WEMS 3.28 AND RCM 1.10 RELEASE NOTES

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AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

IMPORTANT NOTICE

Purpose

The Australian Energy Market Operator has prepared this document to provide information about the Wholesale Electricity Market System (WEMS) 3.28 (Build 3.28-1438-1) and RCM 1.10 (Build 1.10-2871-6) releases, as at the date of publication.

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VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	13/11/2018	Document Creation

DOCUMENT APPROVAL

Name and Position	Date
Martin Maticka Group Manager, WA Markets	13/11/2018

CONTENTS

1. INTRODUCTION

These are the release notes for the Wholesale Electricity Market System (WEMS) 3.28 (Build 1438-1) and RCM 1.10 (Build 2871-6) Release.

This WEMS and RCM release includes:

- Changes required to implement RC_2017_06 – Reduction of the prudential exposure in the Reserve Capacity Mechanism.
- Changes required to accommodate the use of Network Control Services (NCS) contracts.
- Delinking Standing Data temperature dependence curves from Reserve Capacity Mechanism (RCM) calculations.
- A number of resolved issues including:
    - improvements to Applications for Certification for NCS facilities;
    - improvements to notifications in the WEMS Settlement Portal; and
    - improvements to date range specification for the dispatch instruction web service.

These changes and resolved issues under this release are described in the sections below.

Supporting documentation

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

1) WEMS Reports and Web Service Specification, available at:

   http://www.aemo.com.au/-/media/Files/Electricity/WEM/Participant_Information/Guides-and-Useful-Information/AEMO--WEMS-Report-Specification-v36.pdf

2) Final Rule Change Report for RC_2017_06

   https://www.erawa.com.au/rule-change-panel/market-rule-changes/rule-change-rc_2017_06

WEMS and RCM version summary

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

Application	Current version	New version
WEMS	3.27 (Build 1410-4)	3.28 (Build 1438-1)
RCM	1.9 (Build 2787-4)	1.10 (Build 2871-6)

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

2. NEW AND IMPROVED FUNCTIONALITY

This section details the new functionality which will be delivered in this WEMS release.

2.1 RC_2017_06

2.1.1 Background

On 27/06/2018 the Minister for Energy approved RC_2017_06 – Reduction of the prudential exposure in the Reserve Capacity Mechanism.

This rule change removes an identified, unaccounted for prudential exposure in the RCM through:

- a change to the responsible party reference month in the IRCR calculation from month n-3 to month n, so that Market Customers no longer incur IRCR liabilities for any future periods;
- amendments to the Capacity Credit Allocation process, to allow Capacity Credit Allocations to be made by Market Generators and accepted by Market Customers prior to the Market Customers incurring the IRCR liability, where these Capacity Credit Allocations cannot be reversed by AEMO without consideration of the prudential implications; and
- consequential amendments to support the implementation of the two changes outlined above.

AEMO established the Reduction of Prudential Exposure (RoPE) project to implement RC_2017_06. This is one of two releases that contains functionality from the RoPE project. From a Market Participant perspective this release includes:

- Publication of the 4 and 12 Peak SWIS Trading Intervals in the WEMS: RCM System.
- Publication of the 4 and 12 Peak SWIS Trading Intervals on the Public Data Site.
- Web service access to the 4 and 12 Peak SWIS Trading Intervals through the Reserve Capacity Mechanism API using a client certificate.
- Publication of the IRCR Ratios on the Public Data Site.
- Retirement of the publication of the 4 and 12 Peak SWIS Trading Intervals and ratios from the main AEMO Site at http://aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Reserve-capacity-mechanism/Individual-reserve-capacity-requirement-information.

2.1.2 Publication of the Peak SWIS Trading Intervals in the WEMS: RCM System

In accordance with clauses 1.26.4 and 1.26.5 of the Market Rules, AEMO publishes the Peak SWIS Trading Intervals information that can be used by Market Customers to estimate/reconcile their IRCR.

Market Participants will be able to access and download the published 4 and 12 Peak SWIS Trading Intervals in the WEMS: RCM System under the new Peak Intervals menu (Figure 1).

The published IRCR Ratios will continue to be accessible under the existing IRCR menu.

