

29 November 2024

Via email: electricitymarkets@mbie.govt.nz

SUBMISSION TO THE MINISTRY FOR BUSINESS, INNOVATION AND EMPLOYMENT ON AMENDMENTS TO THE ELECTRICITY SAFETY REGULATIONS TO EXPAND THE PERMITTED VOLTAGE RANGE FOR ELECTRICITY SUPPLY

Thank you for the opportunity to present this submission on expanding the permitted voltage range for electricity supply.

The Queenstown Lakes District Council (QLDC) is highly supportive of expanding the permitted voltage range for electricity supply to better support the deployment of rooftop solar and battery systems by residents and businesses. It is council's view that this work needs to be prioritised and accelerated alongside other system changes to support the uptake of rooftop solar. Furthermore, the proposed change to the permitted voltage change will bring New Zealand in line with standard international practice¹. Given that – as noted by the consultation paper – consumer appliances, electric vehicles, solar and battery systems will be designed for the international market, staying aligned with international standards seems an easy win.

The Queenstown-Lakes district (QLD or the district) faces challenges with the capacity, resilience and affordability of electricity supply into the district. MBIE's consultation paper states that the adoption of 230V +10%/-6% is the 'least cost option for mitigating potential constraints on low voltage networks'². QLDC is very supportive of any standards change that relieves constraints on the use of distributed generation in the lowest cost way. The QLD has already experienced significant increases in network charges as a result of Aurora's customised price path (CPP) and is yet to fully understand the implications of its recent application for a CPP reopener. QLDC supports any change in regulation which avoids upward cost pressures for the district's residents and businesses without compromising the safety and reliability of supply. MBIE has flagged that updating voltage standards may require consequential updates to other standards³. QLDC encourages MBIE to move quickly on these to ensure the overall set of standards remain clear, consistent and fit-for-purpose.

Further, QLDC is working closely with Transpower and electricity distribution businesses to create a regional energy development plan, that includes determining the size and timing of an expansion to the network infrastructure that connects the district to the national grid. Greater uptake of rooftop solar and battery systems by households and businesses could provide significant support to the challenges faced, especially if these systems can reduce consumption during periods when network demand is at its highest; or potentially even export to the network⁴. Conversely, retaining the existing standard would unduly prevent an owner of a solar and battery system from providing valuable services to the electricity system, depriving them of a financial benefit⁵.

QLDC understands that changing the voltage standards does not necessarily compel electricity distribution businesses to relax their existing conservative and coarse low-voltage limits on solar and battery export. To have

¹ Paragraph 10 and 11

² Paragraph 10

³ Paragraph 48

⁴ As noted by MBIE in paragraph 58

⁵ Paragraph 59

maximum effect, clear expectations need to be set that electricity distribution businesses move quickly to ensure consumers benefit from MBIE's decision.

While the country is still at an early stage of the energy transition, once the right policy settings are in place the uptake of rooftop solar could occur rapidly, as it has in Australia. Energy systems - from fair pricing in the electricity market, to voltage ranges, and solar finance options - need to be both ready for and to support households to play a role as energy infrastructure, and support a fair and equitable energy transition.

Thank you again for the opportunity to comment.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "M. D. M. Morss".

Michelle Morss
General Manager, Strategy and Policy