Rewiring Aotearoa submission on Reforming network pricing for distributed generation to promote efficient investment

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 supports the Authority's intentions to ensure that distributors can charge distributed generation for incremental costs, share network capacity costs over more connections (rather than just the party that triggers the upgrade), and provide efficient payments for injection when it provides benefits.

However the Code changes proposed in this consultation will not result in distributors providing efficient payments to all groups of customers for the benefits their injection provides, where it reduces network costs for local customers over time.

There is a group of medium sized customers who will miss out. These are customers who are not eligible for default peak export payments (with connections over 45kVA or generation export capacity over 45kW), and who are operating small to medium sized businesses and are not well placed to negotiate a fair deal for payment for injection[1] when it provides benefits.

Outcomes for this group of medium sized firms and organisations will be skewed towards inefficiently low incentives to inject at times and in locations where doing so would deliver benefits. This is because:

[1] We use the term injection and export interchangeable throughout this submission.

- The proposed Code changes in this consultation provide distributors with significant discretion over how negative cost (benefits) from injection are defined and require the customer to invoice for payment for injection
- These customers are not well placed to negotiate for payments that fairly reflect the benefits from their peak time exports with their EDBs.
- It will be resource intensive and there will be an information asymmetry barrier for the Authority to check whether payments for injections that reduce costs are fair for customers eligible for these payments. This is less of an issue for large customers with the resources to test and negotiate a fair deal.
- Invoicing for injection payments creates unnecessary complexity and admin burden for many firms with medium sized connections.

To address this the Authority should:

- reconsider how a broader set of standard contracts, with less restrictive limits on who can access default peak export tariffs, can be used to allocate default peak export tariffs (rebates), so that medium sized customers who are not well placed to negotiate with EDBs, can receive fair and efficient prices for injection.

Getting distribution export payments right is key to achieve the Authority's statutory objective

There is a significant potential for solar and batteries to collectively offset network investment. This is important, because network costs are the largest contributor to electricity bills increases.

We urge the Authority to focus on how it can ensure distribution pricing and payments for injection efficiently signals investment in customer batteries now, so that these energy resources are there and dispatched when they are needed at appropriate scale to offset network investment. If the Authority does not get this right it will result in inefficient network investment and higher electricity bills for all customers.

We believe that the Authority failed to achieve its statutory objective to maximise long term benefits for customers by only requiring default peak export tariffs to be paid to customers with connection sizes up to 45kVA and generation export capacity of 45kW. The Authority has not resolved this failure in the proposed Code changes set out in this consultation, but there is still an opportunity to get this right in time for 2027 distribution pricing.

It is only the Electricity Authority that currently has the tools to ensure appropriate price signals are in place to avoid significant unnecessary investment in distribution infrastructure. This is your opportunity to use the tools at your disposal.

Such price signals are now widely accepted to be in the long term interests of all consumers, as the avoided infrastructure investment on many networks is in the order of hundreds of dollars per year per household for every household on a network. This is significant. Distributed energy resources also provide resilience benefits to communities that are unquestionable in the interest of all consumers.

Failing to take action here is an active decision against the long term interests of consumers and therefore contrary to the Authority's statutory objectives.

EBDs will absolutely need to update their pricing and approach to contracts through this transition, and there will be costs associated with this. However, the costs of not doing this far outweigh the costs of doing it.

Medium sized customers should not have been excluded from default peak export payments

Rewiring Aotearoa has scrutinised the Electricity Authority's decision making process and believe there is evidence that the decision to exclude medium sized customers from receiving default peak export payments based on 45kW generation export capacity and 45kVA connection size was biased and favoured a solution that maintained status quo pricing over wider customer benefits and views from the majority of submitters. This decision was not aligned with the Authority's statutory objective to maximise the long term benefits of consumers.

The Authority excluded medium sized customers from definition of mass market customers without providing any reason, and communication of this change was misleading:

1. The original intent of the 2A Code changes was to focus on mass market customers, rather than larger commercial customers or larger distributed generators.
    a. In the February 2025 Consultation Paper: *Requiring distributors to pay a rebate when consumers supply electricity at peak times* the Authority notes "In this paper, we use the term 'mass-market' to refer to consumers that are on 'standard contracts' (as defined by the Commission's information disclosure rules). This can include

households, small and medium businesses, farms, etc, but usually excludes large industry. [2]

b. In response to this consultation paper, there was wide support from submitters to only applying the principles to mass market customers, as larger customers on bespoke contracts are more likely to be able to negotiate pricing that rewards their injection for the benefits it provides.

2. In the July 2025 Decision paper 2A: *Requiring distributors to pay a rebate when consumers supply electricity at peak times*[3] the Authority changed how it defined 'mass-market' customers to target only households and small businesses, (now excluding medium customers, farms, etc) but misleadingly did not acknowledge this change.
    a. From this point on the language changes to talk about larger customers as being out of scope - which by default based on this new definition means medium businesses and farms are now out of scope.
    b. This is a very significant change and means that a large number of customers that the original policy was proposed to provide default export tariff were now out of scope.
    c. The Authority did not communicate this change in definition in the July 2025 decision paper. Instead, misleadingly, it said that there has not been a notable change in definition. The new definition for mass-market customers was included in the decision paper under the heading "*Other elements of the initial proposal are largely unchanged*", despite the significant change to the definition which now excludes many medium sized customers.

