26 March 2025

Energy Competition Task Force
Electricity Authority
By email: taskforce@ea.govt.nz

Tēnā koe,

Requiring distributors to pay a rebate when consumers supply electricity at peak times

We welcome the opportunity to respond to the Energy Competition Task Force and Electricity Authority (**Authority**)'s February consultation package for Task Force initiatives 2A, 2B and 2C and Distributed Generation Pricing Principles. We have provided our comments in 3 documents but, as the themes are related these should be considered together. This letter addresses *Initiative 2A: Requiring distributors to pay a rebate when consumers supply electricity at peak times*.

We fully support the evolution of distribution pricing to provide efficient incentives for customers to export into congested networks at peak. Powerco will be implementing peak export rebates consistent with the Authority's proposals across its networks on 1 April 2025. Developing and implementing rebates has been a straightforward development of cost-reflective demand pricing.

We are committed to working with the Authority and other organisations on reforms that will ensure a timely least-cost transition to a low-carbon energy future and so optimise outcomes for consumers. Our summary observations are:

Export rebates must be consistent with distribution prices	• Encouraging export with rebates during network peaks is principled and efficient • Posted distribution prices are not perfectly cost-reflective but balance multiple other factors • Initially, rebates will be consistent with distribution prices but not symmetrical
Flexibility procurement allows more granular credit for export than pricing	• Posted distribution prices provide a broad-based long-run marginal cost signal to defer planned network investment • Once a peak signal is in place and as planned upgrades get closer, flexibility tenders can be targeted more precisely than posted prices to defer upgrades to particular network elements • Peak export can receive both pricing rebates and flexibility payments under different circumstances

Rebates are to retailers, not customers	• Distribution businesses' contractual counterparties are retailers who contract with end-customers • Retailers compete with one-another by rebundling distribution prices and the costs of other inputs such as wholesale energy • The Code Amendment should be for distributors to provide peak export credits to retailers, who may both respond to the incentive through customer pricing and also by directly controlling export themselves or through an agent

Our responses to the Authority's questions are tabulated in section 4 below.

We are always keen to meet with the Authority to discuss and develop the ideas in our submissions. In the meantime, if you have any questions or would like to talk further on the points we have raised, please contact Emma Wilson [redacted].

Nāku noa, nā,

[redacted]

Emma Wilson
Head of Regulatory, Policy and Markets
POWERCO

1. Encouraging export rebates is principled but practical implications need to be considered

We agree with the Authority that export into a congested network at peak times can help defer investment the same way that demand reduction can, and that rebating exporters has the same incentive effect that charging users when networks are congested has.

That's why Powerco will be implementing peak export rebates consistent with the Authority's proposals across its networks on 1 April 2025. Developing and implementing rebates has been a straightforward development of our cost-reflective demand pricing, the most difficult part of the implementation was modifying our billing system to accommodate "negative" prices.

In theory export rebates would be "symmetrical" the same as perfectly cost-reflective demand prices. However, as we are transitioning to perfectly cost-reflective demand pricing, symmetrical export rebates would be inefficient at this time. This is because electricity distribution prices are not perfectly cost-reflective but balance multiple other factors, and in the development of prices we have to:

- have regard to transaction costs, consumer impacts and uptake incentives;[1]
- make trade-offs when balancing complex pricing with other aims which may mean an imperfect structure is the most effective way to generate a desired response;[2]
- progressively improve the temporal and locational granularity of prices and charges can deliver increased social welfare; however, these benefits must be balanced against the costs, complexity, and potential equity concerns of implementation; [3] and
- use a degree of judgement to determine economic cost price signals.[4]

This describes the situation in New Zealand today, distribution pricing reform is a work in progress. The distortions of the low-user fixed charge will not be removed until 2027 and distributors are learning more about congestion on their networks and how to signal this. Prices are more cost-reflective than they used to be, but they are not perfectly cost-reflective at an asset level.

