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EMMS - Technical Specification - December 2025
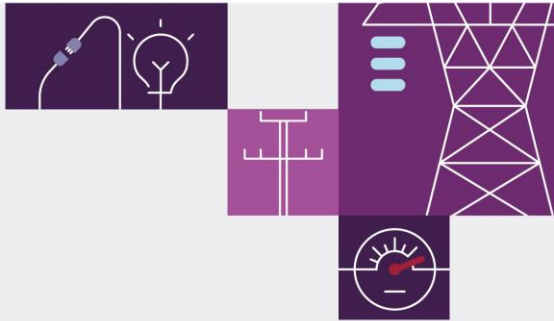
~~1.00~~1.01 July 2025

Pre-production: Tuesday ~~30 September~~28 October 2025~~(TBC)~~

Production: Tuesday 2 December 2025

Rules effective: Tuesday 2 December 2025

AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

Important notice

Purpose & audience

This document describes the technical changes required to participant's systems for the EMMS - Technical Specification - December 2025 (Release). The Australian Energy Market Operator (AEMO) provides this information as a service targeting business analysts and IT staff in participant organisations. It provides guidance about the changes to their market systems under the National Electricity Rules (Rules), as at the date of publication.

How to use this document

- If you have questions about the business aspects of these changes, please see Consultations on AEMO's website.

- The references listed throughout this document are primary resources and take precedence over this document.

- Unless otherwise stated, you can find resources mentioned in this guide on AEMO's website.

- **Text in this format** is a link to related information. Some links require access to MarketNet.

- **Text in this format**, indicates a reference to a document on AEMO's website.

- **Text in this format** is an action to perform in the Markets Portal.

- This document is written in plain language for easy reading. Where there is a discrepancy between the Rules and information or a term in this document, the Rules take precedence.

- Glossary Terms are capitalised and have the meanings listed against them in the Glossary.

- Rules Terms have the meaning listed against them in the **National Electricity Rules** (Rules).

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Distribution

Available to the public.

Document Identification

Prepared by: AEMO Digital

Last update: Wednesday, 9 July 2025 10:04 AMWednesday, 9 July 2025 9:13 AMWednesday, 9 July 2025 9:07 AM

Version History

1.001.01 See Changes in this version

Documents made obsolete

The release of this document changes only the version of EMMS - Technical Specification - December 2025.

Support Hub

To contact AEMO's Support Hub use Contact Us on AEMO's website or for urgent matters phone: 1300 AEMO 00 (1300 236 600.

Contents

1 Introduction

1.1 Audience

AEMO provides this information as a service targeting business analysts and IT staff in Registered Participant companies.

The primary audience are:

- Procurers: AEMO or Transmission Network Service Providers (TNSPs) procuring contracts from the system security service provider.

- Providers: are parties entering into system security contracts with Procurers. Initially, AEMO anticipates providers to be Market Generators (Scheduled and Semi-Scheduled) and Integrated Resource Providers with Battery Energy Storage Systems (BESS).

1.2 Objective

The EMMS - Technical Specification - December 2025 (Release) describes the projects planned by AEMO from a participant perspective and includes any system related changes for participants.

1.3 Status

Version	Status
~~1.00~~1.01	Updated version based on the updated requirements and design. We still expect changes to the design while development and testing are in progress.
V1.00	Updated version based on the updated requirements and design. We still expect changes to the design while development and testing are in progress.
~~v0.01~~v0.01	Initial Draft for review. The design is not ready for participants' builds Presents the EMMS - Technical Specification - December 2025 evolving design. Please send feedback to Contact Us. In the Details of your enquiry section, mention the EAS Knowledge Management team as the Resolver group.

1.4 Release dates

Scheduled for implementation in:

- Pre-production: Tuesday ~~30 September~~28 October 2025

- Production~~:————————————~~:Tuesday 2 December 2025

1.5 Projects and enhancements

Changes and enhancements for this Release include:

No.	Functionality	Change	Affected interface	Reference
1	Registration	Minor updates to identify security service providers and associated units		
2	Settlements	Updates to Settlement Reports		
3	Electricity Data Model 5.6	New/updated data model tables to support enablement instructions, ISF schedules and ISF reporting. Settlements/Billing changes for NSCAS and NMAS security services procured by AEMO		
4	Markets Portal	New ISF interface called the Security Service Management (SSM)		
5	~~Reports~~APIs	New API endpoints allow users to update asset availability and view enablement instructions~~Adds new reports~~		
6	Reports	Adds new reports		

1.6 Rule and procedure changes

The following rules and procedures take precedence over technical specifications and guides.

