

Rewiring Aotearoa cross-submission on Consultation paper - Requiring distributors to pay a rebate when consumers export electricity at peak times

To: taskforce@ea.govt.nz

Please find below our cross-submission on some key common themes from submitters on *Consultation paper - Requiring distributors to pay a rebate when consumers export electricity at peak times.* These are the points where we feel particularly compelled to comment. We have included some specific quotes from submissions, but certainly not all relevant quotes.

As an overarching comment, some submissions included significant statements as if they were fact with no backing evidence. Several even noted they are aware of evidence of certain things, yet don't provide this evidence or point to where it can be found. We recommend that the Task Force track down such evidence and confirm you are confident in this before taking any decisions based on it.

The submission focusses on the following:

- 1. It is good to see consumers getting their voices heard
- 2. Concerns of wealth transfers
- 3. Obsession with aggregators and control
- 4. Claims that batteries can't reduce any network costs
- 5. Location based value and low visibility of LV network
- 6. Failing to undertake good consumption tariff design as excuse
- 7. Concerns about timelines
- 8. Concerns consumers with batteries will themselves be disadvantaged by SETs
- 9. Correcting a few incorrect assumptions

Thank you for this opportunity, and your ongoing work and resolve in the face of vested interests. The energy system is built for New Zealanders. It's about time their contributions to it and agency in it were respected. It's about time they had a clear voice on their behalf.



1. It will be good to see consumers get their voices heard

At the core of the purpose of the Electricity Authority is to deliver for the long-term benefit of consumers, with the Electricity Industry Act 2010 defining "The main objective of the Authority is to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers."¹ It has been great to see the Electricity Authority putting in real effort recently to encourage consumers to have their voices heard, and proposals that seek to deliver better outcomes for consumers.

We have been encouraged by the many statements from the Electricity Authority this year that they are taking these responsibilities seriously, including these:

"We're proposing three changes to help support this consumer empowerment and decentralisation of our energy system. Over time, this will increase community resilience and lower power costs for everyone." Anna Kominic, Chair of Electricity Authority, 12 February 2025

"Over the coming months, it will become increasingly clear that we are absolutely determined to ensure everyday New Zealanders get their share of the benefits our system can provide." Anna Kominic, Chair of Electricity Authority, 3 February 2025

We were blown away by the engagement of consumers with the Task Force consultation, with the large majority of consumers submitting in support of Rewiring's main points. While some individuals copy and pasted content, they took the time to do so and have their voices heard and as one submitter said:

*"I am submitting these points - you may see them in other submissions. I would urge you not to minimise them, even though they are collectively developed and submitted by many people. I wholeheartedly agree with and endorse them."*²

Of the dozens of customised submissions from consumers, the following stood out to us as particularly insightful:

As a prosumer, a symmetrical rate would be far easier to understand, and a more fair way to price electricity, where my electricity is treated as just as valuable as an energy company's energy export or reduction... With a fairer system in place, I may reconsider my decision not to invest in a battery or upgrade my EV battery to one that can act as a storage facility when I have significant excess power.³

We would reconsider [our decision not to get a battery] and add a battery (or even 2) if there was a strong, symmetrical export tariff that provided the prospect of savings over time to offset the considerable upfront cost.⁴

¹ <u>https://www.legislation.govt.nz/act/public/2010/0116/latest/whole.html#DLM2634340</u> s15

² https://www.ea.govt.nz/documents/6876/C_Nathan_Dougherty_2A_2BC_submission_2025.pdf

³ https://www.ea.govt.nz/documents/6864/C_Margy-Jean_Malcolm_2A_2BC_Submission.pdf

⁴ https://www.ea.govt.nz/documents/6816/C Alistair Gunn 2A 2BC submission 2025.pdf



But due to lack of incentive, I will not be paying for a grid connection [for my now home being built] as it is not worth my while compared to investing in my own storage and not be tied to the grid fees I currently pay (usually two-thirds of my power bill).⁵

I would definitely have considered increasing the size of my solar array and installing a battery if the export regime had been more supportive to my calculated payback period. The installation of a battery would also have made my installation more resilient in the event of power-cuts and would have reduced my requirements for grid consumption at peak times.⁶

We are also living in a region that is expecting a large earthquake in the coming decades and large solar systems will literally be life saving systems when this happens.⁷

