

# EMMS – Inverter Dispatch – May 2027

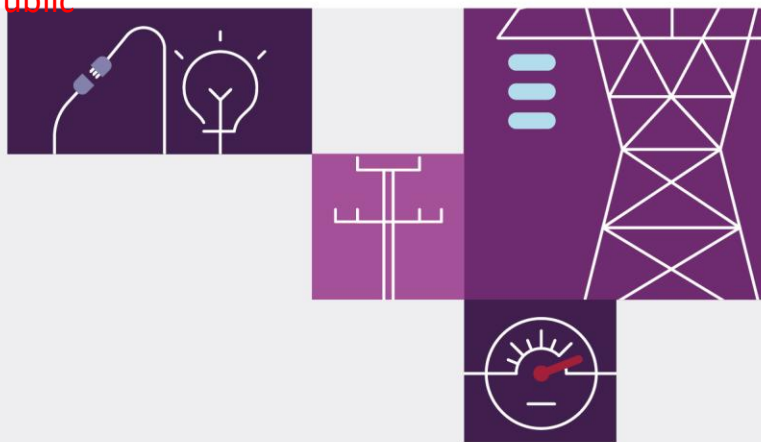
0.01 June 2026

Pre-production: February 2027

Production: May 2027

Rules effective: TBC





# Important notice

## Purpose & audience

This document describes the technical changes required to participant's systems for the System Name - Technical Specification - Month Year (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).

## Privacy and legal notices

The material in this publication may be used in accordance with the [privacy and legal notices](#) on AEMO's website.

## Trademark Notices

Microsoft, Windows and SQL Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Oracle and Java are registered trademarks of Oracle and/or its affiliates.

UNIX is a registered trademark of The Open Group in the US and other countries.

© 2015 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.

## Distribution

Available to the public.

## Document Identification

Prepared by: AEMO Digital

Last update: Tuesday, 16 June 2026 8:25 PM

## Version History

0.01 Initial creation

## Documents made obsolete

The release of this document changes only the version of EMMS – Inverter Dispatch – May 2027.

## 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

<b>1</b>	<b>Introduction .....</b>	<b>5</b>
1.1	Audience.....	5
1.2	Objective .....	5
1.3	Status .....	5
1.4	Release dates.....	5
1.5	Projects and enhancements.....	6
1.6	Rule and procedure changes .....	6
1.7	Related technical specifications .....	6
1.8	Related documents .....	7
1.9	Approval to change .....	7
1.10	Market systems user group meetings .....	7
1.11	Version numbers .....	7
1.12	Changes in this version.....	8
<b>2</b>	<b>Proposed Timeline .....</b>	<b>9</b>
<b>3</b>	<b>Participant Impact .....</b>	<b>10</b>
<b>4</b>	<b>Inverter Dispatch .....</b>	<b>11</b>
4.1	Goal .....	11
4.2	High level changes .....	11
<b>5</b>	<b>Interim Solution .....</b>	<b>12</b>
5.1	Availability and implementation.....	12
5.2	Participant requirements.....	12
5.3	Transition arrangements .....	13
<b>6</b>	<b>Conformance Monitoring.....</b>	<b>14</b>
6.1	Conformance status.....	14
6.2	Conformance process .....	14
6.2.1	Conformance process example .....	14
6.2.2	Non-conformance process example .....	15



<b>7</b>	<b>Industry Testing Support</b> .....	<b>16</b>
<b>8</b>	<b>FAQs</b> .....	<b>17</b>
<b>9</b>	<b>Terms</b> .....	<b>18</b>
9.1	Rules Terms .....	18
9.2	Glossary .....	19

# 1 Introduction

## 1.1 Audience

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


The audience for this technical specification is:

- Market Participants
- Owners and operators of Inverter Based Resources (IBR)
- Transmission Network Service Providers (TNSPs)

## 1.2 Objective

The EMMS – Inverter Dispatch – May 2027 describes the projects planned by AEMO from a participant perspective and includes any system related changes for participants.