Title	Project	Version/status	Effective
Improving security frameworks for the energy transition	ISF	Final	2 December 2025
Procedures For Issue of Directions And Clause 4.8.9 Instructions	ISF	Final	4 July 2024
Inertia Requirements Methodology	ISF	Final	1 December 2024
Network Support and Control Ancillary Services (NSCAS) Description and Quantity Procedure	ISF	Final	1 December 2024
Transitional Services Guideline	ISF	Final	8 November 2024

Title	Project	Version/status	Effective
Regional Benefit Ancillary Services Procedures (Procedures)	ISF	Final	17 October 2024
Provisional Security Enablement Procedures (Provisional Procedures)	ISF	Final	30 June 2024
Schedule of constraint violation penalty factors	ISF	In-progress	2 December 2025
SO_OP_3704 **Pre-Dispatch**	ISF	In-progress	2 December 2025
Spot Market Operations Timetable	ISF	In-progress	2 December 2025
SO_OP_3705 **Dispatch**	ISF	In-progress	2 December 2025
SO_OP_3720 **Security Enablement Procedure** (Complete Publication)	ISF	In-progress	31 August 2025
SO_OP3708 **Non-market Ancillary Services**	ISF	In-progress	2 December 2025
Transition plan for system security	ISF	Final	2 December 2024
Constraint Formulation Guidelines	ISF	In-progress	2 December 2025
SO_OP_3718 **Outage Assessment**	ISF	In-progress	2 December 2025

1.7   Related technical specifications

Title	Description
EMMS – Technical Specification – Data Model 5.6 – November 2025	Provides the detailed Data model table changes.

1.8   Related documents

> **Once published, these resources take precedence over this technical specification**

These guides and resources are updated according to this technical specification and published for the pre-production Release Date.

Title	Description	Status
Markets Portal Help	- Guide to MSATS Reports - Security Service Management Interface	Not started
Data Interchange Online Help	Update documentation related to Data Model 5.6	Not started

1.9 Approval to change

No approval or agreement to change required from participant change controllers. Agreement was sought in the **NEM Reform Wholesale Consultative Forum**.

1.10 Market systems user group meetings

The Market Systems User Group (MSUG) is an industry user group established to discuss NEM wholesale and retail IT systems releases. Its purpose is to facilitate the continuing improvement of AEMO's IT systems by seeking feedback and collaboration from participants.

MSUG meetings are open to all interested parties, with invitations sent to all included on the distribution list. If you have a technical question for a project and want to attend the MSUG ask your company's support team to include your email address in their **AEMO Help Desk Bulletin (CRM)** distribution list.

1.11 Version numbers

AEMO releases new versions of this document as the technical requirements are streamlined.

Incremental version numbers such as 1.01, 2.01 and so on mean there is a minor change to the technical specification.

Major version numbers such as 1.00, 2.00 means there are substantial changes to the technical specification. Participants must carefully review these changes, detailed below.

1.12 Changes in this version

The changes in this version include:

- Updates dates for Data Model preproduction release and the project Market trial duration in the Proposed Timeline chapter.

- Adds information about the updated delivery plan in Participant Impact chapter.

- Adds the API endpoint for asset availability and enablement instructions screens in APIs chapter.

Removes indicative rolling DUID report and adds scheduled availability change report in ReportsReports~~The changes to this version include:~~

- ~~Updates to Registration chapter.~~

- ~~Adds more details to the Settlements reports section.~~

- Adds link to the data model technical specification in Electricity Data Model 5.6 chapter.

- Adds some mock screenshots in the Markets Portal section.

- Adds some details to the APIs chapter.

- Adds more details in the Reports chapter.

- chapter.

2 Proposed Timeline

The dates for the Market System User Group Meetings (MSUG) are tentative. We will provide an invitation one week prior to the meeting.