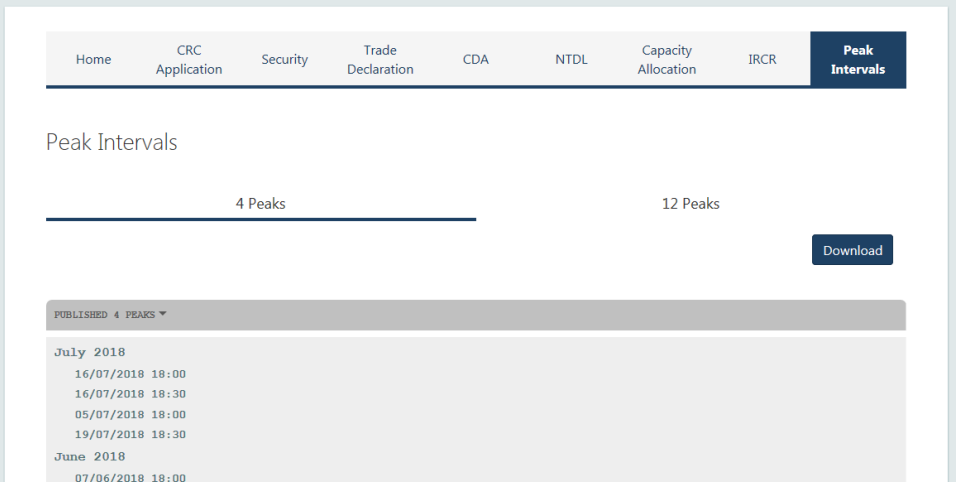

Figure 1 Peak Intervals menu in the WEMS: RCM System

2.1.3 Publication of the Peak SWIS Trading Intervals and IRCR Ratios on the Public Data Site

The Peak SWIS Trading Intervals and IRCR Ratios will no longer be published on the main AEMO Site at http://aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Reserve-capacity-mechanism/Individual-reserve-capacity-requirement-information and will instead be publicly available on the Public Data Site.

The published Peak SWIS Trading Intervals will be available on the new Peak SWIS Trading Intervals page (Figure 2). All of the 4 and 12 peaks will be available to download in a single CSV file (Figure 3).

The published IRCR Ratios will be available on the new IRCR Ratios page (Figure 4). All of the ratios will be available to download in a single CSV file.

