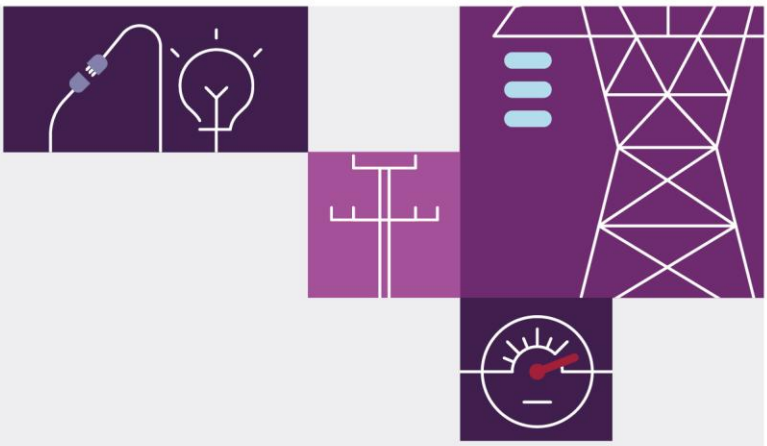
Non Market Ancillary Services (NMAS) report 2024-25

October 2025

An annual report for the National Electricity Market



Important notice

Purpose

The purpose of this publication is to provide information about the:

- Quantities and costs of system restart ancillary services (SRAS) and network support and control ancillary services (NSCAS) acquired by AEMO in the National Electricity Market (NEM) for the financial year 2024-25.
- Acquisition of SRAS to meet the system restart standard for each electrical sub-network in the NEM, and system restart test activities if conducted.

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Version control

Version	Release date	Changes
1	20 October 2025	Initial release

AEMO acknowledges the Traditional Owners of country throughout Australia and recognises their continuing connection to land, waters and culture. We pay respect to Elders past and present.

Abbreviations

Abbreviation	Expanded name
AEMO	Australian Energy Market Operator
NEM	National Electricity Market
MBAS	Market Benefits Ancillary Services
MT PASA	Medium Term Projected Assessment of System Adequacy
NMAS	Non-Market Ancillary Services
NSCAS	Network Support and Control Ancillary Services
NER or Rules	National Electricity Rules
PM test	Post-maintenance test
RSAS	Reliability and Security Ancillary Services
SN test	Short-notice test
SRAS	System Restart Ancillary Services
SRS	System Restart Standard
TNSP	Transmission Network Service Provider

Contents

Tables

1 Introduction

Ancillary services support the management of power system security in the National Electricity Market (NEM).

AEMO acquires both market and non-market ancillary services under the National Electricity Rules (NER):

- Market ancillary services are acquired through central dispatch and the prices are determined using the dispatch algorithm.
- Non-market ancillary services (NMAS) are acquired under bilateral contracts. The types of NMAS that Australian Energy Market Operator (AEMO) may acquire in its capacity as market and system operator:
  - System Restart Ancillary Services (SRAS), and
  - Network Support and Control Ancillary Services (NSCAS).
  - Transitional Services

The remainder of this report provides information about the NMAS acquired by AEMO for the 2024-25 financial year.

1.1 System Restart Ancillary Services (SRAS)

SRAS can help restore electricity supply following a large-scale blackout of part or all of the power system. The Reliability Panel[1] is responsible for determining the system restart standard (SRS), which specifies the level of supply restoration for which AEMO is to procure system restart services.

AEMO must use its reasonable endeavours to acquire sufficient SRAS for each defined electrical sub-network to meet the requirements of the SRS. AEMO completed a system restart procurement process in 2024, resulting in six new contracts and one contract extension. From 1 July 2024 the SRS will be met in all regions except Queensland (due to changes on the possible restart pathway, refer to section 2.1.2 for more information).

For the SRAS in place during 2024-25, the relevant version of the SRS is the SRS that was determined in January 2021[2] and was applicable for SRAS acquired from 28 January 2021 onwards.

The emerging issue of high levels of distributed photovoltaic (DPV) uptake at certain locations along the restoration path can result in load variations and load erosion making the early stages of restoration very challenging. Therefore, it is possible that there may be insufficient stable demand to restart the system during certain times of the day and year. AEMO is considering procuring Restart Support Services (RSS), under the SRAS framework to address this issue.

