System security services reporting fact sheet

Fact Sheet

This fact sheet outlines the content of the system security services reporting that the Australian Energy Market Operator (AEMO) will publish to fulfil its obligations under National Electricity Rules (NER) clause 4.4A.7(a), provide information to the market regarding system security service enablement activities, and support settlement of system security service agreements by Transmission Network Service Providers (TNSPs).

This fact sheet is correct as of November 2026. This fact sheet may be subsequently updated or amended. It does not constitute legal, business, engineering or technical advice. AEMO has made reasonable efforts to ensure the quality of the information in this document but cannot guarantee its accuracy or completeness.

Note that the report fields provided in this Fact Sheet are indicative only. AEMO makes iterative updates to its EMMS technical specifications as part of implementation; please refer to this documentation for final tables and reporting fields.

Reporting requirements

Daily reporting

NER 4.4A.7(a) requires AEMO to publish reports on the previous day's enablement outcomes, as follows:

Each day, in accordance with the timetable, AEMO must publish details of each type of system security service, the relevant facilities, the quantity and AEMO's estimate of the cost of that service enabled in the previous day and the reasons for the enablement.

Annual reporting

In addition, under NER 4.4A.7(b) AEMO is required to publish an annual report (by no later than 30 September) setting out:

1) *an assessment of the extent to which system security services achieved the minimum system security requirements and stable voltage waveform requirements in the previous financial year;*
2) *the total quantity and estimate of costs of each type of system security service that was enabled in the previous financial year;*
3) *the relevant facilities that were enabled in the previous financial year;*
4) *the reasons for enablement of the system security services that were enabled in the previous financial year; and*
5) *any trends in the enablement of system security services compared with earlier financial years.*

The annual report is not covered by this fact sheet.

Fact Sheet

Reporting on enablement of system security services

Reports include all system security services[1], not only those enabled via AEMO's System Security Manager (SSM) application. This includes transitional services, Network Support and Control Ancillary Services (NSCAS), system strength services and inertia network services. Note that system strength services enabled to meet either the minimum system security requirements or the stable voltage waveform requirements will be reported as system strength services.

Typically, daily reports reflect services that were enabled at any point during the previous trading day. For services that were enabled across more than one trading day, reporting occurs daily throughout the relevant enablement period. For example, a system strength service enabled for 27 to 29 December, would be reflected in the 28, 29, 30 December Day + 1 reports.

Publicly available reports

As part of the current release AEMO publishes two (2) daily system security service reports, as well as an additional forward-looking report that are publicly available via NEMWeb and the NEM Wholesale Data Interchange.

The approach to the reporting structure reflects consultation feedback highlighting the importance of maximising transparency whilst also balancing the requirements of NER 4.4A.7 and data confidentiality considerations for participating contracts. AEMO has also sought to align the approach to the extent possible with similar reporting arrangements, such as for directions.

Enablement Periods Day +1 Report

This report summarises the system security service types, reasons for enablement and relevant facilities related to services that were enabled in the previous trading day.

SSM_ENABLEMENT_PERIOD	
INSTRUCTION_ID	Unique Instruction Identifier
DUID	Dispatchable Unit Identifier
ENABLEMENT_START_INTERVAL	The first Dispatch Interval for the INSTRUCTION_ID in the trading day the unit is enabled for system security services.
ENABLEMENT_END_INTERVAL	The last Dispatch Interval for the INSTRUCTION_ID in the trading day the unit is enabled for system security services.
ENABLEMENT_REASON	Refer to **Enablement Reason**
LASTCHANGED	Last time record was changed.

The total number of facilities enabled may be determined based on how many DUIDs are reported as enabled on a given trading day. If a unit is enabled twice within the same trading day, it will appear as two distinct enablement entries in the Enablement Periods Day +1 report.

The total enablement quantity for each system security service type or constraint over the course of the trading day can be determined by summing the enablement duration for each DUID contributing to the system security service type.

Enablement Reason

Prior to release 1.1B the ENABLEMENT_REASON field in the Enablement Periods Day +1 Report was reported as the service type.

In a commitment to provide the highest practicable level of reporting transparency the ENABLEMENT_REASON field in the Enablement

[1] Refer to 4.4A.2 in the NER.

Periods Day +1 Report has been updated to include a constraint reference where available.

A constraint reference indicates that a facility was enabled in response to an unsatisfied minimum system security requirement in the Pre-Dispatch forecast. In instances where AEMO is unable to report the constraint reference, the service type will be reported on in lieu of a constraint reference.

Constraint references may be formatted as 'SSM_' or 'NSW1_' where NSW may be any NEM region.

For further information please refer to the Constraint Naming Guidelines[2].

