To: Energy Competition Task Force

Consultation: *Requiring distributors to pay a rebate when consumers supply electricity at peak times* (Energy Competition Task Force initiative 2A) and *Improving pricing plan options for consumers: Time-varying retail pricing for electricity consumption and supply* (Energy Competition Task Force initiatives 2B & C)

About Rewiring Aotearoa

Rewiring Aotearoa represents everyday New Zealanders in the energy transition and is working to build an electrified future where every Kiwi saves money on energy bills, reduces their carbon emissions and has the resilience to keep their lights on and homes warm.

Our submission

Thank you for the opportunity to provide feedback on the Energy Competition Task Force's.

Overall, Rewiring Aotearoa welcomes the objectives of this package of proposals. We view the package as a critical step in improving energy system outcomes for all consumers.

We consider retailers paying consumers fairly as a critical step, and we are mostly satisfied with the Task Force's approach to this (initiative 2C) and think it will create better outcomes for New Zealand consumers and the energy system as a whole.

In contrast, the Task Force's preferred option around how distributors are required to reward peak input from consumers (initiative 2A) will not in our view meet the Task Force's (or the Electricity Authority's) stated objectives. The short consultation guide for the general public states "The new rules would… make sure power companies pay people who sell power to the network from solar [and battery] systems a fair price that reflects the true value to the local network."[1] This is exactly what we seek, but which we consider will not be achieved by the Task Force's preferred approach.

Rewiring Aotearoa recommends the Electricity Authority should implement Symmetrical Export Tariffs (SETs) with evidence-based exemptions as a clearly better option, for New Zealand consumers, for cost reflectivity of electricity networks, and for simpler regulation that is more likely to achieve its intended purpose.

Rewiring Aotearoa is a fiercely independent, data-driven organisation with no vested interests. We are seeking the lowest cost energy system for the people of New Zealand. We approach all our work with this in mind, and we consider decisions should be made based on the best available evidence.

[1] https://www.ea.govt.nz/documents/6488/ACTUAL_consumer_guide_and_survey.pdf

Our submission does not go into the wide benefits (delivered price of energy/cost of living, resilience, fuel security, balance of trade, emissions reductions and more) of consumers generating and storing electricity that benefit Aotearoa New Zealand at all scales (household, community and national). We know the Electricity Authority (the Authority) and Commerce Commission are aware of these benefits and know where to find our detailed reports and analysis.

This submission contains the following:

1. Context
2. Discussion of *Requiring distributors to pay a rebate when consumers supply electricity at peak times*
3. Answers to specific consultation questions (for both *Requiring distributors to pay a rebate when consumers supply electricity at peak times* 2A) and *Improving pricing plan options for consumers: Time-varying retail pricing for electricity consumption and supply* (2B & 2C)

Preface: general context points

The importance of this work

In the next five years it should be abundantly clear that tens of thousands of households will install solar systems (with or without batteries) as adoption rates continue to increase, and New Zealand sees the type of solar adoption already occurring in various countries around the world. What is still up in the air is whether those installs will include batteries, and how big the average install will be. These things are of immense importance to our energy system and each will be influenced by the outcome of this work.

The Task Force is correct: “Even if more injection from mass-market consumers only reduced or deferred a small proportion of this investment, it would still result in substantial savings for distributors - and consumers - in the long run.”[2] The potential savings from more injection reducing or deferring a large proportion of network investment is therefore well beyond substantial. Furthermore, we expect the vast majority of all consumer energy bill increases for the next decade or more, will come from inefficient investment in network infrastructure, not from generation cost increases. As such the ability to accurately price, and build out low cost distribution networks will be instrumental in impacting the future cost of living of all New Zealanders, in addition to our climate and resilience goals.

While not explored in detail in the consultation papers, the fact “more investment in [distributed generation (DG)] can provide wholesale market benefits by reducing the

[2] 2A document, 4.10, p13-14.

requirement for more expensive generation"[3] is a large opportunity that should be recognised and actively pursued through this work. Rooftop solar and behind the meter battery installations present a fast, financially advantageous, and energy security strengthening method to expand New Zealand's energy system, a method that has been consistently under-appreciated.[4]

The Code requirements that will come out of this consultation will have a meaningful impact on how many installs of batteries happen, and whether the installs will be specified to predominantly benefit those who install them, or will be sized in such a way that they are able to benefit all consumers in the energy system (by deferring investment, and providing additional capacity). Likewise it can also impact investment in emerging vehicle-to-grid technology, which also has significant potential to benefit energy consumers.

We regularly hear stories (and have first hand experience in our team) about consumers being recommended the smallest possible system based on historic bills, rather than likely future bills, let alone what system specifications could best benefit neighbours and the electricity system overall.