We implore the Task Force to listen not only to us, and not only to the 100 individuals and community groups that took the time to ask for the Task Force to do more, but also to listen to themselves:

"We will not be deterred or distracted by the efforts of vested interests hoping to preserve the status quo"⁸ - Sarah Gillies, CE, Electricity Authority

Though this does fly in the face of some submitters:

"Westpower prefers the Authority to maintain the status quo." - Westpower submission⁹

"If the Authority chooses to continue with this work, then we do not support it being embedded in the Code. Creating more regulation is not the answer." - ETNZ submission¹⁰

⁵ <u>https://www.ea.govt.nz/documents/6823/C_Brendan_Pheasant_2A2B2C_submission_2025.pdf</u>

⁶ https://www.ea.govt.nz/documents/6828/C Conor Boyd - 2A 2BC submission 2025.pdf

⁷ https://www.ea.govt.nz/documents/6850/C Joanna Ashe Marasti 2A2B2C submission 2025.pdf

⁸ Consumer interests front and centre of sector transformation, 14 February, LinkedIn

⁹ <u>https://www.ea.govt.nz/documents/6803/D_-Westpower_2A_submission_2025.pdf</u> p11

¹⁰ <u>https://www.ea.govt.nz/documents/6788/D_ETNZ_2A_submission_2025.pdf</u> p4



2. Concerns of wealth transfers

Summary of point made

Many EDBs and the ENA raise concerns about wealth transfers they consider would result from households with batteries to those without batteries. Arguing that because households with higher income can afford batteries first, paying those customers for reducing network demand would result in households without batteries paying additional grid costs.

Quotes from other submissions

"The proposed changes represent a wealth transfer from customers already struggling with the cost of living to more affluent customers able to invest in home batteries... ETNZ is opposed to subsidising owners of battery storage through increased charges to other customers"¹¹

"Those who can afford to invest in solar panels and battery storage are typically wealthier households, meaning this policy would lead to an unfair wealth transfer from lower-income households to those already able to afford private energy solutions.¹²

Response

The concerns raised about "wealth transfers", while generally seeming to be well-meaning in most cases, are based on a short-term reactionary understanding of the realistic impacts of injection tariffs, and as far as we are aware no one has actually modelled the prospective pathways here. We encourage and support this modelling be done, which necessarily must include the deferment value to all grid users that batteries can provide as we progress through the energy transition where (otherwise) networks will require significant capital expansion to accommodate increased loads (e.g. electrification of the vehicle fleet, heating, cooking, and process). It also must necessarily be done independently, with open assumptions, and not by vested interests.

For example, Rewiring Aotearoa's preliminary analysis indicates that if 25% of New Zealand households installed a 10kWh battery, and received symmetrical peak export rates, electricity bills for consumers without batteries would rise by approximately 2.3% (in comparison to if the injection tariff were not there). In exchange, the batteries would be able to provide an instant peak reduction capacity greater than our largest hydro power station, providing significant security of supply and system resilience, and 25% of households removing themselves entirely from peak demand would likely defer a significant portion of the "\$20 billion" that will need to be invested in distribution networks every decade until 2050 according to the BCG "The Future is Electric" report.

The EDBs (and ENA on their behalf) seem on the one hand very concerned about wealth

¹¹ ENERGY TRUSTS OF NEW ZEALAND INC. The Electricity Authority PO Box 10041 Wellington 6143 Via email p1-2

¹² <u>Westpower's Submission on Energy Taskforce 2A Proposal – Opposi on to Mandatory Peak Time</u> <u>Rebates</u> p2



transfers from one customer to another, but largely unconcerned about wealth transfers from all customers to networks through inefficient pricing and underutilised buildout. The economic consequences of even a small inefficiency in network consumption pricing would vastly outweigh even significant inefficiencies in export pricing, because:

- Network consumption pricing affects all 2.1 million ICPs in New Zealand
- Network consumption pricing affects the efficiency of EV charging decisions by their ~80,000 owners
- Inefficiencies in consumption pricing could unnecessarily accelerate the ~\$65B of network build that BCG have forecast
- Network consumption pricing likely affects a consumer's decision to invest in a battery more than export pricing, as the battery will be used to offset consumption first, before using any remaining capability to export.