Where the constraint references relating to South Australia are reported, the corresponding enablement is for a Grid Reference Transitional Service (GRTS) in South Australia[3]. All other constraint references relate to TNSP-procured system strength or inertia services.

Service types may include "System Strength – Combination", "System Strength – Coefficient", "Inertia", "NSCAS", and "Transitional Service – type 1".

Refer to the Congestion information resource[4] for more information.

Enablement Costs Day +1 Report

This report provides information on the estimated cost of enabled system security services over a trading day, aggregated by service type. The costs reported are estimates only and only represent certain elements of the cost of a given enablement. For example, it does not capture all costs associated with a given contract, such as availability payments, rather only those incurred as the result of enablement decisions.

The costs incurred as a result of enablement are estimated for this report: estimates of pool price pass through for energy revenue are adopted; and in the less frequent occurrence of cancellations, the cost of cancelled services is not included.

SSM_ENABLEMENT_COSTS	
END_TRADINGDATE	Trading Date of the end of the enablement
ENABLEMENT_REASON	Reason for the enablement (field covers both service type and reason for enablement; for example: *System strength – combination; System strength – coefficient; NSCAS; NSCAS – voltage control; Inertia; Transitional service – type 1; Transitional service – type 1 MSL; Transitional service – type 2*)
ESTIMATED_COSTS	Cost estimation for the service type.
LASTCHANGED	Last time record was changed.

Treatment of always-on contracts in publicly available daily reporting

Some system security service agreements will relate to facilities that provide an 'always-on' service. These facilities are assumed to be providing the contracted service unless on an outage and do not require day-to-day enablement scheduling by AEMO. The costs incurred are largely fixed by nature to reflect availability rather than enablement.

As such, AEMO will include details of always-on services in its annual report (rather than via daily reporting), including a list of always-on contracts for reference, to ensure completeness.

[2] https://www.aemo.com.au/-/media/files/electricity/nem/security_and_reliability/congestion-information/2016/constraint-naming-guidelines.pdf?rev=17cf9ae9bbcf425299945ca618e69207

[3] https://www.aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/transition-planning/sa-transitional-services-for-grid-reference-son.pdf

[4] https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/system-operations/congestion-information-resource

Indicative Rolling Regional Schedule Report

This report provides a forward-looking view that shows the indicative system security status for each mainland region over the pre-dispatch period. The purpose of this is to provide Participants with early visibility of anticipated system security conditions and potential upcoming enablement periods.

SSM_INDIC_ROLLING_RGN	
VERSION_DATETIME	Effective Date and Time of this record.
INTERVAL_DATETIME	Date and Time of the interval.
REGIONID	Region identifier
REGION_STATUS	System security status for the region (for example: *Secure, Resolved, Not Secure*).
DUID_COUNT_FIRM[5]	Sum of firm units scheduled to be enabled for the region with confirmed enablement instruction(s) sent.
DUID_COUNT_SPECULATIVE[5]	Sum of proposed units planned to be scheduled for enablement for the region where enablement instruction(s) are not sent.
LASTCHANGED	Last time record was changed.

Reporting available to TNSPs & Providers

AEMO publishes four (4) daily reports accessible to participating TNSPs and Providers, in addition to enablement instruction reports notifying that a service has been enabled to provide a contracted system security service. These reports are available in the Participant Data Model report and the Markets Portal.

Final Day +1 Report

This report provides detail on the previous trading day's enablement for each relevant DUID. In combination with contract cost structure and other data accessible to TNSPs relating to their contracted assets (e.g. bids, SCADA data), the Final Day +1 Report provides the information required to support TNSP settlement of payments for enabled services. Although AEMO will be monitoring service provision for the purpose of maintaining system security, AEMO is not in a position to assess whether a service was fulfilled in accordance with contracted arrangements. This will need to be assessed independently by the TNSP.

SSM_SCHEDULE	
INSTRUCTION_ID	Unique Instruction Identifier
CONTRACT_ID	Unique Contract Identifier used to create enablement.
DUID_PARTICIPANTID	Primary recipient (system security service Provider)
TNSP_PARTICIPANTID	Participant ID of TNSP if contract procurer is TNSP.
DUID	Dispatchable Unit Identifier
UNIT_COUNT	Number of sub-units within a DUID that are required for enablement.
EQUIPMENT_TYPE	Dispatchable Unit resource (for example, GENERATOR, LOAD, BIDIRECTIONAL, SYNCHRONOUS CONDENSER).
SERVICE_TYPE	Requested Service to provide.
MIN_DISPATCH_MW	Minimum Dispatch Target required for DUID to enable the contract.
START_INTERVAL_DATETIME	The first Dispatch Interval in the trading day of the enablement.
END_INTERVAL_DATETIME	The last Dispatch Interval of the trading day of the enablement.
LASTCHANGED	Last time record was changed.