Making the impact real: Wellington household

A three person household in Wellington installed 6.8Kw of solar panels, a 6kW inverter, and a Powerwall 2 13.5kWh battery just over a year ago. The dad is an energy nerd who very actively investigated retail offerings and went with the only option we are aware of that includes Time of Use pricing paired with buy-back rates that match the rolling wholesale price every 30 minutes. This plan includes many of the features we expect to become more common once the Task Force implements the changes of this consultation.

By being on this plan rather than a more common plan, they received an average export price over 12 months of 25.42c (versus 8-17.5c from most retailers per the Powerswitch site) for the 2,700kWh they exported. This amounts to $686.34 instead of $216-472.50, an extra $213-470 off energy bills per year. Rewiring Aotearoa's preferred action for initiative 2A would add (based on some conservative assumptions) an additional $180 or so of savings a year.

While all this may not sound huge, taken together over 30 years (and not factoring in very likely power price increases) it adds up to $11,750-$19,250 ($6,500-$14,000 from likely changes due to our recommended approach to 2C, and another $5,250 from 2A). With much of this unlocked by batteries, getting these changes correct will have a big influence on what households decide to install. It provides a clear investment signal, which historically the industry has thought are important for large corporations, but seemingly not everyday New Zealanders, who deserve the same clear investment signals.

This isn't even the main benefit they get from their system, as they also benefit hugely from the cheap power they produce and consume themselves. And peace of mind of keeping the lights on in an outage and welcoming in the neighbours for some warm kai.

[3] 2A document, 4.13, p14.
[4] https://www.rewiring.nz/delivered-cost-of-energy

Distribution export tariff design should maximise benefit

Rewiring Aotearoa's view is that it is important to design a distribution export tariff scheme that provides the greatest overall benefit to consumers. Rewiring Aotearoa's analysis shows that the additional cost to consumers who do not install batteries, from implementation of Symmetrical Export Tariffs, would be small.

Rewiring Aotearoa's preliminary analysis indicates that electricity bills for consumers without batteries would rise by approximately 2.3%, if 25% of New Zealand households installed 10kWh batteries, and received symmetrical peak export rates. This analysis assumes 40% of the battery capacity can be exported during peak times each day and an average distribution peak export rate of 12 cents per kWh, resulting in a total distribution export payment of $175 per year per household. Average bills are assumed to be $2500 before rebate. Under this scenario the battery uptake would provide 5000 GWh of peak reduction per year, and 2500 GW of peak reduction capacity if needed.[5]

Further Symmetrical Export Tariffs would directly incentivise the network to make sure all of their tariffs are cost reflective across the whole network, improving the ability to accurately price, and build out low cost distribution networks.

As the Electricity Authority notes, "The potential benefits of [providing distribution export] price signals are considerable. Boston Consulting Group's 'The Future is Electric' report estimates more than $20 billion will need to be invested in distribution networks every decade until 2050." Therefore it is important to implement a distribution export tariff in a way that is effective to unlock the greatest net benefit for consumers.

New Zealand is not Australia

We are confident that, in the near to medium term, solar in New Zealand will not face the headline challenge seen in Australia, where excessive power is fed into the grid during the solar window.

Australia is about a decade ahead of NZ, and started installing solar en-masse before home batteries or electric vehicles were mass market products. They were installing much earlier in the energy transition.

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.[6] This rate is not necessarily the norm, however it demonstrates what is possible

[5] This would be equivalent to more peak reduction capacity than our largest hydro power station, providing significant security of supply and system resilience.

[6] https://www.emi.ea.govt.nz/Retail/Reports/GUEHMT?DateFrom=20130901&DateTo=20250131&FuelType=solar_all&_rsdr=ALL&_si=v|3

and could be unlocked (and potentially ensured) through providing clearer battery investment signals to consumers.

In comparison, Australia at the end of 2024 had about 4.4% of solar systems with batteries as well.[7] So we are already placed differently on battery adoption, and this may not be surprising given New Zealand's larger need for resilience.

With this trend accelerating, New Zealand can confidently dismiss concerns about solar energy putting pressure on networks, as seen in Australia. Instead, the country can be excited about the positive impact of battery deployment in reducing network congestion and pressure on the distribution network.

In addition to having timed our roll out of solar to be at a point where batteries are cheap and regularly installed (lowering grid impacts and driving benefits to the grid like peak reduction at minimal cost), it is also timed at a point where EV adoption is rising and EV cost parity is expected to be reached within a few years. Therefore the notion of solar's "pressure" on the networks needs to be contextualised with technology price curves and adoption rates. There are plenty of places for low cost daytime energy to go, like charging vehicles and heating our electric water cylinders. New Zealand can deliver a significantly lower cost energy system with rooftop solar heavily featured in it, and many of the "fears" often spoken about are not evidence based.

The time is now: pursue what is needed, not what seems least disruptive to vested interests today

The Electricity Authority has a large, growing and important workload. We consider the Code changes that will result from this work are unlikely to be revisited in the next five years, and likely closer to next ten years. As such it is imperative to do what is in the best interest of the energy system and consumers now, and to regulate based on where the Authority wants things to be in a decade, rather than stepping stone type actions which will inevitably lead to non-cost reflective conditions in the market. The solution should be naturally evolving and cost-reflective over time.