Hence the potential inefficiencies introduced by a more pragmatic and workable approach to export pricing (i.e. SETs) are vastly outweighed by the issues with consumption pricing today. Therefore, we strongly recommend the Authority continue to encourage improved consumption pricing, and grasp the opportunity SETs offer to further incentivise EDBs to improve their network consumption pricing.

This argument equally applies to the concern with equity. By definition, the inefficiencies in today's network pricing is resulting in some customers shouldering the burden of misaligned incentives and potentially millions of decisions being made by Kiwis to consume, or not consume power, based on pricing that is not cost-reflective. Some EDBs have dragged their feet in updating to cost reflective pricing. Hence there are substantial equity issues in network pricing already today - perhaps chief among them inefficient and underutilised lines which could have higher utilisation with more batteries in the system. Yet the EDBs have chosen the potential investment in batteries, that would support security of supply, as the issue to focus on in terms of any chance of inequity. Without focusing on the clear inequity of building unnecessary line upgrades and charging them to all New Zealanders - increasing total system costs unnecessarily.

This wealth-transfer concern is also short term in nature. It is well known that the energy transition will require a significant increase in electricity consumption. Assuming this consumption is supplied in the same single direction electricity system as we (mostly) see today, this is highly likely to require significant capital investment into increasing the capacity of networks and transmission lines. The network proportion of this is expected to be the largest, and worth billions of dollars.

Yet at the same time, generating electricity exactly where the load is, with rooftop solar, is cheaper than it's ever been, and significantly cheaper than grid electricity costs for households (yes, only when the sun is shining - which happens most days). Storing that energy in a battery is also cheaper than it's ever been, and expected to continue to get cheaper year on year.¹³ ¹⁴

 ¹³ Learning curves: What does it mean for a technology to follow Wright's Law? - Our World in Data
¹⁴ Empirically grounded technology forecasts and the energy transition Empirically grounded technology forecasts and the energy transition: Joule



It is our view that many if not most homes installing solar and batteries is inevitable, both New Zealand installation trends, and global installation trends support this theory. For example, see Australian solar installs between 2014 and today, which was a point when solar was priced similarly to it is today in New Zealand¹⁵, and over 2 million systems have been installed since then (more than all homes in New Zealand). There is nuance to this, Australia has in place feed-in tariffs and subsidies during this period. However it has been seen time and time again that locations adopting technology late often adopt at a much faster rate than those that came before them.

The concerns raised about wealth transfers by networks and the ENA, appear to be irreconcilable with their other concern "These rebates could act as barriers to aggregators and other flexibility providers".¹⁶ Which in our interpretation translates to "direct consumer savings through tariffs may get in the way of baking in another profit-taking layer into the energy system".

Yes, there are companies that are providing a public good and their incomes are regulated. But these incomes are based on the size of their regulated asset bases (i.e. poles and wires), and the preferred approach of most EDBs to this consultation will see more poles and wires which will all be paid for by consumers and see profits of EDBs rise. From ALL consumers to EDBs, including low income consumers. It is our view that we New Zealand should take into account distributed resources and the benefits they can provide, to build a low cost system in the first place for all New Zealanders, to further help low-income homes with a lower cost system to start with, and also enable those homes to have access to the lowest cost forms of energy. Even though rooftop solar can save money for most homes in New Zealand, we do not see most EDBs actively trying to get these savings to low-income homes or renters, but on the contrary putting up barriers to this.

We are pleased that a few EDBs such as Powerco agree that:

"Any delays in Capital renewal to solve for network constraints do benefit all consumers and therefore TLC do agree with cost savings spread across all consumers as an outcome."¹⁷

- ¹⁶ ENA submission on ECTF ini a ves 2a, 2b and 2c and Authority DGPP issues paper 2025 p8
- ¹⁷ <u>https://www.ea.govt.nz/documents/6797/D_The_Lines_Company_2A_2BC_submission_2025.pdf</u> p5

¹⁵ Solar prices in 2014 included a subsidy and were LARGELY equivalent to New ZeAland's current prices today with out any subsidy.



3. Obsession with aggregators and control

Summary of point made

Some EDBs argue that injection tariffs are in conflict with and could act as barriers to the business model of "flexibility aggregators" in the market. (e.g. VPPs), and that they need "guaranteed" availability (or control) of customer resources for there to be value.

