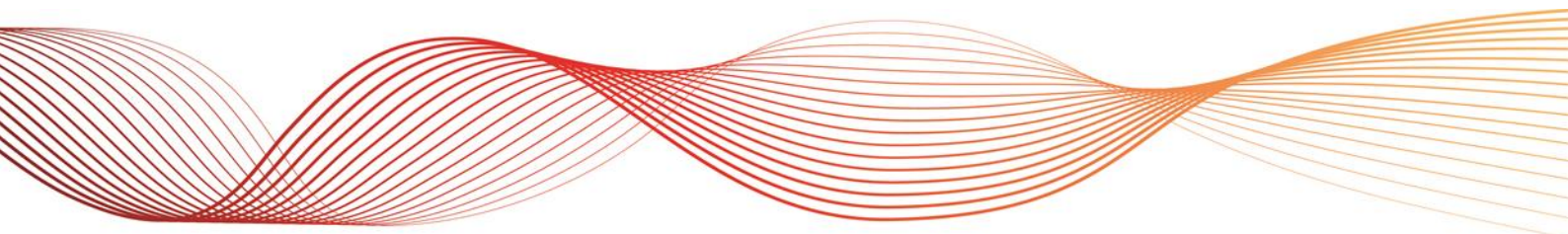# WEMS: RCM 1.1 PATCH RELEASE NOTES

Published: **September 2017**

IMPORTANT NOTICE

Purpose

The Australian Energy Market Operator has prepared this document to provide information about the Wholesale Electricity Market System (WEMS) RCM 1.1 (Build 2098-8) patch release, as at the date of publication.

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VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	17/08/2017	Document Creation
1.1	31/08/2017	Minor updates including addition of section 2.4
1.2	06/09/2017	Minor updates including addition of section 2.4.3

DOCUMENT APPROVAL

Name and Position	Date
Martin Maticka Group Manager, Operations and Technology (WA)	17/08/2017

CONTENTS

1.   INTRODUCTION

These are the release notes for Wholesale Electricity Market System (WEMS) RCM Release 1.1 (**patch release**).

This patch release supports further changes to the Reserve Capacity Mechanism (RCM) required for 1 October 2017 introduced through the Wholesale Electricity Market Amending Rules 2016 made by the Minister under regulation 7(4) of the Electricity Industry (Wholesale Electricity Market) Regulations 2004 as published in the Government Gazette on 31 May 2016.

Specifically, this patch release enables functionality relating to Individual Reserve Capacity Requirement (**IRCR**) calculation and screens described in Section 2 within the RCM system screens for Market Participants.

WEMS and RCM Version Summary

The table below summarises the changes in the version after this release has been deployed.

Application	Current Version	New Version
WEMS	3.21 (Build 1236-22)	3.21 (Build 1236-22)
RCM	1.0 (Build 1848)	1.1 (Build 2098-8)

NEW FUNCTIONALITY

The new RCM functionality is contained within a new section in the WEMS MPI. The new features are accessible through the Reserve Capacity Mechanism link under the Reserve Capacity menu.


Please note that for the following screens, there will be limited availability of historic data.

The information provided in these screens is provided in addition to the IRCR files (PIR's and Logs) that will continue to be made available via the Settlement Portal in the current format.

1.1   RCM Dashboard

The RCM Dashboard provides Market Participants a central screen to view their Reserve Capacity related information in the MPI. Market Participants will be able to view Individual Reserve Capacity Requirement results.
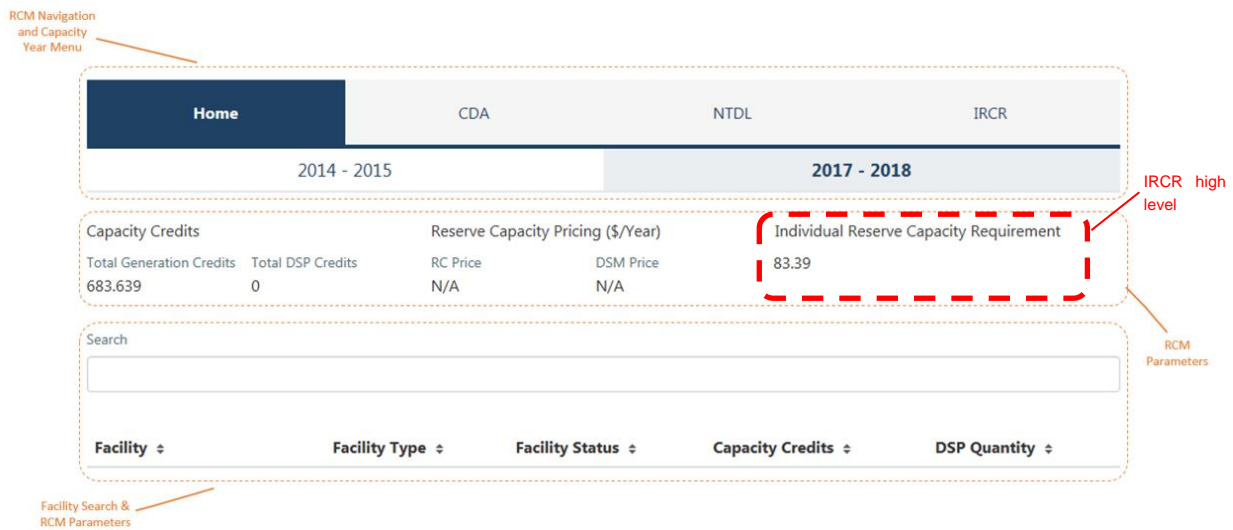
1.2   Individual Reserve Capacity Requirement Dashboard

This screen allows Market Customers to view their IRCR by Trading Month.