Rather than going with an option that will deliver less and reward EDBs for being slow to build cost reflective tariffs for selling, we recommend the Authority view this as the significant opportunity to correct the regulatory failure to date and require EDBs to get it right, and in turn provide consumers with signals to do what is best for themselves and the overall system.

Doing anything less than this is not putting, to quote Sarah Gillies, "consumer interests [at the] front and centre of [the] sector transformation"[8]

[7] https://cer.gov.au/markets/reports-and-data/small-scale-installation-postcode-data
[8] Sarah Gillies: Consumer interests front and centre of sector transformation | Electricity Authority

There is a large information and resource dissymmetry

This submission is what Rewiring Aotearoa has been able to complete in the time available with the information available and our limited resources as an independent non-profit with a small team.

Distributors have significantly more information on low-voltage networks that we are unable to access that would likely make many of our arguments much more compelling. Like with many Commerce Commission processes, the lack of information we are able to access makes it unnecessarily complicated to undertake fulsome analysis, even though it is clear that this is what is needed for New Zealand consumers.

Analysis of this kind should not be left to charities to provide, and there remains a significant resource and vested interest asymmetry in energy system planning. The people who pay the most for, and the energy system is built for (consumers), have the least independent say in the decision making processes that will affect them.

We are hopeful the Task Force will undertake further analysis of what is in the best interest of consumers, and show the courage to make this work open source so assumptions can be challenged. There is no reason the workings for this should not be made fully transparent.

Complementary changes and active oversight are needed

While we are hopeful this package of proposals will lead to positive outcomes for customers, there are complementary changes to make it significantly easier for customers to install solar and batteries, and to be more easily able to install the size that makes sense for them. We look forward to continuing to engage with the Authority and others on these changes in the coming months.

While the system is already stacked in many ways against consumers, some distributors are actively making this even worse. On 25 March we learned of one distributor that is now including in their approval letters[9] for distributed generation the following:

> *Over time, there will be more and more rooftop solar generation… At some future time, the output of all generation connected to the distribution network will need to be coordinated to ensure the network is not overloaded… When this happens there will be an additional cost incurred [for] an appropriate distributed energy resourced management system. We expect to pass this cost through to the connections with generation that export… For small systems, the annual cost to each generator is likely to be in the order of $100-$150. We mention this now so that you are aware of future costs that may affect your decision to proceed…*

They apparently (we have been told) include this warning and active discouragement even when batteries are part of the system, which will provide what should be inarguable benefits

[9] Rewiring Aotearoa is happy to pass on the copy of this letter we have received.

to the distributor through peak reduction, in addition to soaking up excess solar production. This highlights the challenge ahead for Regulators to not just rebalance existing system settings, but also keep ahead of actions from distributors that are working actively against the long-term interests of all consumers. This is without going further into the details about how managing distributed solar should be seen by networks as an inherent part of 21st century electricity infrastructure, and that technically it is highly unlikely that a cost of $100-$150 per year is even remotely cost reflective. It also goes against distribution pricing principles. Symmetrical export tariffs (SETs), discussed below, would help incentivise cost reflective distribution pricing.

Commentary on *Requiring distributors to pay a rebate when consumers supply electricity at peak times* (2A)

In this section we present an evidence-based refutation of the “principles based approach” suggested by the Authority, demonstrating it:

1. Creates an unfair bias against consumers- disadvantaging them in the system
2. Demonstrates clear inconsistency in the Authority’s approach to pricing methodologies
3. Is absent of any quantified evidence of a problem with simpler approaches
4. Will be impractical and almost impossible to adequately manage

We recommend Symmetrical Export Tariffs (SETs) with evidence-based exemptions as a clearly better option, for New Zealand consumers, for cost reflectivity of electricity networks, and for simpler regulation that is more likely to achieve its intended purpose.

We also address some of the specific concerns about SETs raised by the Authority.

1. Creates an unfair bias against consumers - disadvantaging them in the system

At the heart of the Authority’s decision is the simple question: Will the Authority act to make the electricity market fair for consumers, giving them a level footing, or will it recommend an option which inherently values vested interests as more important?

The value of peak reduction is clearly defined by a network's peak consumption pricing - that is, reducing consumption by 1kWh is worth X cents to a home (the peak rate). Which is to say that the extra electricity made available to the network by the consumer reducing demand is worth the same X cents. Yet when a home reduces its demand to below zero, that is it starts to provide energy back to the network (and in practice, to their neighbour), suddenly the value is deemed as less by the Authority? They are the same electrons. Physically there is no difference. If this home had instead called their neighbour and asked them to reduce demand by turning something off, the payment would be the same. Yet if the first home exports electricity at the exact same time, the exported electrons are treated as less valuable.