Contract Unit Availability Report

The Contract Unit Availability Report provides a summary of service availability information changes submitted by Providers and is released when availability has changed.

[5] DUID_COUNT_FIRM and DUID_COUNT_SPECULATIVE fields will only be populated once AEMO deems there are sufficient contracts in the region.

SSM_CONTRACT_UNIT_AVAIL	
CONTRACT_ID	Unique Contract Identifier
DUID	Dispatchable Unit Identifier
INTERVAL_ DATETIME	The starting Dispatch Interval for the availability change. This will be the active availability until the next INTERVAL_DATETIME record for this Contract and DUID.
VERSION_ DATETIME	Effective Date and Time of this record.
AVAILABLE	Indicates if DUID is available for the INTERVAL_DATETIME (1 = True, 0 = False).
UNIT_COUNT	Number of sub-units within a DUID that are available for enablement.
ACTIVATION_LEAD _TIME	The expected maximum lead time for the system security service to be enabled from a non-operational state in minutes.
MIN_DISPATCH_ MW	Minimum Dispatch Target required for DUID to enable the contract.
MIN_ENABLEMENT _DURATION	Minimum duration a unit must be active to enable the contract in minutes.
LASTCHANGED	Last time record was changed

Weekly Scheduled Availability Report

The weekly Scheduled Availability Report provides a retrospective report on the availability submitted for a given DUID over the previous seven trading days.

SSM_SCHEDULED_AVAILABILITY	
CONTRACT_ID	Unique Contract Identifier
DUID	Dispatchable Unit Identifier
AVAILABLE_START_INTERVAL	The first Dispatch Interval in the trading day the unit is available.
AVAILABLE_END_INTERVAL	The last Dispatch Interval in the trading day the unit is available.
TNSP_PARTICIPANTID	TNSP Participant ID
LASTCHANGED	Last time record was changed.

Indicative Rolling DUID Schedule Report

This report provides an indicative forecast of upcoming enablement periods at a DUID level over the pre-dispatch timeframe, with the aim of providing TNSPs and Providers visibility of when their contracted assets may be enabled.

SSM_INDICATIVE_ROLLING_DUID	
VERSION_DATETIME	Effective Date and Time of this record.
INTERVAL_DATETIME	The Date and Time of the interval.
CONTRACT_ID	Unique Contract Identifier.
DUID_PARTICIPANTID	Primary recipient (SSM Service Provider)
INSTRUCTION_ID	Unique Instruction Identifier
DUID_STATUS	Status of each contracted DUID (for example: *Scheduled pending, Scheduled approved, Instruction issued, Fulfilment, Available, Offline, Online, Outage*)
MIN_DISPATCH_MW	Minimum Dispatch Target required for DUID to enable the contract.
EQUIPMENT_TYPE	Dispatchable Unit resource (for example, GENERATOR, LOAD, BIDIRECTIONAL, SYNCHRONOUS CONDENSER).
LASTCHANGED	Last time record was changed.

System security services reporting fact sheet

Fact Sheet

Mapping Reports across publications

Reporting is available via multiple avenues. The table below maps the naming and audience of each report across the different publication sources.

Report	Participant Data Model	Data Interchange	NEMWEB	Audience	Cadence
Ad Hoc Availability	SSM_CONTRACT_UNIT_AVAIL	SSM_CONTRACT_UNIT_AVAIL		SERVICE PROVIDER (SP)	On Availability changes
Instruction	SSM_INSTRUCTION	SSM_INSTRUCTION		SP/TNSP	Each time an instruction is issued
Weekly Availability	SSM_SCHEDULED_AVAILABILITY	NEXT_DAY_SCHEDULED_AVAILABILITY		SP/TNSP	Weekly
Final Day+1	SSM_SCHEDULE	NEXT_DAY_DAILY_SCHEDULE		SP/TNSP	Daily
DUID Schedule	SSM_INDICATIVE_ROLL_DUID	/<Provider>/SSM_FORECAST		SP/TNSP	30 minutes
Region Schedule	SSM_INDICATIVE_ROLL_REGION	/PUBLIC/SSM_FORECAST	SSM_INDICATIVE_ROLL_REGION	PUBLIC	30 minutes
Enablement Costs	SSM_ENABLEMENT_COSTS	NEXT_DAY_ENABLEMENT_COSTS	SSM_ENABLEMENT_COSTS	PUBLIC	Daily
Enablement Period	SSM_ENABLEMENT_PERIOD	NEXT_DAY_ENABLEMENT_PERIOD	SSM_ENABLEMENT_PERIOD	PUBLIC	Daily

System security services reporting fact sheet

Fact Sheet

Where can I find more information?

For any further enquiries, please contact AEMO's Information and Support Hub via

- supporthub@aemo.com.au or
- call 1300 236 600