



INDEPENDENT
MARKET
OPERATOR



WEMS 3.11 Patch 4 Release Notes

(Build 3.11-374-128)

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Document control

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Change history

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Terms, abbreviations and acronyms

Name of Abbreviation/Acronym/Term	Description or Meaning
MR	Wholesale Electricity Market Rule
STEM	Short Term Energy Market
WEMS	Wholesale Electricity Market System

1. Introduction

This document contains the release notes for WEMS 3.11 Patch 4 (Build 3.11-374-128).

The Minister for Energy rejected the rule change RC_2013_10 (Harmonisation of Supply-Side and Demand-Side Capacity Resources) on 21 May 2014. This release reverses the changes introduced for the 2014 Reserve Capacity Bilateral Trade calculation process as required by rule change RC_2013_10.

Due to the deferral of the 2014 Reserve Capacity Cycle to 1 May 2015, this release is required to ensure that certification process for the 2014 Reserve Capacity Cycle is compliant with the Market Rules.

For further information in relation to RC_2013_10, please visit: http://www.imowa.com.au/home/electricity/rules/rule-changes/rejected/rule-change-rc_2013_10

In addition to the above, this release includes the following validations affecting Resource Plans:

- a validation to ensure that Resource Plans for facilities undergoing a commissioning test are compliant with clause 6.11.2(bA); and
- a modification to the existing Resource Plan validation to ensure Market Participants with only Non-Scheduled Generators can submit their expected non-scheduled generation output quantities in compliance with clause 6.11.1(a).

Further information on these validations can be found in Section 4 of these release notes.

2. New features

No new features have been included in this release.

3. Resolved issues

Ref.	Description	Comment	Rating
WEMS-5253	This release reverses RC_2013_10 functionality including changing the number of Availability Classes back to 4 (from 2) and reintroducing the Max Available Hours per Year in the Reserve Capacity Bilateral Trade calculation.	Testing of bilateral trades (Appendix 3 of the Market Rules) will use the same methodology as used for the 2013 Capacity Year.	High

Ref.	Description	Comment	Rating
WEMS-5798	In WEMS 3.11, a Resource Plan validation for a facility undergoing commissioning tests was introduced to comply with MR 6.11.2(bA). The validation was implemented as a warning. In this release the validation has been changed to reject submissions where MR 6.11.2(bA) was not met.	Market Participants submitting resource plans where a facility is undergoing a commissioning test must meet the requirements of MR 6.11.2(bA). Further information is available in Section 4.1	High
WEMS-5264	The Market Rules require Market Participants to submit their expected non-scheduled generation quantity in their resource plan submissions. Resource plan submissions must meet the requirements of MR 6.11.2, which includes meeting MR 6.11.3. Resource plan validation in relation to MR 6.11.3 has been relaxed to exclude Market Participants who only own non-scheduled generators.	The intention of MR 6.11.3 is to only apply to Market Participants with both scheduled and non-scheduled generators while excluding those Market Participants who only own non-scheduled generators. Further information is available in Section 4.2	High
WEMS-5786	In the event of a STEM suspension and the STEM Auction is not running, the STEM summary information report (<i>EM_STEMSummaryInfo</i>) is published without data in the MPI and web services. The STEM summary information report (<i>EM_STEMSummaryInfo</i>) now generates correct data in the event of STEM suspension.	This would result in the inability of WEMS to publish STEM suspension flag which is part of the report.	Medium

Status Key

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

4. Further Information

4.1 WEMS-5798: Resource Plan Validation for 6.11.2(bA)

4.1.1 Background

WEMS 3.11 was released in Market Trial on 28 November 2014 featuring a validation of Resource Plans affecting submissions when a facility is undergoing a Commissioning Test.

On 4 December 2014 the IMO deferred the release of WEMS 3.11 in production *due to the need to revert the WEMS-2468 Resource Plan validation change due to issues identified by a Market Participant*.

The IMO has investigated these issues and ascertained that the WEMS-2468 validation is compliant with the Market Rules and will be reinstating this validation in the WEMS 3.11 Patch 4.

4.1.2 WEMS-5798 Validation

This validation has been included to ensure compliance with existing clause 6.11.2(bA) of the Market Rules which states:

For Resource Plan Submission data or Standing Resource Plan Submission data to be valid: it must not include a generator for any Trading Interval if that generator is undergoing a Commissioning Test during that Trading Interval.

This validation ensures that the **target_mw** and **energy_mwh** fields in the Resource Plan are set to zero in the relevant Trading Intervals for facilities undergoing a Commissioning Test.

This validation uses the details of an approved Commissioning Test plan provided to the IMO by System Management under clause 6.21A.16 to ascertain if a facility is undergoing a Commissioning Test. This information is published in the *EM_CommissioningTest* report available in the WEMS MPI.