We understand the arguments around location based network needs, but these needs are equally true for *consumption* pricing. The authority is effectively arguing that when networks charge customers, location is currently unimportant as broad pricing is applied, yet when customers provide electricity back, suddenly it’s only valuable in certain areas of the network. While it is obviously true that peak reduction is more valuable in some parts of the

network than others, this should be reflected across *all* network pricing. The fact it is not necessarily cost-reflective today should raise a question of “Well how do we fix this?” and not “Well let’s use inaccurate principles based pricing as a justification for a non cost reflective pricing signal”. In contrast, a symmetrical tariff would directly incentivise the network to make sure all of their tariffs are cost reflective across the whole network. The SET is only mirroring the value (and accuracy) of their consumption tariff. If the SET was deemed as unnecessary, so would be the consumption peak tariff.

An SET would create a tangible and direct reason for networks to adopt more cost reflective pricing, something the Authority has been ‘encouraging’ (with mixed success) for years. The alternate principles based approach would enable the network to continue to have non-cost reflective consumption pricing, which benefits no one but the network, and leads to a more unnecessarily expensive electricity system for consumers.

2. Demonstrates clear inconsistency in the Authority’s approach to pricing methodologies

The Authority’s approach appears to take a harder line against the export pricing of batteries, than it does against the cost-reflectivity of network consumption pricing. This is despite the fact that 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, and
- Network consumption pricing affects the efficiency of EV charging decisions by their ~80,000 owners, and
- Inefficiencies in consumption pricing could unnecessarily accelerate the ~$65B of network build that BCG have forecast, and
- 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 (SET) are vastly outweighed by the issues with consumption pricing today.

This argument equally applies to the Authority’s 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. 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 Authority has 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.

3. Is absent of any quantified evidence of a problem with simpler approaches

The Authority's dismissal of more direct and simple solutions is based on a range of conjectures, none of which have been quantified. The Authority's determined focus on the potential inefficiencies of battery uptake that could be triggered by a SET has not been quantified. Above we have laid out some very simple and self-evident arguments that any inefficiency in the SET approach would surely be overwhelmed by issues with consumption pricing faced by all consumers today.

The evidence for SETs is clear, and in-line with cost-reflective LRMC methodology[10]. The evidence for anything else, like a 50% SET, seems to be primarily a product of beginning reasoning with an outcome already in mind, specifically an outcome that tips the balance of fairness away from consumers and towards vested interests.

Despite the Authority asserting risks of over-investment in batteries (which in practice means an over-investment in security of supply), the Authority has not presented any evidence, and appears to have simply accepted the arguments of EDBs, who are by definition the vested interest against the consumer on this topic.

4. Will be impractical and almost impossible to adequately monitor compliance

The success of the Authority's proposed solution (in respect of sending efficient signals to current[11] and potential battery investors) rests solely on the Authority's ability to determine which EDBs are not acting consistent with the guidelines in respect of their export tariffs. In reality, the Authority's principles and additional guidance are so permissive that it is unlikely that an EDB would be found non-compliant except in the most egregious circumstances.

The Authority has offered no examples of how it would evaluate compliance against the principles.

We are surprised by the apparent lack of consideration the Authority has given to the risks associated with a principles-based approach. At the very same time as this consultation was open, the Authority released a consultation on its "Level Playing Field measures: Options Paper"[12], where its preferred option included a principles-based approach (initially). However, the Authority acknowledges that:

---

[10] In short, the LRMC methodology states that the price should be equal to the rate of change (first derivative) in the network company's total cost function. Derivatives do not discriminate between whether the change is driven by a kW of consumption, or a kW of export.
[11] Current battery owners have already made the decision, so the dynamic efficiency impacts are likely zero (save for expansion). An export tariff will, however, influence productive efficiency.
[12] https://www.ea.govt.nz/documents/6605/Level_playing_field_measures_options_paper.pdf

> "[A principles based approach] would be a **qualitative standard which leaves room for interpretation** (but this could be prescribed in additional detail over time).
>
> **Monitoring and enforcement could be challenging** (for example, distinguishing anti-competitive intent from legitimate business decisions).
>
> **May be difficult to identify discrimination** without accounting separation or improved ITP disclosures. "[13]

The Authority reiterates the subjectivity of the approach, which echo strongly our concerns where there are 4-5 gentailers (let alone 29 EDBs for export tariffs):

> "However, there would likely be **a degree of subjectivity** around whether a Gentailer's price or non-price offers are discriminatory. No two retailers or generators have identical businesses, so it **may not always be clear-cut whether non-discrimination principles have been breached**."[14]

Further, the Authority acknowledges that - again for only 4-5 gentailers - "...given the discretion available within a principles-based regime, a **substantial monitoring and reporting regime would be required to incentivise and demonstrate compliance"**[15]

