To: taskforce@ea.govt.nz

Tēnā koutou,

I'm a Sustainability Professional in the food sector and a citizen with an interest in ensuring Aotearoa New Zealand has a resilient, sustainable, and fair energy system. Electrification has a huge role to play in delivering that. We need to reduce our collective reliance on fossil fuels as quickly as possible and transition to renewable electricity wherever possible. This is the only rational response to climate change, escalating and unpredictable energy prices, fossil fuel precarity, and the imperative to reduce our trade deficit.

At present I perceive that the electricity system in Aotearoa New Zealand operates as a loosely aggregated collection of profit-seeking businesses focused on achieving their individual key performance indicators at the expense of all else. In that sense, we do not have an electricity system with shared goals at all.

What is required is not the empowering of consumers. It is the **redefining of consumers as participants in the energy system**.

Distributed energy generation and storage has much to commend it if the goal is energy sovereignty, resilience, sustainability, and fairness. Many citizens, including my wife and I, have invested heavily in solar generation and battery storage despite the long payback period and little financial incentive to do so. I am sure that many others would seriously consider investing private capital in building a world class electricity system in Aotearoa New Zealand given more appropriate and equitable settings. There is an opportunity to show world leadership in this regard.

As such, I agree with the stated aim of providing consumers (aka participants) with more options. I also agree with the high-level problems identified:

- A missing distribution price signal for injection;
- Current injection plans tend to offer fixed rates only;
- Low awareness of benefits of time-varying price plans.

I agree with the proposal to require large retailers to offer Time of Use plans as this empowers consumers (participants) to take better control of their impact on the electricity system and their own bills (2B).

At our home in North Canterbury, we use more electricity than an average household as we have two electric vehicles. Our experience as a household is that it is very simple to minimise the purchase of grid energy at times of peak demand using the vehicles' charging time functions (set and forget). Other home appliances such as the dishwasher and washing machine are also easily timed for off peak usage. We are also in the habit of manually controlling our electric water heating although for much of the year water is heated using our wetback woodburner. Time of Use plans seem to be a very simple but effective nudge.

However, I do not agree that the Task Force's proposed solutions for 2A and 2C will address the problems and achieve what is required.

I agree with the addition of a new rule to “make sure power companies pay people who sell power to the network” (2C). However, this the rule needs to be explicitly extended beyond just “peak times” to include dry years and other extended periods of extra constrained supply. Additionally, for all times, payments for supplied power should reflect the contribution of this power to general supply and the role the energy is playing in reducing the need for new generation and distribution assets, rather than just on the market value at peak times.

I agree that retailers should be required to pass through benefits to consumers (participants) from distributors paying a rebate for supply at peak times.

I support the addition of a requirement in the Code for distributors to pay a rebate when consumers (participants) supply electricity at peak times (2A). While I strongly support the objective of the proposed amendment, I do not support the proposed solution of principles-based rebates.

Principles-based rebates would likely provide too much flexibility, be difficult to monitor and enforce, and not achieve the desired result. The benefits of this proposed solution are unlikely to outweigh the costs.

Instead, I support the alternative option of consumption-linked injection tariffs (with adequate safety valves to ensure too much power does not flow back in). This would fairly apply similar pricing to both consumption and injection during peak times. I support this being a perfectly symmetrical export tariff, and not differential as suggested. This would also strongly encourage distributors to improve their consumption tariffs. As a consumer (participant), a symmetrical tariff is far easier to understand, and a much fairer way to price electricity, where my electricity is treated as being just as valuable as an energy company's energy export or reduction.

These rebates should apply to larger consumers (participants) and generators as well as mass-market consumers (participants), so as to ensure all are appropriately incentivised. This will lead to the lowest-cost possible distribution system for all consumers (participants) in the long-term.

At home we have already invested in over 20kW solar generation and 24kWh battery storage, with the capacity to export 20kWh to the grid. With appropriate incentives, we would greatly increase both storage and generation to feed more power back into the grid at peak times.

Ngā mihi.

Dr Roger Robson-Williams and Dr Melissa Robson-Williams