



9 February 2024

Electricity Authority  
Via email [policyconsult@ea.govt.nz](mailto:policyconsult@ea.govt.nz)

Tēnā koe,

Thank you for the opportunity to provide feedback on the "Code amendment omnibus two: December 2023" consultation paper and to have this feedback considered before any final decisions are made.

The paper consults on three discrete proposals to amend the Electricity Industry Participation Code 2020 (code).

1. Amending Part 6A to include all generation technology,
2. Permanent code amendment to clarify use and availability of controllable load,
3. Updating and clarifying the scope and effect of Part 6A obligations

In this submission we respond to the consultation questions in the format provided. We are happy to help and look forward to reading submissions from others.

If you have any questions regarding this submission or would like to talk further on the points we have raised, please contact [jeremy.smith@powerco.co.nz](mailto:jeremy.smith@powerco.co.nz).

Nāku noa, nā,

A handwritten signature in black ink, appearing to read "Stuart Dickson".

**Stuart Dickson**  
General Manager, Customer  
**POWERCO**

## Question responses

We support the submission by Energy Networks Aotearoa.

### Include all generation technology in Part 6A

Q1.1 Do you support the Authority's proposal to include all generation technology under Part 6A? Please explain your answer

Yes, we support the Authority's proposal to include all generation technology under Part 6A. It updates the terminology to keep pace with the evolution of generation in Aotearoa. This takes a market participation approach rather than focusing on the underlying technology.

Q1.2 Do you support the Authority's proposal to create a new definition for "connected generator" Please explain your answer

While we support the intention of the proposal to create a new definition for "connected generation" we are concerned that it will create ambiguity for distributors with distributed generation such as BESS or diesel generators that are not market participating but are used for providing distribution services. These assets are often used to provide voltage support or to avoid outages in more remote parts of the network with energy being gifted<sup>1</sup> into the local network. **The amendment should clarify that these forms of "connected generation" are not included in the 50MW cap for generation.** Connected generation should only include generation that is market participating. In the future DERs on our network providing distribution services are likely to become more common. An example on the Powerco network is our Whangamatā BESS<sup>2</sup> installed to provide a more secure power supply to our Whangamatā customers.

Q1.3 Do you agree the proposed amendment is preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objective in section 15 of the Electricity Industry Act 2010

Yes, the proposed amendment is preferable to the other options if the comments in Q1.2 are taken into account.

Q1.4 Do you agree with the analysis presented in this Regulatory Statement? If not, why not?

Yes, we agree with the analysis presented in the Regulatory Statement

Q1.5 Do you have any comments on the drafting of the proposed amendment?

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<sup>1</sup> Section 2.19 (a) of the consultation paper

<sup>2</sup> <https://www.powerco.co.nz/what-we-do/our-projects/whangamata-bess-project>

As per Q1.2, we would like clarity on whether a distributors "connected generation" used to provide distribution network services, and is not market participating, is included within the applicable caps. To meet the policy intent, our submission is that the drafting should clarify that this type of connected generation is not included.

## **Clarify the use and availability of discretionary demand control**

Q2.1 Do you support the Authority's proposal to permanently implement the intent of the urgent Code amendment, Electricity Industry Participation Code Amendment (Discretionary Demand Control) 2023? Please explain your answer.

While Powerco supports the intent of the code amendment, it has concerns over the operational resource requirements, new systems required and the impact on our network assets.

Systems, operational resources, and additional plant maintenance required to implement the code amendment permanently, come at a cost that is not being compensated via the market or our default price path set by the Commerce Commission.

When a warning notice is sent, the process of calculating the load available and submitting the difference bids into the system is resource heavy. Network controllers have had to create and manage tools to calculate estimated controllable load in real time which has put further pressure on resources. Requests or instructions come through during periods of peak load when the control room and network controllers have a high workload managing the distribution network.

It will eventually require new systems (especially with split bids) or personnel to operate these initiatives in the future to ensure there are no adverse effects on managing our network operations. Electricity retailers are starting to experiment with controlling customer load directly, further complicating estimation, meaning tools would need external real-time and forecast load values via retailers to estimate the quantum of controllable load.

More frequent use of demand control assets like ripple, will result in increased wear and tear on the assets, requiring more frequent maintenance and a higher likelihood of assets faulting. Escalated faults on ripple assets will also impact street lighting (public safety risk), metering rates and managing other load types such as hot water and electric vehicles for the security of supply.

To date these costs have effectively reduced our regulatory expenditure allowances, drawing resources and funds from existing work programmes.

These services offered to the market should be compensated at market rates, for the high-value service being provided. The scheme is set up much like the reserves market, given that resources are expected to be controlled for the time periods offered. On this basis, the controllable load offered should be compensated at the reserve market prices regardless of whether the load is requested to be controlled.