[2] Consultation February 2025: *Requiring distributors to pay a rebate when consumers supply electricity at peak times* https://www.ea.govt.nz/documents/6481/2A_consultation_paper_web_version_7a6SkWd.pdf#:~:text=This%20paper%20sets%20out%20the,supply%20electricity%20at%20peak%20times.

[3] Decision paper 2A: *Requiring distributors to pay a rebate when consumers supply electricity at peak times* https://www.ea.govt.nz/documents/7774/2A_Requiring_distributors_to_pay_a_rebate_when_consumers_supply_electricity_at_hYzYEsJ.pdf

The rationale for significantly limiting customers eligible for default export tariffs was based on valid concerns over access by large distributed generators (who were not originally intended to be in recipients). The solution the Authority chose to address this concern was biased toward industry preferences and will not maximise consumer benefits.

1. The Authority proposed identifying mass market customers as ICPs with Standard Contracts. Most submitters (including many EDBs) were comfortable with the use of the term including "standard contracts" in the Code to refer to mass market customers.[4]
2. Only two submitters - WEL Networks and EA Networks, raised concerns that without further clarification, there is a risk that large customers with substantial on-site generation could access negative charges intended for mass market customers.
3. Based on documents Rewiring Aotearoa received under OIA [OIA-2500040, February 2026] the Authority identified the issue that implementation of distributors' peak-time rebate obligation could unintendedly provide significant peak payments to larger distributed generation injection. The Authority notes in its GM report:
    - " *The intent of the proposal was to require distributors to pay negative charges (rebates) when mass market consumers inject electricity at peak times. The negative charge was not intended to be paid when larger distributed generation is injected.*"[5]
    - "*In response to consultation feedback about the lack of clarity about the term "mass market" during the development of these requirements, the Code now requires distributors to pay rebates when residential and small business consumers inject. The risk is some larger distributed generation could be considered by a distributor to be small business consumers.*[6]"
4. In assessing Consumer impacts the Authority notes that if the default peak-time rebate is applied to a wind farm like Meridian Energy's Mill Creek windfarm, Meridian would receive an annual rebate of ~$2.2 million, or an additional $12.40 a year per ICP. This is 1.8% of Wellington Electricity's 2025 allowable revenue under the Commerce Commission's DPP4.
5. Rewiring Aotearoa is not seeking to expand default peak-time negative charges beyond mass market customers in this submission. Rewiring understands the rationale for the Authority's choice to exclude large distributed generation customers like Meridian's Mill Creek windfarm with 60MW capacity because customers of this scale are better placed to

[4] https://www.ea.govt.nz/documents/7774/2A_Requiring_distributors_to_pay_a_rebate_when_consumers_supply_electricity_at_hYzYEsJ.pdf
[5] *GM Report - Network and System Change*. Meeting date 29th September 2025.
[6] *GM Report - Network and System Change*. Meeting date 29th September 2025.

negotiate with EDBs than mass market customers. However the Authority should implement Code changes that deliver default peak export pricing to the originally intended group of customers. Farms with 100 to 300kW's of solar and in a paddock and 100kW of batteries are not that same as a 60MW commercial wind farm. These medium sized customers should be included in the definition of who receives default export pricing.

6. The Authority chose to proceed with a consultation on how to define a small business customer. Following consultation it decided to tightly define small business customers as those with up to 45kW exportable generation capacity or 45kVA connection size. This is a flawed choice, firstly because the original intent of the policy was to include mass market customers including "households, small and medium businesses, farms, etc", and secondly because the issue found by the Authority was with the potential for inclusion of large distributed generators. Instead of landing on a definition that excluded many customers who were the original intended recipients of the default peak-time rebate, the Authority could have looked at how standard contracts are used for large distributed generators and designed a solution that was targeted to only exclude these larger customers. For example it would make more sense in terms of maximising consumer benefit to encourage distributors to put large generation customers on to bespoke contracts or to choose higher connection capacity and generation capacity limits, that better reflect large customers.
7. Rewiring Aotearoa simply wants to see the Electricity Authority follow through on the original intention of the 2A regulation to protect mass market customers (including medium customers and farms), ensuring they can receive efficient peak export payments, rather than prioritise the convenience of a small number of EDBs with large generation customers in mass market price tariffs.

The Authority has now shifted in this consultation to a narrative around why it cannot apply default peak export tariffs (rebates) to customers with generation export capacity over 45kW or connections of over 45kVA, because this could overwhelm the network with injection at peak times.

1. Rewiring does not agree that this narrative should be applied to medium sized customers, and the Authority has provided no evidence that it applies in the real world. If EDBs monitored and assessed when peaks occur on parts of their networks (splitting distribution pricing into a small number of regions with common peak demand profiles), they could accurately define peak pricing periods to coincide with times of peak demand. This would mean that constraints related to high injection at peak would be limited at

the medium and high voltage level, in fact pricing would work as it should and mitigate constraints related to peak demand.

