

Nhulunbuy Power System Performance Report 2023-24

RTA Gove Pty Ltd (formerly Alcan Gove Pty Ltd) operates under a section 87 [exemption](#) issued by the Utilities Commission of the Northern Territory (Commission) under the [Electricity Reform Act 2000](#). This exemption allows RTA Gove to operate in the Territory's electricity supply industry, including the operation of an electricity network in the township of Nhulunbuy.

RTA Gove's [exemption](#) requires RTA Gove to comply with the Guaranteed Service Level Scheme in the [Electricity Industry Performance Code](#) and sets the [guaranteed service levels](#) in relation to RTA Gove's electricity network in Nhulunbuy. Where a guaranteed service level is not met, eligible customers receive a payment. These payments are intended to acknowledge poor service, rather than act as compensation, and incentivise the network provider to improve their service quality.

On 4 June 2024, RTA Gove's exemption was amended to include additional network performance reporting, specifically the reporting of unadjusted and adjusted System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) metrics. These metrics measure both the duration and frequency of power interruptions, respectively. As a result, this report (formerly Township of Nhulunbuy Guaranteed Service Level Report) has been renamed to reflect the broader scope and now includes a review of both unadjusted and adjusted SAIDI and SAIFI, alongside [guaranteed service level](#) performance.

RTA Gove is required to submit its [guaranteed service level](#) and network performance reporting to the Commission by 31 October each year, covering the preceding financial year.

Although this is the Commission's fourth report regarding the township of Nhulunbuy, the first report (in relation to 2020-21) was not based on a full year's data due to RTA Gove's system limitations at the time. Given this, and now that there are three full years of reporting history, this report will no longer include comparisons with 2020-21.

Power system performance

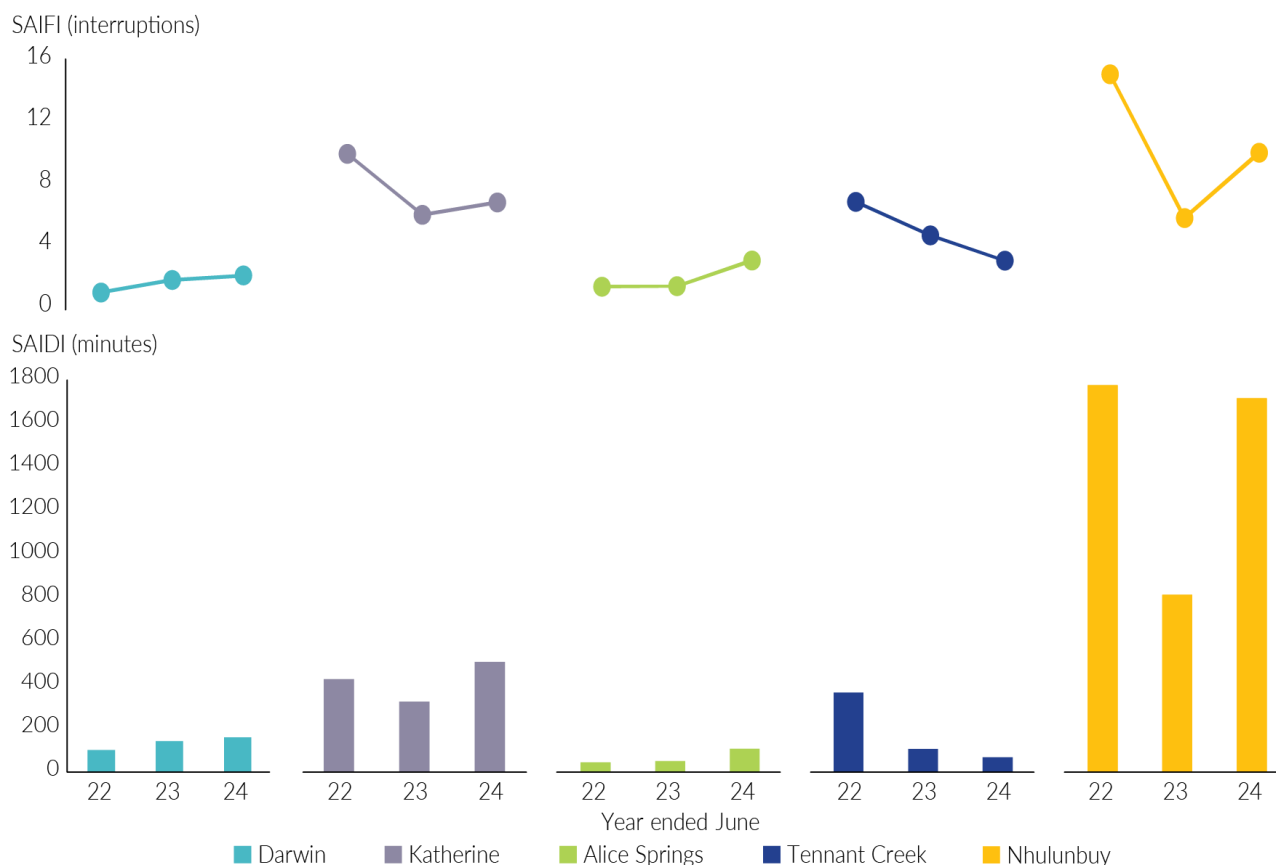
The duration and frequency of all customer interruptions, referred to as unadjusted SAIDI and SAIFI, include all outages in the power system. These interruptions can arise from various factors, including generation issues, network faults, safety incidents, or weather-related events. To assess network-specific performance only, interruptions unrelated to network operations are excluded, resulting in adjusted SAIDI and SAIFI metrics.

