

26 March 2025 Submitted via email: <u>taskforce@ea.govt.nz</u>

SUBMISSION TO THE ELECTRICITY AUTHORITY ON REQUIRING DISTRIBUTORS TO PAY A REBATE WHEN CONSUMERS SUPPLY ELECTRICITY AT PEAK TIMES

Thank you for the opportunity to present this submission on requiring distributors to pay a rebate when consumers supply electricity at peak times.

The Queenstown Lakes District Council (QLDC) is supportive of work that enables the energy system to make better use of solar electricity at peak times and provides benefit back to households for electricity injections.

QLDC recommends that the most effective way to support these outcomes is to implement a symmetrical export tariff. This is a simple approach with a low regulatory and implementation cost, and it would help form an energy system that recognises the role of household energy resources in the provision and security of electricity supply.

If the Electricity Authority is interested in trialling a symmetrical export tariff to inform decision-making, QLDC encourages the Authority to consider utilising the Queenstown-Lakes district to pilot this approach.

Thank you again for the opportunity to comment.

Yours sincerely,



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SUBMISSION TO THE ELECTRICITY AUTHORITY ON DISTRIBUTOR REBATES FOR CONSUMERS SELLING SOLAR AT PEAK TIMES

1.0 Context of distributor rebates for peak solar in relation to QLDC

- 1.1 Developing a reliable, resilient, sustainable and affordable energy network is a high priority for the Queenstown-Lakes District (QLD or the district). The district faces a complex electricity challenge due to the capacity of the infrastructure, its topography, landscape values and protections, seismic risk of the landscape, rapid increases in energy demand, and the cost of asset investment and maintenance programmes. Scaling up household and community-scale renewable energy generation is a critical part of the system that will meet the district's energy needs.
- 1.2 The QLD is growing rapidly and over the next thirty years its resident and visitor populations are forecast to more than double¹. It is a challenge for electricity infrastructure to not only meet current demand but to match the pace of growth. Due to the ongoing challenges with the capacity, resilience and affordability of the electricity supply into the district, QLDC, Transpower, and electricity distributors are working together on a regional electricity development plan. Greater uptake of rooftop solar and battery systems could provide significant support to the district's electricity challenges by reducing consumption and supporting injecting power back to the network during peak demand. With regulatory support, households with rooftop solar could become part of the energy infrastructure and network that meets the district's energy needs.
- 1.3 QLD has significant decarbonisation and electrification aspirations. In 2019, QLDC declared a climate and ecological emergency in the district. A greater shift towards renewable energy is essential to help meet the district's goal of reducing its greenhouse gas emissions by 44% by 2030 and achieving net-zero greenhouse gas emissions by 2050.²
- 1.4 Resilience remains an imperative in the district, given the high probability of seismic activity and the increasing risks associated with climate change. The QLD is vulnerable to a wide range of disruptive natural hazard events given its alpine setting. Such events have the potential to result in significant impacts to people, property and communities in the QLD. These vulnerabilities necessitate a highly resilient electricity supply and distribution network capable of addressing future shocks, as well as sufficient capacity to cope with peak demand. In light of these vulnerabilities, careful consideration needs to be given to future generation and transmission network planning, the use of smart technology to alleviate pressure on the grid, and incentivising faster uptake of household and community scale renewable energy generation.

2.0 There is no evidence a principle-based approach for pricing injection from mass-market consumers will be effective

2.1 QLDC does not support the proposed principle-based response to pricing injection from mass-market consumers. This is due to a lack of evidence that principle-based approaches have worked in the past to encourage changes to how electricity distribution businesses approach network pricing. Even if the principles were mandatory, the likely outcome is that each of the 29 electricity distribution businesses would have their own interpretation and application of the principles, creating a significant monitoring and compliance burden and cost for the Authority. This is a cumbersome and expensive way to approach something that has a simple solution.

¹ <u>https://www.qldc.govt.nz/community/population-and-demand</u>

² <u>Our Plan | Climate Action and Biodiversity</u>

3.0 The simplest and most effective approach to network pricing for distributors is a symmetrical export tariff

- 3.1 QLDC considers that Rewiring Aotearoa's 'symmetrical export tariff' is the simplest approach for distributors to implement³. This is a two-way tariff where the network price charged for peak consumption is also paid for peak export, similar to the alternative option of a consumption-linked injection tariff. The regulatory and implementation cost of such an approach is low, due to its inherent simplicity. It recognises household solar as part of the network and system to meet peak energy demand and could better support the economic viability of solar battery systems for households.
- 3.2 QLDC would encourage the Authority to consider utilising the district to pilot this approach, should that be helpful in future decision-making.
- 3.3 QLDC understands the Authority's concern around the potential spatial inaccuracy of electricity distribution business consumption tariffs, and that this inefficiency would be mirrored through export rebate payments under a symmetrical export tariff approach. However, this inefficiency is only being considered for the fewer than 10,000 households that have batteries. The potential spatial inaccuracy of tariffs also applies to the 2.1 million electricity consumers who are charged a network consumption tariff at peak times. It is unclear why the spatial inaccuracy and inefficiency of a tariff is a concern for a minority group of battery owners but is not a concern for all electricity consumers.
- 3.4 QLDC also does not consider the spatial inaccuracy to be a major factor for consumers considering buying a battery, as they are more likely to be incentivised by using the battery to reduce the 'inefficient' peak consumption charge than they will be by receiving an equal export rebate. Given the overriding importance of security of supply, as well as the QLD's own significant pending transmission investment (triggered by peak demand), QLDC does not see the risk of inefficient investment in batteries in New Zealand being a relevant consideration.
- 3.5 As a general comment, QLDC is concerned that the preferred option from the Authority appears to continue a supply-side bias in regulation. QLDC would prefer to see a balanced approach that recognises the increasing role of customer energy resources in the future provision of security of supply and creates fair pricing signals.

4.0 Equity is an important consideration that needs to be considered in the context of the whole energy system

4.1 The equity implications for low-income households need to be considered whichever option is pursued. However, equity needs to be considered in the broader context of the whole energy system. All electricity consumers will bear the cost of developing greater network capacity to meet peak demand through more poles and wires. Taking advantage of household solar and batteries to help meet peak demand can delay the need for more infrastructure. For Queenstown, a new electricity line is estimated to cause electricity bills to rise by \$500 per year for every household.

Recommendations:

R.1. Implement a symmetrical export tariff as a simpler and more effective approach to peak export rebates.

³ <u>Symmetrical Export Tariffs Paper</u>