PowerNet Limited
251 Racecourse Road, PO Box 1642,
Invercargill 9840, New Zealand
P: [redacted]
E: [redacted]

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The Electricity Authority and Energy Competition Task Force
c/o taskforce@ea.govt.nz

Tēnā koutou,

Submission on the consultation paper – Requiring distributors to pay a rebate when consumers export electricity at peak times

Introduction

1. PowerNet Limited (PowerNet) appreciates the opportunity to make a submission to the Electricity Authority (the Authority) and Energy Competition Task Force (Task Force) on requiring distributors to pay a rebate when consumers export electricity at peak times consultation paper. We will be making a combined submission to address any points raised around the consultation paper improving pricing plan options for consumers: time-varying retail pricing for electricity consumption and supply (ECTF 2b, 2c)

2. PowerNet is an electricity management company with its head office based in Invercargill and is owned by The Power Company Limited (TPCL). PowerNet manages the non-exempt Electricity Distribution Business (EDB's) of Electricity Invercargill Limited (EIL), OtagoNet and Lakeland Network (LNL), the exempt EDB of TPCL and Ruakura EDB Limited Partnership (Tainui Group Holdings Limited), and the non-grid connected Stewart Island Electric Supply Authority (SIESA).

3. With an asset base and investments in excess of NZ$1 billion, the aggregated electricity distribution asset base managed by PowerNet is the fourth largest in New Zealand. TPCL operates in Southland and West Otago, OtagoNet in rural and coastal Otago region that surrounds Dunedin City, EIL operates in Invercargill and Bluff, Lakeland Network (LNL) in the Frankton, Cromwell and Wānaka regions, SIESA on Stewart Island, and Ruakura in the Waikato.

4. PowerNet has long-term management agreements in place with TPCL, OtagoNet, LNL, EIL, and Ruakura, with the benefit of integrated business management systems in place, and a core purpose and expertise in asset management capability.

5. PowerNet supports, in principle, the submission made by Electricity Networks Aotearoa (ENA) and have included in our own submission key issues that we wish to raise with the Task Force and Authority. We support aspiration to reach net zero emissions by 2050 and 100 percent renewable energy generation, that is not cost prohibitive, by 2030. We acknowledge the important role distribution networks will play in supporting New Zealand's transition to an electrified nation and a low emissions economy.

6. This submission can be published in full on the Authority's website.

Key discussion points

7. PowerNet, in principle, agrees with the reasons the Authority and Task Force are seeking outcomes that will encourage greater investment in new electricity investment, and enable mass-market consumers in particular, to better manage their own electricity use and costs.

8. We are supportive of the overall intent to introduce incentives that encourage generation and behaviour change that will materially affect the reduction of network upgrades and maintenance that results from pressure on the networks.

9. With this in mind, we agree that in the long-term these outcomes are desirable, however see the short-medium term impact to be negligible with the current proposal. We therefore do not see any benefit in prioritising this issue ahead of other areas that would have material impact and network benefit, and do not support the urgency being applied. We view the proposed approach and its implementation as displacing resources from other priority developments.

10. An appropriate approach may be to publish these principles as voluntary but with the intent to make these obligatory in a more appropriate timeframe. The Authority could monitor the development of congestion identification and the relative uptake rates of solar and battery technology to determine when these principles become more practicable and valuable.

11. This approach would allow distributors to prioritise these developments appropriately, while potentially delivering early where developments may be more efficiently developed alongside other priority developments. The Authority has noted not all EDBs are aligned with earlier principles and should be wary of leaving the industry behind in proceeding with this approach ahead of need.

12. In summary, at a surface level the principles seem reasonable and PowerNet would support their implementation to the extent they were practicable to implement and prioritised correctly with respect to resourcing other important development priorities. However, we see the short-term impact to be negligible. We are encouraged that the Authority have identified some of the issues with trying to implement these principles, however, do not seem to have been reconciled in favour of proceeding. We would not like to see this proposal result in systems and payments with little material benefit, and the risk of over-incentivising adverse consumer behaviour. We query how this proposal reconciles with the Authority's decision to remove Avoided Cost of Transmission (ACOT), and if this is simply a smaller version of ACOT, i.e. Avoided Cost of Distribution (ACOD).

