

# Inefficient price discrimination in the wholesale market - Issues and options

Submission to the Electricity Authority – Te Mana Hiko

When you take a whole of system view of the electricity market it is clear that the Electricity Authorities' 52 questions can be condensed into two:

Is the system being gamed by the generator-retailers and/or New Zealand Aluminium Smelters (NZAS)?

And

Can the system be modified to prevent this – to make it operate fairly and efficiently in the interests of New Zealanders?

The short answers are:

Yes, the system is being gamed by the generator-retailers and NZAS. Otherwise there would not have been the nation-wide price spike and the blackout in parts of Auckland in August 2021.

Nor would residential power prices in New Zealand have gone up by 48% since 2000 after adjusting for inflation according to the Electricity Price Review from 2018.

Nor would generation companies have made an estimated \$5.4 billion in “excess profits” between 2010 and 2016 according to Auckland University energy economist Stephen Poletti.

Nor would NZAS have been subsidised by an estimated \$125 to \$150 per year by the New Zealand taxpayer. But the system is sufficiently complicated that proving this is almost impossible.

And

It is not likely that the system can be modified successfully. As long as the generator-retailers have de-facto control of both the generation and retail markets they will be able to game the market. Oligarchies have always managed to find ways to game the system (witness the petrol and diesel markets and supermarkets). In a complicated system like the current one it is difficult to fix one problem without introducing others. And it is usually only a matter of time before they find a way to game the new system.

The generator-retailers know each other's businesses well enough to know the options available to each other and to capitalise on any uniquely favourable conditions – and when to hold back so they can all profit – at the expense of New Zealand customers.

And as long as New Zealand politicians would rather continue subsidising NZAS than face the political fallout if NZAS leaves then NZAS can continue to get cheap electricity.

New Zealand needs a radically different system to provide for our future needs.

We have inherited a system designed to serve a small population with a single system from (apparently) abundant, predominantly renewable resources, matching supply and demand in a single government-controlled system. This has been changed in stages to the current market system which attempts to have a fair market between generators and suppliers, but this is undermined by the generator-retailers' de facto control of the market.

The past system of generators controlling the supply of electricity to the customer needs to be replaced by a system where generators and users of all kinds and sizes are dynamically balanced as near-continuously as possible.

The market will need to enable generators and users to transact business on as near-continuous a basis as possible.

For this to happen there are a number of necessary conditions:

- The grid will have to be upgraded to handle vastly increased two-way traffic and fluctuating loads. Having all kinds of different sources which can be generated or made available at different times will help with this. Dynamic short term storage will also be needed.
- Open standards and information will be needed so that free and fair transactions can take place between parties of all sizes.
- Barriers to joining the market must be progressively lowered so that all parties can take part on a fair basis.

This cannot happen unless the generator-retailers' de facto control of the market is ended so that all can take part on a fair basis. This is the only way the right incentives can be built into the system. We can then start to plan and transition from the present dysfunctional system to the dynamic responsive system that we need.

The Electricity Authority could perform a great service to New Zealand by acknowledging this and starting to plan accordingly.

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