WEMS 3.21 - RCM RELEASE 1 (BUILD 1236-20) RELEASE NOTES

Published: **July 2017**

IMPORTANT NOTICE

Purpose

The Australian Energy Market Operator has prepared this document to provide information about the Wholesale Electricity Market System (WEMS) 3.21 – RCM Release 1 (Build 1236-20) release, as at the date of publication.

Disclaimer

This document or the information in it may be subsequently updated or amended. This document does not constitute legal or business advice, and should not be relied on as a substitute for obtaining detailed advice about the Wholesale Electricity Market Rules, or any other applicable laws, procedures or policies. AEMO has made every effort to ensure the quality of the information in this document but cannot guarantee its accuracy or completeness.

Accordingly, to the maximum extent permitted by law, AEMO and its officers, employees and consultants involved in the preparation of this document:

- make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of the information in this document; and

- are not liable (whether by reason of negligence or otherwise) for any statements or representations in this document, or any omissions from it, or for any use or reliance on the information in it.

VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	03/07/2017	Document Creation

DOCUMENT APPROVAL

Name and Position	Date
Martin Maticka Group Manager, Operations and Technology (WA)	03/07/2017

CONTENTS

1. INTRODUCTION

These are the release notes for Wholesale Electricity Market System (WEMS) 3.21 (Build 1236-20). This release is the first of three releases to support the changes to the Reserve Capacity Mechanism (RCM) required for 1 October 2017 introduced through gazettal of the Wholesale Electricity Market Amending Rules 2016 made under regulation 7(4) of the Electricity Industry (Wholesale Electricity Market) Regulations 2004 (**2016 WEM Amending Rules**) on 31 May 2016.

This first release introduces a number of new screens for Market Participants. These are discussed in Section 2 below with further information available in the following documents:

- Sections 8.1, 8.6 and 8.7 of the WEMS MPI User Guide have been updated to include information on the relevant screens in the WEMS MPI.

- Sections 4.3 and 4.7 of the WEM Registration Technical Guide have been updated to include details of the required formats for additional and amended Standing Data.

Both documents are available from http://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Participant-information/Guides-and-useful-information.

2. NEW FUNCTIONALITY

The new RCM functionality has been 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, availability of historic data will be limited. It is envisaged that historic Capacity Years' data will be migrated at a later date.

2.1 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:

- Select the Capacity Year they wish to view
- Perform specific RCM related functions
- View parameters specific to a Capacity Year
- Search and view facility parameters specific to a Capacity Year

2.2 Consumption Deviation Applications

This function will allow Market Participants to submit Consumption Deviation Applications for the purposes of the Relevant Demand calculation. Once an application has been accepted by AEMO, the Relevant Demand calculation will automatically take into account the maintenance intervals provided by the Market Participant.

By selecting the Consumption Deviation Application from the RCM Dashboard, the user will be brought to the Consumption Deviation Applications summary screen as seen below.

Home	CDA	NTDL	IRCR
2014 - 2015		2017 - 2018	

Search and summary of Consumption Deviation Submissions by NMIs

Consumption Deviation Applications

New Application

Search

NMI ⇕	Application Status ⇕	Submitted On ⇕

This screen will allow the user to view current Consumption Deviation Applications including their status as well as submit a new application. On selection of the New Application button, the user will be brought to the following application form.

Home	CDA	NTDL	IRCR
2014 - 2015		2017 - 2018	

New Consumption Deviation Application

Cancel   Save

Participant: Capacity Year: 2017 - 2018

Displays the Participant and Capacity Year that the application is being submitted for

NMI *

List will display NMIs which applications can be submitted for

Maintenance file submission and template download

Maintenance Intervals *

Drag file here or browse

Download Template

Supporting evidence files for application

Evidence *

Drag file here or browse

For each Consumption Deviation Application, Market Participants will need to:

- Select the NMI for which the application applies
- Upload a maintenance interval file (this will be validated to ensure it is consistent with the template provided)
- Provide any supporting evidence of the maintenance undertaken.