13. PowerNet therefore favour voluntary principles as used in Australia and believe these are appropriate. Distributors would then implement these principles as they become practicable and an appropriate priority for development. If the Authority and Task Force proceed with the current proposal and the principles become mandatory, this should be on condition that networks have the economic means to identify congestion on their networks.

Visibility of the network

14. We have some concerns that the proposed approach assumes that EDBs can identify specifically where distributed generation export benefits the network. Specifically, that EDBs can locate where and when constraints may be arising.

15. PowerNet is cautious, in that the Authority has still not taken action to enable economic near real time meter data access so that EDBs can begin this crucial analysis capability development. We cannot locate our network constraints if we do not know where power is flowing on our networks. Guess work and the risk of ill-informed forecasting will not get us to the rapidly approaching future where congestion management must be up and running to prevent unaffordable wide scale network upgrades that EDBs are actively trying to avoid.

16. In addition to understanding network constraints, should mass-market consumers be incentivised to export generation to the network, it will become crucial for PowerNet to have visibility of the data to ensure the ongoing safety of our networks, and to design pricing that is effective and recover allowable revenue efficiently. Additional generation at the wrong times can cause unintended consequences on the network, and in the long term lead to more network maintenance and upgrade, not less.

17. We encourage the Authority to have regard to the practicality of implementation of these principles for EDBs. PowerNet has previously warned, that while the Authority continues to consider data access, EDBs may be perceived to be the bottleneck in determining where and when congestion is occurring and the benefits and efficiencies that flow from this.

18. PowerNet advocates to the Authority and Task Force that, before considering the proposal to incentivise mass-market consumers through rebate when they supply electricity at peak times, the far greater urgency is to ensure distributors have access to reliable, timely and affordable data on the network. It makes no logical sense to us that the Authority would mandate reward for more generation on the network when EDBs are struggling to identify and have appropriate visibility over the existing areas of constraint.

Areas of greater priority for reducing network and consumer costs

19. PowerNet considers the proposed approach by the Authority and Task Force to be a token move that will not materially move the industry towards the changes needed to ensure a resilient and cost effective electricity network for the future. We support the ENA's position that there are far greater savings available to customers that the Authority has so far been largely inactive on.

20. The Authority has a large number of projects underway and planned, with the aim of "ensuring that Aotearoa's low-emissions transition happens efficiently, while still providing a reliable, secure and resilient electricity supply."[1]

21. This proposal, alongside a number of those prior, is resulting in a thousand blunt cuts to try and address material issues around affordable and resilient networks for the future. It is PowerNets position, that applying urgency to this proposal, requiring distributors to pay a rebate when consumers supply electricity at peak times, and correspondingly mandating pricing signals through retailers, is again only skimming the edges of far greater issues of priority. We support the ENA submission, and would encourage the Authority to consider the far greater areas of impact and material difference for EDBs including, but not limited to:

[1] www.ea.govt.nz/projects/all - accessed 11.39am 21 March 2025.

- The significant costs for EDBs associated with traffic management in maintaining the network
- The increasing costs to insure network assets, assets that are essential services for the population
- The high costs for vegetation management that distributors face to ensure a safe and reliable network. There are significant outages and costs associated with trees and the damage they cause to power lines, yet distributors own none of them and maintain vegetation management at considerable cost to the network, ultimately borne by the consumer
- The issues already raised around the lack of affordable, reliable and timely data to gain visibility of the network. It would make material change to network planning, upgrades and maintenance for distributors to have visibility over what is happening on their own assets.

22. PowerNet views the urgency assigned to the proposal in this consultation as disproportionate to the benefits that may be realised on the future of the network. We would encourage the Authority and Task Force to refocus resources on issues that will materially benefit the long-term future of electricity resilience and supply.

Retail pricing

23. PowerNet is supportive of initiatives that improve pricing plans for consumers, particularly through retailers carrying through the price signals that distributors send to encourage behaviour change that would benefit the consumer and the network. This is an important step in supporting any proposal from the 2a consultation paper around distributor rebates.