2. The Authority makes the point in this consultation (footnote 16) that "*Recognising the peak pricing windows used for time-of-use tariffs are pre-determined and will span many days when demand is low during those windows (eg, a warm winter day or a public holiday).*" Improved understanding of when peaks occur and tighter definitions of peak pricing periods could help address variation in demand during peak pricing periods. This would require more efficient pricing methodologies to be developed by EDBs and should be encouraged by the Authority.
3. On low voltage networks, (where there is less diversity of demand and supply) connection export limits set in connection agreements are sized to avoid constraints and would deal with most of the risk of low voltage network constraints due to peak export. The Authority may be concerned about locations where local demand on a low voltage network is atypically low at peak and local battery export capacity is cumulatively high from multiple ICPs, resulting in potential for constraints associated with injection at peak. This situation would be atypical and the risk should be identified at the time of connection and avoided through connection export limits under current arrangements. In the near future it could be managed through dynamic export limits[7], which would maximise the benefits from existing network infrastructure, without letting infrequent atypical demand or export patterns limit consumer benefits.
4. Further to point 3 above, if an EDB has done hosting capacity studies they will know the inverter limit of any ICP (commercial and residential) which should have been used to set the export limit for an ICP. It is highly unlikely that export at this limit during a peak time will exceed a network's capacity. But to be absolutely sure for medium sized customers, specific studies at the peak time could be done.

Answers to a subset of questions

Q1. Do you agree with the background and context summary above? Why? Is there additional background, evidence, or context relevant to the proposals in this paper?

[7] Two EDBs are already moving on dynamic operating envelopes to deliver dynamic export limits.

Please refer to the *Key Messages* and *Getting peak export pricing right is key to achieve the Authority's statutory objective* section in this submission which answers this question.

The Authority has left out any consideration of medium sized customers in this context section. There is no consideration of the impact of medium customers on network injection capacity. The Authority argues against an untargeted approach for large connections. However these arguments do not apply to medium sized customers, for example a family farm with 100 kW solar and batteries. This is because:

- EDBs can create contracts with peak export tariffs for regions of their network that have common peak demand profiles and more tightly define the time period when network peak applies for each pricing region. This would address concerns of medium scale customers being inefficiently paid for export and,
- Export limits set through connection agreements can limit concerns about overwhelming network injection capacity from medium sized customers on LV networks. At higher voltage parts of the network increased demand (offtake) at peak would offset the impact of overwhelming network injection capacity. (Please see our response to Question 17 for more details.)

Q4. Do you consider it remains appropriate to regulate injection pricing methodologies? Why?

Yes, it is important that injection pricing methodologies are regulated, especially payments for injection that provide benefits.

With the potential for customer-owned solar and batteries and V2G to provide an alternative that can offset network investment, these technologies are effectively competing with traditional network investment. Over the long term growth in network regulated asset bases could be restricted resulting in significantly smaller bill increases due to delayed and smaller network upgrade requirements. Regulation of injection pricing methodologies (especially payments for injection where it reduces costs) is important to deliver efficient network investment to efficiently incentivise these customer technologies through pricing. Given the limited efforts to date from distributors to reward customers through pricing for injection that lowers network costs, it is clear that regulation is needed.

Some EDBs would prefer to contract flexibility instead of incentivising it through pricing. However, efficient investment price signals that are present for years in

advance of the need for customer flexibility are crucial to investment, so that flexibility from customer technologies is there when needed to offset peak constraints.

Clearly signalled prices for peak exports can help address the “chicken and egg” problem we often hear cited as a reason why networks cannot access non-network solutions.

Why is there no distributed flexibility available in the market when networks go out to contract for it? Because there are no long term efficient price signals to incentivise investment. The Authority should address this through broader application of default peak export pricing to more customers.

Please refer to the *Key messages* and *Medium sized customers should not have been excluded from default peak export payment*s sections of our submission above for more details.

Q17. Do you agree that for larger connections a more bespoke approach that accounts for dependability and mitigates risks such as over-injection or inefficient payments is more appropriate than the prescriptive broad-based approach used for residential and small business consumers? What do you consider such an approach should look like?

Please read the section above titled *Medium sized customers should not have been excluded from default peak export payments* in response to this question.

Rewiring agrees that for genuinely large customers with large connections a more bespoke approach is appropriate. However we do not agree with how the Authority defines a large connection or large customer.

More prescriptive approaches, such as the default peak export tariffs (rebates) are appropriate for medium sized customers that are not well placed to negotiate and seek a fair deal from their EDB. Peak exports from these mid-sized customers would not risk over-injection and would not create network constraints if appropriate regional pricing and appropriate definition of peak times are used by EDBs to define default peak export tariffs (rebates) for medium sized customers.

The Authority should reconsider how a broader set of standard contracts can be used to allocate default peak export tariffs (rebates) so that medium sized customers who are not well placed to negotiate with EDBs, can receive fair and efficient prices for injection.