[1] The Reliability Panel is established under the National Electricity Law by the Australian Energy Market Commission (AEMC), and comprises representatives from the AEMC, AEMO, registered participants, and consumers. The Panel's responsibilities are specified in section 38 of the National Electricity Law and NER 8.8.1.

[2] At https://www.aemc.gov.au/sites/default/files/2021-08/SRS%20Review%20-%20System%20Restart%20Standard%20-%20FOR%20PUBLICATION_0_0.pdf.

1.2 Network Support and Control Ancillary Services (NSCAS)

NSCAS may be procured by transmission network service providers (TNSPs) to maintain power system security and reliability, and to maintain or increase the power transfer capability of the transmission network to maximise net economic benefits[3]. Such TNSP-procured NSCAS is not the subject of this report.

AEMO, in its role as Market Operator, can also procure NSCAS as a last resort to prevent an adverse impact on power system security and reliability. NSCAS procured by AEMO as Market Operator is reported on in Section 3 of this report.

1.3 Transitional Services

The "transitional services rule change" refers to the Australian Energy Market Commission's (AEMC) "Improving security frameworks for the energy transition" rule, which established a framework for AEMO to procure transitional non-market ancillary services (NMAS) to maintain power system security during the transition to a low to zero emissions power system. These "transitional services" can be acquired:

- to address power system security needs or issues that cannot be met by existing frameworks; or
- for the purpose of trialling new technologies, or a new application of existing technologies.

Transitional services procured by AEMO as Market Operator is reported on in Section 4 of this report.

1.4 Non-market ancillary services (NMAS) reporting

AEMO is required, under NER 3.11.10, NER 3.13.5 and NER 3.11.12, to report annually on specified matters relating to SRAS, NSCAS and Transitional Services respectively. This report includes:

For SRAS:

- The number of SRAS acquired per NEM region and electrical sub-network in 2024-25 and for 2025-26.
- The total actual annual cost for provision of SRAS in 2024-25, broken down into charges for availability, testing and usage, for each electrical sub-network and each NEM region.
- The total estimated annual cost for provision of SRAS in 2025-26, broken down into charges for availability, testing, and usage, for each electrical sub-network and each NEM region.
- Whether SRAS were acquired to a level that meets the SRS for each electrical sub-network.
- Whether any system restart test activities were undertaken.

For NSCAS:

- The quantities and types of NSCAS covered under existing ancillary services agreements.

[3] For more information, see http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Security-and-reliability/Ancillary-services/Network-support-and-control-ancillary-services-procedures-and-guidelines.

- The actual costs and quantities of each facility contracted to provide NSCAS under ancillary services agreements.

For Transitional Services:

- The total annual cost for the provision of transitional services, broken down to the costs incurred for each facility providing transitional services.
- Description of the transitional services provided by each facility and the reasons for acquiring services from that facility.
- The procurement process followed by AEMO to acquire transitional services for each facility in that year.
- How it has applied the Transitional Services Procurement Objective when procuring transitional services.
- If applicable, the reasons why AEMO did not accept an offer received in accordance with clause 3.11.11(f)(5).

For more recent actual (weekly) cost data for NMAS, see the AEMO website[4].

[4] See the Ancillary Services (AS) Payments Summary file at http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Data/Ancillary-Services/Ancillary-Services-Payments-and-Recovery.

2 System restart ancillary services

2.1 SRAS Procurement

There were 11 contracted SRAS in place during the 2024-25 year, shown in Table 1 by region and electrical sub-network.

Table 1 Number of SRAS acquired per region and electrical sub-network – July 2024 to June 2027

Region	Electrical sub-network	Number of SRAS
Queensland	Queensland	3
New South Wales	New South Wales	2
Victoria	Victoria	2
South Australia	South Australia	2
Tasmania	Tasmania	2
Total		11

2.1.1 Meeting the SRS

For the 2024-25 year, there was sufficient contracted SRAS to meet the SRS for all electrical sub-networks. For completeness, AEMO notes that the actual availability of all SRA providers were above the required availability for that service, for most of the year, as established by the terms of the relevant contract[5].