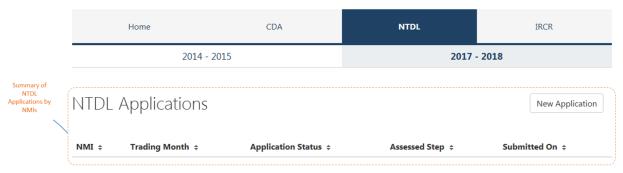Once the application has been saved, it will be submitted to AEMO for assessment.

For an outline of key changes to the CDA process between the new system and the old system refer to Appendix A.
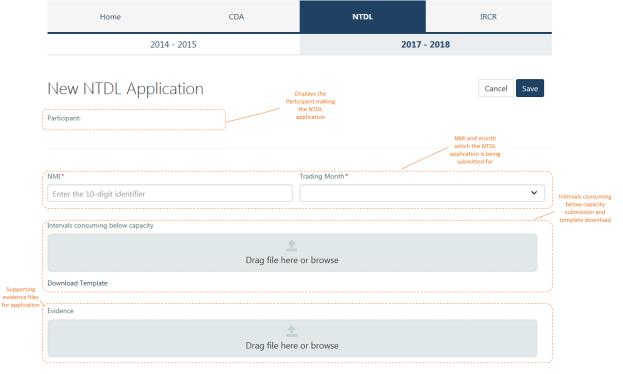
2.3   Non-Temperature Dependent Load

This function will allow Market Participants to submit Non-Temperature Dependent Load (NTDL) Applications to facilitate the process defined under Appendix 5A of the WEM Rules. Once an application has been accepted by AEMO, the Individual Reserve Capacity Requirement (IRCR) calculation will take into account the outcomes of this application in accordance with Appendix 5 of the WEM Rules.

By selecting the NTDL Application from the RCM Dashboard, the user will be brought to the summary screen as seen below.

This screen will allow the user to view current NTDL Applications including their status, as well as submit a new application. On selection of the New Application button, the user will be brought to the following application form.

For each NTDL Application, Market Participants will need to:

- Select the NMI for which the application applies
- Select the Trading Month for which the application applies
- Upload a file that identifies the intervals where the load is consuming below capacity (this will be validated to ensure it is consistent with the template provided)
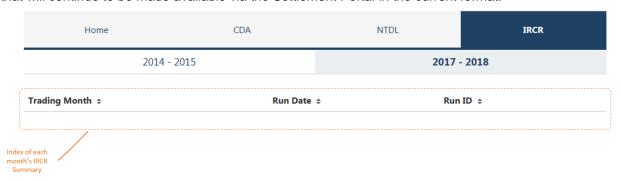- Provide any supporting evidence.

Once the application has been saved, it will be submitted to AEMO for assessment.

2.4 Individual Reserve Capacity Requirement Dashboard

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

It is noted that the information provided in this screen should be read in conjunction with the IRCR files that will continue to be made available via the Settlement Portal in the current format.

Home	CDA	NTDL	IRCR
2014 - 2015		2017 - 2018	

Trading Month ⇕	Run Date ⇕	Run ID ⇕

Index of each month's IRCR Summary

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).

2.5   Demand Side Programme Standing Data

The 2016 WEM Amending Rules have introduced a number of new standing data fields for Demand Side Programmes (DSPs) required for Trading Day 1 October 2017 and onwards. They include:

- Forecast consumption profile or profiles of the facility (Appendix 1(h)(xv))

- Extra Consumption Decrease Price for Peak Trading Intervals (Appendix 1(h)(vi)3. Market Participants will be able to enter a specific price or use the DAP – DSM Activation Price tick box.

- Extra Consumption Decrease Price for Off-Peak Trading Intervals (Appendix 1(h)(vi)(4)) Market Participants will be able to enter a specific price or use the DAP – DSM Activation Price tick box.

- The Ramp Rate Limit for each Trading Interval (MW/min) (Appendix 1(h)(xi))

- The rate at which the Facility is expected to increase its consumption when dispatch ends (MW/min) (Appendix 1(h)(xi))

It is noted that although the 2016 WEM Amending Rules remove a number of standing data fields from Appendix 1 of the WEM Rules, these fields have been maintained in this release. This has been done to ensure that:

- Market Participants who operate DSPs are able to manage their facility standing data required for Trading Days up to and including 30 September 2017; and

- Historic change requests are still viewable by Market Participants from 1 October 2017 onwards.