Q2.2 Do you support adopting the term controllable load? Please explain your answer.

Yes, we support change to the term controllable load, aligning with the industry standard.

### Q2.3 Do you support the use of the term 'resources' over 'quantity of demand'? Please explain your answer.

No, we do not support the use of term resources over quantity of demand. The consultation paper describes the intention of this change:

*"This would enable a difference bid to reflect the total net reduction in load at a grid exit point that is available to be utilised (whether by controlling demand or increased network support generation)."*

This change will compel distributors to use network support generation like BESS systems and Diesel generators to reduce network demand during a low residual event. If a distributor is not intending to use the "resources" for network demand management (or in the reserves market) during the notice period, they are compelled to offer these for use by the system operator. This will likely cause escalated maintenance and use costs for distributors as network support generation, with a lack of compensation (based on the consultation paper assumptions) which would see Powerco incur costs for the benefit of others who derive income from low residual events such as those in the reserve or wholesale markets. This will also likely accelerate the depreciation of assets and impact the expected ROI on these assets.

To illustrate this from a Powerco perspective, our Whangamatā BESS was designed to support loading issues for the 33kv line during holiday periods, faults, and maintenance. Ongoing grid demand management support was not factored into this business case. The use of these batteries over and above the original design has the potential to adversely impact their life cycle, in addition to their being contracts with suppliers and service providers for specific MWhr/year usage to stay within their warranty limits. Replacing faulted battery cells outside of the warranty process would prove very costly. Offering this asset as part of this scheme would increase risk and cost significantly, while also reducing the long-term consumer benefits that our Whangamatā BESS was designed to achieve.

In addition to the BESS, if Powerco was compelled to operate our diesel generation, these costs would also escalate due to higher fuel usage and additional maintenance costs, this is before accounting for the additional release of carbon into the atmosphere. A higher carbon release than necessary is counterproductive to the environment and Powerco's strategy. With carbon accounted for in ESG reporting, will the Authority or the system operator incur these additional carbon costs? Or will it fall onto Powerco/the distributor?

### Q2.4 Do you support the proposal to introduce two price-bands? Please explain your answer

While from an operational perspective the proposed price bands and load type are manageable, the compensation issue for resource and asset usage remains. This proposal will provide an improved stability of supply and further negate the likelihood of an emergency event.

### Q2.5 Do you support pricing requested controllable load at \$0.01/MWh? Please explain your answer

We are of the same view as the ENA that providers of controllable load through the difference bid process should be compensated for making these resources available. We believe there are two ways in which this can be achieved:

1. Load reduced by the EDB on the request of the system operator should be compensated at the bid price (\$9000/MWh) during a grid emergency.
2. Prevailing reserve market prices should be paid for all trading periods covered by a notice (requested and instructed controllable load)

Both these options would maintain the integrity of the wholesale and reserves markets, recognise the value of controllable load and be in the long-term interest of consumers by encouraging EDBs to continue to maintain and invest in their load control infrastructure. This becomes even more important if EDBs are compelled to offer all network support assets.

Clarity is needed on the intention for the requested controllable load change as the proposed definition amendment and then the comment in section 3.15 is contradictory. By the definition, if a difference bid is submitted for requested controllable load, the load will only need to be reduced if a formal notice is issued, whereas the commentary in 3.15 suggests it should be reduced regardless of a notice.

- ***“requested controllable load*** means the quantity of resources (in MW) that a connected asset owner estimates will be available for use by the system operator when requested under a formal notice.”
- **Section 3.15:** “...this load would need to be controlled for the time periods it relates to – regardless of whether the system operator requests it.”

Q2.6 Do you agree the proposed amendment is preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority’s statutory objective in section 15 of the Electricity Industry Act 2010

We have no further comments.

Q2.7 Do you agree with the analysis presented in this Regulatory Statement? If not, why not?

We disagree with the “Costs” section of the regulatory statement, based on our analysis presented in answers to prior questions. Distributors costs could increase significantly, are not marginal, and have not been accounted for in the assessment.

Q2.8 Do you have any comments on the drafting of the proposed amendment?

We have no further comments.

## **Updating and clarifying the scope and effect of Part 6A obligations**

Q3.1 Updating and clarifying the scope and effect of Part 6A obligations.

We support the updating and clarifying the scope and effect of Part 6A obligations.

Q3.2 Do you agree with the proposals? Please explain your answer

Yes.

Q3.3 Do you agree with the analysis presented in this Regulatory Statement? If not, why not?

Yes.

Q3.4 Do you have any comments on the drafting of the proposed amendment?

No.