The consequence of this is that export rebates can be targeted at the same pricing regions and in the same peak periods as demand prices but should not be symmetrical. As the Authority notes,[5] over-signalling export rebates would encourage inefficient investment in generation and storage, and the level of export rebates should be lower than the variable peak demand charges.

[1] The fourth distribution pricing principle: https://www.ea.govt.nz/industry/distribution/distribution-pricing/

[2] *Distribution Pricing Practice Note v2.2*, 2022, Electricity Authority. Para 50

[3] The distribution pricing practice note quotes MIT's Utility of the Future Paper, Ibid. Para 81

[4] Ibid Para 81

[5] Electricity Authority, *Requiring distributors to pay a rebate when consumers supply electricity at peak times*, 12 February 2025, 5.39

2. Tendering for flexibility is complementary to pricing for export

The falling cost and improving capability of new technologies to control demand and store or generate electricity means that the opportunity for us to do this economically is improving all the time. Posted distribution prices provide broad-based long-run marginal cost signal to defer planned network investment whereas flexibility tenders are asset-specific, unlike posted prices.

Flexibility procurement allows more granular credit for export than what pricing can. Where our asset management plan identifies the need for a planned upgrade, despite us signalling this with peak prices, there may be an opportunity to defer the project by paying third parties to inject electricity from a local generator or a battery or reduce demand in the affected area – using controllable load or injection in this way is called "flexibility". Over the years we have been trialling the use of flexibility:

- Our first step in this process was in 2018 when we called for expressions of interest in providing non-transmission network solutions as options for reinforcing electricity supply in the South Waikato. In this instance, the non-network alternatives were more expensive than the transmission solution
- In 2021 we ran a tendering process for network support to the Coromandel Region. SolarZero was awarded a contract to provide 1MW of network support during peak consumption times. This required them to keep their batteries fully charged when a local network peak was forecast and to export stored electricity into the network when the peak occurred. [6]
- In September 2023, we livened four controllable fast chargers for electric vehicles at Z's forecourt in Waioru. These support the electricity network by intelligently responding (reducing load) to minimise impact during peak demand periods.
- In December 2023, Z Energy livened a 500kW flexible Kwetta EV fast charging array at Ngātea, on part of our network which has voltage constraints during peak periods.
- In February 2025, we sought expressions of interest from flex service providers to provide demand reduction services during peak electricity load times in the Mt Manganui area[7].

These projects have informed our understanding of how we can use flexible connections to minimise the cost and maximise the speed of the transition as well as increasing our understanding about "dynamic operating envelopes", where we allow customers access to constrained parts of our network on terms which make the most of network capacity when it is available but don't adversely affect other network users when it's constrained.

Peak export can receive both pricing rebates and flexibility payments under different circumstances. Where exporters can control the timing and location of the services they provide, they can benefit both from the (lower) long-run regional cost signal in the export rebate and specific flexibility payments.

3. Rebates are to retailers, not end-consumers

The policy intent of the consultation paper is to ensure that distributors pay a rebate when consumers supply electricity at peak times. Distributors are wholesale providers of line services to retailers, while distributors may

[6] We have suspended the contract with solarZero as a result of their liquidation SolarZero enters liquidation | RNZ

[7] https://www.powerco.co.nz/our-partners/flex-solutions/flex-solutions---mt-maunganui-gxp

have direct contracts with very large end-customers, for mass-market customers we contract with retailers. Therefore, a simpler way to think about it, is that it's effectively treated as a negative tariff, treated in the same way as every other tariff and is applied to the retailer.