2.1.2 The process for acquiring SRAS

Reporting year 2024-25

AEMO did not acquire any additional SRAS for the year 2024-25. The SRAS contracts procured in 2023-24 and which remained in place in 2024-25, applied until 30 June 2027. Please note in the SA Region the SRAS procured contract with a 5 year term a up to June 2029/2030.

The following SRAS contracts procured are as follows:

- Queensland services have been contracted until 30 June 2027 with no extension options. From 1 July 2024, the SRS is not fully met in Queensland due to changes on the possible restart pathway. The “north of Bundaberg” requirement outlined in section 5 of the SRS is not met outside of business hours. Outside of business hours the SRS requires 825MW within 4 hours, however only up to 705MW of generation and transmission capability can be restarted in 4 hours.
- In South Australia one service has been contracted to 30 June 2029 and the other up to 30 June 2030.
- Victorian, New South Wales and Tasmanian services have been contracted from 1 July 2024 to 30 June 2027, with an option to extend by up to one year at AEMO’s discretion, and up to a further year by agreement between AEMO and the service provider.

[5] SRAS are procured to meet a minimum availability, which in turn contribute to meeting the required aggregate reliability for each electrical sub-network as specified by the SRS

2.2 Costs of SRAS

2.2.1 General

The annual cost of SRAS is based on an aggregation of three types of payments to contracted providers:

1. Availability – $ per 30-minute interval.
   - The availability cost may vary, as it is paid only when the service is available. For example, it is not paid when plant used by the SRAS is out of service, or when the SRAS fails a test under the contract. For cost estimation purposes, however, AEMO takes a conservative approach, assuming the plant has full availability for the whole year.
2. Testing – fixed amount per successful test.
   - The testing charge, per test, is fixed in SRAS contracts. There are currently two separate requirements for SRAS tests, which means that there may be more than one test per SRAS per year:
     - Post-maintenance (PM) test[6]: within 20 business days after a period of maintenance.
     - Short-notice (SN) test[7]: at a date and time nominated by AEMO with no less than five business days' notice.
3. Usage – fixed amount.
   - Paid only if the service is used following a black system event.

2.2.2 2024-25 SRAS costs

Table 2 shows a comparison of the estimated and actual costs for 2024-25. The difference between the estimated and actual SRAS costs for 2024-25 is attributable to the following:

- Availability costs were slightly lower in South Australia due to lower than estimated plant availability.
- Testing costs were lower than expected, as outage programs were amended during the year; some planned outages were cancelled, TNSP substation issues and PM and SN SRAS tests were combined.
- No usage payments were made.

Table 2 Comparison of 2024-25 estimated and actual SRAS costs

Sub-network	Number of SRAS	Estimated availability	Actual availability	Estimated testing	Actual testing	Estimated usage	Actual usage	Estimated total	Actual total
QLD	3	$8,700,082	$8,700,082	$1,750,000	$700,000	$44,925	$0	$10,495,007	$9,400,082
NSW	2	$12,659,076	$12,582,334	$343,209	$343,209	$25,000	$0	$13,027,285	$12,925,543
VIC	2	$8,565,002	$8,551,457	$202,649	$147,649	$35,750	$0	$8,803,401	$8,699,106
SA	2	$4,214,261	$4,162,319	$289,435	$115,000	$14,810	$0	$4,518,506	$4,277,319
TAS	2	$6,902,880	$6,902,880	$802,200	$534,800	$1,000	$0	$7,706,080	$7,437,680
Total	**11**	**$41,041,301**	**$40,899,072**	**$3,387,493**	**$1,840,658**	**$121,485**	**$0**	**$44,550,278**	**$42,739,730**

[6] For more detail, see 4.3.2 (b) (i) in the SRAS Guideline, at https://www.aemo.com.au/-/media/files/electricity/nem/security_and_reliability/ancillary_services/sras/sras-guideline-2021.pdf?la=en.

[7] For more detail, see 4.3.2 (b) (ii) of the SRAS Guideline.