Milestone	Date	Description
Approval required	NA	Final date for participant approval of this Release
Revised Technical Specification	~~May 2025~~August 2025	AEMO releases new versions of this document as the technical requirements are streamlined. During the project this document is the source of truth From the production release, the technical specification becomes final and the **related documents** become the source of truth **Technical Specification Portal**
Related Documents publication	~~1 October 2025~~28 October 2025	Release of guides and resources mentioned in Related on page 10on page 10on page 8
Next MSUG meeting	~~2 June 2025~~1 August 2025 ~~(TBC)~~	Market Systems User Group Meeting (MSUG) to review the technical specification and ask AEMO technical SMEs questions This date is tentative. The Knowledge Management Team provides the invitation prior to the meeting
Pre-production Data Model auto subscription	~~24 September 2025~~14 October 2025 No auto-subscription for existing files	For any **existing** files with modified or new tables, if participants are subscribed, AEMO moves them to the Legacy version For more details, see Data subscriptionData subscriptionData subscription on page 15on page 15on page 12
Pre-production Data Model release	~~24 September 2025~~14 October 2025	Participant Data Model scripts released
Pre-production refresh	Wholesale preproduction 18 August 2025 - 5 September 2025 (for ISF 1.0) Retail preproduction 25 August 2025 - 29 August 2025 (for MSR - R1)	Refresh of the pre-production system with data refreshed from the production system. An outage of up to five days can occur to the pre-production environment during this period. Participant access is not restricted, however, AEMO do not guarantee the pre-production data content or system availability. During the refresh, access to other AEMO systems such as AWEFS, EMMS, OPDMS, and STTM may be intermittently affected

Proposed Timeline

Milestone	Date	Description
Pre-production implementation	~~25 September 2025 – 2 October 2025~~20 October 2025 – 27 October 2025	AEMO implements components of the Release to pre-production for participant testing AEMO has full access to the system during this period Participant access is not restricted; however, the data content or system availability is not guaranteed
Pre-production available	~~15 October 2025~~28 October 2025	Testing period begins for participants
Market Trials	~~1 October 2025~~28 October 2025 - 1 December 2025	AEMO coordinated testing with all participants
MSUG meeting: pre-production review	~~1 November 2025~~12 November 2025 (TBC)	MSUG to review the technical specification and ask AEMO technical SMEs questions This date is tentative. The Knowledge Management Team provides the invitation prior to the meeting
Production implementation	24 November 2025 – 1 December 2025	AEMO implements the release to production
Production Data Model auto subscription	19 November 2025 No auto-subscription for existing files	For any **existing** files with modified or new tables, if participants are subscribed, AEMO moves them to the Legacy version For more details, see Data subscriptionData subscriptionData subscription on page 15on page 15on page 12
Production Data Model release	19 November 2025	Participant Data Model scripts released
Production systems available	2 December 2025	Production systems available to participants
MSUG meeting: post-production review	18 December 2025 (TBC)	Market systems user group meeting to review the implementation of the production release This date is tentative. The project manager will provide an invitation one week prior to the meeting

3 Participant Impact

> **This chapter is updated as the details are finalised during the project lifecycle.**

For information about the transition approach, see **ISF Draft Transition Approach**.

For more information on the market trial, see the ~~Draft Market~~**Improving Security Frameworks (ISF) Phase 1.0 Revision Markets Trial Strategy**.

3.1 Revised delivery approach

The project now is breaking down the delivery into Release 1 and Release 1.1:

Release 1 is delivered on 2 Dec 2025 and focuses on Manually Generated Enablement Instruction.

Release 1.1 is delivered around June 2026. Includes delivery of automated payments.

~~3.1~~3.2 EMMS data model v5.6

Participants wanting to receive the ISF information in their Data Interchange environments must upgrade to EMMS Data Model v5.6.

~~3.2~~3.3 Data subscription

~~3.2.1~~3.3.1 Auto-subscription

Existing participants are auto -subscribed to any new files when they upgrade to the latest data model version. New file names to be advised.

~~3.2.2~~3.3.2 Legacy files

There is **no** auto-subscription for the following existing files:

- TBC

Participants are moved to the Legacy version of this file and continue to receive the same data until they upgrade to EMMS Data Model v5.6 and subscribe manually to <ADD FILEID here>. Once you upgrade, unsubscribe from <ADD FILEID here>.

4 Improving Security Frameworks

4.1 Goal

The Improving Security Frameworks (ISF) project aims to improve the market arrangements for security services. The ISF project addresses system security challenges during the transition by reducing reliance on directions and providing better incentives for participants to invest in providing system security in the longer-term. It also increases transparency on system security needs and understanding, and how AEMO plans to manage system security as we transition to a secure net-zero emissions power system.

The ISF project allows AEMO to predict when a system shortfall is expected in the operational timeframe and use the system security contracts to fill this gap using the new Security Scheduler.

4.1.1 New service types

Service types impacted by the ISF project are called the system security services (SSS) and include the following:

- System strength services - scheduled by Security scheduler

- Inertia network services - scheduled by Security scheduler

- Network Support and Control Ancillary Services (NSCAS)

- Transitional services (new)

  - Type 1

  - Type 2

Depending on the circumstance, AEMO or the Transmission Network Service Provider (TNSP) procure these services under a contract for that service per the NER.

