



WEMS 3.32 Release Notes

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Important notice

PURPOSE

The Australian Energy Market Operator has prepared this document to provide information about the Wholesale Electricity Market System (WEMS) 3.32 (Build 3.32-1480-1) and Reserve Capacity Mechanism (RCM) 1.12 (Build 1.12-2974-1) release as at the date of publication.

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VERSION CONTROL

Version	Release date	Changes
1.0	24/06/2019	Initial Publication for WEMS 3.32 Market Trial Release

DOCUMENT APPROVAL

Name	Position	Date
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1. Introduction

1.1 Overview

These are the release notes for the Wholesale Electricity Market System (WEMS) 3.32 (Build 3.32-1480-1) and Reserve Capacity Mechanism (RCM) 1.12 (Build 1.12-2974-1).

This WEMS release includes:

- System changes required to implement to RC_2014_06 – Removal of Resource Plans and Dispatchable Loads.
- System changes required to implement to RC_2017_06 – Reduction of Prudential Exposure in the Reserve Capacity Mechanism.
- Additional functionality to the Reserve Capacity Mechanism CRC Application for DSP's.

The system changes under this release are described in the sections below.

1.2 Supporting Documentation

The following documents¹ have been updated for this release and should be read in conjunction with these release notes:

- WEMS MPI User Guide
- WEMS Report and Web Service Specification
- WEMS Submission Specifications

1.3 WEMS and RCM Version Summary

The table below summarises the changes in version post this release deployment.

Table 1: WEMS and RCM Version Summary

Application	Current version	New version
WEMS	3.31 (Build 3.31-1478-2)	3.32 (Build 3.32-1480-1)
RCM	1.11 (Build 1.11-2970-14)	1.12 (Build 1.12-2974-1)

To view the current version of MPI, please navigate to Help > About in the MPI.

1.4 Abbreviations

The following table outlines the abbreviations used in this document:

Table 2: Abbreviations

Abbreviation	Expanded name
AEMO	Australian Energy Market Operator
CRC	Certified Reserve Capacity

¹ All available at <https://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Participant-information/Guides-and-useful-information>

Abbreviation	Expanded name
DSP	Demand Side Programme
IPP	Independent Power Producer
MOSMI	Market Operator System Monitoring Interface
MPI	Market Participant Interface
MOP	Market Operator Portal
MR	Market Rule
PCS	Product Configuration Specification
PDS	Public Data Site
RC	Reserve Capacity
RCM	Reserve Capacity Mechanism
RRP	Removal of Resource Plans (Rule change RC_2014_06)
SMITS	System Management IT Systems
WEMS	Wholesale Electricity Market System

1.5 Status Legend

The following table outlines the issue statuses used in this document:

Table 3: Status Legend

Status
● Internal changes
● Minimal or no impact to Market Participants
● Needs Market Participants' attention. Potentially requires system or operational procedure changes.

2. RC_2014_06: Removal of Resource Plans and Dispatchable Loads

2.1 Background

This is the second release of the RC_2014_06, the key changes introduced in this Rule Change that will be implemented in WEMS through this release are:

- Updates to RCM Settlements variables, including end dating variables that are no longer relevant;
- Changes to the Non-Scheduled Generation Forecast used in MPI; and,
- Improvements to MPI.

2.2 RCM Settlements

The removal of Resource Plan submissions in WEMS means that some data currently used by the RCM Settlements system will no longer be available. As a result, a number RCM Settlement variables have been updated or end dated from RC_2014_06 effective date.

The changes were not required to be deployed before RC_2014_06 effective date as they are relevant for the July 2019 Initial settlement run, which occurs in September 2019.

2.2.1 CAPA – Capacity Available in STEM

The RPAQ variable included in this calculation has been end dated and will therefore be removed. In addition, as the Synergy Portfolio did not submit Resource Plans, Synergy had a specific CAPA calculation, this will also be removed.

From RC_2014_06 effective date the CAPA variable is:

```
if (STEM Suspension Flag = 1)
  then
  RCOQLA
  else
  IXLRCOQ + STEMPOS + STEMOTY + ASQ + Max(0, IBSFO - RTFO)
endif
```

Figure 1: CAPA Variable

2.2.2 STEMPOS – Stem Effective Position

The STEM_RPSF variable included in this calculation has been end dated and will therefore be removed.

From RC_2014_06 effective date the STEMPOS variable is:

```
2 x (STEM_NCP)
```

Figure 2: STEMPOS Variable

2.2.3 DSMDI – Dispatch Instruction in MWh for a DSP

The description of this variable has been updated to remove the reference to Dispatchable Loads. No other changes to the variable have been made.

2.2.4 End Dated Variables

The following variables will be end dated from RC_2014_06 effective date.

