Submission to the Energy Competition Task Force community engagement that seek to empower electricity consumers to take better control of their own energy bills

Subject: That All large power companies must offer their customers at least one time-of-use plan

My name is Roland Nash, I live on Waiheke Island for most of the year and witness energy poverty here, especially among older permanent residents that could benefit from lower energy prices achieved by solar renewables and the ability to consume electricity at times lower prices.

I am excited by the potential to empower consumers to contribute to reshaping our energy future. While these proposals are a step in the right direction, key changes will ensure individuals make decisions that lead to Aotearoa New Zealand building out the most economic and resilient energy system possible.

This is important to me because continuing with the status quo, where we have no real competition or economic supply alternatives available, can only lead to progressively higher electricity prices and less energy security.

There is little debate that New Zealand has reached a critical impasse where the country has insufficient generation capacity and grid resilience to provide reliable electricity year-round. Investment is required in increasing base capacity for both generation and transmission to major, growing population centres.

Relying on the semi privatised government generation and distribution companies to increase capacity with traditional lines and generation assets will come at significant cost and will likely ultimately result in more dependence on fossil fuel.

I agree with the stated aim of providing consumers with more options, and that flexible distribution generation can help drive down costs for everyone into the future. 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 to take better control of their impact on the electricity system and their own bills (2B).

I access a time of use plan to charge my EV making the low carbon transport I have chosen affordable.

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) and but that to do this the rule needs to to be explicitly extended beyond just "peak times" and into:

Dry years and other extended periods of extra constrained supply.

For all times, reflect the contribution of this power contribution to general supply and the role the energy is playing to reduce need for new generation assets, rather than just on the market value at peak times.

I agree that retailers should be required to pass through benefits to consumers 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 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, a symmetrical tariff is far easier to understand, and a more fair way to price electricity, where my electricity is treated just as valuable as an energy company's energy export or reduction.

These rebates should be applied to larger consumers and generators as well as mass-market consumers, as ensuring all are appropriately incentivised will lead to the lowest-cost possible distribution system for all consumers in the long-term.

Incentivising people to either supply power when it's needed or reduce demand during peak load periods will improve the resilience and overall peak capacity of our electricity supply networks for the simple reason that it reduces peak demand. The value this

resilience brings to the electricity is more than the spot price of electricity as it defers investment in line and generation capacity.

A practical way to incentivise this is through electricity use tariffs that incentivise off-peak consumption and supply of electricity into the grid during peak demand.

Key is this in providing sufficient incentive to recover investment in battery storage systems through electricity cost savings.

A practical example is useful to understand this-

Residential PV systems with battery storage are typically 2.8-3 times more expensive than Grid Tied Solar PV per kW installed.

To understand the value required for such an incentive it is useful to understand favourable economic conditions that need to occur for consumers to invest in PV storage systems. Using a hypothetical 6kWp Grid Tied Solar PV home system suitable for 3-4 people. Such an installation today costs in the region of $10,000- $12,000. Adding 10kW of storage and a hybrid inverter increases this to $30,000- $38,000.

In this example residential battery storage adds $20,000- $26,000 to the PV system installation cost.

An equivalent annual rebate of $2,200 would be required, assuming a 7-year payback period and 6% finance cost.

Required for this investment to be viable is stable, reliable pricing and incentive from the electricity retailer.

It is likely that additional investment support in the form of grants, or low interest finance will be required for any meaningful uptake in such systems in the residential sector to occur.

Practical incentives, either by way of financial relief or grants have been successful in encouraging homeowner participation and investment in solar PV investment in Australia, US and Europe over the past 2 decades. Following this approach will likely have the same positive effect in stimulating investment in residential and commercial PV installations and sustained growth in renewables that make a significant contribution to the resilience and capacity of our nation’s electricity generating capacity where and when it is needed.

A strong monitoring and reporting regime to ensure compliance and provide valuable insights is critical across all changes. Complementary Code changes should be undertaken to ease the process of solar and battery installation and upgrades for consumers and enable them to maximise the size of their contribution to the system.

How does this consultation fit with all the other things?

A significant huge amount of relevant consultations and changes underway in the energy system at the moment. These include:

- Changes to the permitted voltage range: consultation on this happened late last year, and we are hopeful the Government will soon make changes that should result in a doubling of the default limits of how much electricity households can export.
- Wider Task Force proposals and consultation, including consultation closing 23 April on a proposal to introduce new "mandatory non-discrimination obligations" for gentailers.
- Expected rewrite of the Energy Efficiency and Conservation Act 2000, which is being advanced this year and will pave the way for things like smart EV charging.
- Updates to hundreds of outdated Electricity Safety Regulations, which include outdated rules for things like inverters that add cost and complexity and can prevent the best technology from being used.
- The Regulatory Systems (Immigration and Workforce) Amendment Bill, which will enable future updates to Electricity Safety Regulations to be a lot easier, should be advanced later this year.
- Consumer Data Right Bill, which we submitted last year and is with Parliament. It seeks to improve consumer access and control over information.

I trust that my submission will be considered and make a positive contribution to the Energy Competition Task Force review.

Yours sincerely, Roland Nash