For more information on overview of ISF, see **Improving security frameworks for the energy transition HLIA**.

4.2 High-level changes

Function	Description	Reference
Registration	Minor updates to identify security service providers and associated units	Registration
EMMS Data Model v5.6	New/updated data model tables to support enablement instructions, ISF schedules and ISF reporting. Settlements/Billing changes for NSCAS and NMAS security services procured by AEMO	**EMMS Technical Specification – Data Model 5.6 – November 2025**

Inserted Cells

Function	Description	Reference
Settlements	Updates to Settlement Reports	Settlements
Markets Portal	New ISF interface called the Security Service Management (SSM) in the Markets Portal: - To access and enablement instructions, indicative DUID schedules and variable reporting - To submit/maintain ISF service availability (and other operational information).	Markets Portal
APIs	Exposes APIs to view enablement instructions and update asset availability	APIs
Reports	Adds new reports for the following: - Rolling DUID Schedule - Final Day + 1 - Enablement Instruction - Enablement Periods Day + 1 - Enablement Costs Day + 1 - Schedule availability - Scheduled availability change	ReportsReports

5 Registration

The Registration team ensures all ISF providers providing security services:

- Have a DUID (registration data) including assets currently not formally registered with AEMO, synchronous condensers or experimental assets.

- Have contract information (ISF services provided) and availability stored in (new) ISF data store.

- Are predominantly registered scheduled load, generation, and bidirectional units.

- Non-registered providers have Participant IDs with the category System Security and the class code as NON-MARKET.

Some scenarios:

- Market Participant with existing market PID (with categories Market Generator, System Security) and existing classified DUID (Scheduled Generator) must have an existing market DUID flagged for System Security linked to the market PID.

- Market Participant with existing market PID (with categories Market Generator, System Security) and new unit not classified (Synchronous Condenser) but is required to provide system security services must have a non-market DUID flagged for System Security linked to a new station ID linked to the market PID.

- Non-market provider with a new non-market PID (with categories System Security) and new unit not classified (Synchronous Condenser) but is required to provide system security services must have a non-market DUID flagged for System Security linked to the non-market System Security PID.

5.1 Updates to Registration systems

The ISF project add the following changes to the Registration systems:

- Adds a new participant category called SECURITYSERVICE.

- Adds a new connection point type called SECURITYSERVICE.

6   Settlements

For the New service types introduced in ISF, the following are the payment and recovery types.

6.1   Payment types

The payment types describe the ways through which AEMO compensates a service provider for the security service they provide.

Payment types	Availability ($/hr)	Compensates a provider for maintaining the availability of the system security service.
	Activation ($/activation)	Only paid if not operational in time before instruction. Paid to come online for system security services.
	Usage ($/hr)	Payment for actual usage for when the unit was on for system security service purposes as indicated by enablement start and enablement end period in the scheduling tool.
	Energy Revenue ($)	Revenue transfer to AEMO from the sale of electricity on the spot market (positive or negative) resulting from the ISF asset enabled at Minimum Dispatch or Auxiliary Load (if applicable).
	Test	Payment for conducting successful tests.
	Ad hoc	Lump sum payment for service providers uploaded manually.
	OTHER	Payment Type allows extra fields for bespoke contracts in future.

6.2   Recovery types

The recovery types are the mechanisms through which AEMO recovers the payments from the market.

Recovery types	Trading interval (TI)	Single TI payment recovered based on single TI energy.
	Settlement Day	Each TI payment recovered based on energy for settlement day.
	Billing Week	Each TI payment recovered based on energy for Billing week.
	Event Duration	Each TI for event duration recovered based on the energy over the event duration.
	Ad hoc	Recovery for event ad hoc/manual.

6.3   Settlement reports

Within Settlements, the ISF project updates the following reports:

- Settlement Reconciliation

- NMAS Recovery

- NMAS recovery RBF

- Ancillary Summary

These reports include new rows for the new services.

6.3.1 Settlement reconciliation report

The SR report contains new NMAS details:

- The service fields in the NMAS – Payments section include the new service types for Inertia, System strength, Type 1 and Type 2.

