBs to properly consider non-network alternatives.

If the Commerce Commission wants to continue with a light touch approach to regulating distribution network investment, it needs to put standardised systems and requirements in place to increase the chance of identifying where EDBs are not efficiently investing in non-network solutions. Alongside this, stronger financial penalties should be put in place increasing the risk and cost to EDBs from not accurately considering non-network solutions (where they could provide a lower cost solution) and creating a stronger incentive for efficient investment.

The Commerce Commission should work with the Electricity Authority and require appropriate pricing and export tariffs to be in place to efficiently incentivise non-network solutions for 5 years (and for a short term over the next 5 years) before any growth capex is approved.

The Commerce Commission should also require mandatory reporting on appropriate utilisations rate measures through updates to information disclosure requirements. In Virginia in the US, where regulators are trying to combat rising electricity prices, in part due to rapidly increasing demand from data centres, utilisation rates reporting is being progressed as a way to looking at existing poles and wires to identify efficiencies, and where complementary tools can help reduce peak demand, balance load, and maximise value from existing assets.