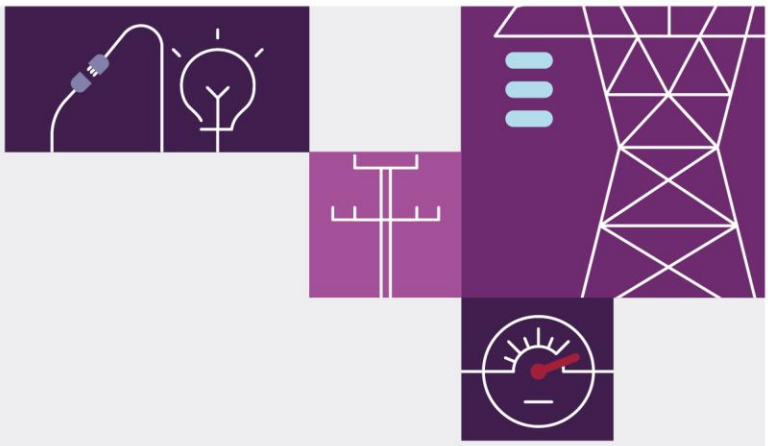
Release Notes: WEM Dispatch Engine 3.2.0 WEMDE-UI 2.8

October 2025

AEMO
AUSTRALIAN ENERGY MARKET OPERATOR



Important notice

Purpose

The Australian Energy Market Operator has prepared this document to provide information about the WEM Dispatch Engine release as at the date of publication.

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Document version control

Version	Release date	Changes
1.0	09/10/2025	Initial Issue

Document approval

Name	Position	Date
Adrian Pearce	Acting Manager, WA Real-Time Market Monitoring	09/10/2025

Contents

1 Introduction

1.1 Overview

These are the release notes for WEM Dispatch Engine 3.2.0 release. This WEMDE release primarily includes updates to the Dispatch Algorithm to co-optimize load contingency size with Contingency Lower requirement as well as co-optimization between the size of the Largest Credible Supply/Load Contingency, and the RoCoF Safe Limit requirement.

The changes introduced in this release are described in the sections below.

1.2 Terms and abbreviations

The terms and abbreviations used in this document are outlined in Table 1.

Table 1 Terms and abbreviations

Abbreviation	Expanded name
RTMS	Real-Time Market Submission
WEMDE	WEM Dispatch Engine
LCSC	Largest Credible Supply Contingency
LCLC	Largest Credible Load Contingency
RoCoF	Rate of Change of Frequency
FCESS	Frequency-Co-Optimised Essential System Services
ST PASA	Short Term Projected Assessment of System Adequacy

2 Co-optimization of Contingency Lower And RoCoF Safe Limits Constraint Equations

Details related to the implementation of the co-optimisation of Contingency Lower and RoCoF Safe Limits can be viewed in the AEMO Procedure Change Proposal 2025_14.

The high-level amendments are listed below:

- Addition of new sets *Defined Load Contingency* Set and *Load Contingency* Set;
- Addition of new Contingency Lower co-optimization constraints;
- Addition of new RoCof Safe Limit constraints; and
- Addition of new parameters for the above equations.

The above amendments to the Dispatch Algorithm will result in the following changes:

- WEMDE will now co-optimise the Largest Credible Load Contingency (LCLC); and
- WEMDE will include consideration of the RoCoF Safe Limit when co-optimising Contingency Raise and Contingency Lower.

3 Additional Results from WEMDE

Additional results produced by WEMDE are published in the Solution File as follows:

- New results in "facilityScheduleDetails":
  - “loadContingency”
  - “FacilityLowerRisk”
- New results in "contingencySolution":
  - "dpvLevel"
  - “clearedContingencyLower”
  - "largestLoadContingency"
  - "contingencyLowerRequirement"
  - "contingencyLowerDeficit"
- New section: "definedLoadContingency"

No schema changes have been made to the Case File.

4 Major Load as Load Contingency

Two Major Loads (KARARA_MINE and BODDINTON_MINE) are included as Facility Lower Risks. Their load contingencies are co-optimized with Contingency Lower and RoCof Safe Limit requirement. The results are included as per Section 3 above.

Note that Major Loads are not Registered Facilities and therefore do not receive dispatch instructions, however, will have associated Facility Lower Risks and Network Lower Risks.

5 Additional Scope

In addition to the functionality above, the scope mentioned below has been delivered in this release.

Table 2 Additional Scope Items

Scope Item	Status	Summary
Certification	●	Preparation of materials required to certify new Dispatch Algorithm by an external vendor.
WEMDE Settlement Integration (WSI)	●	Provision of data to WEM PaSS for the purpose of Prudential and Settlement calculations.

Scope Item	Status	Summary
MSDC	🟡	Fulfill AEMO's obligations, in relation to scope introduced in the WEM FCESS Cost Review, under Section 2.16 of the WEM Rules. Outstanding items to complete MSDC data catalogue, however this is scheduled for shortly after the Production release.
ST PASA Calculation	🟡	Ensure that AEMO's ST PASA calculation utilises the new Dispatch Algorithm introduced.
WEMDE-UI	🟢	Update WEMDE-UI (internal only) to align with the change in load contingency management.
Grid System Services	🟢	Added capability to use dynamic line rating for forecasted intervals.

Table 3 Status Legend

Status
🟢 Internal AEMO changes. No impact to Market Participants.
🟡 Additional functionality. Market Participants awareness only.
🔴 Change to Market Participant functionality. Needs Market Participant attention.