Assessment of Network Outage Event on 30 November 2023 – Power and Water Corporation



On 9 January 2024, Power and Water Corporation (PWC) submitted a report to the Commission in accordance with clause 5.4.2 of the <u>Electricity Industry Performance Code</u> (the Code), advising of its intention to exclude a network outage event in the Alice Springs region on 30 November 2023 from certain network performance reporting (adjusted category performance indicators) and <u>guaranteed service levels</u> in accordance with clauses 7.2.3(f) and 4.1.7 and of the Code, respectively. This is an assessment of PWC's report under clause 5.5 of the Code for the purpose of verifying that the network outage event was outside the control of PWC.

## **Obligations**

PWC holds a <u>network licence</u> granted under Part 3 of the <u>Electricity Reform Act 2000</u> which authorises it to own and operate electricity networks, including in Alice Springs (township and surrounding rural areas). PWC is required to comply with the Code, which includes performance reporting requirements and <u>guaranteed service levels</u>.

The Code sets out certain exclusions from network performance reporting and <u>guaranteed</u> <u>service level</u> payments, including natural events identified as statistical outliers by the US Institute of Electrical and Electronic Engineers 2.5 beta method (the beta method). The beta method is a statistical method to identify network outage events that are outside normal operational boundaries.

The Commission has an obligation under clause 5.4.4 of the Code to verify that the event on 30 November 2023 was outside of PWC's control.

## **Event**

On 30 November 2023, a severe storm pushed trees and debris onto power lines causing significant damage to the electricity distribution infrastructure across the Alice Springs region, resulting in prolonged network outages for customers connected to the Alice Springs network. As the network licensee, PWC notified the Commission that a natural event occurred, which was, or may be identified as a statistical outlier using the beta method. On 9 January 2024, PWC submitted a report to the Commission in accordance with the Code proposing to exclude events commencing on 30 November 2023 in the Alice Springs system from adjusted category performance reporting and <u>guaranteed service level</u> payments.

# Assessment

The beta method refers to a statistical outlier as a 'major event day' (MED). A MED is a day in which the daily system average interruption duration index (SAIDI) exceeds a threshold value  $(T_{MED})$ .

The Commission assessed the network outage data with reference to the beta method and found that the network outage event on 30 November 2023 was a statistical outlier for the purposes of clause 5.4.1 of the Code, as shown in Table 1.

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Table 1: Summary of Commission's findings of the network outage event on 30 November 2023

Network	Network outage event date	T <sub>MED</sub>	Daily SAIDI	MED
Alice Springs	30-11-2023	37.7	117.1	Yes

## Outcome

The Commission has verified the network outage event that occurred in the Alice Springs region on 30 November 2023 was due to a natural event and is a statistical outlier using the beta method, and was therefore outside the control of PWC. As such, the Commission considers the event an excluded event for the purposes of PWC's performance reporting and <u>guaranteed service level</u> payments under the Code.