2.2.3 2025-26 estimates

Table 3 shows an estimated cost breakdown for the year 2025-26.

Table 3 Estimated SRAS costs for 2025-26

Sub-network	Number of SRAS	Estimated availability	Estimated testing	Estimated usage	Total estimated
QLD	3	$8,909,036	$1,792,031	$44,925	$10,745,991
NSW	2	$12,963,115	$351,452	$25,000	$13,339,567
VIC	2	$8,770,712	$207,516	$35,750	$9,013,978
SA	2	$3,093,471	$289,280	$11,992	$3,394,743
TAS	2	$7,068,670	$821,467	$1,000	$7,891,137
Total	**11**	**$40,805,003**	**$3,461,745**	**$118,667**	**$44,385,416**

For availability costs, the estimate assumes 100% availability for each service. This will likely result in a slight over-estimation of costs for each service, because some SRAS sources will have SRAS outages of some duration over a year.

For testing costs, the estimate assumes 13 SN tests[8] and 6 PM tests. The number of PM tests is based on a combination of outage forecasts provided as part of the tender process, and the Medium-Term Projected Assessment of System Adequacy (MT PASA).

For usage costs, the estimate assumes a black system event once every 20 years. Therefore a cost probability of 5% has been applied, based on contracted usage charges.

AEMO is considering procuring RSS in FY 2025-26 in the VIC region. No cost estimate for RSS was considered in table 3, but will be reported on in the FY26 NMAS report.

2.2.4 Historical comparison of SRAS costs

Table 4 shows an historical comparison of SRAS costs over recent years.

The cost differences between the 2019-21 period and the 2021-24 / 2024-25 period are due to:

- a change in the structure of SRAS regions, effective from 1 July 2021, and
- a new set of contracts, effective from 1 July 2021 and 1 July 2024, with different commercial outcomes.

The 2025-26 cost estimate is based on the new set of contracts effective from 1 July 2024 (see details in 2.2.3). It can be observed in table 4 a small decrease in total SRAS cost in the SA region. This is due to a small decrease in the Estimated Availability charge as shown in table 3. This small decrease can be attributed to market competition in providing SRAS from SA plant.

[8] One for each of the 11 SRAS, plus one for an SRAS that includes a back-up power station, which also requires a test.

Table 4 Comparison of SRAS costs from 2019 through to 2025 against estimated costs for 202-26

Sub-network	Actual 2019-20	Actual 2020-21	Actual 2021-22	Actual 2022-23	Actual 2023-24	Actual 2024-25	Estimate 2025-26
QLD			$2,979,832	$2,707,112	$2,903,615	$9,400,082	$10,745,991
QLD North	$1,369,942	$1,397,532	QLD Region Merged				
QLD South	$4,566,122	$5,222,151					
NSW	$10,589,575	$10,786,405	$11,138,612	$11,724,643	$12,581,385	$12,925,543	$13,339,567
VIC	$7,125,455	$7,230,430	$7,516,218	$7,950,337	$8,483,431	$8,699,106	$9,013,978
SA	$5,923,901	$6,061,588	$3,672,238	$4,502,874	$4,689,818	$4,277,319	$3,394,743
TAS	$6,235,475	$6,243,855	$6,591,011	$6,506,137	$6,980,633	$7,437,680	$7,891,137
Totals	**$35,810,471**	**$36,941,962**	**$31,897,911**	**$33,391,102**	**$35,638,882**	**$42,739,730**	**44,385,416**

2.3 System restart testing

Clause 3.11.10(b) of the NER requires AEMO to report annually on any system restart tests that were conducted (or planned but not conducted) in any electrical sub-network.

Two system restart tests were planned and one was conducted in 2024-25. These were extended network energisation tests, which were planned and successfully conducted in the following regions:

- SA Region in May 2025;
- VIC Region in May 2025 (planned but not conducted).

The one test was conducted successfully. In particular:

- the results of each system restart test were consistent in achieving the SRS and AEMO's power system security responsibilities,
- AEMO satisfied its obligations to consult with the appropriate Test Participants in the affected region in relation to any system restart test, and
- AEMO analysed system conditions and provided relevant information to Test Participants on the most appropriate time to conduct system restart tests in order to minimise operational and market impacts.

