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



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. Government's response to the independent investigation accepted 14 of the Commission's recommendations in whole, and one in-principle.

On 8 December 2019, the Treasurer requested the Commission 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.

On 24 March 2021, the former Minister for Essential Services requested the Commission continue to publish six monthly reports until all outstanding Alice Springs system black actions are complete.

This is the Commission's ninth progress report.

Summary of implementation progress

Of the 33 recommended actions for Power and Water Corporation (PWC) and Territory Generation (TGen) to implement, one remains incomplete, that PWC undertake a review into the under frequency load shedding (UFLS) scheme in Alice Springs (recommendation 12). Notable progress has been made since the last six-monthly report in August 2023, including relevant models being validated and the engagement of an expert consultant by PWC to undertake the Alice Springs UFLS scheme study.

A detailed summary of 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 outstanding implementation of recommendation 12

The original due date set by government for PWC to undertake the recommended review into the Alice Springs UFLS scheme and provide the review report to the Commission for advice to government (recommendation 12) was 30 June 2020.

In its February 2020 report, PWC advised studies had commenced and were on track, but subsequently informed the work was reliant on various power system modelling activities being completed first, such as the development and acceptance of models for TGen's Jenbacher generators and battery energy storage system. Updates from PWC over the three years up to and including 10 August 2023 continued to advise that PWC and TGen were

¹ <u>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</u>



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progressing various modelling activities.

On 2 August 2023, TGen provided an update to the Commission advising TGen's final Jenbacher models, which the Commission understands are a crucial piece required to develop an overall Alice Springs system model, were submitted to PWC on 2 June 2023. PWC advised on 10 August 2023 that it was still finalising the due diligence process on TGen's final Jenbacher models, which was expected to be completed within one to two months.

On 21 November 2023, TGen advised the Commission that it had received confirmation from PWC that the models of the Jenbacher units had completed the validation process, with no further action required by TGen. On 19 January 2024, PWC advised it would be looking to commence the detailed UFLS scheme study in February, with the work expected to be completed by April 2024. The rollout of associated changes would be pursued in May and June, with expected closure by June/July 2024. Subsequently, on 9 February 2024, PWC advised an expert consultant has been engaged to undertake the UFLS scheme study.

Based on the updates provided by PWC and TGen, the Commission considers recommendation 12 remains underway (not complete), although notable progress has been made since the last six-monthly report.

While it has taken more than four years to reach this point, the Commission notes PWC's previous advice that the current UFLS scheme is in service and has demonstrated performance through major system events. Regardless, the Commission is still of the view that the work to optimise the UFLS settings is necessary and is pleased this now appears to be progressing.

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.

In July 2023, the Commission conditionally approved PWC's proposed power system incident reporting related amendments to the System Control Technical Code (SCTC), with the approval conditions subsequently met by PWC. The amended SCTC and associated Power System Incident Reporting Guideline came into effect on 14 February 2024 and make clearer the roles and responsibilities for the investigation and reporting of power system incidents which have, or could have, a significant adverse effect on the security or reliability of the power system or electricity supply.