Finally, the Authority concludes that it is necessary to preserve the option to "[Tighten] the principles-based regime over time to clarify and address issues that may arise and impact the workability or outcome of implementation."[16]

In the export tariff consultation paper, the Authority appears to have given no equivalent consideration to the risks associated with a principles regime, what data would be required to underpin compliance monitoring, how substantial the monitoring regime would be, and what options need to be credibly on the table should the principles regime appear to fail. Its greatest consideration is contained within a single paragraph where it gives itself significant discretion to take a very *laissez faire* approach to monitoring compliance:

> *"The Authority would have flexibility around how it reviews pricing methodologies and monitors compliance with these principles. It would not necessarily have to undertake an in-depth review of all distributors' methodologies. Rather, it may choose to target its efforts towards distributors it considers may be lagging in this area – possibly based off previous assessments or feedback from the wider industry."*[17]

---

[13] Ibid, Table 2, emphasis added
[14] Ibid, 5.7
[15] Ibid, 6.15
[16] Ibid, 5.7(b)
[17] Ibid, 5.9

It suggests its remedial action may initially be a polite request to any EDB to amend their pricing methodology, and potentially some stronger followup. No timelines are offered for how quickly the action occurs, but if the primary mechanism is the pricing methodology (updated annually by EDBs), that pace of change could be extremely slow. We suspect that, from implementation of the Code containing the guidance, it would be two to three years before any meaningful action would be taken against non-complying EDBs, even if the Authority were to be able to detect non-compliance.

At a time when security of supply at peak demand is at its tightest level since the market began (1996), this seems an unreasonably 'light handed' approach by the Authority, which very much suits the interests of the well funded and resourced EDBs (relative to the very limited resources of the consumer).

We question why the Authority did not, instead, consider a regime whereby it would require EDBs to implement an export tariff (via the symmetrical approach), whilst allowing EDBs evidence based exceptions where an EDB could demonstrate that the default approach would cause significant risk to the network or inefficient uptake of batteries. This customer-centric approach, putting the burden of proof on the EDB, contrasts with the supply-side centric approach proposed by the Authority, which relies on permissive principles and compliance monitoring of 29 EDBs by customers or the regulator, which will inevitably fall short, to the customer's detriment (certainly not to the EDB's detriment).

Further, the exemptions could be designed to avoid the lessons of the low user fixed charge regulations, where no practical exemptions existed to deal with inefficiencies caused by the regulations (e.g. over-incentivising conservation)[18].

It seems clear to us that the Authority's commitment to customer focus, as demonstrated in this quote, has come up short in this proposal:

> *"We know change will be uncomfortable for some players, and we're committed to setting a pace that provides for participation in our decision making. However, we will not be deterred or distracted by the efforts of vested interests hoping to preserve the status quo." - Sarah Gillies*

In contrast, the "principles based approach" suggested by the Authority is defending vested interests to the detriment of consumers by setting two sets of value, one for networks and a separate, lower one for consumers.

[18] We note that the parallel to the LUFC regulations is limited; part of the inefficiencies of the LFC was that the constraints on the fixed charge for low users (a large population) had significant impacts on tariff design for standard users (see Batstone & Milkop 2014). With battery owners representing such a small proportion of customers today - and, even under ambitious growth rates, into the near future - we think it highly unlikely that anywhere near the degree of inefficiency will be experienced for many years, by which point the Authority could review and amend where necessary.

Our recommendation: Symmetrical Export Tariffs with evidence based exemptions

We strongly recommend the Task Force should advance Symmetrical Export Tariffs with evidence based exemptions as this approach is:

- aligned long-term with goals of cost reflectivity
- simple for consumers and networks to understand
- simple for networks to implement
- simple to regulate *effectively*
- simple to monitor and enforce
- able to evolve naturally without regulation changes.

We understand that should the Task Force agree to advance consumption-linked injection tariffs further engagement may occur. We recommend that this consultation be tightly focussed and seek information from EDBs on:

- any arguments for injection tariffs being anything less than symmetrical
- specific scenarios where an exemption may be warranted, and what restrictions (time, scale) are appropriately placed on these exemptions; we consider it important to tightly define the scenarios where an exemption from SETs may be warranted.

Any arguments presented by EDBs should be evidence-based, and thoroughly examined by the Authority to be in-line with the cost reflective methodology that is in the best interests of a low cost and resilient energy system for consumers.

Addressing specific topics raised by the Authority

Response to Task Force arguments against injection pricing mirroring consumption pricing (5.38)

Our key point: Injection pricing mirroring consumption pricing will drive cost-reflective tariff design
While we agree that consumption pricing is largely not cost-reflective, 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 become cost reflective.

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 have significant information about their low-voltage networks (including usage at a micro level) that to date they have failed to invest in using 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 resource 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.