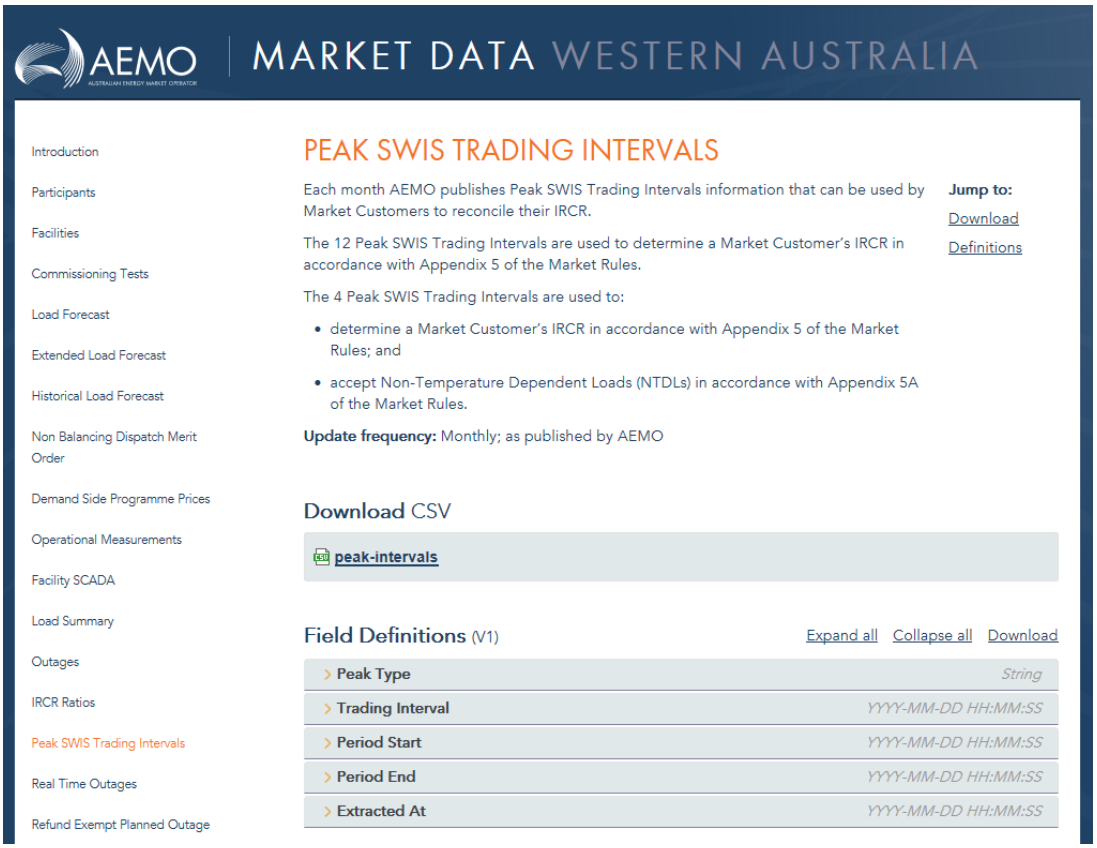

Figure 2 Peak SWIS Trading Intervals on the public Market Data Site

	A	B	C	D	E
1	Peak Type	Trading Interval	Period Start	Period End	E
128	12 Peak SWIS Trading Intervals	7/03/2006 15:00	1/12/2005 8:00	1/04/2006 8:00	
129	12 Peak SWIS Trading Intervals	21/02/2006 13:00	1/12/2005 8:00	1/04/2006 8:00	
130	12 Peak SWIS Trading Intervals	21/02/2006 13:30	1/12/2005 8:00	1/04/2006 8:00	
131	12 Peak SWIS Trading Intervals	28/02/2006 16:00	1/12/2005 8:00	1/04/2006 8:00	
132	12 Peak SWIS Trading Intervals	28/02/2006 15:30	1/12/2005 8:00	1/04/2006 8:00	
133	12 Peak SWIS Trading Intervals	28/02/2006 15:00	1/12/2005 8:00	1/04/2006 8:00	
134	4 Peak SWIS Trading Intervals	16/07/2018 18:00	1/07/2018 8:00	1/08/2018 8:00	
135	4 Peak SWIS Trading Intervals	16/07/2018 18:30	1/07/2018 8:00	1/08/2018 8:00	
136	4 Peak SWIS Trading Intervals	5/07/2018 18:00	1/07/2018 8:00	1/08/2018 8:00	
137	4 Peak SWIS Trading Intervals	19/07/2018 18:30	1/07/2018 8:00	1/08/2018 8:00	
138	4 Peak SWIS Trading Intervals	7/06/2018 18:00	1/06/2018 8:00	1/07/2018 8:00	
139	4 Peak SWIS Trading Intervals	7/06/2018 18:30	1/06/2018 8:00	1/07/2018 8:00	
140	4 Peak SWIS Trading Intervals	7/06/2018 17:30	1/06/2018 8:00	1/07/2018 8:00	
141	4 Peak SWIS Trading Intervals	7/06/2018 19:00	1/06/2018 8:00	1/07/2018 8:00	
142	4 Peak SWIS Trading Intervals	31/05/2018 18:00	1/05/2018 8:00	1/06/2018 8:00	

Figure 3 Extract from the peak-intervals.csv file

Figure 4 IRCR Ratios on the public Market Data Site

2.1.4 Access to the Peak SWIS Trading Intervals through the Reserve Capacity Mechanism API

Market Participants with a valid client certificate will be able to access the 4 and 12 Peak SWIS Trading Intervals using the relevant web service request through the Reserve Capacity Mechanism API (Figure 5 and Figure 6).

Documentation will be available in the relevant environment as follows:

- Production: https://wems.aemo.com.au/rcm/api/docs/
- Market Trial: https://wems-mkt.aemo.com.au/rcm/api/docs/