Table 4: End Dated RCM Settlements Variables

Variable Name	Description	Type	Change
RPAQ	STEM Resource Plan Applicable Quantity (MW), if no STEM submission exists for an interval, taken from the STEM resource plan	Calc	End Dated
RPQLA	Loss Factor Adjusted STEM Resource Plan Quantity, in MWh	Calc	End Dated
LFAMSQ	Metered Schedule Quantity, in MWh, loss factor adjusted, excluding Demand Side Programmes which are not loss factor adjusted	Calc	End Dated
DLDAmount	Dispatchable Load Decrease Dispatch Instruction Payment	Calc	End Dated
DLIAmount	Dispatchable Load Increase Dispatch Instruction Payment	Calc	End Dated
TPNBFDIP	Participant Decrease Dispatch Instruction Payment for Dispatchable Load facilities	Calc	End Dated
TPNBFIDIP	Participant Increase Dispatch Instruction Payment for Dispatchable Load facilities	Calc	End Dated
STEM_SUB	STEM Submission Flag - 0 if no submission exists, 1 if submission exists	Input	End Dated
STEM_RPLOAD	Resource Plan Load, in MWh, including demand associated with any Interruptible Load, but excluding demand associated with any Dispatchable Load. imported as a negative quantity	Input	End Dated
STEM_RPSF	STEM Resource Plan Shortfall, in MWh	Input	End Dated
STEM_RPQ	STEM Resource Plan Quantity, in MWh, not loss factor adjusted	Input	End Dated
DLCDP_OffPeak	Dispatchable Load Consumption Decrease Price for an off-peak interval	Input	End Dated
DLCDP_Peak	Dispatchable Load Consumption Decrease Price for a peak interval	Input	End Dated
DLCIP_OffPeak	Dispatchable Load Consumption Increase Price for an off-peak interval	Input	End Dated

2.3 Non-Scheduled System Generation Forecast

The Forecast Non-Scheduled Generation data provided to Market Participants in MPI is currently based on data submitted in Resource Plans. This data will now be populated based on the quantities submitted into the balancing market by NSG facilities and represent the forecast cleared quantity of NSG per interval.

This will improve accuracy of the NSG data being provided as it will update based on each BMO calculation (every 30 minutes).

2.4 MPI Improvements

The Market Window Status screen in MPI will no longer display the status of the Resource Plan submission window.

Market	Name	Trade Date	Start Time	Close Time	Status
Energy Market	Bilateral Contracts	21 Jun 2019	13 Jun 2019 08:00	20 Jun 2019 08:50	CLOSED
		22 Jun 2019	14 Jun 2019 08:00	21 Jun 2019 08:50	OPEN
		23 Jun 2019	15 Jun 2019 08:00	22 Jun 2019 08:50	OPEN
		24 Jun 2019	16 Jun 2019 08:00	23 Jun 2019 08:50	OPEN
		25 Jun 2019	17 Jun 2019 08:00	24 Jun 2019 08:50	OPEN
		26 Jun 2019	18 Jun 2019 08:00	25 Jun 2019 08:50	OPEN
		27 Jun 2019	19 Jun 2019 08:00	26 Jun 2019 08:50	OPEN
Energy Market Standing Submission	Stem Submissions	28 Jun 2019	20 Jun 2019 08:00	27 Jun 2019 08:50	OPEN
		21 Jun 2019	20 Jun 2019 09:00	20 Jun 2019 10:50	OPEN
	Bilateral Contracts	22 Jun 2019	21 Jun 2019 09:00	21 Jun 2019 10:50	NOT OPEN
		29 Jun 2019	20 Jun 2019 13:00	20 Jun 2019 15:50	NOT OPEN
Reserve Market (Monthly)	Reserve Capacity Allocation	05/2019	04 Jun 2019 09:00	17 Jun 2019 17:00	CLOSED
		06/2019	01 Jul 2019 09:00	15 Jul 2019 17:00	NOT OPEN
Balancing Market	Capacity Credit Allocation Consumer Data	05/2019	19 Jun 2019 09:00	26 Jun 2019 12:00	OPEN
		06/2019	17 Jul 2019 09:00	24 Jul 2019 12:00	NOT OPEN
	Balancing Submissions	01 Jul 2012			OPEN
		20 Jun 2019	20 Jun 2019 14:00	20 Jun 2019 19:30	CLOSED
Load Following	Load Following Submissions	20 Jun 2019	20 Jun 2019 20:00	21 Jun 2019 01:30	OPEN
		20 Jun 2019	21 Jun 2019 02:00	21 Jun 2019 07:30	OPEN
		21 Jun 2019	21 Jun 2019 08:00	21 Jun 2019 13:30	OPEN

Figure 3: Market Status Screen

The option to submit Resource Plans in MPI will also be removed as this no longer serves a purpose. The ability to query the historical submission activities will be retained:

Home > Energy Market > File Exchange > Resource Plan

File Exchange

Upload Type: **Bilateral Contract** (dropdown menu open)

Upload Format: -- Energy Market --

Upload Options: Bilateral Contract, LFAAS Submission, STEM Submission

Files: XML File [input field] [BROWSE...]