By selecting **Summary** for a given trading month (located next to Run ID), Market Participants' will be able to view the run information relating to the IRCR calculation for that month. A sample of the IRCR Run Information is available below.

IRCR Run Information

Run ID	Trading Month	Run Date
1	Oct 2016	1 Nov 2016 8:00AM

Results

Participant ⇕	TPTDLCR ⇕	TPNTDLCR ⇕	TPNMNTCR ⇕	TPNMTDCR ⇕	TPILRCR ⇕	IRCR-X ⇕	IRCR ⇕
	2	2	2	2	2	2	42

Legend

TPTDLCR	Participant Temperature Dependent Reserve Capacity Requirement
TPNTDLCR	Participant Non-Temperature Dependent Reserve Capacity Requirement
TPNMNTCR	Participant New Meter Non-Temperature Dependent Reserve Capacity Requirement
TPNMTDCR	Participant New Meter Temperature Dependent Reserve Capacity Requirement
TPILRCR	Participant Intermittent Load Reserve Capacity Requirement
IRCR-X	Sum of Participant Reserve Capacity Requirement

Ratios

TDL Ratio	NTDL Ratio	Total Ratio
37	30	100

Peaks

Four Peaks	Hot Season Peaks

It is noted that this summary report will only be populated after the completion of the first IRCR run for the 2017/18 Capacity Year (ie September 2017, for Trading Month October 2017).

1.3   IRCR Documentation

1.3.1   IRCR Logs and PIRs

This release has made minor amendments to the way the data has been presented in both the IRCR Logs and PIRs.

The changes to the IRCR Logs include:

- The Notional Wholesale Meter will be represented by 'Notional' in the NMI column. This entry will appear twice differentiated by the NewFlag.
- Intermittent Loads will appear as their facility short name rather than their NMI in the NMI column.

The changes to PIRs include:

- Multiple segments will no longer be reported below the header in the PIR as it has been replaced by a single segment. This has resulted from the improvements in how IRCR is calculated.
- Variables are ordered alphabetically by participant, with market wide variables first followed by participant specific variables.

1.3.2   IRCR PCS

This release has redeveloped the IRCR calculation methodology, retiring the previous Brady Pomax implementation. As part of the redevelopment a new document, the IRCR-CSS, has been created to assist in the understanding of the outputs and variables used in the new implementation. This document replaces the IRCR sections of the previous WEMS-PCS which has been updated to reflect this. While some variable names remain the same, a number of changes were made to align with the terminology in the WEM Rules.

Both new IRCR-CCS and the updated WEMS-PCS are available within WEMS.

For all IRCR calculations from and including October 2017 please refer to the IRCR-CCS documentation. Please refer to the historical PCS to validate any IRCR calculations prior to and including September 2017.

1.4   IRCR Calculation

This release has clarified some aspects of how meter data is treated for the purposes of the IRCR calculation. Please note records within the IRCR Logs and PIRs in the test environment may differ from previous IRCR calculations due to the following minor clarifications in methodology.

1.4.1   Median Calculation

Step 5 of Appendix 5 of the Wholesale Energy Market Rules require AEMO to calculate, for a set of meters, the "median value of the metered consumption for that meter during the 4 peak SWIS Trading Intervals of Trading Month n-3."

In general, consumption is represented as a negative value and generation is treated as a positive value. In the instance where the difference between consumption and generation is greater than zero for a given interval for a meter, a value of zero will be used as the metered consumption for the IRCR median calculation.

1.4.2   Treatment of missing meter data

For the purposes of the 4 peak SWIS Trading Intervals, in the instance where meter data is not present, the calculation will treat missing data as null if a meter had an active status during the relevant peak interval and treating the missing data as 0 if the meter did not have an active status during the relevant peak interval.

2.   RESOLVED ISSUES

	Reference	Summary	Resolution
●	SET-225	IRCR values were not being attributed to meters associated with Registered Generating facilities.	Determine an IRCR value for meters associated with Registered Generating facilities, when a median consumption value is calculated.

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

ABBREVIATIONS

Abbreviations

Abbreviation	Expanded name
AEMO	Australian Energy Market Operator
IRCR	Individual Reserve Capacity Requirement
IRCR-CSS	Individual Reserve Capacity Requirement Calculation Specification Spreadsheet
MPI	Market Participant Interface
NMI	Notional Meter Identifier
PIR	Participant Information Report
RCM	Reserve Capacity Mechanism
WEM Rules	Wholesale Electricity Market Rules
WEMS	Wholesale Electricity Market System
WEMS-PCS	Wholesale Electricity Market System Production Configuration Specification