The design is in progress for this change and AEMO provides more details as these are finalised.

```
Non Market Ancillary Service Transactions - Payments
---------------------------------------------------------------
NMAS Type          Service Provided     Amount($)
---------------------------------------------------------------
SRAS                      RESTART      $516,850.88
NSCAS             SYSTEM STRENGTH        $1,500.00
Type 1                        MSL        $2,300.00
---------------------------------------------------------------
Total Payment From AEMO                $520,650.88
===============================================================
```

- Adds a new section for ISF NMAS by contract/DUID to provide a payment summary at Contract / DUID level. Each Payment type is listed as a row for each contract / DUID.

```
ISF Non Market Ancillary Service by Contract ID - Payments
---------------------------------------------------------------

Contract ID, Type & DUID          SS_ST_01      NSCAS System Strength      DUID1
Availability Payment              $1000
Usage Payment                     $500

---------------------------------------------------------------

Contract ID, Type & DUID          T1_ST_01      Transitional Services Type 1   DUID3
Availability Payment              $2000
Usage Payment                     $100
---------------------------------------------------------------
```

- The calculated recovery amounts for each type of payment is displayed against these rows.

- In the NMAS Transactions by Region and Type - Recovery and NMAS payment by contract ID and DUID, the following payment types are updated:

  - Availability

- Activation

- Usage

- Energy Revenue

- Testing

6.3.2 NMAS recovery report

Updates the report with new NMAS details:

- Service – now includes new services for inertia, system strength, type 1, and type 2 transitional services.

- Payment type – updates with all payment types for ISF, availability, activation, energy revenue, usage and test.

- Recovery amount – Calculated based on consumed and sent out energy.

6.3.3 NMAS recovery RBF report

Updates the report with new NMAS details:

- Service – now includes new services for inertia, system strength, type 1, and type 2 transitional services.

- Payment type – updates with all payment types for ISF, availability, activation, energy revenue, usage and test.

- Recovery amount – Calculated based on consumed and sent out energy.

6.3.4 Ancillary summary report

Updates the report with new NMAS details:

- Service – now includes new services for inertia, system strength, type 1, and type 2 transitional services.

- Payment type – updates with all payment types for ISF, availability, activation, energy revenue, usage and test.

7   Electricity Data Model 5.6

> **Participant systems incorrectly configured and not compliant with the Baseline Assumptions in the Data Interchange Framework and Glossary may suffer data loss.**

This Release contains an updated version of the Electricity Data Model 5.6. This section describes the affected packages, tables, files, reports, and interfaces.

For more information on the changes, see **EMMS Technical Specification – Data Model 5.6 – November 2025**.

8 Markets Portal

A new interface in the Markets Portal to allow system security service providers titled the Security Service Management interface whether they are registered or non-registered participants.

The security service providers can import file to update the parameters. They can also search, filter and export data from the page.

The interface also generates missing data by performing a system check at regular intervals to see if all relevant parameters are available for the next 7 prospective calendar days. If not, it generated this data for those time intervals.

8.1 User access rights

To access the new interface within the Markets Portal, make sure you have the following user rights entity:

<mark><NEED INFO ABOUT USER RIGHTS to access the interface></mark>

~~Participant Administrators (PAs) authorise **Participant User** access in **MSATS**. The initial **PA** is set up by the **AEMO** system administrator as part of the registration process.~~

Participant Administrators (PAs) authorise Participant User access in MSATS. The initial PA is set up by the AEMO system administrator as part of the registration process.

The design is in progress for this change and AEMO provides more details as these are finalised.

The PA needs to tick the following rights to allow access to the Security service management interface in the Markets Portal:

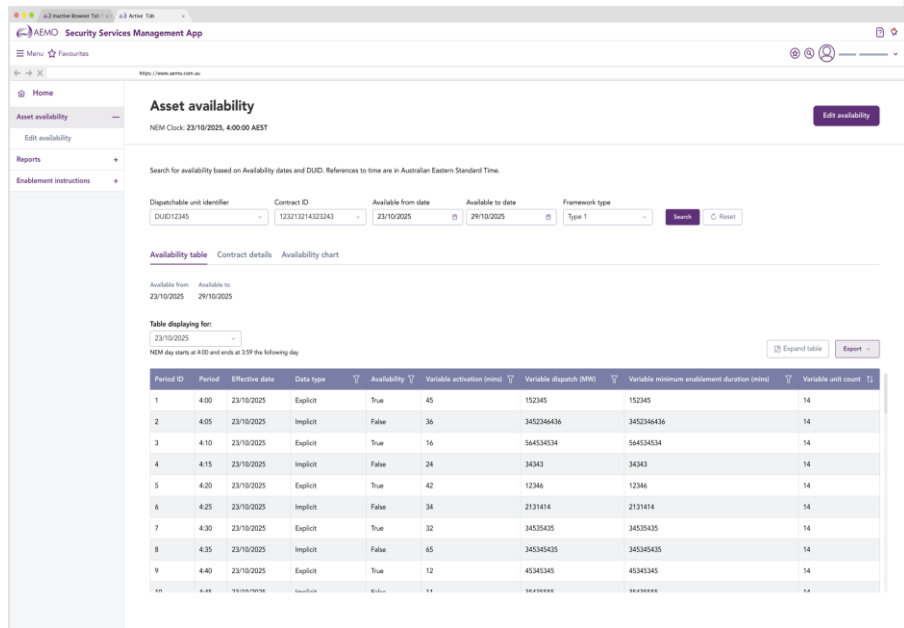| Function	Access rights
Read	Allows user to only view relevant information.
Create/Update	Allows user to edit asset availability.
Delete	Allows user to delete asset availability

The final interface may be different from the screenshots in this section.

