

On 13 October 2019, the Alice Springs power system went black, with approximately 12,000 customers affected for periods varying between 30 minutes and up to 10 hours. The Treasurer at the time requested the Commission conduct an independent investigation into the incident, and 14 of the Commission's associated recommendations were accepted in whole, and one in-principle.

The Commission was subsequently asked to compile and publish a report on the implementation of the recommendations of the independent investigation and other major incident reports. The first progress report was to be published by the end of February 2020, with further reports every six months thereafter for a period of two years. As work was still outstanding in March 2021, the Commission agreed to continue to publish six monthly reports until all outstanding Alice Springs system black actions are complete.

This is the Commission's tenth and final progress report.

Summary of implementation progress

Of the 33 recommended actions for Power and Water Corporation (PWC) and Territory Generation (TGen) to implement, all 33 are complete. Notable progress has been made since the last six-monthly report in February 2024, including completion of recommendation 12 in relation to improving the under frequency load shedding (UFLS) scheme in Alice Springs.

A detailed summary of the completion of recommendation 12 is provided below and previously completed recommendations (and subsequent actions) can be found in the Commission's February 2022 progress report¹.

The Commission has seen evidence that PWC System Control continues to actively track, and seeks to implement and close out, major incident recommendations across the Darwin-Katherine, Alice Springs and Tennant Creek power systems as it considers appropriate, in consultation with relevant system participants.

Details of completion of recommendation 12

The Commission considers that recommendation 12, which focused on improving the UFLS scheme in Alice Springs, is now complete. This is based on PWC System Control's latest update (August 2024), which advised that all five components of the recommendation have been completed. Further, while not strictly within the scope of recommendation 12, this assessment is made with the expectation that PWC will continue to monitor and report on the associated final UFLS scheme adjustments.

The five components of the recommendation, and the work undertaken to complete them include:

- UFLS scheme optimised setpoints and time delays - A detailed review of the UFLS scheme was conducted by PWC System Control's consultant, which provided recommendations for the optimisation of setpoints and time delays. Although not all recommended setting changes have been implemented as of August 2024, work is well underway with completed feeders

¹ <https://utilicom.nt.gov.au/publications/reports-and-reviews/progress-report-on-the-implementation-of-recommendations-from-independent-investigation-of-alice-springs-system-black-incident-on-13-october-2023>

August 2024 Progress Report – Implementation of recommendations from independent investigation of Alice Springs system black incident on 13 October 2019

representing 45% of the load that can be shed. Additional work is scheduled to commence on 26 August 2024 on further feeders, covering another 45% of the load, with final adjustments scheduled for September 2024

- BESS droop settings - Adjustments to the BESS droop curve were completed to better respond to frequency events, enhancing system security
- coordination with spinning reserve policy - The settings of the UFLS system have been coordinated with the updated spinning reserve policy with a view to improving contingency management
- resolution of UFLS stage 3 failure - The mechanical relay failure at Ron Goodin power station, which caused UFLS Stage 3 to fail during the system black, has been addressed
- BESS output capping - The BESS output has been capped, in line with the recommendation.

While some feeder adjustments are still in progress, PWC System Control has advised that work completed to date has already demonstrated effectiveness in managing events similar to the 2019 system black. PWC has committed to completing the remaining work and will provide a report to the Commission in October 2024 once works have been completed.

Major incident reports – recommendations and progress update

Consistent with recommendation 13a, PWC System Control provided a version of its major incident recommendation tracking spreadsheet to the Commission in July 2020, which the Commission considered met the intent of the recommendation. PWC System Control has continued to refine its major incident recommendation tracking spreadsheet.

The Commission has seen evidence that PWC System Control continues to actively track, and seeks to implement and close out, major incident recommendations across the Darwin-Katherine, Alice Springs and Tennant Creek power systems as it considers appropriate, in consultation with relevant system participants.

Relevantly, it would be unrealistic to expect the number of incidents and associated recommendations to ever be zero, as power system incidents happen in all power systems. Further, where a recommendation is not related to a compliance issue, there is no obligation for the recommendation to be actioned, meaning negotiation with the relevant system participant (or participants) is required.