3 Network support and control ancillary services (NSCAS)

3.1 Types, quantity, and cost of NSCAS

AEMO's NSCAS Description[9] specifies two categories of NSCAS:

1. Reliability and Security Ancillary Service (RSAS); and
2. Market Benefit Ancillary Service (MBAS).

In its 'last resort' procurement role, AEMO can only acquire NSCAS in the reliability and security category.

On 10th July 2024, AEMO published a notice[10] under clause 3.11.3(c)(3) of the National Electricity Rules (Rules), confirming that a NSCAS gap would remain in South Australia until mid-2026. AEMO was therefore required to use reasonable endeavours to acquire sufficient NSCAS to meet this gap in accordance with clause 3.11.5 of the Rules and the NSCAS Tender Guidelines. Further, contracting for the provision of NSCAS in South Australia would likely reduce the need for market intervention by AEMO.

AEMO acquired NSCAS contracts for the financial year 2024-25 in the SA region with a total of 234 MVAR of absorption capability for voltage control.

Table 5 summarises the quantities and costs of the services as of financial year 2024-25.

Table 5 Quantities and Cost of NSCAS over the FY 2025

Region	Facility	Quantity	Actual cost as of June 25
SA	Facility 1	126 MVAR	$3,047,534*
SA	Facility 2	108 MVAR	$0

*The NSCAS cost amount is inclusive of Wk21 to Wk26 of 2025. As 29 and 30 of June 2025 will be included in billing week 27 of 2025 so will be considered in the next annual report.

[9] At https://www.aemo.com.au/-/media/files/electricity/nem/security_and_reliability/system_security_planning/nscas-description-and-quantity-procedure-v3-0.pdf?rev=79c63a4d0979453384d4ab16493f23da&sc_lang=en

[10] At https://aemo.com.au/-/media/files/stakeholder_consultation/tenders/2024/notice-that-nscas-gap-remains-in-sa-july-2024.pdf?la=en

4 Transitional Services

4.1 Types, quantity, and cost of Transitional Services

AEMO's Transitional Services Guideline[11] specifies two types of transitional services:

1. Type 1 Services: NER 3.11.11(b)(1) defines these as:
    - the services are required for power system security and cannot otherwise be provided by an inertia network service, a system strength service, a market ancillary service or a NMAS.
    - Contracts for the procurement of Type 1 services may be up to three years in length and must not have a term that extends past 1 December 2029.
2. Type 2 Services: NER 3.11.11(b)(2) defines these as:
    - the services are acquired for the purpose of trialling new technologies, or a new application of existing technologies, for the management of power system security in a low- or zero-emissions power system where the particular application of the technology employed through the transitional services has not been used to provide services to manage power system security prior to 28 March 2024.
    - Contracts for the procurement of Type 2 services may be up to 10 years in length and must not have a term that extends past 1 December 2039.

AEMO may procure Type 1 or Type 2 transitional services in the circumstances set out in Table 3 and Section 2.7 of the Transitional Services Guideline.

In December 2024, AEMO received an unsolicited offer of Type 2 Transitional services. Following a detailed evaluation, AEMO has determined that the proposal does not meet the requirements under the Type 2 Services framework.

While AEMO did not acquire any Transitional Services for the financial year 2024-25, it did implement a procurement process via a direct Request for Offer (RFO) approach to select battery energy storage system (BESS) service providers in SA and VIC for Type 1 Minimum System Load (MSL) Transitional Services. The procurement commenced in March 2025 in readiness to address forecast MSL events in spring 2025.

Further information on the use and performance of these contracts will be provided in the FY26 NMAS report.

Additionally, AEMO intends to conduct a NEM wide (excluding the TAS region) procurement for the provision of both Type 1 and Type 2 MSL Transitional Services, anticipated to commence in late 2025 and to consider a wide range of technologies and solutions.

[11] At https://www.aemo.com.au/-/media/files/electricity/nem/security_and_reliability/ancillary_services/transitional-services/transitional-services-guideline_.pdf?rev=beff743b1c964d63b47d75e41f6ee082&sc_lang=en