8.2   Security service management interface

The interface allows security service providers to perform the following:

- On the **Asset Availability** screen:

  – View ~~and update~~ their unit's availability parameters.

  – Update the unit's availability parameters, manually, importing a file, duplicating rows or by using the quick fill option.

  – View and update their unit's operational parameters.

  – View the availability chart.

  – Export the asset availability information as csv or json file.

- On the **Enablement Instructions** screen:

- View the current provider's enablement instructions and amendments.

- Current and in progress enablement instructions under a tab called **Current enablement instructions.**

- View historical enablement details under the **Historical enablement instructions.**

- Users can download all current and historic enablement instructions.

- On the **Schedule** screen:

  - AEMO publishes the schedule information.

  - Users can download all schedule information (current or historical) based on filtered or unfiltered search.

- On the Reports screen:
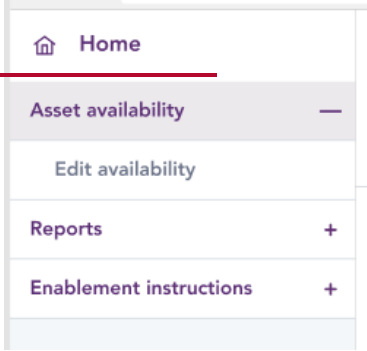
Users can view and download current and historical reports.

9   APIs

For ISF, the following functionality are available using APIs:

- The APIs allow participants to submit, validate, and manage asset availability data for 7-day forecasts in 5-minute intervals. Participants can also perform these functions using the Markets Portal or upload a file in the Markets Portal interface.

The API design is in progress and AEMO provides more details as these are finalised.

- The APIs allow provides to pull the enablement instructions relevant to their participant ID.

9.1   Asset availability

For the asset availability screen, the following APIs are available:

- get /api/v1/variableParameter/contractUnitAvailability

- post /api/v1/variableParameter/contractUnitAvailability

9.2   Enablement instructions

For viewing the enablement instructions:

- get /api/v1/enablementInstruction/enablementInstructions

10 Reports

The following new reports are going to be published to the participants as a part of the ISF changes:

- ~~Indicative rolling DUID schedule report~~
- Enablement instructions report
- Final day + 1 report
- Enablement periods day + 1 report
- Enablement costs day + 1 report
- Scheduled availability report
- ~~Indicative rolling DUID schedule~~<u>Scheduled availability change</u> report

The design is in progress for this change and AEMO provides more details as these are finalised.

~~This report provides notice of system security status to service providers and TNSP. The intent is to provide forewarning of possible enablement instruction that may be required.~~

~~Visibility: Private sent to relevant TNSP and service provider.~~

~~Details: The report contains the energy target for a region, DUID, start and end time, and the security status.~~

~~Trigger: If the DUID status is any of the following – scheduled, instruction sent, fulfilment, or fulfilment failed.~~

~~Schedule: Initially, every 30 minutes based on the results of the scheduler post processing.~~

~~This report is available in the Participant Data Model report as well as on the Markets Portal.~~

10.1 Enablement instructions report

An enablement instruction is a transaction that notifies a participant that their service will be required. It can also be used as a means of informing the recipient there is a change to a previous enablement instruction.

It contains information requesting a service provider to execute a security strength service.

Visibility: Private sent to relevant TNSP and service provider.

Trigger: When a scheduler detects a change to a previously sent enablement ~~instructions~~<u>instruction</u>.

This report is available in the Participant Data Model report as well as on the Markets Portal.

10.2 Final day + 1 report

The Final Day + 1 report provides Participants with enablement information from the previous day. The report only contains the last version of the enablement instructions.

Visibility: Private sent to relevant TNSP and service provider.

Details: The report contains information related to the previous day system security enablement signals. It reflects the latest version of the enablement instruction/amendment and provides the participants visibility of their latest settlement position.

Trigger: Daily at 4:00 am.

This report is available in the Participant Data Model report as well as on the Markets Portal.