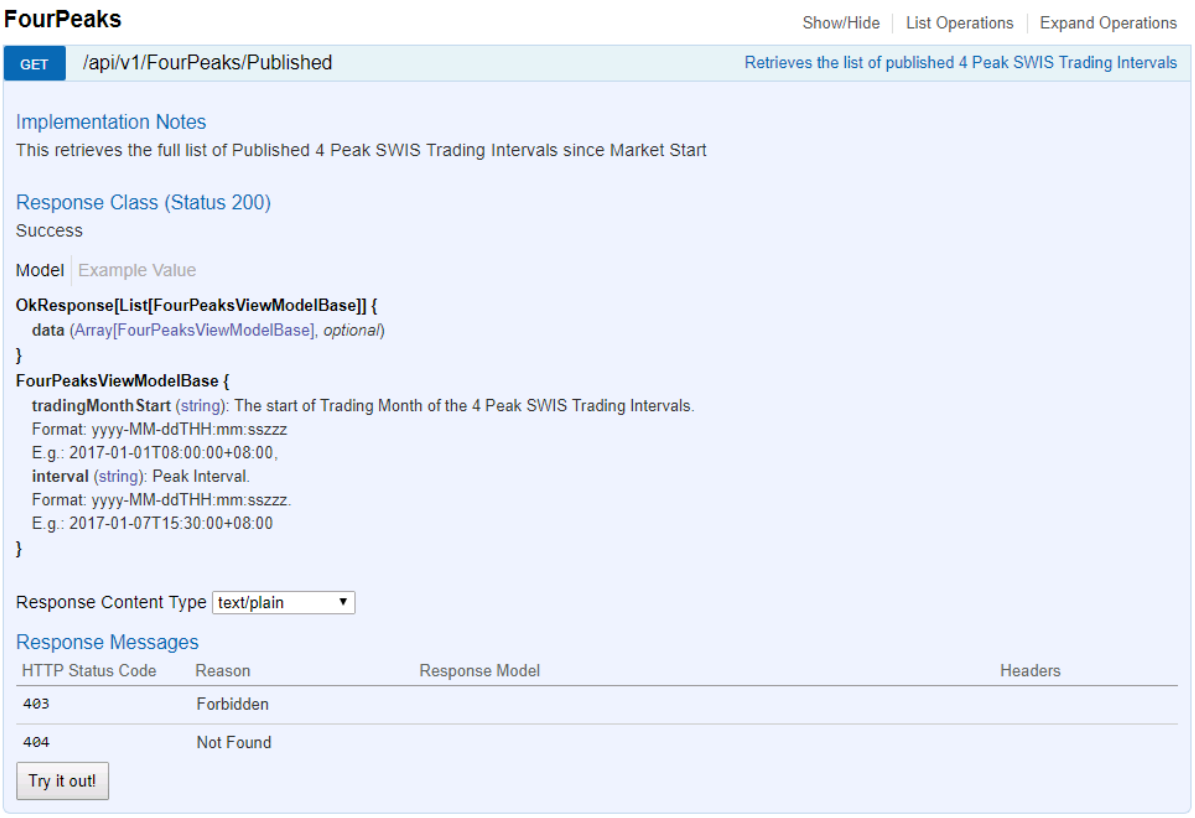

Figure 5 RCM API web service documentation for 4 Peaks

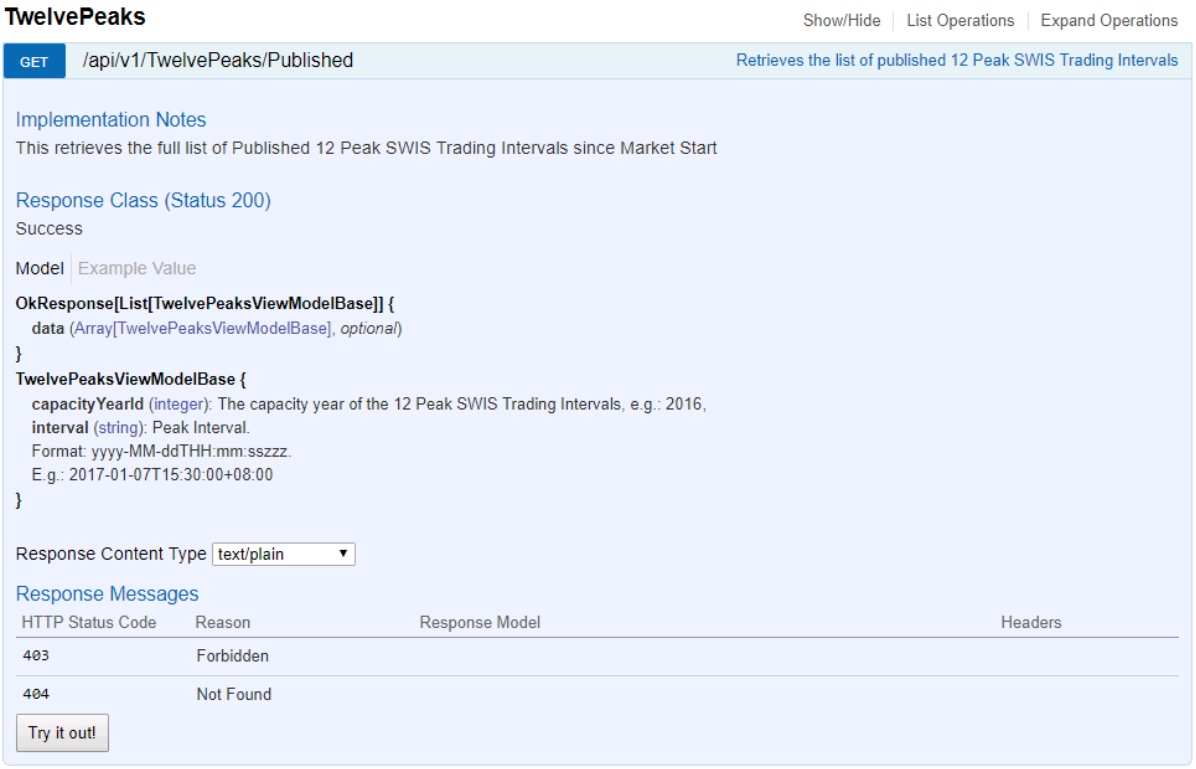

Figure 6 RCM API web service documentation for 12 Peaks

2.2 Network Control Services Information

AEMO is required to publish information for the Network Operator in relation to Network Control Service (NCS) Contracts on a monthly basis in accordance with clause 5.9.3 of the Market Rules. To date, the WEMS has not accommodated this requirement. With the implementation of new NCS contracts in the WEM, the WEMS has been amended.

WEMS 3.27 made changes to support changes in data flows between System Management's systems and the WEMS. WEMS 3.28 has completed the required updates with the addition of:

- New WEMS Operating Instructions report available to Market Generators via WEMS MPI and Web Services; and
- New WEMS NCS Dispatch Information report available to the Network Operator and Market Generators via WEMS MPI.

The new version of report web service is now: **https://wems.aemo.com.au/mpi/ws/reports/v7?wsdl**

These changes have been documented in section 4.11 of version 3.6 of the WEMS Reports and Web Service Specification.

2.3 Delinking Standing Data temperature dependence curves from Reserve Capacity Mechanism calculations

AEMO has removed the link between temperature dependence curves stored in Standing Data and two RCM calculations required for Scheduled Generators. Previously, the Required Level and Reserve Capacity Obligation Quantity (RCOQ) used temperature dependence curves stored in Standing Data to adjust Capacity Credits for temperature. AEMO will cease using curves in Standing Data for these two RCM calculations for the following reasons:

- Temperature dependence curves in Standing Data are required to be measured on a generated basis for the relevant Facility. All RCM processes focus on the sent out generation of the Facility and therefore require temperature dependence curves measured on a sent out basis. For most Facilities there is little to no difference between curves, however in some circumstances it can result in differences to Required Level and RCOQ values.
- Temperature dependence curves provided during the Certification of Reserve Capacity (CRC) under MR 4.10.1(e)(i) must be provided on a sent-out basis. Curves are reviewed annually by AEMO and must be supported by the manufacturer's technical specifications or an independent engineer. AEMO considers this the most suitable source for temperature dependence curves when adjusting for ambient temperature in the Required Level and RCOQ calculations.