## 1.3 Status

Version	Status
0.01	 <p><b>Initial Draft for review. The design is not ready for participants' builds</b></p> <p>Presents the EMMS – Inverter Dispatch – May 2027 evolving design.</p> <p>Please send feedback to <a href="#">Contact Us</a>. In the <b>Details of your enquiry</b> section, mention the EAS Knowledge Management team as the Resolver group.</p> <hr/> <p>Participants can commence their system builds but design changes may occur according to participant feedback</p>

## 1.4 Release dates

Scheduled for implementation in:

## Introduction

- Pre-production: February 2027
- Production: May 2027

## 1.5 Projects and enhancements

Changes and enhancements for this Release include:

No.	Functionality	Change	Affected interface	Reference
1	Conformance monitoring	New conformance process	TBC	TBC
2	NEM Reports	Data Model v5.6 tables for DISPATCH_IS, PREDISPATCH_IS and P5MIN packages include ELEMENT_CAP field.	Data Model tables NEM reports	<a href="#">NEMWeb</a> <a href="#">Data Interchange</a>

## 1.6 Rule and procedure changes

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

Title	Project	Version/status	Effective
<a href="#">Inverter limits included in dispatch instructions for inverter-based resources</a>	Inverter Dispatch	Proposal	June 2028 (TBC)

## 1.7 Related technical specifications

Title	Description
<a href="#">Data Model 5.6</a>	Includes table updates for Inverter Dispatch.

## 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
-	-	-

## 1.9 Approval to change

No approval or agreement to change required from participant change controllers. Industry feedback was sought in the [NEM Reform Program forums](#).

## 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.

## Introduction

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

No changes, this is the initial version.

## 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	n/a	Final date for participant approval of this Release
Revised Technical Specification	July 2026	<p>AEMO releases new versions of this document as the technical requirements are streamlined. During the project this document is the source of truth</p> <p>From the production release, the technical specification becomes final and the <a href="#">related documents</a> become the source of truth</p> <p><a href="#">Technical Specification Portal</a></p>
Related Documents publication	February 2027	Release of guides and resources mentioned in Related on page 7
Next MSUG	17 June 2026	<p>Market Systems User Group Meeting (MSUG) to review the technical specification and ask AEMO technical SMEs questions</p> <p>This date is tentative. The Knowledge Management Team provides the invitation prior to the meeting</p>
Pre-production refresh	n/a	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
Pre-production available	February 2027	Testing period begins for participants
Market Trials	February 2027 - March 2027 TBC	AEMO coordinated testing with all participants
Production implementation	May 2027	AEMO implements the release to production
Production systems available	May 2027	Production systems available to participants

### 3 Participant Impact

Key impacts for participants:

Impact	Details	Implementation date
Interim solution	AEMO implements an interim solution to provide participants with early access to inverter dispatch functionality using existing Market Systems (EMMS Data Model/Interchange).	31 March 2026
Receive inverter limits electronically	Participants receive inverter limit instructions electronically instead of via phone calls. AEMO publishes inverter limits through existing market systems (for example, NEM Reports, Data Interchange, or SCADA channels).	May 2027
Conformance monitoring process	Participants may require process changes to ensure conformance with monitoring of inverter limits.	May 2027
Network Service Provider (NSP) receiving information from AEMO	Changes to how NSPs receive information from AEMO, to include inverter limit SCADA signal over existing ICCP.	May 2027
Rule change for including inverter limits in <a href="#">dispatch instructions for inverter-based resources</a>	AEMO has engaged with stakeholders when proposing the dispatch limits for inverter-based resources rule change. The AEMC will conduct a formal consultation process on the rule change proposal.	June 2028 TBC

## 4 Inverter Dispatch

### 4.1 Goal

AEMO is introducing an inverter dispatch solution that uses existing Market Management System (EMMS) and SCADA (ICCP) functionality to send inverter limits to participants for dispatch and pre-dispatch.

The goal of the initiative is to:

- Reduce reliance on manual communication, including phone-based instructions for managing inverter limits.
- Provide a consistent, automated way for participants to receive inverter limits electronically.
- Support participants to respond to inverter limits quickly and efficiently.
- Improve AEMO's ability to maintain power system security as IBRs increase.
- Reduce manual operational effort for both AEMO and participants through increased automation.
- Provide earlier visibility of inverter limits through information in participant pre-dispatch and dispatch reports.