Retailers compete with one-another by rebundling distribution prices and the costs of other inputs such as wholesale energy. The great benefit of this "interposed" contractual model is that retailers offer a variety of retail services, offers and prices in competition with one another. As the Authority's companion consultation paper notes:[8]

> *the drafting of the design requirements are intended to require the development of price plans that … pass through benefits to the consumer, taking into account that … repackaging between different rates and charges is justified where it improves consumer uptake or likelihood of consumers responding to the price signals*

On an open access network, all customers must be able to access the distribution system on the same terms, but each customer responds to prices and incentives differently. Since all retailers are exposed to the same price signals from distributors, they minimise their cost of supply by designing products and services that suit individual customers and groups of customers. In some cases, this may involve controlling consumer or third-party owned resources such as batteries and EVs to respond directly to the price signal themselves if customers agree.

Powerco supports the Authority's proposed rebate initiative, however, we are not sure that the suggested drafting[9] accurately reflects the interposed arrangement and that the distributor's contractual relationship is with the trader / retailer. In particular, the references to customer highlighted below should be references to the trader / retailer (i.e. a participant that trades on, is connected to, or uses a distributor's network or equipment connected to a distributor's network). Or alternatively, rebates could simply be defined as a negative tariff.

We therefore suggest that the Code Amendment should be for distributors to provide peak export credits to retailers, who may not just respond to the incentive through customer pricing but also by directly controlling export themselves. The draft Code Amendment reads:

> *A distributor's pricing methodology must … provide for payments to be made to customers in respect of injection from the ICPs identified under paragraph (a) … at a level that shares the network benefits from the injection with the distributor's customers responsible for the injecting ICPs …*
> *A payment resulting from subclause (1)(b) may be met by way of a credit against any amount owed to the distributor by the customer or as a negative tariff applied in the same way as a demand tariff.*

Distributors' "customers" in this sense are retailers. The Default Distributor Agreement in Schedule 12A.4, Appendix A of the Code defines

> *"Customer" means a person who purchases electricity from the Trader that is delivered via the Network*

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[8] *Improving pricing plan options for consumers: Time-varying retail pricing for electricity consumption and supply*, Electricity Authority, February 2025. 6.10

[9] *Improving pricing plan options for consumers: Time-varying retail pricing for electricity consumption and supply*, Electricity Authority, February 2025. Appendix B

4. Responses to the Authority's questions

Problem definition	
Q1. Do you agree with the problem definition above? Why, why not?	Yes. Efficient distribution pricing is an important tool in the least-cost transition to a low-carbon energy system by minimising network costs. It should not be a subsidy for renewable generation – as the Government Policy Statement to the Authority notes *it is not the Electricity Authority's role to prefer one form of supply over any other*. We also support the Authority's observation that "this pricing is unlikely to be perfectly cost-reflective" as it's one tool, not a silver bullet.
Proposed solution: principles-based rebates	
Q2. Do you agree with these principles? Why, why not?	Yes. It may be helpful to clarify that the principles are consistent with the Authority's distribution pricing principles and the implementation guidance provided in its *Distribution Pricing Practice Note*.
Q3. Do you agree that the principles should only apply to mass-market consumers, or should they apply to larger consumers and generators also? Why, why not?	Yes, however it should be extended to small commercial but exclude large connections that have bespoke tariffs as most large connections have bespoke distribution pricing, which may include the option for peak export (or netting self-supply off against peak demand charges). The Authority's problem definition (that there is a missing price signal for injection) does not apply to these large connections. As we argue in our submission and cross-submission on connection pricing reform[10], regulation should be proportionate to the benefit that follows from it.
Q4. Do you agree the principles should apply to all mass-market DG, including inflexible generation (noting that the amount of rebate provided will still be based on the benefit the DG provides)?	Yes – noting that distribution export pricing should be consistent with demand pricing and that distribution pricing reform is a work in progress and "unlikely to be perfectly cost-reflective".
Q5. Do you agree with the direction of the guidance that would likely accompany the principles? Why, why not?	Yes.
Q6. Are there any additional issues with the principles where guidance would be particularly helpful?	No
Q7. Do you agree the principles should be incorporated within the Code, rather than being voluntary principles outside the Code? Why, why not?	Yes - in order to achieve greater EDB alignment which is important for retailers and customers. Distribution pricing reform is a gradual process and export rebates are small relative to peak pricing signals for demand.