Safeguards: rebuttal to suggested safeguards and recommended safeguards (5.42)
Linking injection rebate rate to variable charge differential (5.42(a)) is unnecessary as distributors should improve their consumption pricing, and these Code changes should be viewed as key levers to encourage this. If this differential proposal is included it will actually incentivise some distributors from staying away from cost-reflective consumption pricing.

We have intimate knowledge of the Aurora trial referenced that provides the 50% precedent for an adjustment factor (5.42(b)). As explored in Forest Lodge Orchard's submission to you, the current 50% incentivises a conservative approach to injections when they are of most value to the local network, to the detriment of consumers. This 50% number was quickly and arbitrarily decided by the network as the mid-point between 0% and 100%: a starting point.

Such an arbitrarily decided number, with no evidence, should not be used as a precedent and the fact it was is a worrying insight of the ability of decisions made by vested interests to create unfair precedents against consumers, that do not get challenged or investigated deeply by the Authority.

While we have been unable to undertake or find relevant thorough analysis, we would be interested to see the outcomes delivered by different adjustment factors in Australia. From an initial look (and noting difficulties in confirming the adjustment factors included in the paper[19]) it appears for example that there is a correlation between higher adjustment factors and more installs including batteries (with other factors also at play).

We are supportive of the Authority monitoring and reviewing the adjustment factor of zero (which we expect evidence will prove should be zero) to ensure it remains appropriate. It will be critical to ensure there is clarity on exactly what the Authority will be looking for when assessing appropriateness, and that the long-term interests of the consumer are at the forefront of this. Adjusting this will be significantly easier than making changes via the principles based approach.

Allowing distributors to offer rebates in more targeted ways than equivalent consumption charge, either temporally or spatially, (5.42(d)) is another workaround for poor consumption pricing. Allowing this provides another reason for distributors to not invest in necessary pricing reform. This will also complicate the Authority's monitoring and enforcement. We recommend keeping things as simple as practical and not allowing for such blanket exemptions. There may be instances where such an approach is agreed as part of an evidence based exemption from SETs.

Additional comment

Need to link approach and monitoring data with Commerce Commission processes

If a proposal advances that requires distributors to identify ICPs (or groups of ICPs) that will be able to be rewarded for mass injection (such as as described in 6.5, and noting we don't support the overall approach this is part of), we recommend the Task Force discuss how to link this to what distributors are allowed to seek approval for through custom and default price pathways. There should be no situation where distributors can be allowed to build additional capacity in areas they have not identified ICPs or groups of ICPs where the network can benefit from their injection.

[19] With Endeavour Energy listed twice (once for either 25% of 53%, and again for 73%).

2A: Specific questions

Q1. Do you agree with the problem definition above? Why, why not?

Yes, as explored above we agree there is an important price signal missing, and as explored above (specifically on this proposal area and within our general Context discussion on the importance of this work).

Q2. Do you agree with these principles? Why, why not?

No, as explored above in detail we do not agree that the approach of principles will be successful in achieving the objective sought.

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?

N/A as do not agree approach of principles will be workable to address the objective of this work. However, our preferred solution should apply to larger consumers and generators as well as mass-market consumers.

There is no difference between an electron being injected from a household or from a farm. The benefits to the entire system of these electrons are the same regardless of the source. So long as the distribution network can handle the various injections, they should be rewarded based on the value of peak injection onto the network. We note that some farms and businesses may not be connected to large networks, and therefore may have lower peak pricing and ability to benefit the network, but again this interacts accurately with a symmetrical export tariff, as any injection pricing will simply be a mirror of peak consumption pricing.

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)?

N/A as do not agree approach of principles will be workable to address the objective of this work.

Q5. Do you agree with the direction of the guidance that would likely accompany the principles? Why, why not?

N/A as do not agree approach of principles will be workable to address the objective of this work.

Q6. Are there any additional issues with the principles where guidance would be particularly helpful?

N/A as do not agree approach of principles will be workable to address the objective of this work.

Q7. Do you agree the principles should be incorporated within the Code, rather than being voluntary principles outside the Code? Why, why not?

N/A as do not agree approach of principles will be workable to address the objective of this work.
That said, we do agree the solution should be incorporated within the Code rather than being voluntary. We consider this necessary for it to be picked up consistently by EDBs to address the problem and for EDBs to act on reasonable timelines.

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.

We support our recommended solution being implemented as soon as is practical and believe this would be tariffs beginning to reach customers within early 2026. Noting that many EDBs have significant work to do to improve their overall tariff design and do the necessary work to understand their networks better (work which we consider networks should already have undertaken given the scale of impact on consumers, and following DPP4 where they made arguments in favour of billions of dollars in investments to grow their networks), we support the Code amendment coming into effect on 1 April 2026. However, given symmetrical export tariffs are an ever-evolving mirror of consumption pricing accuracy, we see no reason they cannot be rapidly implemented as the rest of a network's pricing evolves.

Q9. Do you agree the proposal strikes the right balance between encouraging Requiring distributors to pay a rebate when consumers supply electricity at peak times price-based flexibility and contracted flexibility? Why, why not?

