

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 1 November 2023, Transpower New Zealand Limited - grid owner reported to the Authority that it had breached Part 8 Technical Code A, Schedule 8.3 clause 4(4)(a)(ii) of the Electricity Industry Participation Code 2010 (Code) between 1:33pm and 2:09pm on 20 May 2022.

Clause 4(1) of Technical Code A, Schedule 8.3 of the Code requires the grid owner and the asset owner on both sides of a grid interface to co-ordinate so that a faulted asset is electrically disconnected by the main protection system first and the other assets are not prematurely electrically disconnected.

On 15 August 2024, the Authority appointed an investigator under regulation 12 of the Regulations to investigate the alleged breach.

On 10 December 2024, the Authority received and considered an investigator's report prepared in accordance with regulation 19 and a recommendation from the investigator to discontinue the investigation.

The report detailed that on 20 May 2022 at 1.33 pm, a fault occurred on the Waverley 11kV feeder. As a result of this fault, power was tripped almost simultaneously in three separate locations:

- The Waverley transformer T1 low voltage circuit breaker (CB302) located at the grid interface point at Waverley GXP.
- The Transpower network asset circuit breaker (CB262) for the Waverley feeder, by its protection due to the overcurrent element operation.
- A Powerco circuit breaker (2680) located upstream of the network fault.

The investigator considered the grid owner did not breach clause 4(4)(a)(ii) of Technical Code A, Schedule 8.3 of the Code. The investigator's reasons for his conclusion are:

- the grid interface in relation to the Waverley GXP is the 110kV/11kV transformer (T1) and the protection systems that are required to be coordinated are either side of this transformer (110kV CB42 and 11kV CB302)
- the three 11kV feeders (CB242, CB262 and CB282) are not part of the grid interface nor are they used to make the connection to the grid.

The investigator therefore concluded that clause 4(4)(a)(ii) of Technical Code A, Schedule 8.3 of the Code does not apply to this event and found that Transpower, as the asset owner on the low voltage (11kV) side of the grid interface point, was not in breach of clause 4(4)(a)(ii) of Technical Code A, Schedule 8.3 of the Code when the fault occurred on the Waverley 11kV feeder on 20 May 2022 and tripped Waverley T1 (CB302) which is located at the downstream side of the grid interface point at Waverley GXP.

The investigator noted:

- the grid owner's assessment of this trip event assumed the grid interface point was where Transpower's assets connected to Powerco distribution assets. The investigator considered this assessment is not consistent with the interpretation of grid interface within the Code
- Transpower was aware that the 11kV feeder circuit breakers at Waverley were at the end of their expected life and in certain fault scenarios or conditions may not operate as expected
- Transpower has implemented steps to resolve the reliability issues of the controllers for the Waverly 11kV feeder circuit breakers.

The Authority's decision

On 10 December 2024, the Authority decided under regulation 23(3)(a) of the Regulations to discontinue the investigation.

Reasons for the Authority's decision

The Authority accepted the investigator's recommendation to discontinue the investigation based on his view that, in the circumstances, the grid owner did not breach clause 4(4)(a)(ii) of Technical Code A, Schedule 8.3 of the Code because:

- the grid interface at Waverley GXP comprises assets belonging to the grid owner, and the protection systems for these assets were coordinated. The failure to coordinate protection systems was at a lower level in the power system, beyond the protection systems on both sides of the grid interface
- the faulted 11kV feeder circuit breaker (CB242) is not connected to, or otherwise part of, the grid (or grid interface) at the Waverley GXP
- no grid assets were impacted by this event
- there was no security impact as a consequence of this tripping event in relation to the system operator's principal performance objective
- accordingly, in the circumstances clause 4(4)(a)(ii) of Technical Code A, Schedule 8.3 of the Code did not apply.