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3. RESOLVED ISSUES

	Reference	Summary	Resolution
●	RCM-1637	Only a Facility in Committed or Commercial Operation could apply for an upgrade when submitting a CRC application. Under the Generator Interim Access (GIA) Western Power is now signing Network Control Service (NCS) contracts with new Facilities connecting to the SWIS. Under MR 4.14.3 these Facility's do not submit a trade declaration and hence do not need to apply for Committed status. Therefore, it should be possible for a NCS Facility in Proposed status to apply for an upgrade when submitting a CRC application.	When a Market Participant is submitting an application for CRC it will now be possible to apply for an upgrade for a Facility in Proposed status if it holds a NCS contract. An upgrade button will automatically appear for all applicable Facilities.
●	WEMS-6790	The WEMS Settlements Portal occasionally undergoes maintenance. During this time files may be inaccessible.	The WEMS Settlements Portal page will display a message when the portal is undergoing maintenance. Participants should refresh the page periodically if this message is displayed to determine when maintenance is complete. During the maintenance period, some or all of the participant's settlement data may not be visible.
●	WEMS-6782	The dispatch instruction web service (getDispatchInstructions) requires trading interval range parameters where the end_date_interval was interpreted as an *exclusive* parameter. This has led to potential misinterpretation, as a request for data from interval 8-1 (inclusive) to interval 7-2 (exclusive) of a Trading Day, for instance, would include dispatch instructions sent between 08:00 and 07:30 on that Trading Day, but not those sent after 07:30 until the end of the Trading Day.	The interpretation of these parameters is now *inclusive* on both ends, so for the previous example, the data returned would now include dispatch instructions sent for the whole Trading Day.

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

ABBREVIATIONS

Abbreviation	Expanded name
AEMO	Australian Energy Market Operator
CRC	Certified Reserve Capacity
GIA	Generator Interim Access
MPI	Market Participant Interface
NCS	Network Control Service
PIR	Participant Information Report
Public Data Site	The data repository website for the WEM - http://data.wa.aemo.com.au/
RC	Reserve Capacity
RCM	Reserve Capacity Mechanism
WEMS	Wholesale Electricity Market System