RTA Gove's unadjusted performance, or overall power system performance, deteriorated significantly in 2023-24, with SAIDI increasing to 1685 minutes and SAIFI to 10.2 interruptions per customer. This represents a dramatic reversal from the improvement seen in 2022-23, where SAIDI and SAIFI were 798.8 minutes and 5.7 interruptions, respectively. The deterioration in 2023-24 is attributed to multiple generation-related outages.

The Commission has compared RTA Gove's performance to relevant Territory benchmarks. Figure 1 shows RTA Gove's unadjusted SAIDI and SAIFI performance for Nhulunbuy over the last three reporting periods against the Power and Water Corporation's (PWC) performance in the Darwin, Katherine, Alice Springs and Tennant Creek networks or regions.

The Commission acknowledges the benchmarks used in this report are not directly comparable to RTA Gove's operations in Nhulunbuy, particularly Darwin, but they are a useful reference, noting Tennant Creek is the most comparable benchmark, given the power systems are the most similar in terms of the capacity of available generation, network voltage and customer numbers.

Figure 1 Nhulunbuy unadjusted SAIDI and SAIFI performance comparison, 2021-22 to 2023-24



In 2023-24, RTA Gove's unadjusted SAIDI and SAIFI metrics were significantly worse than those of other regions. Even in 2022-23, despite improvements, RTA Gove's unadjusted SAIDI and SAIFI was higher than most benchmarks, particularly in terms of the duration of outages.

This visual comparison highlights the substantial improvement that would be needed in overall power system performance to more closely align with customer experiences in other regions, including Tennant Creek.

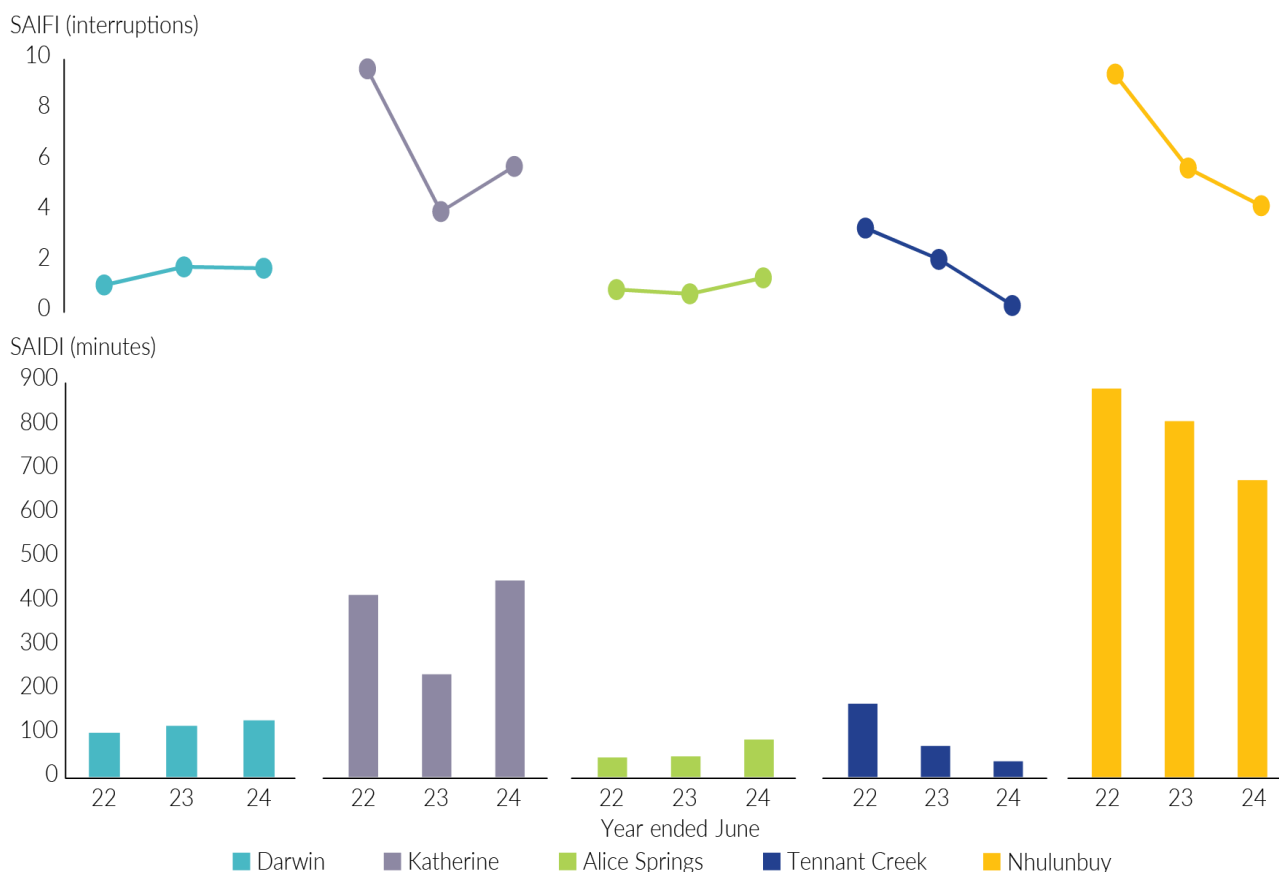
Although there is little historical data to observe trends, the Commission consider that the poor level of performance seen in Nhulunbuy over the last three years is consistent with anecdotal evidence over recent years, such as from stakeholder interactions and media reports.