[CLEAR] [Go]

Figure 4: Resource Plan Submissions in MPI

3. RC_2017_06: Reduction of Prudential Exposure – Release 3

3.1 Background

The third release of RC_2017_06 resolves some bugs identified and improvements requested during the Market Trial process. The key changes introduced in this Rule Change that will be implemented in this release are summarised in Table 4:

Table 5: RoPE Release 3 Changes

Reference	Summary
● ROPE-536	Add "Filter Transaction by CCA ID" search bar above the Transaction grid which will filter only the CCA ID
● ROPE-575	IRCR PIR and Log documents will be split into separate API's as they contain different data fields.
● ROPE-517	IRCR Summary page to provide the Run Type (Indicative, Initial, Adj1/2/3) to provide the user required context on the IRCR run.

3.2 ROPE-536

During the Market Trial period feedback was received from Market Participants that when a large number of Capacity Credit Allocations have been made it is difficult to find a specific allocation transaction in the list of all allocation transactions made.

A new filter option has been added to the CCA screen that allows a user to filter transactions by a specific CCA Id.

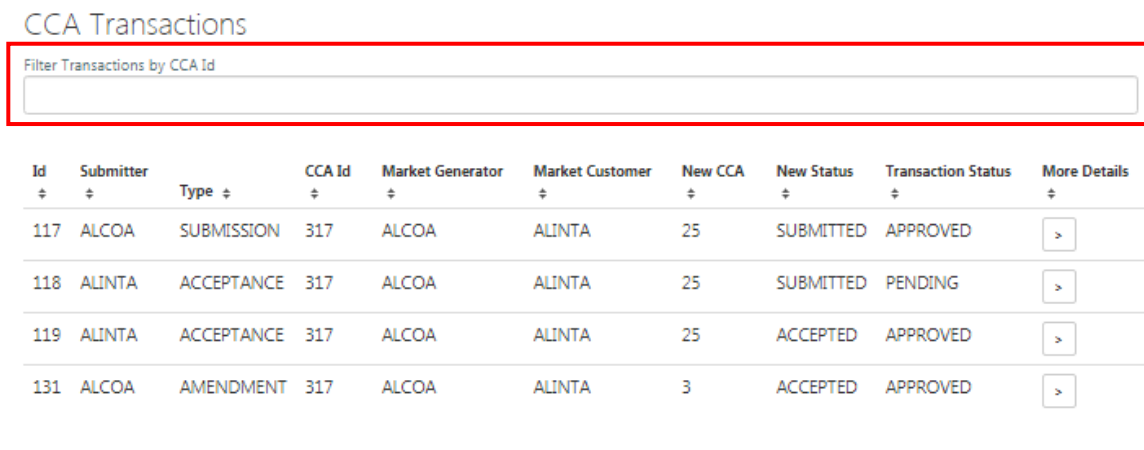


Figure 5: CCA ID Filter

3.3 ROPE-575

The IRCR PIR and Log documents are currently requested through a single API with the "document" field specifying the document type.

Going forward a separate API for each type has been created, the WEM Report and Web Service Specification guide will be updated to reflect this change:

```

GET
/api/v1/CapacityYears/{capacityYearId}/Ircr/{tradingMonth}/pir?ircrType=Indicative|Initial|Adjustment1|Adjustment2|Adjustment3

```

```

GET
/api/v1/CapacityYears/{capacityYearId}/Ircr/{tradingMonth}/log?ircrType=Indicative|Initial|Adjustment1|Adjustment2|Adjustment3

```

The existing IRCR API will be depreciated in this release:

```

/api/v1/CapacityYears/{capacityYearId}/Ircr/{tradingMonth}

```

3.4 ROPE-517

Currently the IRCR Run Information page that Market Participants can access through MPI down not display which settlement run the IRCR is calculated for (Indicative, Initial, Adj1/2/3).

New functionality has been included to show Market Participants which settlement run the IRCR values are calculated for. Details of settlement run dates can be found in the Settlement Cycle Timeline.

IRCR Run Information

Run ID 26	Trading Month Apr 2019	Run Date 20 Mar 2019 10:45AM	Run Type Indicative
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Results

Participant	TPNMTDCR		TPNMNTCR		TPILRCR	IRCR_X	IRCR
	TPTDLCR	TPNTDLCR	TPNMTDCR	TPNMNTDCR			
Retailer A Pty Ltd	9.187	0	0	0.218	0	9.405	9.328

Figure 6: IRCR Run Type

4. Maintenance Intervals for DSPs CRC Application

As part of the Certification of Reserve Capacity (CRC) process for a Demand Side Programme (DSP) AEMO is required to calculate the expected Relevant Demand for the Facility. In accordance with Appendix 10 of the WEM Rules, maintenance intervals may be excluded from the Relevant Demand calculation if the loads' consumption has been reduced.

AEMO has implemented additional functionality to a DSP's CRC application which enables them to upload maintenance intervals for any new loads that have not previously had an opportunity to submit a Consumption Deviation Application. These intervals will now be excluded from AEMO's Relevant Demand calculation for the purposes of assigning CRC.

5. AEMO Changes

Additional AEMO functionality has been introduced to complement the changes seen by Market Participants. This functionality is primarily in relation to the monitoring and alerting application MOSMI. These changes ensure AEMO can effectively managed its obligations to Market Participants as detailed in the WEM and GBB Participant Support Guide².

² Available on Participant Information section of the AEMO website <http://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Participant-information/Guides-and-useful-information>