Quotes from other submissions

"These rebates could act as barriers to aggregators and other flexibility providers"¹⁸

"A more nuanced and targeted approach can be taken if the demand or generation is attracted via a flexibility arrangement. We are of the view that, as an industry, we should promote and develop flexibility service options, rather than blunt pricing incentives"¹⁹

"Export rebates may conflict with the role of flexibility providers..."20

*"For EDBs to have confidence to rely on injection that would allow the deferral of network investment, the injection needs to be reliably available on a predictable and consistent basis at the right times. If the injection is inconsistently available, then the EDB will need to make the investment regardless, with the result being that the EDB's customers must pay for both the investment and the injection."*²¹

Response

While on the one hand arguing that paying for battery export direct to consumers might create unjust "wealth transfers", EDBs have been comfortable to propose a "wealth transfer" from all consumers to another corporation which will sit in between consumers and their energy bill - defending flexibility providers while not acknowledging the significant likelihood of wealth transfer occurring there. While customers foot the bill for the full cost stack - generators, transmission lines, EDBs, metering companies, retailers and more - EDBs seem to have minimal concern about adding one more corporate organisational layer of inefficient cost to this mix.

In our view a lack of independent consumer representation in the electricity sector has led to a default acceptance of viewpoints based upon vested interests that are not based on reality.

EDB's say things like:

"Any solution providing network support and enabling deferral of investment needs to

¹⁸ ENA submission on ECTF ini a ves 2a, 2b and 2c and Authority DGPP issues paper 2025 p8

¹⁹ <u>https://www.ea.govt.nz/documents/6786/D_EA_Networks_2A_submission_2025.pdf</u> p2

²⁰ https://www.ea.govt.nz/documents/6784/D Aurora Energy Submission 2A submission 2025.pdf p3

²¹ <u>Submission on Requiring distributors to pay a rebate when consumers supply electricity at peak</u> <u>times</u>



be certain... Pricing does not provide certainty that consumers would respond.. EDBs would need to have control of batteries to get similar control over generation [to that of load control of hot water]^{"22} "

"EDBs have no control over the amount of DG they receive, the timing of the injection or the consistency of the injection. If injection is too intermittent, EDBs cannot rely on receiving it and need to invest in the network to ensure their services are maintained."²³

These perspectives do not reconcile with the reality of diversity on networks, or even with well known methodology for regulating monopoly markets. The burden of proof should not be on the consumer, it should be on the EDB. EDB's may "want" a guaranteed response but it is a "need" that they have invented, and this thinking should be inverted. They do not have a guarantee on whether or not people will turn on the kettle or stove to reliably forecast peak demand and plan investment - they therefore do not "need" a guarantee and control of every battery in their system to be able to benefit from it. They can receive significant benefits and reliability in aggregate from battery installations without needing to have 100% perfect control of them 100% of the time.

Instead of them saying flexibility is worth nothing without guaranteed response, which has no evidence, the burden of proof should be on networks. Provide the signal to batteries (e.g. SET), and then measure and prove what portion of batteries they can rely upon. They could even test it outside of peak season if they were at capacity. At absolute minimum, they should be able to inform everyone what percentage of battery capacity they can rely on. Which is obviously not 0% like they imply.

Our view is not necessarily that a symmetrical tariff is perfectly efficient (e.g. it is not seasonal unless peak pricing is seasonal), but it puts the burden of proof on the EDB, either to change their consumption tariff (which naturally also changes the symmetrical export), or prove with evidence any value they want to offer that is not symmetrical. As a mirror, the symmetrical export tariff simply provides the incentive for EDB's to have the most cost reflective and fair pricing across their entire network.

We agree that there is value that flexibility aggregators can provide, but don't agree that value consumers can provide (and receive) should be farmed out to another profit taking layer away from consumers. Flexibility aggregators should compete for what they can do in addition to consumer behaviour. For example, a consumer battery's default programming can predict weather in advance and respond to numerous pricing signals rapidly. The idea that networks can argue that consumer resources cannot be trusted - while not providing clear market signals for those resources to automatically help the network - is clear hypocrisy.

