

To: Electricity Authority

Re: Submission on Green Paper

Thank you for the opportunity to respond to the Green Paper *Working together to ensure our electricity system meets the future needs of all New Zealanders*

(https://www.ea.govt.nz/documents/7187/Green_paper_-decentralised_electricity_system.pdf).

I set out below some responses to the specific questions in the Green Paper. I also include, in response to the last of those questions, a link to my submission to a similar MBIE discussion in 2023, which provides further detail.

Question 1

Do you agree with the description of decentralisation?

If not, why not?

The description is pitched at the most general level, repeating well-worn generalities from the international literature and popular discussion, but entirely failing to engage with the hard specifics of the New Zealand electricity system. To enable the positive developments and aspirations set out here to come to fruition, truly radical changes are needed to the structure and governance of electricity in New Zealand, and I am not certain that the Authority has either the will or the mandate to bring those changes about. However, here's hoping!

In particular, there are three specific areas in which the path to genuine decentralisation is currently blocked:

- 1) the lines-energy split, embedded in the 1998 Electricity Industry Reform Act, blocks local lines network operators from becoming the foci for local energy communities by combining energy management with lines operation – specifically, participating in and coordinating energy production, battery storage, demand-side management and provision of extension services for households and small businesses entering into electricity supply on their own account.
- 2) the current approach of Transpower (and the Authority) which has blocked electricity islanding capability. Recent examples of the issue were the complete loss of electricity in Hawkes Bay after Cyclone Gabrielle took out the Redcliffe substation, with no distributed generation equipment able to fill the gap; and even more dramatically the loss of power in Northland when a Transpower pylon fell over and all solar and geothermal generation downstream of the breakage had to shut down - because Top Energy had not been allowed to establish any arrangements for the Ngawha geothermal plant to operate in islanded fashion to supply the local market in the absence of connection to the grid.
- 3) the compulsory pass-through of grid charges by local distributors, as fixed charges to consumers - a price distortion which severely reduces the economic viability of distributed generation - because although distributed generation reduces the need for grid services, there is no recognition of this in current pricing arrangements. One solution would be to return to the original NZES bundling arrangement under the Bulk Supply Tariff which enabled central generation and grid costs to be averaged and bundled. This would mean that distributed generation would confront central supply on a level playing field, with local distribution networks as the platform for genuine competition.

Question 2

Do you agree with the articulation of the potential outcomes and benefits from decentralisation for consumers?

If not, why not?

The articulated outcomes are all highly desirable and ought to have been pursued from the start of the electricity reform process. The fact that they have not been pursued, and that on the contrary they have been systematically foreclosed by the major vested interests in the industry, goes to the heart of the problem: these outcomes are incompatible with the rent-taking and asset-value-protection of the major incumbent industry players. The articulated outcomes are Panglossian pipe-dreams until the prevailing anticompetitive industry structure is addressed.

Question 3

Do you agree with the articulation of the possible challenges to unlocking the benefits of decentralisation?

If not, why not?

Paragraph 4.4 goes to the heart of the issue. Paragraphs 4.1-4.3 simply ratify the prevailing status-quo power imbalance, that deprives consumers and small players of autonomy and opportunity. Breaking the dead grip of market power is the central requirement and will not be achieved by just reciting easy nostrums about empowerment.

Paragraph 4.6 correctly notes that “current market, distribution pricing and retail services do not fully enable or reward consumers for local sharing of local energy, including the potential benefits of community batteries”. Absolutely right. But then paragraph 4.7 talks of “sophisticated management tools … to maintain grid stability and optimise operation”, which signals a return to the dominance of Transpower managers and industry-captured consultants over local empowerment. So long as price-making power remains centrally held, local empowerment will be minimal. But making Transpower a price-taker rather than price-maker, and bringing the legacy hydro assets into a new role as backstop for distributed renewables rather than dominant vested-interest forces in the dispatch process, are much tougher than the Green Paper seems to realise.

Paragraph 4.13’s recognition that “decentralisation will require organisations within and beyond the electricity sector to take on new or different roles — across governance, asset ownership, planning, finance, market facilitation, and system operations” is true, but glosses over just how radical – and politically explosive – that process would be.

Question 4

Do you agree with the articulated opportunity statement for a more decentralised electricity system?

If not, why not?

See above. The articulated opportunities will be resisted to the last ditch by the entrenched vested interests that currently dominate the industry.

Question 5

What other feedback would you like to provide to input into the discussion on, for example:

- a) what a more decentralised electricity system might look like,**
- b) how this might benefit consumers, and**
- c) what might be needed to unlock these benefits.**

Rather than writing an extensive new discussion here, I refer the Authority to my extensive submission to a similar MBIE consultation process in 2023. That submission is online at <https://geoffbertram.com/wp-content/uploads/2023/10/bertram-submission.pdf> .

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