Outlook

EA consultation on "Maximising benefits from local generation"

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To Connection Feedback <connection.feedback@ea.govt.nz>

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Electricity Authority consultation on "Maximising benefits from local generation"
Submission by Steve Southall, 19 Nov 2025

Introduction

I write as a private individual. I own a house with a 3-phase supply, and have a solar/battery system installed.

I am somewhat dismayed by this Government's energy policies, and believe that increased encouragement of domestic (and commercial) solar will help alleviate issues and support climate change commitments.

I would like to comment on three topics which would help in maximising the benefits of distributed generation.

Export limits for small-scale distributed generation

I support:

- Setting a default 10kW export limit (noting this should explicitly state a per-phase limit)
- Setting default voltage response settings for inverters (using Australian settings)
- Prohibiting distributors from imposing any limits on the nameplate capacity of installed distributed generation
- Not setting unnecessary limits on the size of solar and battery installations.

Ie we should seek to maximise the energy small scale solar can inject into the grid.

Multi-phase billing considerations

A considerable barrier to rooftop solar and recovery is the way electricity retailers handle billing, and this mostly affects multi-phase customers.

Most consumers understand Time of Use (TOU) pricing, and that the value of a kWh changes over the day due to both demand and supply considerations. For this reason, the concept of "Net metering" can't be reasonably applied as a kWh injected into the grid at noon can't be offset against a kWh consumed at 7pm.

As a result, smart meters record grid consumption and injection on separate channels by half-hourly intervals.

However the way retailers bill using this data is iniquitous, insidious and far from transparent.

Retailers (using Electric Kiwi as an example, but Octopus Energy does the same) advertise TOU consumption and feed-in tariffs, and calculate billing on half-hour intervals. But rather than amalgamating energy consumption over the phases over the period, they bill consumed energy and exported energy independently.

This is particularly aggravating for customers who have a single phase inverter on a multi-phase supply, but also affects customers with 3-phase inverters as inverters have per-phase limits and cannot rapidly balance changing loads over the phases.

My argument is that retailers should be directed to use “Net billing” within a half-hour period, where the customer is billed for the net amount of energy consumed/injected, irrespective of the phase flows.

As an example, let’s say that in a half hour period the customer:

- Imports 3kWh on phase 1
- Exports 1kWh on phase 2
- Exports 1kWh on phase 3.

For current billing models, the customer is charged for the 3kWh imported at a high tariff, and credited for 2kWh exported at a low feed-in tariff. Under “Net billing”, the customer would be charged for 1kWh consumed.

At the very least, retailers should make it clear on their websites how their billing engines work so customers can make an informed choice. It’s extraordinarily difficult to extract this information from retailers.

Can the EA please address this.

Access to metering data

My 3-phase smart meter (an Atlas EDMI Mk10D) contains a wealth of per-phase metering data covering power, voltage and power factors. However even though I host the meter on my property this data is completely inaccessible to me, and my requests for access to my retailer and associated metering company have fallen on deaf ears.

For any consumer wanting to monitor and optimise their energy consumption, surely they should have real-time read access to this data (as is done in some overseas jurisdictions). The summary data provided by retailers is amalgamated, billing-focused and historical, so is not fit for purpose.

Can the EA please address this.

Summary

In summary, the EA has the ability to direct changes so customers (and the country) can maximise the benefits of distributed generation:

- Relax the limits relating to grid export
- Ensure customer billing is fair and transparent
- Allow customer access to metering data.

Hoping the EA can work to the benefit of the consumer on these issues.

Regards - Steve

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