We agree with PowerCo that you need both *"Tendering for flexibility is complementary to pricing for export"*.²⁴ PowerCo's conclusion is based on on-the-ground flexibility trials since

²² https://www.ea.govt.nz/documents/6791/D MPNZ and MLL 2A submission 2025.pdf p2, 3, 5

²³ ENA submission on ECTF ini a ves 2a, 2b and 2c and Authority DGPP issues paper 2025 p11

²⁴ Requiring distributors to pay a rebate when consumers supply electricity at peak times p4



2018 and distribution prices that "provide broad-based long-run marginal cost signal[s] to defer planned network investment."

We consider the more that can be done by consumers, the less need (and less value) that will be provided by aggregators. While Rewiring supports the role for aggregators and other flex providers, we implore the EA to not prioritise the development of these businesses over the interests of consumers.

We would like to emphasise to EDB's and the Authority, that regulated monopoly markets are meant to create outcomes similar to real market competition. In real market competition, batteries on the network that can clearly provide network deferment value would not be ignored by EDBs until they could have perfect oversight and control over them. In a competitive market they would already be utilised, increasing network utilisation, decreasing customer customer costs of electricity, and we would already be learning what portion can be relied upon. Instead the excuse of needing complete control is used while more network assets are built, and batteries in the system go unused by networks - increasing costs and inefficient electricity pricing to consumers.

Alfred E Kahn in his 1970 text "The economics of regulation" (MIT press): *"the single most widely accepted rule for the governance of regulated industries is regulate them in such a way as to produce the same results as would be produced by effective competition, if it were feasible."*



4. Claims that batteries can't reduce any network costs

Summary of point made

Many EDBs argue that consumers injecting power at peak times does not provide any benefit at all to the network.

Quotes and submission points

"The proposal disincentivises network investment... Retailers are much better placed to manage this, as they will directly benefit through lower wholesale pricing when periods of high demand can be smoothed... There is no network benefit to be gained from inflexible DG"²⁵

"Several EDBs have desktop reviews or real-world experience demonstrating that DG doesn't generate cost-saving benefits on their networks. Even if the injection occurs at consumption peaks, if the network isn't congested, the injection is unlikely to incur or reduce any network costs."²⁶

Response

We don't have access to the so called "evidence" that consumer energy resources are unable to benefit networks, but we believe their statement somewhat goes against physics.

It also does not align with the views of more innovative networks or international experience, which leaves us to wonder how it could possibly be true that to some networks CER can have no value and simultaneously for other networks it can have significant value.

Quote from South Australian Power Networks (SAPN) Distributed Energy Transition Roadmap, written 5 years ago:²⁷

Our strategies for enabling more DER

Achieving South Australia's goal of achieving net-100% renewable electricity by 2030 will require changes to the way the electricity network is planned and operated. We are pursuing a range of strategies to integrate more DER with the network, while maintaining a safe, affordable and reliable grid for all South Australians.

'Stretch and fill'

Over the next five years, our strategies are all about doing more with the network that we have. We call this 'stretch and fill'. —We are working to stretch the export capacity and performance of our network assets with smarter systems, in particular more dynamic voltage management, as well as better monitoring and visibility. By being smarter about how we manage the network we can enable more solar to connect without costly upgrades to infrastructure, keeping prices down for all. —As

²⁵ Westpower's Submission on Energy Taskforce 2A Proposal – Opposi on to Mandatory Peak Time <u>Rebates</u> p1, 8

²⁶ ENA submission on ECTF ini a ves 2a, 2b and 2c and Authority DGPP issues paper 2025 p11

²⁷ https://www.sapowernetworks.com.au/public/download.jsp?id=319084



the network is sized for peak demand, it has lots of spare capacity outside of peak times. We are working to unlock this capacity and fill the troughs in asset utilisation by encouraging load shifting, through new tariffs and by actively integrating customers' smart DER through new systems and open interfaces. A key element of this strategy is the transition from fixed export limits for DER customers to smart, flexible connections.

It should be noted that SAPN does indeed provide a tariff credit for injection at peak, and see its value. As do other Australian networks.

