21 July 2023

Consultation — Ensuring an Orderly Thermal Transition
Future Security and Resilience
Electricity Authority
PO Box 10041, Wellington 6143

Via email fsr@ea.govt.nz

Tēnā koutou,

Monitoring complex interdependencies for reliability in the transition

Ensuring market arrangements are in place to support investment decisions and an orderly thermal transition will contribute to reliability both in the short and longer term. Powerco supports the Electricity Authority (EA) regularly checking the risks and responses to achieving the right level and type of energy capacity and storage in the system, for thermal as well as other related components of the system.

Powerco is one of Aotearoa's largest gas and electricity distributors, supplying around 354,000 (electricity) and 113,000 (gas) urban and rural homes and businesses in the North Island. These energy networks provide essential services and will be core to Aotearoa achieving a net-zero economy in 2050. A well-managed transition is critical for Powerco and our customers: this includes entry and exit of generation plant. Our summary views on managing risks to achieve the right level and type of energy supply in the transition are:

EA's role in reliable capacity in the transition

- We support EA reviewing market settings to ensure they incentivise and deliver an orderly transition. The right level of capacity and stored energy will support reliability, emissions reduction and equity
- EA's analysis of risks and options needs to be ongoing during the transition. This includes considering how options can provide a response for multiple transition inputs/outcomes (thermal being one)
- The paper notes a managed transition of gas supply and infrastructure is not part of this work and that MBIE workstreams will consider these aspects. While overlapping work needs to be avoided, there remains is a **critical reliability interdependency** with upstream and downstream gas infrastructure. We recommend that the EA work closely with MBIE on orderly pathways for these interdependent, foreseeable, and manageable transition issues.

Risks are difficult to model with many interdependencies

- EA has concluded from the Concept modelling that risks for thermal investment decisions will be low with change/retirement for thermal by 2032 providing for a planned transition. We note that the conclusions are based on several assumptions and a range of factors that could converge to quickly change the risk of sub-optimal decisions. Regular modelling and review of market behaviour is required
- Investment in renewable generation is a critical interdependency for thermal investment decisions. Generators need a connection to supply customers, via either the transmission or distribution networks. We endorse EA to work with MBIE to facilitate development across the system and keep decision makers informed (eg on timing). It is Powerco's view that RMA National Policy Statements need reform to facilitate generation, transmission **and distribution** build at the pace needed for an orderly transition. Current proposals do not facilitate distribution networks to support generation connections, undermining the lowest cost transition pathway (ie one with a significant contribution from distributed supply and storage options).

Flexibility and responsiveness in options

- Monitoring, reassessment, new options and changes will be necessary during the transition. We endorse EA to embrace the principles of flexibility and responsiveness in its approach to introducing, modifying and removing options during the transition. We recommend a first review post-winter 2023.
- Powerco supports providing information and incentives to support transition decisions, beyond just thermal. We agree with broader implementation of the winter 2023 work, for example ongoing improved visibility about demand and supply changes, and discretionary demand control. (Options A and D)
- The winter 2023 work looked at key operational options and identified the most effective options to pursue in 2023 and further ahead. We support continued work on the options which could not be implemented in time for winter 2023, and keeping the non-recommended options on the table for the future should the risks change (Options D, E)
- EA assessed the period up to 2025 as 'lower risk' of thermal investment issues. This provides time to further assess and pursue some of the more difficult options (Options G, H, I).

EA's work concludes that thermal transition risks are low and many response options are already in-hand. We encourage EA to continue to monitor transition risks, effectiveness of implemented options, and be responsive to changing the Code. In particular, information provision to support good market operation, close monitoring of identified risks, and working with others on critical interdependencies, should be an underlying aim of EA's work to support transition risks.

If you have any questions regarding this submission or would like to talk further on the points we have raised, please contact Irene Clarke at Irene.Clarke@powerco.co.nz.

Nāku noa, nā,

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