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Tēnā koe

## Response to forecast tight supply on 10 May and Restoring confidence in market signals

The industry has rightly put security of supply at the top of its priority list. It is our responsibility to 'keep the lights on' and ensure New Zealanders can rely on continuous supply of electricity when they need it. We also have a responsibility to deliver affordable electricity as we decarbonise generation.

However, Contact Energy is concerned that some actions taken in the lead up to, and during, the forecast tight supply conditions of 10 May could harm both market efficiency and confidence. The industry needs to rethink how we communicate with customers so that confidence in supply security is maintained and market incentives are preserved during periods of tight supply. We are also seeking clarification about the use of 'constrained on' mechanisms by the System Operator during tight market conditions.

In the days leading up to the morning of 10 May Transpower as System Operator identified a low residual situation between 7.30 and 8.30am. In response a number of steps were taken:

- a) A Consumer Advice Notice (CAN) was issued on 9 May at 7.28am to alert the market that residual generation was less than 200 MW.
- b) This was soon upgraded to a warning notice (WRN) at 10.51am on 9 May, where Transpower notified that there was insufficient generation to provide N-1 security.
- c) Later that day at 2.03pm, Transpower issued a press release requesting consumers conserve electricity the next morning. Transpower also requested that retailers repeat this message via their own channels. This resulted in 260MW of demand reduction.<sup>1</sup> We are unsure if this was in part driven by the discretionary demand control bids being dispatched.

<sup>&</sup>lt;sup>1</sup> <u>https://www.energynews.co.nz/news/demand-response/158765/industry-households-deliver-260-mw-demand-reduction</u>

d) During the tight period certain assets were then constrained on, but out of merit order. For example, our diesel plant at Whirinaki was constrained on at \$6,000 / MWh, whilst market prices remained significantly lower.

The last two actions undermined market signals, damaged incentives to commit plant, and harmed incentives to invest.

Contact Energy acted in good faith based on the market signals. Most notably, our team at Stratford responded to the WRN notice by accelerating the completion of necessary maintenance work on the Taranaki Combined Cycle (TCC) power station to bring it back to service for the morning peak. This included abandoning some preventative maintenance work which could not be achieved in the timeframe, and likely contributed to the later failure of the plant. A start of this nature and in this heavily condensed timeframe is not best practice and causes additional plant wear and operating costs to Contact.<sup>2</sup> <sup>3</sup>

Due to the significant reduction in demand compared to Transpower forecasts, market prices solved much lower than expected. As a result generation in the market was not adequately compensated for the clear scarcity that was evident. Market signals are preserved via scarcity pricing if there is involuntary curtailment, but no similar mechanism is in place for requests for voluntary demand reductions, or discretionary demand control.

We are also unsure why Whirinaki was constrained on. This resource was offered into the market and was available if necessary. However, we see no marketbased reason it needed to be constrained on. This action resulted in generation being dispatched out of the merit order, ultimately harming market signals for plant that was added after the WRN notice was released.

The resulting prices distort market signals for future events, particularly for long commitment plants like TCC, which despite having high running costs had to be offered in at \$0/MWh as we have no control over generation output while it is ramping up. Perversely this means these actions increase the chances of future scarcity. This situation appears similar to the Authority's recent preliminary decision that a UTS occurred on 9 August 2021 due to "prices being determined by offers in conjunction with demand management in circumstances where participants would expect higher prices to apply."<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> A full ramp-up of TCC takes 72 hours. To support the market we decided to turn the unit on [20] hours ahead of the forecast low residual period so that it could offer some supply during its ramp up period. We would not have chosen to turn it on at this time if there were not the market signals to support it.

 <sup>&</sup>lt;sup>3</sup> Transpower also requested Contact to advance our plans on the Tauhara geothermal power project to accelerate critical commissioning activities for the day into the 7:00am – 8:30 am Trading Periods. However, we concluded this could not be achieved as it would cause substantive risk to the plant.
<sup>4</sup> <u>https://www.ea.govt.nz/documents/4845/Preliminary decision paper - 16 Feb 2024 UTS.pdf</u>

We believe that if these actions continue longer term, it will harm industry rationale to invest in energy transition. We are currently looking at investments into flexible assets such as grid scale batteries and large-scale demand response from industrials that are designed to meet the needs of cold winter days like 10 May. The business cases for these flexible resources are based on accurate market signals, including the ability to reach scarcity pricing or plants at top of the merit order being dispatched due to prevailing spot prices. Our experience is that it is becoming increasingly difficult to trust that these price signals will eventuate, making it harder to justify these investments to our shareholders.

Transpower and the Electricity Authority need to urgently start a work programme to restore confidence in market signals. We recommend that there are three parts to this work:

- 1. Clarifying the steps taken in response to scarcity conditions, including what notices are given, who the audience is, and the triggers that need to be met.
- 2. Considering mechanisms to preserve market incentives when demand is artificially reduced either by triggering discretionary demand control, or a public request to reduce demand. It may be appropriate for such actions to trigger scarcity pricing, as is the case for involuntary demand curtailment.
- 3. Improving the rules around the System Operator's ability to constrain on assets. In times of short supply it may be appropriate for market prices to be set at the offer price of the constrained on asset to maintain market signals.

Ngā mihi nui,

**John Clark** Chief Generation Officer Contact Energy