

# Assessment of Network Outage Event on 12 November 2022 – Power and Water Corporation

On 23 November 2022, Power and Water Corporation (PWC) submitted a report to the Commission in accordance with clause 5.4.2 of the [Electricity Industry Performance Code](#), advising of its intention to exclude a network outage event in the Alice Springs region on 12 November 2022 from certain network performance reporting (adjusted category performance indicators) and [guaranteed service levels](#) in accordance with clauses 7.2.3(f) and 4.1.7 of the Code, respectively. This is an assessment under clause 5.4.4 of the Code of PWC's report for the purpose of verifying that the network outage event was outside the control of PWC.

## Obligations

PWC holds a [network licence](#) granted under Part 3 of the [Electricity Reform Act 2000](#) 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 [Electricity Industry Performance Code](#), which includes performance reporting requirements and [guaranteed service levels](#).

The [Electricity Industry Performance Code](#) sets out certain exclusions from network performance reporting (adjusted category performance indicators) and [guaranteed service level](#) 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 [Electricity Industry Performance Code](#) to verify that the event on 12 November 2022 was outside of PWC's control.

## Event

On 12 November 2022, a severe thunderstorm caused extensive 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 23 November 2022, PWC submitted a report to the Commission in accordance with the [Electricity Industry Performance Code](#) proposing to exclude events commencing on 12 November 2022 in the Alice Springs region from adjusted category performance reporting and [guaranteed service level](#) 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 network outage data with reference to the beta method and found that the network outage event on 12 November 2022 was a statistical outlier for the purposes of clause 5.4.1 of the [Electricity Industry Performance Code](#), as shown in Table 1.

Table 1: Summary of Commission's findings of the network outage event on 12 November 2022

| Network       | Network outage event date | T <sub>MED</sub> | Daily SAIDI | MED |
|---------------|---------------------------|------------------|-------------|-----|
| Alice Springs | 12-11-2022                | 49.3             | 259.9       | Yes |

## Outcome

The Commission has verified the network outage event that occurred in the Alice Springs region on 12 November 2022 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 performance reporting and [guaranteed service level](#) payments under the [Electricity Industry Performance Code](#).