

11 April 2024

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**Submission on:** *The future operation of New Zealand's power system - consultation paper*

## Introduction

1. Thank you for the opportunity to make a submission on this consultation paper. This submission is from the Consumer Advocacy Council, the independent advocate for residential and small business electricity consumers in New Zealand.
2. If you have any questions regarding our submission, please contact:
  - Emma Sturfels, acting manager, Consumer Advocacy Council
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## Response to questions

**Q1. Do you consider section 3 to be an accurate summary of the existing arrangements for power system operation in New Zealand? Please give reasons if you do not agree.**

3. We consider the summary of existing arrangements in section 3 provides a high-level description of existing arrangements. We suggest the summary would benefit from inclusion of how (and to what extent) existing arrangements require consumer interests to be taken into account in planning and decision making.

**Q2. Do you agree that we have captured the key drivers of change in New Zealand's power system operation? Please give reasons if you do not agree.**

4. In addition to the factors identified, it would be useful to explicitly recognise that changes will also be driven by consumer demand for affordable and sustainable electricity.
5. Our survey research has found consumer concerns about electricity costs are growing. Our June 2023 [consumer sentiment survey](#) showed:

- 65% of domestic consumers felt the cost of electricity was putting pressure on household budgets, up from 58% in December 2022
  - 28% of small businesses said the cost of electricity was putting pressure on their finances, up from 21% in December 2022.
6. Cost concerns and a desire to reduce environmental effects are motivating many consumers to consider changes to their electricity use. Our [2023 behavioural survey](#) found that over the next five to 10 years:
- almost one in two (48%) consumers think their home will have switched to mostly electric power tools and equipment, such as electric lawnmowers
  - four in 10 (42%) think their household will have an electric car and a similar number (40%) think they will have an electric bike, scooter or motorbike
  - about one in three (32%) of those with mains gas expect to swap gas appliances for electric ones.
7. This survey also found significant interest from both households and small businesses in new technology:
- 71% of domestic consumers and 75% of small businesses were interested in this technology to help manage power bills
  - 70% of both domestic and small business consumers were interested in learning about new ways of generating, storing and distributing electricity
  - about four in 10 considered themselves “early adopters” of new tech.

**Q3. Do you have any feedback on our description of each key driver?**

8. See our response to question 2.

**Q4. What do you consider will be most helpful to increase coordination in system operation? Please provide reasons for your answer.**

9. The Council agrees coordination needs to be improved to ensure the system is operated in a way that helps meet consumers’ needs. The growth of renewable generation and distributed energy resources (DER) will also require a system that is able to quickly respond to changes in both power flows and network loads.
10. Effective system coordination is not something that can be left to chance. It will need clear and robust planning processes, which ensure consumer needs drive decision making, and a system operator that has oversight of the network and the capacity to respond appropriately to changing conditions.
11. In particular, the growth of DER will see the development of many new energy injection points (and many potential points of failure). System coordination will need to accommodate this development, and the many domestic and small business consumers who will have capacity to make the power they generate available to the network.

**Q5. Looking at overseas jurisdictions, what developments in future system operation are relevant and useful for New Zealand? Please provide reasons for your answer.**

12. Our counterpart in Australia, Energy Consumers Australia (ECA), recently ran a series of webinars on 21<sup>st</sup> energy system planning. This series included a session on integrated transmission and

distribution planning, which looked at emerging best practice and the move internationally to “more transparent and intentional” planning as countries navigate the energy transition.

13. In the US, the term “consumer-oriented integrated planning” is being used to highlight the central place of consumers in future networks. Using this approach, planning starts by looking at the needs at the consumer (rather than those of network companies). This type of integrated approach is also being recognised as essential to consumer affordability.
14. Further information on this approach can be found in the ECA’s webinar series at [21st Century Energy System Planning Webinars \(energyconsumersaustralia.com.au\)](https://energyconsumersaustralia.com.au). We would welcome the opportunity to discuss how such an approach might be applied to improve New Zealand’s electricity transmission and distribution planning.

**Q6. Do you consider existing power system obligations are compatible with the uptake of DER and IBR-based generation? Please provide reasons for your answer.**

15. The existing power system was developed to provide electricity flows in one direction i.e., from networks to consumers. The grow of DER where electricity flows will be bi-directional i.e., from networks to consumers and from consumers to networks, will require changes to the system and system obligations.
16. We agree with the authority’s comment (para 5.19) that a “whole-of-power-system approach to the planning and operation of New Zealand’s power system is needed to unlock the full potential of consumer-side technology development”. This will require a proactive approach by the authority to ensure the system and system rules are fit for purpose.

**Q7. Do you consider we need an increased level of coordination of network planning, investment and operations across the New Zealand power system? Please provide reasons for your answer.**

17. As noted in our response to question 4, the development of DER will require increased system coordination. This needs to include better coordination of network planning, investment and operations across the power system to ensure the system is fit for purpose and meets consumers’ needs.

**Q8. Do you think there are significant conflicts of interests for industry participants with concurrent roles in network ownership, network operation and network planning? Please provide reasons for your answer.**

18. There is a very real risk of conflicts of interest when companies have concurrent roles in network ownership, operation and planning. As the consultation paper notes (para 5.52), this risk is heightened when monopoly lines companies are privately-owned and are therefore likely to have a greater incentive to maximise profits.
19. Conflicts of interest can lead to over-investment in the network, resulting in consumers paying higher costs. Companies may also be reluctant to change their business model to plan for non-network solutions if these options are seen as eroding future revenue and therefore reducing profits.
20. Given the potential for these conflicts to cause barriers to DER and demand management alternatives that can reduce costs to consumers, we consider this is an area that warrants further

attention by the authority. We note moves in the UK to create a “future system operator”, which may provide a useful model to explore further for adoption in New Zealand.

Yours sincerely,

A handwritten signature in purple ink, appearing to read 'DHart', with a stylized, cursive script.

Deborah Hart

Chair

Consumer Advocacy Council