Market Participants are encouraged to review and update their Standing Data in WEMS prior to 1 October 2017 to ensure all required fields are completed. Please note AEMO is afforded 3 business days to approve Standing Data changes and a change will take 2 days from AEMO's approvals to become effective in the system.

2.6   Temperature De-rate Curve

This release has standardised the Temperature De-Rate curve format required to be submitted under Appendix 1(b)(iv). This de-rate curve will be used by AEMO to perform Reserve Capacity Tests and to determine the Reserve Capacity Obligation Quantity.

The file format will be in CSV and will be validated to ensure it meets the requirements of these fields:

Field	Description
facility_identity	This is the facility shortname used to identify the facility in which the temperature de-rate curve relates to.
fuel_type	This describes the fuel type for which the de-rate curve relates to. Valid values are L – Liquid and N – Non-liquid.
temperature	This describes the temperature for which the facility capability relates to. This must include temperature ranges from 0 to 45 degrees Celsius in 0.1 increments.
facility_capability	This describes the MW capability of the facility at the given temperature. This is to be specified to three decimal places.

Market Participants are required to review and update their Standing Data in WEMS prior to 1 October 2017 to ensure a Temperature De-Rate curve is nominated in the required format. Please note AEMO is afforded 3 business days to approve Standing Data changes and a change will take 2 days from AEMO's approvals to become effective in the system.

3.   RESOLVED ISSUES

	Reference	Summary	Resolution
●		No issues resolved in this release	

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
CSV	Comma Separated Values
IRCR	Individual Reserve Capacity Requirement
MPI	Market Participant Interface
NMI	National Meter Identifier
NTDL	Non-Temperature Dependent Load
2016 WEM Amending Rules	Wholesale Electricity Market Amending Rules 2016 made under regulation 7(4) of the Electricity Industry (Wholesale Electricity Market) Regulations 2004
RCM	Reserve Capacity Mechanism
STEM	Short Term Energy Market
WEM Rules	Wholesale Electricity Market Rules
WEMS	Wholesale Electricity Market System

APPENDIX A. CHANGES TO THE CONSUMPTION DEVIATION APPLICATION PROCESS

As part of the RCM 3 improvement project the process for making Consumption Deviation Applications (CDAs) has been updated.

The key changes between the old system and new system are as follows:

- Under the old system CDAs were made by navigating to the Maintenance Interval Uploads page (Figure 1) from the Reserve Capacity drop down list in MPI. In the new system participants navigate to the Reserve Capacity Mechanism landing page, and select the CDA tab (Figure 2) to make a CDA.

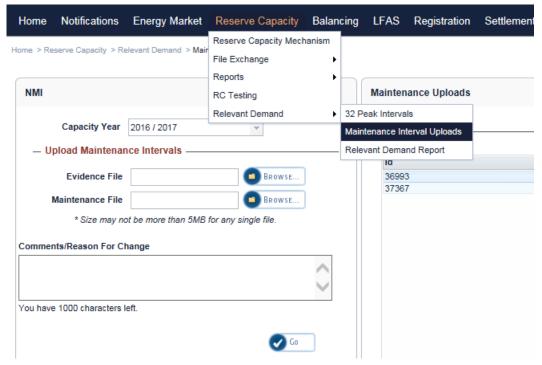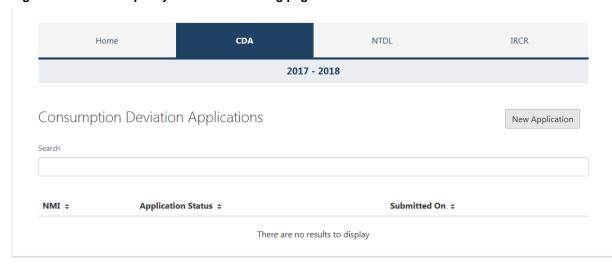**Figure 1   Maintenance Interval Uploads page**