24. Time of Use (TOU) can incentivise consumers to move high consumption during peak times, in turn helping to manage congestion on the network. PowerNet supports the ENA position that leaving this choice to consumers seems an appropriate way to maximise benefits.

25. We would be very supportive of any obligation that requires retailers to provide data to distributors. This would be an important part of the process to ensure distributors could identify and 'rebate' for areas of use, congestion and generation that gave benefit to the network during peak times. Should the proposal to require rebates from distributors proceed as suggested, this data will be necessary to be received from the retailer.

26. Ultimately, a continually variable pricing system that dynamically tracks the true cost-value of generation and load would be most efficient. We would support this being the role of retailers to make this manageable and attractive for customers e.g. through price cap risk management packages. There is far greater value on the table for this initiative and PowerNet supports more cost reflective prices from retailers that recognises their dynamically varying input costs to unlock flexibility.

27. PowerNet welcomes the requirement for TOU pricing to be made available to customers. We note this proposal is at the light end of the scale of enabling customers to access efficient pricing signals and therefore manage their consumption (and potentially export) to best minimise their costs.

28. PowerNet has a concern that retailers that own generation have a conflict of interest in enabling flexibility that has the goal of moving consumption off (and export toward) peak demand times. The resulting reduction in wholesale prices are not to a generators benefit

while the retail input cost is simply passed on to the consumer. We therefore are concerned that, given scope, gentailers will likely continue to flatten incentives to reduce peak consumption in their retail pricing.

29. We note that while some TOU pricing has been made available the resulting behavioural shifts are heavily weighted toward a 9pm 'switch-on' time. 9pm is not sufficiently off-peak to optimise wholesale prices or line prices. For example PowerNet's line prices shift from peak to shoulder rates at 9pm with only modest price differentials reflecting that, while 9pm is after peak demand, it is still a relatively high demand time.

30. To the extent that some customers might ignore variable pricing if it were more strongly regulated it would be unlikely to negatively impact their energy costs while those that do respond should create cost efficiencies for all customers (assuming underlying efficient cost reflective pricing).

31. In short the Authority must be careful to ensure that prices created by this proposal are not just tokenistic but actually result in appropriate behaviour shifts that benefit consumers.

Cost reflective pricing

32. PowerNet advocates for increasingly granular dynamic cost reflective pricing. Customers with solar installations typically target "self-consumption" (they try to consume directly and avoid export). This can be considered a result of inefficient pricing where buy and sell prices (e.g. 30c/kWh for consumption and 10c/kWh for DG export) have diverged significantly whereas energy trading should ideally result in buy and sell prices tracking together with a smaller margin.

33. Flattened prices create this issue, where buy back rates reflect export value only in peak sunshine and lower demand hours while consumption prices reflect 24hr averaged prices (including peak demand). More dynamic pricing should avoid this impact and PowerNet suggest that the Authority should require TOU import and TOU export pricing to be packaged together, as opposed to allowing these to be separate price plans as proposed. While customers have some means to "work around" this inefficient pricing by trying to self-consume, it makes more sense to allow the wider market (i.e. local customers) to consume surplus generation in a context of similarly (TOU) priced consumption and export.

34. This issue is further exposed by the frequent requests from customers for "peer-to-peer" schemes. Again consumers are seeking to close the gap between buy and sell rates because it does not make sense to them. Peer-to-peer can be seen as an attempt to effectively aggregate meters to enable a similar "self-consumption" approach so as to work around inefficient pricing. Often these requests come from rural customers where they want to "self-consume" their own generation across their multiple (individually metered) ICPs (e.g. across their farm buildings), but do not have a suitable work-around. Currently, there appears to be little support from retailers for peer-to-peer schemes, and where available, are typically capped (e.g. on kWh sharing) limiting the value passed to customers (that the retailer would have to absorb).

35. While the Authority have experimented with multiple trading relationships (MTR) as a means to enable peer to peer, it seems a relatively complex approach compared with requiring retailers to offer more granular dynamic cost reflective pricing.

Terminology

36. We acknowledge that the Authority's reference to 'paying rebates to consumers' and distributors 'rewarding customers' is determined under these proposals as rebates incorporated into distributors' charges to retailers. It is proposed further that under the Task Forces' initiative 2c the process would be completed by ensuring retailers pass this rebate on to the consumers through buy-back pricing plans.