No, as we do not agree the approach of principles will be workable to address the objective of this work.

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?

We acknowledge that in the short-term (i.e. before DPP5 or new Custom Price Pathways come into effect) households, farms and SMEs that do not install batteries will pay more with our preferred option of SETs than they would likely pay under the status quo or a principles-based approach. However, we consider these additional costs will significantly pale in comparison with the savings and reduced prices rises that would result without the changes. If the EA is concerned about this, it should be modelled and made publicly available. We believe any cost increase cost by SETs would be minor, and almost imperceptible on most electricity bills, while at the same time delivering long term savings through infrastructure deferment.

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?

Disagree with this, as explored above. Consider prescriptive approach of SETs should be preferred (not the prescriptive approach as presented as an option in the paper). A principles based approach would be less cost reflective, harder to regulate, and less workable to adjust to market realities over time (e.g. it cannot naturally evolve like SETs can).

Q12. Do you agree that a consumption-linked injection tariff would not be sufficiently targeted, and therefore should not be preferred? Why, why not?

Disagree, as explored in detail above.

Q13. If this approach was progressed, do you think:

a) injection rebates should perfectly mirror consumption charges?

Yes, as discussed above.

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?

As explored above, allowing for evidence based exemptions from SETs is the appropriate mechanism to avoid incentivising injections to the point they lead to additional network costs.

Q14. Do you agree with the objective of the proposed amendment? If not, why not?

We agree with the high-level key objective, however consider providing further specificity and additional criteria are important in analysing options and determining the best solution. In particular:

- Incentivises cost-reflective pricing
- Simple to understand for market participants
- Ease of adaptability over time
- Ease of reporting and monitoring
- Ease of compliance
- Incentivises uptake of batteries where network benefits
- Benefits all consumers in long-run
- Competition
- Reliable supply
- Efficient operation.

We have undertaken an assessment of options against these criteria.

Q15. Do you agree the benefits of the proposed amendment outweigh the costs?

No, as we do not agree the approach of principles will be workable to address the objective of this work.
However we do consider that the benefits of our recommended approach will outweigh the costs.

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.

No, as explored above we do not agree.
We consider that the prescriptive and less flexible nature of SETs that we recommend is warranted despite going against the voluntary Code amendment principles the Authority applies. We consider the overarching long-term benefits of our preferred approach far outweigh not pursuing the option which best follows the Authority's voluntary principles.

Q17. Do you have any comments on the drafting of the proposed amendment?

N/A as do not agree approach of principles will be workable to address the objective of this work.

2B and 2C: *Improving pricing plan options for consumers: Time-varying retail pricing for electricity consumption and supply*

Specific questions

Q1 Do you agree the issues identified by the Authority are worthy of attention? If not, why not?

As explored above in our general discussion on the importance of this work, absolutely yes. We do note that an increase in penetration among customers of solar and batteries will not just maintain energy security (as noted in 4.45 on p22), but can do a lot to improve energy security. For example, higher rates of solar can help keep significant storage in our hydrolakes in dry years[20], and more customers making their own energy will only further improve the recent finding that accelerating the transition to zero-emission vehicles is the most impactful thing we can do to improve fuel security[21].

Per our Context discussion, we agree that the time to address these issues is now, and the Task Force is right to not wait for overwhelming clear demand from consumers.

Q2 Which option do you consider best addresses the issues and promotes the Authority's main objective? Are there other options we have not considered?

Subject to the changes proposed below, we support the suite of proposed Task Force solutions.

Q3 Should we require retailers to offer a price plan with time-varying prices for both consumption and injection? Why or why not?

Support that each retailer must have at least one time-varying plan for consumption and one for injection.
Support that these do not need to be the same plan. While we would support most people going on time-varying consumption and injection plans, there are some consumers where it may make more sense from their perspective to have time-varying for either consumption or injection, and not for the other. This approach is likely to lead to them being able to find a retailer with a pricing plan that best suits their needs.

Q4 Do you have any feedback on the design Requirements?

While we are supportive of the proposed requirements to reflect the relative economic benefits of customer injections during peak and off-peak, alone this could see some retailers

[20] https://www.rewiring.nz/watt-now/why-solar-makes-sense
[21] https://www.mbie.govt.nz/dmsdocument/30476-fuel-security-study-pdf

offering plans that offer no reward during off peak. This is not in the interest of the customer injecting, nor in the interest of the energy system and all consumers in the long-term.

While the value of energy at peak times is especially high, there is also significant value cumulatively of energy provided at non-peak times. We do not consider there is rationale to only appropriately reward consumers at peak.

We recommend an additional requirement be added that requires retailers to reward consumers for some of the benefit they derive from these off-peak injections.