[10] https://www.ea.govt.nz/documents/6343/Powerco_DCP_-_Submisisons_2024_i7uSvux.pdf

Q8. Do you agree with the proposed implementation timeline for this proposal? If not, please set out your preferred timeline and explain why that is preferable.	Yes. We note that the low user fixed charge will not be removed until 1 April 2027. This is a major distortion to distribution pricing, which will evolve in the 2027-2028 pricing year as a result. Export rebates should evolve in the same way.
Q9. Do you agree the proposal strikes the right balance between encouraging price-based flexibility and contracted flexibility? Why, why not?	Yes. It may be helpful to consider the different, but complementary, roles of pricing and tendering for flexibility as set out in section 3 above.
Q10. Do you agree the proposal will lead to relatively minor wealth transfers in the short term, and will lead to cost savings for all consumers in the longer term?	Hopefully, provided that implementation is focused on rebates in the same network peaks signalled by the distributor's demand pricing and limited to the mass-market.
Alternative option: prescribed rebates	
Q11. Do you agree that more prescriptive requirements to provide rebates will be less workable than a principles-based approach, and therefore should not be preferred? Why, why not?	Yes. This is particularly important given the fluid state of distribution pricing reform and the importance of keeping export rebates consistent with demand pricing.
Alternative option: consumption-linked injection tariffs	
Q12. Do you agree that a consumption-linked injection tariff would not be sufficiently targeted, and therefore should not be preferred? Why, why not?	Yes. As discussed in Q1 above, the role of export credits is to minimise costs not subsidise generation.
Q13. If this approach was progressed, do you think: a) injection rebates should perfectly mirror consumption charges? b) there are sufficient safeguards in place that would allow distributors to avoid over-incentivising injection to the extent that it incurs additional network costs?	a) No. We agree with the Authority's assessment in 5.39 that the over-signalling the value of export will be more inefficient than over-signalling the cost of consumption at peak. Given the limitations to the cost-reflectivity of distribution pricing at the moment discussed in section 2 above, the variable rate for peak export should be lower than the variable rate for peak demand. b) It's not clear from the consultation paper whether the four safeguards listed in 5.42 will be regulated and if so, how. The draft code amendment requires payments to be made "at a level that shares the network benefits from the injection …". Modifying this to "at a level that shares the network benefits from the injection efficiently …" would create grounds for a code breach if rebates were inefficiently high and against which the Authority could proactively assess payments.
Regulatory statement	

Q14. Do you agree with the objective of the proposed amendment? If not, why not?	Yes. The risk of inconsistency with the Statutory Objective could be reduced by modifying the objective to "to ensure distribution pricing for mass-market consumers with DG ~~appropriately~~ efficiently incentivises investment …"
Q15. Do you agree the benefits of the proposed amendment outweigh the costs?	Hard to say. It is disappointing that the consultation paper does not attempt to quantify costs and benefits. The qualitative competition benefits set out relate to equality of treatment for small-scale DG with demand response and large-scale DG. These are benefits but relate to efficiency rather than competition.
Q16. Do you agree the proposed amendment is preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objectives in section 15 of the Electricity Industry Act 2010.	Yes
Proposed amendment Code drafting	
Q17. Do you have any comments on the drafting of the proposed amendment?	See commentary in section 3 above – to change references from "customer" to "trader" or "retailer" and/or define as a negative tariff. *A distributor's pricing methodology must … provide for payments to be made to customers in respect of injection from the ICPs identified under paragraph (a) … at a level that shares the network benefits from the injection with the ~~distributor's customers~~ (Trader/Retailer) responsible for the injecting ICPs …* *A payment resulting from subclause (1)(b) may be met by way of a credit against any amount owed to the distributor by the ~~customer~~ (Trader/Retailer) or as a negative tariff applied exactly the same way as demand tariffs.*