

Notice of the Authority's decision under regulation 29 of the Electricity Industry (Enforcement) Regulations 2010

Under regulation 29(1) of the Electricity Industry (Enforcement) Regulations 2010 (Regulations) the Electricity Authority (Authority) must publicise every decision made under regulation 23(3) of the Regulations, together with the reasons for the Authority's decision.

Investigation

On 29 June 2022, the Authority appointed an investigator under regulation 12 of the Regulations to investigate the alleged breaches of clauses 13.58A(1)(e)(i), 13.58A(2)(d)(i), 13.69A and 13.88(3) of the Electricity Industry Participation Code 2010 by Transpower New Zealand Limited as the system operator from 17 March to 30 April 2021.

The system operator self-reported breaches of clauses 13.58A(1)(e)(i) and 13.58A(2)(d)(i). The Authority alleged breaches of clauses 13.69A and 13.88(3).

The system operator incorrectly modelled the AC transmission system by incorrectly modelling the Pakuranga to Whakamaru circuit impedances.

The error caused approximately 1.1 MW less generation to be procured per trading period for approximately six weeks. The Authority assessed the market impact of the alleged breaches as purchasers paying approximately \$5.4m less than they should have, with generators being underpaid by approximately \$4.5m.

The only party to join the investigation was Transpower New Zealand Limited as the grid owner. No settlement was achieved because neither party submitted any settlement requirements.

On 13 October 2022, the Authority received and considered a report and recommendation from the investigator to discontinue the investigation and issue a warning.

The investigator:

- viewed the alleged breaches as relatively severe in that the modelling error went undetected for a long period of time and the market impact was assessed as severe;
- noted the complexity involved in modelling the grid ahead of and in real time; and
- considered that the actions already taken by the system operator regarding the incident will reduce the likelihood that such breaches will occur in the future.

The Authority's decision

On 13 October 2022, the Authority decided under regulation 23(3)(a) of the Regulations to discontinue the investigation and issue a warning.

Reasons for the Authority's decision

The reasons for the Authority's decision to discontinue the investigation were:

- the system operator took steps to prevent recurrence, including updating its process document and adding a new automated check to confirm data that is added into the relevant spreadsheet. It is also considering longer-term enhancements to replace the spreadsheet with an online database;

- the alleged breaches were inadvertent; and
- the alleged breaches were investigated because of the market impact, to increase transparency and to give participants who considered they were affected by the alleged breaches an opportunity to join the investigation. With only one party joining the investigation this indicates there was little interest in the matter and increased transparency has been achieved through opening a formal investigation.

In deciding to warn the system operator, the Authority noted:

- the market impact was assessed as severe;
- the introduction of real-time pricing from 1 November 2022 particularly increases the importance of accurate system modelling;
- the system operator should use robust tools and processes to manage the risks involved in system modelling; and
- since reporting this event the system operator has reported further system modelling breach events. While action has been taken to mitigate the risk of this specific breach reoccurring, generally there has been an increasing trend of these events.