Or from Endeavour Energy Network, another Australian EDB (DNSP):²⁸

"The shift from traditional poles and wires to a flexible modern grid will give customers more control on how they use and receive energy in the future, based on their lifestyle needs. It will also:

- Ensure greater reliability of the grid
- Reduce power system costs which translates into lower electricity bills for customers
- Enable more renewable energy onto the grid to provide customers with more choice
- Ensure customers can reap the benefits of solar without risking the stability of the network
- Reduce emissions and contribute to a cleaner energy future
- Support the electrification of industries and contribute to building sustainable and vibrant communities"

Which leads us to wonder why some New Zealand networks cannot see the same value that others can in the technology of distributed energy, and specifically batteries? The simple answer we believe is that some networks have not kept pace with technological progress, to the detriment of customers, and which will lead to inefficient and overpriced networks.

We are pleased that a handful of EDBs do recognise the value of injection from consumers:

"TLC concurs that the increase in two-way electricity flows could provide distributors with more opportunities to encourage mass-market customers to inject during peak times, thereby alleviating upstream constraints and reducing network costs. TLC acknowledges that even if increased injection from mass-market consumers only slightly reduces or defers future investment, it could ultimately result in long-term savings for both distributors and consumers."²⁹

Recently released draft *Standards New Zealand Residential solar photovoltaic (PV) and battery storage systems guideline* reinforce the value:

²⁸ Our modern grid strategy | Endeavour Energy

²⁹ <u>https://www.ea.govt.nz/documents/6797/D_The_Lines_Company_2A_2BC_submission_2025.pdf</u> p3



"Solar PV can strengthen or support weak networks, especially when batteries are added. The distribution Business (Vector) applied this strategy from around 2016/2017, using 5 kW grid-tied inverters (GTIs) with batteries at end-of-line locations. This was a cheaper alternative to much needed network upgrades"³⁰

We do agree with The Lines Company that guidance would be helpful on *"defining and measuring network benefits"*.³¹ This is helpful in the context of these proposed changes, but also clearly needed more generally to ensure all EDBs and interested parties are on the same page on what is a critical thing for the next several decades: the role of consumer generation and storage in networks.

We note that any network who proposes that batteries exporting into the network cannot provide any value at all, should naturally have no peak pricing within their entire network, and not be conducting any capacity upgrades. As Symmetrical Export Tariffs (SETs) are a mirror of consumption tariffs, any network who could truly prove they were in this unrealistic position would not be impacted by SETs anyway.

³⁰ <u>https://consultations.standards.govt.nz/draft-standards/nzs6014-public-</u>consultation/user_uploads/snz-pas-6014-2025-draft-v10.pdf p22

³¹ <u>https://www.ea.govt.nz/documents/6797/D_The_Lines_Company_2A_2BC_submission_2025.pdf</u> p5



5. Location based value and low visibility of LV network

Summary of point made

EDBs largely state that injection shouldn't be priced broadly. EDBs consider export only valuable in certain locations of constraint in their networks. And that they don't have the data at low-voltage level to know these areas of constraint.

Response

We agree that low voltage network visibility is and will be a useful tool for EDBs to better manage network constraints and steps are being put in place by the Authority to make this data more accessible to EDBs. Therefore this should not be used as an excuse.

On location-based value, we agree that at a technical level, injection is more valuable in areas of the network with constraint, than areas without. However, the same is true of consumption peak pricing, and this *'rules for thee but not for me'* approach taken to injection pricing shows clear hypocrisy in pricing methodologies.

When *charging* consumers for peak consumption, the peak charge is broadly applied across large swathes of the network, regardless of individual location based network constraints. In some ways, this methodology is understandable, as much more locationally cost reflective pricing in this regard may see one street with no peak price, and another street with a large peak price. This would confuse customers, and create a yoyo effect on pricing as network constraints appear in varying places.

Yet even though EDB's comfortably charge customers in broad ways that are not necessarily cost-reflective, they rally against crediting customers with that same methodology. To this we point out that Symmetrical Export Tariffs drive clear incentives for EDBs to have more accurate pricing on both consumption and injection, and in all locations of their network. SETs are simply a mirror of consumption peak tariffs, so if an EDB is of the view that an area has no constraint issues today or into the future, they can choose for that area to not have an injection tariff, by simultaneously removing the consumption peak tariff, which should also not be there if they are cost reflectively representing network constraints. We note here however that in time, much if not all of the network would likely come under constraint through the energy transition, hence the value of signalling the long run marginal cost with peak pricing, and peak injection pricing.