Figure 2   Reserve Capacity Mechanism landing page - CDA tab

Home	CDA	NTDL	IRCR

2017 - 2018

Consumption Deviation Applications   New Application

Search

NMI ⇕	Application Status ⇕	Submitted On ⇕

There are no results to display

- To lodge a CDA in the old system, participants populate a Maintenance Intervals csv file. This was used to specify the action for each interval (submit or cancel), the NMI, the type of time period (day or interval) and the time period value (refer to Figure 3). The new system has a simplified csv file template, only the time values for intervals affected by maintenance and reasons these intervals were affected need to be specified (refer to Figure 4).
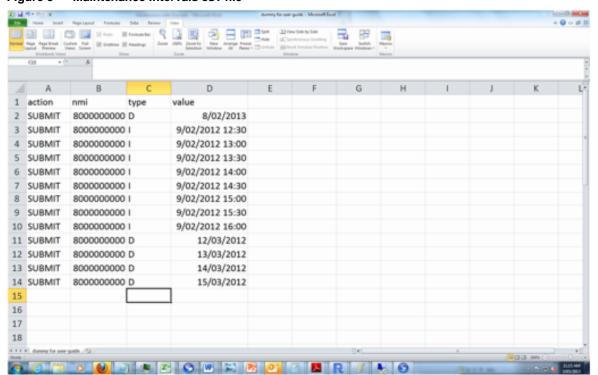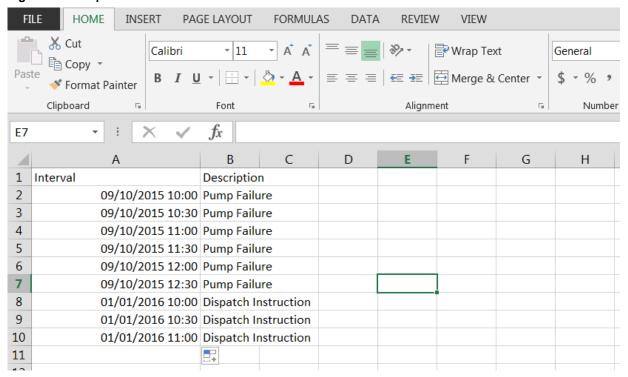
Figure 3   Maintenance Intervals csv file

	A	B	C	D
1	action	nmi	type	value
2	SUBMIT	8000000000	D	8/02/2013
3	SUBMIT	8000000000	I	9/02/2012 12:30
4	SUBMIT	8000000000	I	9/02/2012 13:00
5	SUBMIT	8000000000	I	9/02/2012 13:30
6	SUBMIT	8000000000	I	9/02/2012 14:00
7	SUBMIT	8000000000	I	9/02/2012 14:30
8	SUBMIT	8000000000	I	9/02/2012 15:00
9	SUBMIT	8000000000	I	9/02/2012 15:30
10	SUBMIT	8000000000	I	9/02/2012 16:00
11	SUBMIT	8000000000	D	12/03/2012
12	SUBMIT	8000000000	D	13/03/2012
13	SUBMIT	8000000000	D	14/03/2012
14	SUBMIT	8000000000	D	15/03/2012
15				
16				
17				
18				

Figure 4   Simplified Maintenance Intervals csv file.

- The NMI associated to the CDA is now specified via a drop down list rather than the Maintenance Interval csv file.

- The Comments/Reasons For Change window (Figure 2) provided in the old system has been decommissioned. In the new system participants provide high level reasons in the Maintenance Intervals csv file. More detailed reasons should be provided by uploading evidence files. Up to 20 evidence files may be submitted per CDA.

- The old system did not allow CDAs to be modified once they had been submitted to System Capacity (WA). This functionality has been added to the new system. Participants may now withdraw, edit, and resubmit a CDA. System Capacity (WA) may also request further information if required for assessment of a CDA.

- As a CDA can now be withdrawn, edited and resubmitted, there is no need for multiple CDAs per NMI. Once a CDA has been accepted or rejected by System Capacity (WA) that NMI is no longer available in the NMI drop down list on the CDA page. Therefore, all intervals from the previous capacity year that the participant wishes to be covered by the CDA need to be included in the one submission. Note that System Capacity (WA) will request additional information from applicants prior to rejecting any application

- CDAs may be saved by participants at any time prior to submission to complete at a later date.