



Electricity Authority
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Manawa Energy submission – Winter 2023 solutions

Introduction

Manawa Energy (**Manawa**) thanks the Electricity Authority (**Authority**) for the opportunity to submit on its November 2022 *Driving efficient solutions to promote consumer interests through winter 2023 consultation paper* (**Consultation paper**).

The Consultation paper discusses risks around the availability of sufficient flexible generation and demand response as New Zealand transitions away from thermal plant and relies on intermittent plant for its core energy requirements. A particular focus is a potential supply shortfall in the winter of 2023.

The Consultation paper presents 11 possible options to address these risks. The Authority is seeking feedback on these options and seeking to understand any other options that might not yet have been identified.

The Authority has a statutory duty to promote reliable supply by the electricity industry for the long-term benefit of consumers.

Problem definition and industry response

The System Operator has advised that it is becoming increasingly difficult to co-ordinate supply and demand at all GXPs in certain periods.

As the Authority is aware, the CE Forum (of which Manawa is a member) shares the System Operator's concerns around the implications of the changing system on reliability of supply. There is evidence that the system is being run more precariously as supply is not being committed despite spot market price signals. We agree with the CE Forum's view that the security of supply standards in the Code (based on winter capacity margins) are no longer fit-for-purpose and need to be reviewed.

The CE Forum has been considering a practical solution for next winter. We have been part of this process and have contributed to, and support the group's views, while noting that there is more development work to be done under some urgency.

Causes

In addition to the causes noted in the Consultation paper, we think the removal of peak demand charges for distributed generation and providers of embedded demand response (such as ripple control) is also a contributing factor.

- As we explained in our submissions on the Authority's September 2022 *Avoided Cost of Transmission (ACOT) – proposed TPM related amendments consultation paper*¹, distributed generation no longer has the same incentives to operate at likely times of system peak demand. For example, when scheduling maintenance ahead of time. Under the current rules

¹ <https://www.ea.govt.nz/development/work-programme/pricing-cost-allocation/avoided-cost-of-transmission-payments/consultations/#c19238>

distributed generation owners may not have sufficient prospect of earnings to make their plant available when the necessary commitment has to be made.

- The removal off RCPD charges means the providers of embedded demand response are now determining their own practice in relation to the deployment of load control at peak periods. This adds to the overall uncertainty of what might be available to the System Operator when it needs to issue a grid emergency notice.

Solutions identified by the Authority

Of the solutions identified by the Authority, Manawa agrees:

- It would be beneficial to publish the residual offer information used by the System Operator when calculating Grid Warning and Emergency Notices (Option A);
- It would be beneficial to provide sensitivity case spot price forecasts in forward schedules as well as central forecasts via WITS if practicable, or alternatively on the System Operator's website (Option B);
- It is not practicable to improve the quality of intermittent generation forecasts by Winter 2023, but we support cross-industry work to do this as soon as practicable (Option C);
- The System Operator should procure an external wind forecast and ask participants to review their offers in the event of significant discrepancies between the forecast and offers (Option D);
- The availability and use of discretionary demand such as ripple control should be clarified with distributors and be a priority area of focus (Option E);
- There is insufficient time to introduce a new requirement on retailers to make payments to consumers to cover short duration power cuts caused by insufficient supply resources being available (Option H). However, Manawa believes this option may have some broader merit and should be explored over the longer term;
- Prior to winter 2023, it is not practical to review the value of the cost of involuntary load reduction to consumers (if demand is curtailed) or reduced system security (if there is insufficient reserve) (Option I);
- A hours-ahead market would require significant policy development and market system changes and so is not feasible before winter 2023 (Option J). However, Manawa supports the MDAGs recent recommendation that the Authority should further explore an ahead market over a longer time period as this could be useful for enabling more demand side participation and batteries into the system; and
- Permitting or requiring the System Operator to procure additional resources outside the spot market when there is less than 200MW in the supply stack is not desirable as it will undermine spot market incentives to commit resources (Option K).

Manawa also considers there is a need for a standby energy/reserve product (provided by demand response, flexible generation or batteries) to improve reliability in Winter 2023 (Option F). However, we have reservations about the value of increasing the procurement of existing ancillary services (frequency keeping or instantaneous reserve) for the purposes of mitigating risks of uncertainty in demand and intermittent generation (Option G). Instead, we support a multi-hour winter peak ancillary service that operates along the same lines as frequency keeping in terms of procurement process.

We also note that it will take time for retailers to understand and respond to their customers price-reliability preferences even when better information is available. In the interim, the Authority will need to determine an acceptable reliability level and ensure that that the implications of the level are clearly understood by all industry stakeholders (including politicians).

To support this, we endorse early design and implementation of the MDAG's recommendations² to introduce a structured information programme aimed at wider stakeholders (Option E1) and to introduce regular briefings to key Ministers and officials on the near-term (seasonal) outlook for the system and spot market conditions (Option E2). These two initiatives would be helpful to have established in advance of winter 2023.

Other solutions

Manawa observes that the owners and operators of resources such as distributed generation need to have sufficient confidence that they will make a reasonable return on their assets for operating at the time of system need. That confidence has been dented with the removal of peak demand charges.

We discussed these issues in our submissions on the Authority's September 2022 *Avoided Cost of Transmission (ACOT) – proposed TPM related amendments consultation paper*.

The conclusions in those submissions that the Authority should adopt a staged removal of peak charges are relevant here as well.

For any questions relating to this submission please contact Fiona Wiseman, Head of Policy, Consenting and Risk

² As reflected in its recently released options paper on price discovery in a renewables based electricity system: <https://www.ea.govt.nz/assets/dms-assets/31/MDAG-options-paper-final-2.pdf> Note the MDAG has recommended that work on E1 and ES could start in 2023 with potential implementation in 2024, we highly recommend that the Authority considers urgently bringing forward this work in advance of winter 2023