6. Failing to undertake good consumption tariff design as excuse

Summary of point made

EDB's argue the lack of good cost reflective consumption tariffs is a reason to justify not having consumption-reflective symmetrical injection tariffs, and that processing dynamic pricing signals is above their current capabilities.

Response

While we agree that consumption pricing from many networks is largely not cost-reflective today, we do not agree this is a reason for injection pricing to not mirror consumption pricing. Instead, we consider this fact adds to the rationale for injection pricing mirroring consumption pricing. It is in the interest of consumers, and we understand a medium-term objective of the EA, that pricing becomes cost reflective in networks.

Requiring injection pricing to mirror consumption pricing will provide a significant incentive to distributors to undertake pricing reform and make their consumption (and therefore injection) pricing significantly more cost reflective. Directly linking injection pricing and consumption pricing will also remove concerns from the Authority around overregulation of export pricing getting in the way of better regulating import pricing.

We also agree that the true cost of consumption varies by time and location. However, we consider distributors can access significant information about their low-voltage networks (including usage at a micro level) and prioritise investment to use it to improve management of their networks, future planning and tariff design. Linking consumption and injection pricing means distributors only need to do one set of pricing, rather than separate. With this they should be able to focus more resources on making much better use of the data they already have to get a much better understanding of the true cost of consumption by time and location to improve pricing.

While it may be true that perfectly cost reflective pricing is impossible, this should not let perfection be the enemy of the great. And there is an opportunity through this work to move to great. The stated lack of ability for EDB's to take into account dynamic and complex pricing structures (principles based) should mean they then support simpler, easier to price and implement pricing of mirrored consumption - symmetrical export tariffs. Then they still only have the same pricing to decide upon, implemented at the granularity they choose, now with more incentive than ever to get it right on behalf of consumers and New Zealand.



7. Concerns about timelines

Summary of point made

Many EDBs consider significant work will be required to set up injection tariffs and then have retailers take them onboard, and that the proposed timeframes are not adequate for this work to be done. Others raise questions on what timeframe is being proposed.

Quotes from other submissions

"Similarly, if the Authority goes ahead with the Proposal, Westpower requests that the Authority reconsider the implementation timeline, as proposed tariff changes would require significant system upgrades. Westpower is already planning the introduction of additional time-of-use tariffs from April 2026, and implementing additional tariff structures simultaneously would be impractical"³²

*"...if the Authority sets an effective date for the Code change of 1 April 2026, then it can only impact pricing methodologies that are set on or after 1 April 2026."*³³

Response

Powerco has already implemented what they consider are tariffs consistent with the EA's proposal: "Powerco will be implementing peak export rebates consistent with the Authority's proposals across its networks on 1 April 2025"³⁴ We note that these apply only at winter peak and are far from symmetrical currently, though PowerCo indicates an intention to move them towards symmetrical.

We acknowledge that for some EDBs a principles-based approach could be a high-cost, time intensive complex approach exercise. We agree with Northpower and others that implementing the EA's preferred approach will take a lot of time, and likely require expensive consultants and experts to be brought in, paid for by consumers. In contrast however, SETs themselves have none of these concerns, are incredibly simple and not resource-consuming to calculate and put in place: they simply mirror consumption tariffs, and create an ongoing incentive to continually refine and improve consumption tariffs to be as cost reflective as possible.

We agree with ETNZ that accelerating the energy transition (to electric) is in the best interest of New Zealand and New Zealanders. However, we disagree vehemently that putting the Authority's focus on the electricity system will act to slow this down: *"The Authority's electricity-centric view is hampering progress towards delivering real savings for homes and businesses."*³⁵

³² Westpower's Submission on Energy Taskforce 2A Proposal – Opposi on to Mandatory Peak Time <u>Rebates</u> p4

³³ ENA submission on ECTF ini a ves 2a, 2b and 2c and Authority DGPP issues paper 2025 p 22

³⁴ <u>Requiring distributors to pay a rebate when consumers supply electricity at peak times p1</u>

³⁵ ENERGY TRUSTS OF NEW ZEALAND INC. The Electricity Authority PO Box 10041 Wellington 6143 Via email p3



The right price signals, including appropriately rewarding consumer injections, will help encourage appropriate investment at household, farm and SME level to invest in their own generation and storage. Consumers can install solar and batteries much faster than larger-scale generation and network infrastructure can be built. And once they have built this, they are more likely (as they are more strongly incentivised) to electrify their fossil fuel machines. We are strongly of the opinion that the fastest way to accelerate the energy transition involves consumer generation and storage, alongside building the <u>necessary</u> network infrastructure and large-scale generation. Building more than what is necessary will only drive up electricity costs for all New Zealanders which would in time create less incentive for electrification.