While technically more challenging, we also recommend further work be undertaken to explore how retailers could be required to reward injection in dry years and other extended periods of extra constrained supply that reflects the relative economic benefits to the retailer of that supply in those months of a dry year with significantly higher wholesale rates and a "normal" year. This would be a requirement to include price variations on a very different timeframe to within-day variations.

While there are challenges for retailers to offer plans that reward differently in a dry year, we consider given the significantly higher value of generation in these times of constrained supply that consumers should be more fairly rewarded. We consider this will provide a price-signal that would make a cumulatively noticeable impact on the size of systems that customers choose to install. As explored elsewhere in our submission, the benefits to all consumers and our economy of these larger systems will be positive.

We also recommend that, as explored in Q5, retailers are required to pass through injection rebates to those who have earned these rebates.

Q5 Is there a risk that injection rebates will not be passed through to the consumers targeted? If so, how could we safeguard against this risk?

Without an explicit requirement for injection rebates to be passed on to those consumers who they apply to, there is a chance retailers may not include injection rebates in the new relevant price categories within their updated price schedules.

While difficult to quantify, some retailers (in particular large gentailers) may be incentivised to not pass injection rebates through to the consumers who have "earned" those rebates. Though not particularly likely, given the potential large contribution of energy from consumers in the future, generators may feel incentivised to water down the price signals producing consumers receive to lessen the incentives on consumers to maximise the size of their solar installations.

We recommend this risk be removed through a requirement in the Code that requires retailers to pass through the full value of injections rebates to the relevant consumers. There is unlikely to be reasonable arguments for anything but the full amount of the rebates to be passed on.

Not including such a requirement in the Code sets up the Authority for unnecessary work, and if a future Code change were required this may struggle to make it onto the work programme despite being in the interest of consumers.

Q6 Which retailers should be captured by the proposal and why?

We consider that every retailer should be required to be captured by this proposal. They will need to have systems in place to be able to pass through SETs (or whatever injection rebate is advanced) to relevant customers. We do not see a method for retailers to be able to do this without having time-varying injection plans. That said, we are generally very supportive of doing what can be done to reduce barriers for entry and encourage new small retailers to enter the market (noting a majority of innovation comes from independent retailers).

We have no concern with the proposal to exclude retailers from the pro-active requirements where all of their pricing plans are consistent with the design requirements.

Q7 What are your views on the proposed timeframe for implementation of 1 January 2026? Would 1 April 2026 be preferable, and if so why?

We support this being implemented as soon as practicable and therefore support the 1 January 2026 implementation timeframe. We will continue to encourage retailers to get ahead of the rest of the market and implement as soon as they can. We encourage the Authority to probe a bit on claims that IT system upgrades do not make 1 January 2026 possible, to have confidence whether or not this is the case.

Q8 What are your views on Part 2 of our proposal that would require retailers to promote the time-varying price plans?

We support this requirement as it will ensure consumers have more information and are more informed. Despite some potential minor compliance costs, we support the specific requirements of the proactive offer obligation as this is the only mechanism to ensure consumers are easily provided with the right information for them. We do recommend that in cases where retailers do not have detailed data on customers' consumption of the past two years, they are required to make proactive offers based on what information they do have.

Q9. What should the Authority consider when establishing the approach to and format of the reporting regime?

Support the reporting regime including appropriate detail (low compliance cost but rich information) on proactive offer requirement information as suggested. Requirements should ensure the information is able to build a better understanding of consumer and retailer behaviour, which can help refine the intervention and will also provide insights that can help build the lowest-cost energy system into the future.

What is proposed appears appropriate and we encourage the Authority to produce insights that are useful both for consumers, and for retailers to improve how they can encourage customers to take up offers that are in customers' best interest.

Q10. Should the Authority include a sunset provision in the Code, or a review provision? Why?

We recommend that a review provision rather than a hard sunset provision is preferable. This will provide a trigger for a thorough review of whether the changes are having the desired impact and opportunity to decide whether or not the rules should stay. Depending on retailer practice and culture, a hard sunset provision may see retailers drop products that meet the rules, to the detriment of consumers.

We consider the risks you are concerned of can be as easily managed via a review provision rather than a sunset clause, and that the sunset clause would unnecessarily introduce additional risks.

We are less concerned about this decision compared to others we comment on.

Q11. What are your overall views on Part 3 of the proposal?

We agree that a strong monitoring and reporting regime is important.

Q12. What are your views on Part 4 of our proposal to amend the Code to require that consumers are assigned to time-varying distribution charges, that retailers provide half-hourly data to distributors for settlement

Fully support the need for this and the proposal.

Q13. Do you agree with the objective of the proposed amendment? If not, why not?

Agree broadly with the objective, and recommend it be expanded to encourage injection beyond just peak times, and seek to improve incentives for consumers to increase their injection at all times when this helps minimise overall system costs (including deferring or removing the need for new generation).

Q14. Do you agree the benefits of the proposed amendment outweigh its costs?

Yes. Definitely.

Q15. 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.

With our recommended changes and additions, yes.