Network performance

RTA Gove's adjusted SAIDI and SAIFI, which reflect network-related performance only, continued to improve in 2023-24. RTA Gove reported adjusted SAIDI of 666.6 minutes and SAIFI of 4.2 interruptions per customer, a reduction from 798.8 minutes and 5.7 interruptions in 2022-23. These improvements suggest better network performance.

Figure 2 shows the adjusted SAIDI and SAIFI performance for RTA Gove for Nhulunbuy over the last three reporting periods against PWC's performance in the Darwin, Katherine, Alice Springs and Tennant Creek networks or regions.

Figure 2 Nhulunbuy adjusted SAIDI and SAIFI performance comparison, 2021-22 to 2023-24



Adjusted SAIFI in 2023-24 is comparable to the Katherine region but worse than the other three regions used as benchmarks, indicating some parity in the frequency of interruptions. However, adjusted SAIDI in 2023-24 remains significantly higher than all benchmarks, highlighting longer durations of network-related interruptions in Nhulunbuy.

These results suggest that while network performance in Nhulunbuy has improved, it still lags behind the levels observed in other regions, particularly in the duration of interruptions.

The Commission consider that substantial improvements in network-related performance are required if the level of performance in Nhulunbuy is to be consistent with other Territory networks, including Tennant Creek, which is the most comparable of those networks.

Guaranteed service level performance

As a direct result of network performance, the most impacted customers in 2023-24 experienced six unplanned outages and 18 hours without power, which is a mixed result as it is an improvement from eight unplanned outages, but a deterioration from 16 hours without power for the most impacted customers in 2022-23. The longest duration outage in 2023-24 was just over eight hours, which compares poorly with the longest duration outage in 2022-23 of just under five hours.

Consistent with the previous year, RTA Gove reported that it met all of its [guaranteed service levels](#) in 2023-24 and were not required to make payments to customers. Notably, guaranteed service levels exclude planned interruptions, which require at least 2 business days' notice prior to commencement of the planned interruption (or maintenance) occurring, and interruptions associated with a loss of generation.

[Guaranteed service level](#) payments, alongside the full list of guaranteed service levels over the last three years are shown in Table 1.

The [Electricity Industry Performance Code](#) permits RTA Gove to exclude certain non-network performance-related unplanned outages (or events) from its [guaranteed service level](#) payment obligations and reporting. Accordingly, unplanned interruptions to customers' electricity supply included under RTA Gove's [guaranteed service level](#) reporting, as shown in Table 1, do not reflect all interruptions experienced by customers over the last three years.

Table 1: RTA Gove guaranteed service level performance in the township of Nhulunbuy, 2021-22 to 2023-24

Guaranteed service levels	2021-22		2022-23		2023-24	
	Customer s impacted	Total payment (\$) ¹	Customers impacted	Total paymen t (\$) ¹	Customer s impacted	Total payment (\$) ¹
Duration of a single interruption:						
More than 12 hours and less than 20 hours	0	0	0	0	0	0
More than 20 hours	0	0	0	0	0	0
Frequency of interruptions:						
More than 12 interruptions in a financial year	56	3,440	0	0	0	0
Cumulative duration of interruptions:						
More than 40 hours of interruptions in a financial year	0	0	0	0	0	0
Time for establishing a connection:						
Re-connection of an existing premises – within 24 hours of receipt by the network entity of a valid request for re-connection from the small customer	1	38	0	0	0	0
New connection of a customer's premises (excluding connections requiring network extension or augmentation) – within 5 business days of receipt by the network entity of a valid electrical certificate of compliance from the small customer, or as otherwise agreed with the customer	0	0	0	0	0	0
Time for giving notice of planned interruptions:						
At least 2 business days' notice prior to the commencement of the day upon which the planned interruption will occur	41	1,572	0	0	0	0
Keeping appointments:						
Within 30 minutes of the time agreed with the small customer	0	0	0	0	0	0
Total guaranteed service level payments:	98	5,051	0	0	0	0

¹ Guaranteed service level total payments are rounded to nearest dollar.