The energy transition needs to happen much faster. These tariffs will play an important role in the transition, in particular how many batteries and of what size are installed in the next five years. This can't wait for EDB's to decide they can be bothered to price the benefits of modern technology cost reflectively.

We do acknowledge that keeping up with technological change and pursuing the best outcomes for consumers in this evolving reality are challenging for some smaller EDBs. As stated by Horizon Networks:

*"Small EDBs such as Horizon Networks are not resourced to rapidly implement multiple, complex elements of pricing reform in parallel with each other. The Electricity Authority's timeframes and expectations need to reflect the capabilities and resourcing within EDBs."*³⁶

We find ourselves wondering whether the current make-up of 29 EDBs, some with incredibly small customer bases and therefore limited resourcing, is fit for purpose to deliver what is required for the energy transition and reality of two-way energy flows. New Zealand's electricity system should be designed around the interests of New Zealanders, not around the limited capabilities of small EDBs.

We support the Authority having the Code changes come into force prior to 1 April 2026 and be clear they apply in practice to the 2026/27 pricing year.

³⁶ <u>Horizon Energy Distribution Limited (Horizon Networks) submission on Requiring distributors to pay</u> <u>a rebate when consumers supply electricity at p1</u>



8. Concerns consumers with batteries will themselves be disadvantaged by SETs

Summary of point made

Some argue that consumers who are injecting at peak would themselves be disadvantaged by a SET.

Quotes from other submissions

"We believe export rebates should be lower than consumption tariffs... to encourage households to offset their own demand before exporting surplus energy, including preventing 'battery dumping' at the start of congestion periods. We have seen evidence, for example, of consumers over-exporting at a peak and then finding by the end of the peak that they need to consume from the network, resulting in a net cost to the consumer"^{37 38}

Response

We consider the reality to be exactly the opposite of this point. SETs protect consumers from (the distribution tariff portion) in this exact situation. From behaviour we are aware of, and as explored in Forest Lodge Orchard's submission, consumers are more likely to be worse off from less-than-symmetrical export tariffs. It is only because of asymmetrical rates that it is a net loss in terms of distribution tariffs.

The larger the differential between import and export distribution tariffs, the more consumers are likely to hold onto their battery. The more asymmetrical the signals, the more complicated, and messy the export dynamic will be, with consumers timing export/import to expected peak periods. A symmetrical injection tariff would incentivise stable behaviour over the peak period.

³⁷ ENA submission on ECTF ini a ves 2a, 2b and 2c and Authority DGPP issues paper 2025 p13

³⁸ Note this is an example where we would appreciate the opportunity to consider and respond to the "evidence" that is referenced



9. Correcting a few incorrect assumptions

Lack of batteries: *"Since most distributed generation (DG) installations lack battery storage..."*³⁹ While this is currently true, the trends are very clear that this is rapidly changing, as explored in our primary submission: In November 2023 just over 5% of solar systems also had battery storage in New Zealand; by January 2025 that leapt to nearly 13%, with a major solar installer on the South Island reporting that in the last quarter around 90% of their new solar installations included batteries.

Mobile solar: *"As the uptake of solar and battery and EV charging technology continues, we see a future where these appliances come and go from properties."⁴⁰ Due to the installation costs and complexity (of rooftop solar in particular), we do not consider there is a future where consumer systems are removed and reinstalled with any regularity. Yes, the size of batteries may change with new owners as EVs become the main battery, but the reality of systems overall means they will not be mobile.*

³⁹ <u>Westpower's Submission on Energy Taskforce 2A Proposal – Opposi on to Mandatory Peak Time</u>

⁴⁰ https://www.ea.govt.nz/documents/6786/D_EA_Networks_2A_submission_2025.pdf p4