

24 June 2024

Open industry letter regarding the events of 10 May 2024

Tēnā koutou katoa,

In early May New Zealand faced a challenge with tight electricity supply. An unseasonal cold snap for the country coincided with low wind generation and several power stations on planned outages, including hydro, geothermal and thermal power stations.

Thanks to the actions taken by the sector and the public, this period of high demand on 9/10 May passed without escalating to a grid emergency.

While the situation was resolved without the need for instructed demand management¹ by the system operator, industry participants have raised concerns with the transparency of operational processes, the system operator's use of communications with all consumers, and the maintenance of appropriate pricing signals for long term investment.

The Authority acknowledges the concerns raised by participants about the events of 10 May. In response, this letter provides the Authority's view of the actions of 9/10 May and where we see opportunities to enhance operational tools and communications.

Security of supply is the priority, and we want to ensure market settings strike a balance between providing the system operator with sufficient flexibility to manage power system security, as well as promoting appropriate market signals in a way that incentivises reliable supply for consumers.

Actions of 9/10 May

The system operator forecasted a potential situation developing and issued industry notices highlighting the issue and requesting participant action. The Customer Advice Notice (CAN), issued on the morning of Thursday 9 May for 7:30-8:30am on Friday 10 May, was quickly upgraded to a more serious [Warning Notice](#) (WRN).

On the evening of 9 May the system operator extended its request for action to consumers to avoid the potential need for instructing demand management for the morning of 10 May. This was consistent with the process communicated with the sector as part of the industry exercise that same week.

¹ The system operator gains the powers to instruct the disconnection of some consumer demand in an emergency situation. The threshold for this situation is defined as there being either a forecast deficit or a real-time deficit being seen after gate closure.

The system operator is responsible for operating the power system by coordination of electricity supply and demand in real time. This means taking necessary and reasonable steps to keep the lights on across New Zealand.

The Electricity Authority contracts the system operator to perform this function. The Authority's focus is on making sure the right market mechanisms are in place to incentivise a reliable supply of power, and on supporting the system operator to perform its critical role.

The Authority and its service providers – including the system operator - have made significant improvements since August 2021 to manage winter peaks. However, potential for further improvement remains and the Authority continues to encourage the feedback and support of industry in pursuing this.

Use of demand response and the impact on price signals

Operational processes and pricing signals for managing winter peaks have been evolving since the 9 August 2021 demand management event and the implementation of real-time pricing in November 2022. Ongoing improvement is always necessary and the Authority will continue to drive for this.

We will continue working with the system operator and the industry to improve operational tools and communications to manage potential system events.

The Authority also recognises the need for appropriate price signals in potential scarcity situations and agrees the use of out-of-market resources should be considered in this context.

We also recognise the critical role accurate price signals play in the investment cases for flexible resources, which play a key role in ensuring security of supply in the medium to long term.

Future enhancements will be done under the principles of transparency and sustaining a competitive, responsive market, where results in market prices appropriately reflect actions taken to manage potential shortage situations.

Consumer communications and compensation

It is important the system operator is able to take any reasonable steps to manage system security. The Authority is conscious, however, of the need to ensure appropriate price signals to incentivise participants to invest in generation and offer that generation when potential shortage situations are forecast.

The communications used by the system operator on 9 and 10 May had been developed and tested during the recent pan-industry grid emergency exercise. While no issues with the proposed communication were raised at that time, we acknowledge that unanticipated issues can sometimes present themselves when new tools and processes are used in real time.

Many retailers have gone to significant effort to develop solutions that reward consumers for providing flexibility. These flexible resources have the potential to influence the

outcome of a potential shortage situation, while both maintaining and relying upon appropriate price signals.

The Authority is considering how best to achieve the appropriate balance between system security and price signals, particularly in light of the measures already in place such as flexible price plans. This could include further thought on the suitability of how to better compensate for mass market demand response in emergency supply situations.

We will also provide our feedback on messaging for future public communication of potential system events to the system operator for its consideration, particularly in relation to public statements to all consumers in response to a WRN.

Review of scarcity pricing and system security assumptions

The implementation of real-time pricing allowed for the inclusion of scarcity pricing in the forecast and dispatch market schedules. The relative values for energy and reserve scarcity were reviewed before real time pricing go-live in response to lessons learned from the 9 August 2021 demand management event.

Further operational changes have been made by the system operator and participant bid and offer practices have evolved over the following years.

The 10 May event has highlighted that a review of the scarcity pricing settings, the interaction of reserve scarcity and the use of controllable load ahead of real time may be needed. We will work with the system operator and the industry in any review of the market settings and operational practices.

We highlighted the need to review the security standards assumptions document (SSAD) in our recent consultation on potential solutions for peak electricity capacity issues.² This is a project that we intend to prioritise for the coming financial year.

Thanks again for raising your concerns, if you have further questions we are happy to meet to discuss them.

Nāku noa, nā

Sarah Gillies

² <https://www.ea.govt.nz/projects/all/managing-peak-electricity-demand/consultation/potential-solutions-for-peak-electricity-capacity-issues/>