

My name is Bruce Anthong Gulley and I'm a 72 year old pakeha male, a baby boomer. I live at [REDACTED]. 35+ years ago we built the house that we live in. 13+ years ago we installed solar panels on our house.

Right now we are building a passive house at [REDACTED]. It will have 16 solar panels on it and a battery. It will be completed in February 2026.

My neighbour has 33 panels. Other neighbours who have completed renovations recently now have solar panels. That is just our what we can see. So solar panels with large arrays are happening it is just that the industry makes it difficult.

We agree with the Electricity Authority Te Mana Hiko (Authority) aim to remove unnecessary barriers to more efficient investment in distributed generation and maximise the benefits it brings for all New Zealanders.

It seems to me absolutely crazy that New Zealand society does not harness the energy from the sun as opposed to creating more carbon dioxide by generating power from fossil fuels or building new power stations and the additional losses from heat loss from the transmission are beyond comprehension.

Currently, there are arbitrary restrictions on the amount of power those with rooftop solar and batteries connected to distribution networks can export to the grid. Higher export limits should speed up distributed generation (eg, roof top solar) and battery adoption rates because the payback period will be reduced and incentivise bigger systems to be installed. This will increase savings for homeowners and also help bring down the price of electricity for everyone on the network and the transmission costs to get electricity from the South Island to our main urban areas in the central and north of the North Island.

I support the Electricity Authority proposals to improve export limits for small-scale distributed generation (DG) by:

- setting a default 10kW export limit (with allowance to set lower limits where appropriate based on an industry-developed assessment methodology) for small scale distributed generation connections (up to 10kW capacity),
- setting default voltage response settings for inverters (using Australian setting) and allowing for distributors to set different settings where appropriate.

I support the Electricity Authority proposals to improve export limits for large-scale distributed generation (DG) by:

- mandating distributors to use an industry-developed bespoke export limits assessment method to set export limits for larger DG
- Mandating the use of the latest inverter performance standard for low voltage DG

Making sure the way bespoke export limits are set for many small businesses, community groups, farms and households who want to install more than 10kW of solar is really important to get right, so that unnecessary limits are not placed on the scale of their solar and battery installations. This critical group of customers installing mid-size solar are typically not resourced to engage in the connection process with distributors in the same way that the large utility scale distributed solar and battery firms are. Therefore it's important that the proposed assessment method that distributors use is transparent, fair and its use is monitored by the Electricity Authority to ensure it is not used to unnecessarily limit distributed generation.

Allowing for distributors to set lower default limits than 10kW where appropriate using an industry-developed export limits assessment methodology, might be needed in specific

situations but it should not be used as a way for EDBs to avoid improving network management approaches to support more customer solar investment and continuing to impose arbitrary unnecessary export limits. Electricity Authority scrutiny should be applied here, to monitor use.

Higher export limits will have widespread benefits for all New Zealanders and strengthen the resilience of the electricity supply. For example, distributed generation can increase the energy resilience of local communities by reducing reliance on electricity generated from centralised, grid-scale generation. Plus solar and battery systems can provide essential back up if there is a power outage, providing power for essential communications, EV charging and basic needs.

The country is screaming out for more generation and we know there is currently spare solar energy being curtailed by the networks that could be helping, especially in a dry year. We want to encourage the biggest possible solar systems because it reduces the costs for the homeowner and for everyone else on the network and higher export limits will help do that.

I am right now going through the tortuous process of setting up the new electricity connection to [REDACTED] and then applying for a DG Agreement. It has cost more for the cable from the pole two metre underground than it has cost for my solar system. It has taken nearly 2 months and I am not there yet. People like Vector appear to slow the process down and the call centre staff at Meridian do not understand how new connections occur. The industry appear to act like luddites as far as solar power is concerned. It is just amazing to watch the roadblocks that the industry create, presumably to increase their cost plus change out to customers. If solar was a real alternative they would have to be competitive.

Bruce Gulley

Bruce Gulley BSc, GradDipBusStuds, Dip Mgt,

CertProfNZISM | 
New Zealand Institute of Safety Management