37. However, we think it's important the Authority take into consideration any issues relating to income tax and GST. We encourage the Authority and Task Force to carefully explore the terminology of rebates, such as Income Tax deductibility / accessibility and the GST position to those paying and receiving them.

Timeframes

38. As previously mentioned, PowerNet does not consider the issues raised and the proposed approach to be material and requiring urgency.

39. The Authority is proposing a 1 April 2026 implementation timeframe which we view is unrealistic. Should the proposal proceed there are numerous systems and processes that will need to be altered to meet any new requirements. We do not consider rushed and unrealistic timeframes to be good regulatory practice, and risks poorly developed and thought through processes being put in place just to meet regulatory timeframe.

40. As we support in principle what the Authority and Task Force are trying to achieve for consumers having greater choice over their energy consumption and generation, and the overall outcomes that will encourage greater investment in new electricity investment, we would support any proposed change in regulation being required by 1 April 2027 as a more appropriate timeframe.

Summary

41. The value on the table is very small in this proposal (2a). We are wary of rewarding customers for injecting back into the network while the benefit is minimal and where it is also understood that solar customers on standard charges are already reducing their variable (per kWh) lines charges while providing negligible benefit to congestion management.

42. PowerNet have identified the cross subsidisation of line price savings for solar customers as a pricing development area where pricing should be adjusted such that customers save online charges only when they are providing benefit to the network. Necessarily if the proposed principles go ahead PowerNet will group these developments together (with forced greater urgency) and it is doubtful that solar customers as a whole will end up better off (though they would be getting more efficient price signals). This may ultimately be counter-intuitive to the outcomes being sought.

43. We support the intent of the proposals as presented by the Authority and the Task Force and are encouraged to see thought given to some of the issues around implementation. PowerNet would prefer to see a voluntary approach taken to the initial implementation of the principles, and once the visibility of data can be sourced in a timely, reliably and affordable

way to ensure the principles are achieving the desired outcomes, move to regulation in a more appropriate timeframe.

44. We have provided more detailed response to several of the questions posed by the Authority and the Task Force in the Appendix below and would welcome the opportunity to expand on any comments if the occasion arises. Again, we thank the Authority for the opportunity to submit on these proposals.

For more information contact: Michelle Fowler-Stevenson
Regulatory and Risk Manager

PowerNet responses to the ECTF's specific consultation questions

Questions	PowerNet Comments
Problem definition	
Q1. Do you agree with the problem definition above? Why, why not?	We agree with the premise that incentivising customers with DG to inject generation could have long-term benefits. This could be through alleviating identified network constraints, and reducing the need for network maintenance and upgrades. We support the encouragement of generation for DG consumers and long term behaviour change. With the proposed approach, we do not agree that this is an urgent issue to be resolved, and do not consider any likely benefits to be material.
Proposed solution: principles-based rebates	
Q2. Do you agree with these principles? Why, why not?	We agree with a principles based approach. We see there is too much complexity of variation in circumstances to gain benefit from being more prescriptive with rules.
Q3. Do you agree that the principles should only apply to mass-market consumers, or should they apply to larger consumers and generators also? Why, why not?	Yes. As above, large consumers and generators have significantly more variation in their agreements and circumstances. We would not favour this approach being applied to those outside mass-market consumers.
Q4. Do you agree the principles should apply to all mass-market DG, including inflexible generation (noting that the amount of rebate provided will still be based on the benefit the DG provides)?	Yes, if these principles are introduced we agree in their application for mass-market DG. However we reiterate that we do not believe this to be an issue that will result in significant benefit to the network, nor do we see any material rebate being applied to consumers. The focus on distributor rebates suggests an exaggerated perception of value currently on the table for customers.
Q5. Do you agree with the direction of the guidance that would likely accompany the principles? Why, why not?	The guidance seems reasonable.
Q6. Are there any additional issues with the principles where guidance would be particularly helpful?	We support the ENA submission.
Q7. Do you agree the principles should be incorporated within the Code, rather than being voluntary principles outside the Code? Why, why not?	No. We support the ENA submission. In addition, as noted in our cover letter, An appropriate approach may be to publish these principles as voluntary but with the intent to make these obligatory in a more appropriate timeframe. The Authority could monitor the development of congestion identification and the relative uptake rates of solar and battery technology to determine when these principles become more practicable and valuable. This approach would allow distributors to prioritise these developments appropriately, while potentially delivering early where developments may be more efficiently