10.3 Enablement periods day + 1 report

This report provides visibility of the previous days enablement's at a DUID level.

Visibility: Public

Trigger: Daily at 4:00 am.

This report is available in NEMWeb as well as on the Wholesale Data Interchange.

10.4 Enablement costs day + 1 report

This report provides visibility of the previous days enablement's estimated costs at a region level.

Visibility: Public

Trigger: Daily at 4:00 am.

This report is available in NEMWeb as well as on the Wholesale Data Interchange.

10.5 Scheduled availability report

The Scheduled Availability Report provides Participants with the periods their assets were available for use over the previous 7 days.

Visibility: Private to only TNSPs listed in the contract.

Trigger: Weekly, every Monday at 4:00 am.

This report is available in the Participant Data Model report as well as on the Markets Portal.

10.6 Scheduled availability change report

The scheduled availability change report is published when availability has changed either by the participant or AEMO.

Visibility: Private, and available only to the service provider and TNSPs listed in the contract.

Trigger: When an availability is revised

This report is available in the Participant Data Model report as well as on the Markets Portal.

11 FAQs

This section is updated based on the participant queries from the MSUG.

12 Implementation

12.1 Transition

TBC

12.2 Upgrading

You can upgrade your pre-production or production Data Model environments once you receive the Data Model scripts. Applying the scripts sets up the new Data Model structure on your local database. You receive the same data until the new versions of fields, files, and reports are released into pre-production or production and you update your subscriptions.

For help, see:

- **Upgrading your DI environments**

- **Updating your subscriptions**:

12.3 Implications

To maintain systems in-line with AEMO's market systems, participants need to:

- Review and assess the impact on their market systems with respect to the changes implemented as part of this Release.

- Change their systems prior to the implementation of this Release.

- Schedule staff and resources to upgrade their market systems for the production implementation of this Release.

12.4 Risks

- TBC

13 Terms

13.1 Rules Terms

You can find the following terms defined in the **National Electricity Rules (NER)** and the **Settlements Residue Auction Rules**.

Term	Term	Term
AEMO	Maximum Units	Trading Limit
AEMO Markets Portal	NEM	Trading Margin
AEMO Website	Notional Interconnector	Trading Position
Directional interconnector	Region	Unit Category
Linked Bid	Regional reference prices	Units
Market Clearing Price	Registered Participant	
Market Participants	Trading Interval	

13.2 Glossary

You can find a full list of AEMO glossary terms in **Industry Terminology** on AEMO's website.

Abbreviation/Term	Explanation
AEST	Australian Eastern Standard Time
Binding inertia requirements	The binding inertia sub-network allocation, binding satisfactory inertia level and binding secure inertia level.
Binding system strength requirements	The system strength standard specification (as defined in clause S5.1.14) as applicable for each system strength node.
Contract	The contract or agreement between the procurer and the provider for providing system security services to be used under the mechanisms (e.g. enablement, settlement, etc.) brought in by the ISF project.
EMMS	Electricity Market Management System; software, hardware, network and related processes to implement the wholesale energy market
FCAS	frequency control ancillary services

Abbreviation/Term	Explanation
FTP	File transfer protocol
Inertia service provider	The Inertia Service Provider for an inertia sub-network is: - the Transmission Network Service Provider for the inertia sub-network; or - if there are more than one Transmission Network Service Provider for the inertia sub-network, the jurisdictional planning body for the participating jurisdiction in which the inertia sub-network is located. Inertia sub-networks are currently split up by NEM region boundaries, so there is only TNSP per region and therefore the inertia service provider for all inertia sub-networks is the TNSP. NOT a registration category.
ISF enabled	A system security services unit provides a system security service in accordance with AEMO's instructions. A service commences enablement after the Activation Period ends.
MSATS	Market Settlement and Transfer Solution for retail electricity
NER	National Electricity Rules
Network support agreement	An agreement under which a person agrees to provide one or more NSCASs to a Network Service Provider, including system strength or inertia services provided to meet an NSCAS gap.
NMAS	Non-Market Ancillary Service
NSCAS	Network Support and Control Ancillary Service. A service (including an inertia network service or system strength service) with the capability to control the active power or reactive power flow into or out of a transmission network to address an NSCAS need.
NSCAS provider	A person who agrees to provide one or more NSCASs to AEMO under an ancillary services agreement. NOT a registration category.
MW	Megawatt
PID	Participant ID
Procurer	Either AEMO or the TNSP. The parties procuring contracts from the system security service provider.
Provider	The parties entering system security contracts with the procurer to provide system security services. Initially, providers are Market Generators with Generators (Scheduled and Semi-Scheduled) or Integrated Resource Providers with Battery Energy Storage Systems (BESS). However, they may not always be a registered participant.
Power system security	Achieved when controls and services are available to keep the power system operating within defined technical limits and capable of returning it within those limits after credible disturbances. This differs from reliability which concerns the ability to supply adequate power to satisfy consumer demand in accordance with defined standards.
Release	EMMS - Technical Specification - December 2025