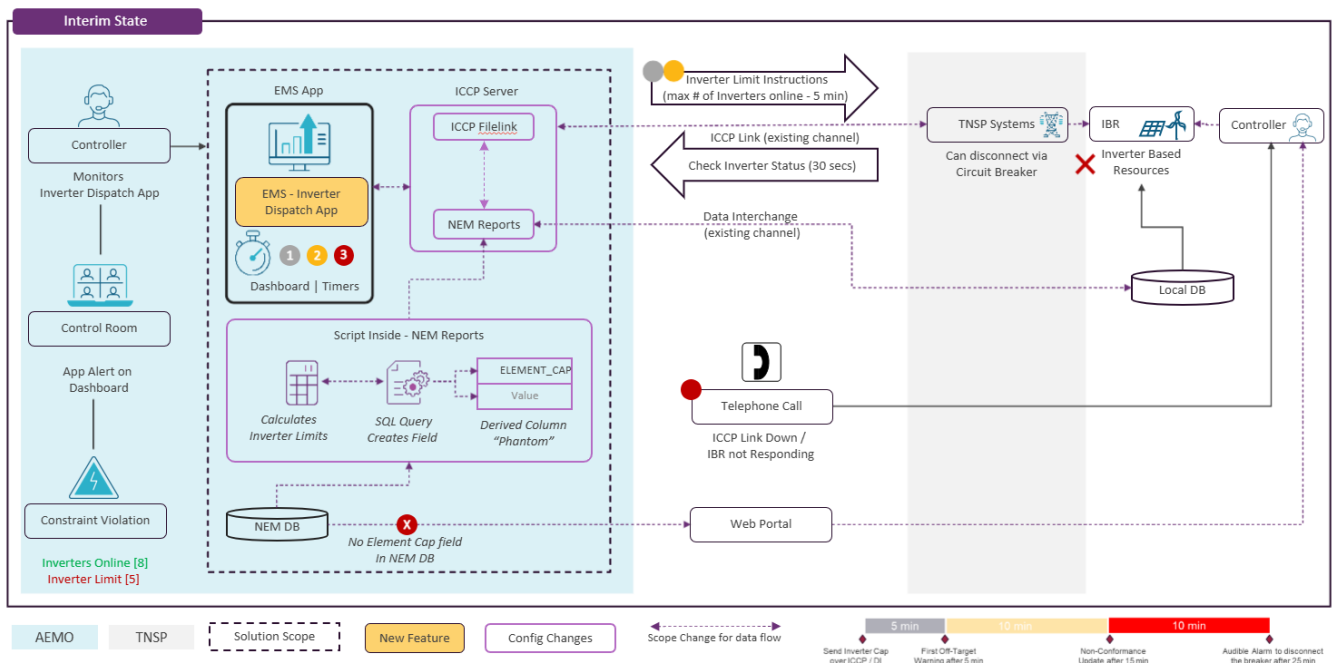
### 4.2 High level changes

Function	Description	Reference
Inverter limit communication	AEMO provides inverter limits via automated channels, replacing manual phone-based communication. Limits are communicated through EMMS (NEM reports and Data Interchange) and SCADA ICCP signals.	<a href="#">NEMWeb Data Interchange</a>
EMMS Data Model v5.6	We have updated Data Model tables for DISPATCH_IS, PREDISPATCH_IS and P5MIN packages to include ELEMENT_CAP field.	<a href="#">Electricity Data Model 5.6</a>

## 5 Interim Solution

AEMO implements an interim solution to provide participants with early access to inverter dispatch functionality using existing Market Systems.

The interim solution supports a transition away from manual phone-based communications by enabling participants to receive inverter limits electronically through the EMMS Data Model.



### 5.1 Availability and implementation

AEMO deployed the interim solution to Production 31 March 2026 following successful testing in the pre-production environment with selected IBR participants.

Any participants interested in adopting the interim solution are encouraged to reach out to AEMO by email to [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au).

### 5.2 Participant requirements

To use the interim solution, participants:

- Upgrade to EMMS Data Model version 5.6 or later.
- Subscribe to relevant dispatch and pre-dispatch reports.
  - For dispatch NEM reports: DISPATCH\_IS contains DISPATCHLOAD table.

## Interim Solution

- For pre-dispatch NEM reports: PREDISPATCH\_IS contains PREDISPATCHLOAD table and P5MIN contains P5MIN\_UNITSOLUTION table.
- Access to EMMS Data Interchange.

### 5.3 Transition arrangements

During the interim period:

- AEMO continues to provide support through updates at participant forums and onboarding activities for participants adopting the interim solution.
- AEMO still uses phone communications where required, to support participants and compliment the automated communication of inverter limits (via EMMS and SCADA).

## 6 Conformance Monitoring

Conformance monitoring ensures that IBRs comply with AEMO-issued inverter limits. It compares the number of inverters online against the applicable inverter limit for each DUID and provides visibility, alerts, and escalation where non-conformance occurs.