Questions	PowerNet Comments
	developed alongside other priority developments. The Authority has noted not all EDBs are aligned with earlier principles and should be wary of leaving the industry behind in proceeding with this approach ahead of need.
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 determine the timeframe to be too ambitious. There are still significant limitations to visibility and identifying areas of constraint on our networks, and barriers around costs to obtain data. It would be the preference of PowerNet to allow more time to ensure any changes are implemented appropriately and without reaction to a sense of urgency that we do not deem is justified. We would consider 1 April 2027 an appropriate timeframe to ensure our systems and processes can manage the changes required in this approach.
Q9. Do you agree the proposal strikes the right balance between encouraging price-based flexibility and contracted flexibility? Why, why not?	No. PowerNet supports the ENA submission, and agrees that, while the intent is good, the rebates being proposed are likely to be very small and immaterial.
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?	Yes, we agree that in the long-term this is the likely outcome. We see the short-term impact to be negligible. Based on this, we do not see any benefit in prioritising this issue ahead of other areas that would have material impact and network benefit. It certainly doesn't support the urgency being applied, and the implementation will displace resources from other priority developments.
Alternative option: prescribed rebates	
Q11. Do you agree that more prescriptive requirements to provide rebates will be less workable than a principles-based approach, and therefore should not be preferred? Why, why not?	Yes. Prescriptive requirements would be impractical and potentially lead to higher costs for consumers if rebates are paid for generation to the network that doesn't result in benefits to the network.
Alternative option: consumption-linked injection tariffs	
Q12. Do you agree that a consumption-linked injection tariff would not be sufficiently targeted, and therefore should not be preferred? Why, why not?	A principle of cost-value reflectivity is more appropriate than trying to link to consumption which would not be well targeted and risks inefficiencies and incorrect incentives. The work to assess whether this resulted in a cost-value reflective tariff would enable an actual cost-value reflective tariff to be designed.
Q13. If this approach was progressed, do you think: a) injection rebates should perfectly mirror consumption charges? b) there are sufficient safeguards in place that would allow distributors to avoid over-incentivising injection to the extent that it incurs additional network costs?	This approach sounds very crude, creating a signal that is probably too strong and then dialling it back, so it doesn't appear excessive - like jamming your foot on the accelerator and brake at the same time?

Questions	PowerNet Comments
Regulatory statement	
Q14. Do you agree with the objective of the proposed amendment? If not, why not?	Yes. We agree in principle with what the Authority and Task Force are wanting to achieve. Incentivising behaviour that provides network benefit is a good outcome. However, we are not convinced that the proposed changes will achieve the scale of result the Authority are seeking.
Q15. Do you agree the benefits of the proposed amendment outweigh the costs?	The value on the table is small, implementation early to be prioritised given other issues and the cost understated (if practicable at all). The creation of pricing that looks the part but has not been properly designed to be efficient may be low cost (but still a distraction of resources from other priorities. We are wary of rewarding customers for injecting back into the network while the benefit is minimal and where it is also understood that solar customers on standard charges are already reducing their variable (per kWh) lines charges while providing negligible benefit to congestion management. We have identified the cross subsidisation of line price savings for solar customers as a pricing development area where pricing should be adjusted such that customers save online charges only when they are providing benefit to the network. Necessarily, if the proposed principles go ahead we will group these developments together (with forced greater urgency) and it is doubtful that solar customers as a whole will end up better off (though they would be getting more efficient price signals).
Q16. Do you agree the proposed amendment is preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objectives in section 15 of the Electricity Industry Act 2010.	Yes, however as stated, as stated, voluntary principles that reward injection (only for real network benefit) are preferred.
Q17. Do you have any comments on the drafting of the proposed amendment?	