Abbreviation/Term	Explanation
Release Dates	Pre-production: Tuesday 30 September 2025 Production: Tuesday 2 December 2025
Synchronous machine	A synchronous generating unit or a synchronous condenser.
System security	Power system security relates to: the technical parameters of the power system such as voltage and frequency. the rate at which these parameters might change. the ability of the system to withstand faults.
Security Unit	Represented by a DUID, the asset providing the system security service per contract.
Spot market operation	Definition applicable in ISF info guide context only: a system security services unit operating for the purpose of earning energy revenue and/or FCAS revenue.
SSS	System Security Services
Synchronous machine	A synchronous generating unit or a synchronous condenser.
Synchronous Three Phase Fault Level	The three phase fault level comprising Synchronous Machines and those grid-forming inverters whose positive system strength contribution has been demonstrated by wide-area PSCAD/EMTDC studies, in MVA.
System security service provider	Each of the following: 1. a System Strength Service Provider; 2. an Inertia Service Provider; 3. a NSCAS Provider; and 4. a Transitional Services Provider. NOT a registration category.
System strength service provider	The System Strength Service Provider for a region is the Transmission Network Service Provider for the region. NOT a registration category.
TI	Trading interval
TBC	To be confirmed
TNSP	Transmission Network Service Provider. A person who engages in the activity of owning, controlling or operating a transmission system. Must be a registered Network Service Provider participant category with AEMO. Currently one TNSP per NEM region as follows: - NSW: TransGrid - QLD: Powerlink - SA: ElectraNet - TAS: TasNetworks - VIC: AEMO (VIC Planning – moving to VicGrid 2025)
Transition Plan for System Security	A new annual report (Transition Plan) required by the ISF rule change, outlining a plan to maintain power system security for the NEM through the transition to a low-emissions power system.

Abbreviation/Term	Explanation
Transitional services	A new framework defined by the ISF rule change, enabling AEMO to procure transitional services necessary for the energy transition that cannot otherwise be provided through existing frameworks (Type 1 contracts), and to trial new sources of security services or new applications of existing technologies (Type 2 contracts), expiring on 1 December 2039.
Transitional services provider	A person (may be a registered or unregistered participant) who agrees to provide one or more transitional services to AEMO under an ancillary services agreement. Only procurable by AEMO, not TNSPs, but TNSPs can be a transitional services provider (see service providers for more info). NOT a registration category.

14 References

Guide to AEMO's e-Hub APIs: Provides details about using AEMO's e-Hub as an interface to communicate information with AEMO. It assists Wholesale electricity and gas participants developing their own APIs.

Guide to Information Systems: Provides guidance for *Registered Participants* and interested parties about AEMO's participant electricity market systems.

Guide to User Rights Management: Assists participant administrators (PAs) to use the user rights management functions in the MSATS Web Portal.

Retail Electricity Market Glossary and Framework: assist participants of the Retail Electricity Market to understand the overall framework. It also contains a list of terms used in the Retail Electricity Market Procedures and a full list of NEM procedures, guidelines, and documents.

14.1 Data interchange and data model resources

14.1.1 About

Information about setting up a Data Interchange environment: Data Interchange Help > **About Data Interchange**.

14.1.2 Help

- **Data interchange online help**

14.1.3 Software

You can find Data Interchange software in the following locations:

- Data Interchange Help > **Software Releases**.

- Releases directory on the participant file share: FTP to 146.178.211.2 > Data Interchange, pdrBatcher, pdrLoader, or pdrMonitor.

14.1.4 Reports

- Data Interchange Help > **Data Model Reports**.

14.1.5 Releases

- Data Interchange Help > **Release Documents**.

15 Index

A1. Version history

15.1 V1.00

The changes to this version include:

- Updates to Registration chapter.

- Adds more details to the Settlements reports section.

- Adds link to the data model technical specification in Electricity Data Model 5.6Electricity Data Model 5.6Electricity Data Model 5.6 chapter.

- Adds some mock screenshots in the Markets Portal section.

- Adds some details to the APIs chapter.

- Adds more details in ReportsReports chapter.

~~15.1~~15.2 v0.01

No changes, this is the initial version.