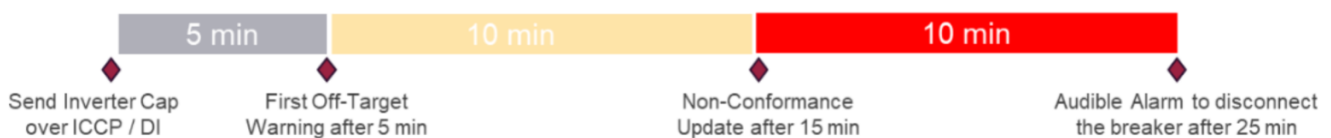
**Conformance monitoring is only available in the final solution and is not part of the interim solution.**

### 6.1 Conformance status

The system assigns a conformance status for each DUID based on the comparison between actual and target values:

- Normal: No action required. Unit is following inverter limit target.
- Off-Target: Inverters online exceed the cap within the allowed response window. Move to dispatch target or rebid.

### 6.2 Conformance process



#### 6.2.1 Conformance process example

Count	DUID	Interval datetime	Inverters online	Inverter cap	Conformance status	AEMO Action
1	IBR01	[DATE] 15:00	15	10	Off-Target	Send inverter cap notification (ICCP, NEM Reports, Market Portal)
2	IBR01	[DATE] 15:05	10	10	Normal	n/a

### 6.2.2 Non-conformance process example

Count	DUID	Interval datetime	Inverters online	Inverter cap	Conformance status	AEMO Action
1	IBR01	[DATE] 15:00	15	10	Off-Target	Sends inverter cap notification
2	IBR01	[DATE] 15:05	15	10	Off-Target	Sends Off-Target status (NEM Reports)
3	IBR01	[DATE] 15:10	15	10	Off-Target	Active Off-Target status (NEM Reports)
4	IBR01	[DATE] 15:15	15	10	Off-Target	Active Off-Target status (NEM Reports)
5	IBR01	[DATE] 15:20	15	10	Off-Target	Active Off-Target status (NEM Reports)
6	IBR01	[DATE] 15:25	15	10	Off-Target	Disconnects breaker (manual phone call to TNSP)
7	IBR01	[DATE] 15:30	0	10	Normal	n/a

## 7 Industry Testing Support

Information to come in future iterations of the technical specification.

## 8 FAQs

This section is updated based on participant queries from the MSUG meetings and Industry testing phase.

Refer to the [NEM Reform project web page](#) for Inverter Dispatch with a list of General FAQs.

## 9 Terms

### 9.1 Rules Terms

You can find the following terms defined in the [National Electricity Rules \(NER\)](#).

Term	Term	Term
AEMO	Maximum Units	SRDA Units
AEMO Clearing Account	NEM	Trading Limit
AEMO Markets Portal	Notional Interconnector	Trading Margin
AEMO Website	Offer Database	Trading Position
Allocated Units	Offer File	Unit Category
APA	Offer Period	Units
Auction	Offer Submission	
Auction Participant	Offered Units	
Auction Rules	Offers	
Average cancellation price	Product	
Average purchase price	Prudential Approved Participant	
Bid File	Prudential Exposure	
Cancelled Units	Region	
Cancelled volume	Regional reference prices	
Cash Security	Registered Participant	
Confidential Information	Relevant Quarter	
Directional interconnector	Settlement residue auction	
Linked Bid	Settlement residue committee	
Market Clearing Price	Settlement residue distribution agreement	
Market Participants		

## 9.2 Glossary

You can find a full list of AEMO glossary terms in [Industry Terminology](#) on AEMO's website.

Abbreviation/Term	Explanation
<b>AEST</b>	Australian Eastern Standard Time
<b>B2B</b>	Business-to-business
<b>B2M</b>	Business-to-market
<b>EMMS</b>	Electricity Market Management System; software, hardware, network and related processes to implement the wholesale energy market
<b>FCAS</b>	frequency control ancillary services
<b>FTP</b>	File transfer protocol
<b>IBR</b>	Owners and operators of Inverter Based Resources
<b>MMS</b>	Market Management System
<b>MSATS</b>	Market Settlement and Transfer Solution for retail electricity
<b>NER</b>	National Electricity Rules
<b>NSP</b>	Network Service Provider
<b>MW</b>	Megawatt
<b>Release</b>	EMMS – Inverter Dispatch – May 2027
<b>Release Dates</b>	Pre-production: February 2027 Production: May 2027
<b>TBC</b>	To be confirmed
<b>TNSPs</b>	Transmission Network Service Providers