Electricity Authority's consultation to limit customers who can access distribution peak export payments

Effective environmental policy creates behaviour or practice change in a way that is suitable for the needs of rural communities.

I support the objective: to encourage consumers with generation/storage (e.g., solar + battery) to supply back into the network at peak times (beneficial to network) and receive a clearer price signal for that injection.

BUT

- **The 45 kW threshold unintentionally excludes most farms, rural businesses, and community organisations from accessing peak-export payments."**
- **This undermines the EA's stated objective because the segment with the greatest potential to reduce peak load is automatically excluded."**

My name is Emma Crutchley, I am a sheep beef and arable farmer with my family in the Maniototo in Central Otago. We farm in a challenging climate, achieving resilience with our 480 ha of irrigation. Central Otago Sheep and Beef farming is commonly low input extensive systems that are interconnected with the natural environment and as a result highly complex.

To achieve positive outcomes on farm, farmers are thinking across complex systems unique to our own environment, including the dynamic and changing climate. Income generated from farm systems not only enables diverse income streams, also investment in pest and weed control, natural capital enhancement adaptation to climate change and international markets and emissions targets. Sheep and beef are typically lower income systems, increasing costs reduces net income, meaning less investment in these initiatives.

This means farmers like us are searching for ways to diversify businesses to increase profit, not only for profit, but to be able to invest in land management, emissions reduction and whole of community outcomes.

With the decreasing cost of solar and battery infrastructure in recent years, we have made a large investment in solar panels and battery systems for all our households on farm and solar for irrigation, with a further investment in a solar and battery system planned for an irrigation system this summer.

The current proposal ignores the win – win opportunity New Zealand has, to support farmers and community organisations in rural New Zealand alongside network operators. This submission highlights how treating rural solar as "large DG" means lost opportunity for community resilience and doesn't align with the Authorities objective.

This is because

- Many rural areas are facing challenges from more extreme weather events and resulting power outages. (Recent example being Southland storms) These areas are also more prone to prolonged outages because of the distance of lines and aging infrastructure. Smaller systems under the proposed threshold will be far too small to have any benefit to the wider community in peak use times or in the event of a power outage.

- Under your current proposal only two of our home systems would qualify for the proposed 45 kW generation capacity cap, neither of these are large enough to contribute meaningfully to community resilience in the event of a power outage. A 120 kW system is large only because rural energy loads are large (e.g., irrigation pumps), not because the business is "big" in commercial terms.

- Making large investments like this means taking on risk. Farm businesses of this scale don't have commercial negotiating power with electricity retailers. Lower income land uses are most vulnerable to rising costs and should be fairly (and with certainty) remunerated for diversification, especially if it builds resilience in rural areas and enables wider investment into managing our environment.

- Our example - Currently for our 120 kW ground array we are price takers at 8-17 c/kWh export value with an average of 11c for our ground array, this is due to our connection being a time of use (TOU) connection. Our supplier will only offer us a

spot market export rate. Our peak import rate (what we pay) is over 30 c/kWh. This uncertainty makes our proposed battery investment look less attractive.

- The Cap disincentivises the move to solar and battery systems that can support the network due to uncertainty around being remunerated for peak export value of energy generated.
- Winter peak export from rural solar is highly cost-reflective because it directly reduces the need for reinforcement on long, constrained rural lines. In irrigation-based farming systems, this value is amplified: irrigation load falls to zero in winter, meaning systems like our 120 kW array and our next solar and battery investment can export during the highest-stress periods on the network.
- This proposal may lead rural businesses to undersize generation purely to meet the cap, creating inefficient investment outcomes.

Solution

In rural networks, systems between 50 kW and 1000 kW are commonplace for pumps, woolsheds, dairy sheds, cool stores, and irrigation. They are still fundamentally mass-market users not commercial generators.

To ensure the regime works as intended, I ask the Authority to:

- Option A (preferred):

Raise the threshold from 45 kW to 1 MW to reflect typical rural load and generation scale

- Option B:

Create a separate eligibility pathway for mid-scale rural solar (50 kW–1 MW), recognising the unique value these systems provide to winter peak support and rural resilience.

Without one of these changes, the proposed policy will not encourage peak time export from the segment best positioned to supply it and risks missing a major opportunity for both network efficiency and community resilience in rural New Zealand.

The Authority's objective is sound and Rural New Zealand can and wants to be part of the solution. But the 45 kW threshold excludes almost all rural generation, undermining oppertunity, disincentivising investment, and increasing inequity. A threshold aligned with rural load profiles, or a dedicated rural pathway, is essential for this policy to achieve its purpose.

Thank you for considering this submission and I would welcome the opportunity to contribute to any rural-focused refinement of this policy.

Emma Crutchley
Puketoi Farming Company

[redacted]

Email: [redacted]

Phone: [redacted]