Furthermore, Market Participants other than Synergy and excluding those who only own Non-Scheduled Generators, must ensure their Resource Plan submission is compliant with clause 6.11.3 of the Market Rules which states:

A Market Participant, other than Synergy, must ensure that either:

(a) $TargetLFA = (NCP + DQ - NonSchGen - Shortfall) \pm Tol$

Where:

TargetLFA = the sum of the Loss Factor adjusted energy quantities, in MWh, submitted by the Market Participant under clause 6.11.1(b)(iii)

NCP = the Net Contract Position

DQ = [is the absolute] demand quantity, in MWh, provided by the Market Participant in accordance with clause 6.11.1(d)

NonSchGen = the amount, in MWh, provided by the Market Participant under clause 6.11.1(a)

Shortfall = the amount, in MWh, provided by the Market Participant under clause 6.11.1(e)

Tol = $\min(3MWh, \max(0.5, 3\% \text{ of } NCP))$;

These validations are performed at 10:50AM for standing Resource Plans and at the time of submission for variation submissions.

4.1.3 Failing the Validation

If a Resource Plan fails the clause 6.11.2(bA) validation the following error message is displayed:

The facility X must have a zero Target MW and Energy MWh while undergoing commissioning during the Trading Intervals Y-Z, Y-Z...

If a Resource Plan fails the clause 6.11.3 validation the following error message is displayed:

The sum of energy_mwh values of X MWh (energy_mwh multiplied by the loss factor) for all facilities plus the non_sched_generation value of X MWh plus the shortfall_mwh value of X MWh plus the total_demand_mwh value of X in the Resource Plan submission must be between net contract position X and X in hour X and interval X.

If either error message is produced, the file will be rejected. The Market Participant must ensure that a successful Resource Plan submission is resubmitted within the Resource Plan window between 11:00AM to 12:50PM.

4.1.4 Failure to submit a Resource Plan

If a Market Participant fails to submit a Resource Plan within the Resource Plan window, the IMO will prepare a default Resource Plan submission in accordance with clause 6.5.4(a). This default Resource Plan will set the Market Participant's Scheduled Generators and Non-Scheduled Generators scheduled output to zero, set all Dispatchable Loads scheduled consumption to zero and set the level of the supply shortfall equal to the total Net Contract Position.

The default Resource Plan submission will have the following settlement impact on a Trading Interval basis:

- Scheduled Generators that are nominated to be on commissioning by System Management **will not** incur a capacity credit refund; and
- Scheduled Generators which **are not** undergoing a Commissioning Test by System Management or will have a Resource Plan Shortfall quantity and **will** incur capacity credit refund.

4.1.5 Compliant Resource Plan for a facility on a Commissioning Test.

A Resource Plan submission must ensure compliance with, amongst others, clauses 6.11.3 and 6.11.2(bA) of the Market Rule.

For facilities undergoing a Commissioning Test 6.11.3 compliance can be achieved by nominating a shortfall between the net energy scheduled in Resource Plan and the NCP in accordance with clause 6.11.1(e). Further 6.11.2(bA) compliance can be achieved, for a facility undergoing a Commissioning Test, by ensuring that both **target_mw** and **energy_mwh** are zero for relevant intervals.

4.1.6 Settlement Impact

Clause 4.12.6(c) requires that *if the generating system ... is subject to a Commissioning Test Plan approved by System Management during a Trading Interval, then the IMO must reduce the Reserve*

Capacity Obligation Quantity for that Facility to zero during that Trading Interval. Please note the Reserve Capacity Obligation Quantity for facilities not on commissioning test will be applied.

In addition, a Market Participant must ensure they have fulfilled their capacity obligations to avoid a Net STEM shortfall for intervals in which they are commissioning as calculated by clause 4.26.2.

To meet specified capacity obligations and avoid a Net STEM shortfall refund, a Market Participant must ensure the sum of the quantities described in clause 4.26.2(d) is always greater than or equal to the Reserve Capacity Obligation Quantity during that Trading Interval.

Therefore, provided a facility undergoing a Commissioning Test submits its Resource Plan in accordance with the above and ensures the above quantities are greater than or equal to their Reserve Capacity Obligation Quantity for a Trading Interval, there will be no impact to the net settlement amount and no net STEM refund will be incurred. However, if the sum of the quantities **is not** greater than or equal to the Reserve Capacity Obligation Quantity during that Trading Interval, then Capacity Refunds may apply in accordance with clause 4.26.3(b).

Further information regarding the outcomes of the settlement calculations for Net STEM shortfall refund as described above, can be provided to Market Participants upon request.

4.2 WEMS-5264: Resource Plan Validation for Non-Scheduled Generator

4.2.1 Background

All Market Participants are required to submit the total expected Loss Factored adjusted output for Non-Scheduled Generators in their Resource Plan submissions under clause 6.11.1(a). To do this, Resource Plan submissions must meet the requirements of clause 6.11.2 and where applicable meet the requirements of clause 6.11.3.

The current validation associated with clause 6.11.3 requires a Market Participant with only Non-Scheduled Generators to nominate the expected output equal to the Net Contract Position plus any demand quantity for the respective Trading Interval. This has the unintended result of inaccurate expected generation quantities being submitted in the Resource Plans for those Market Participants with only Non-Scheduled Generators.

4.2.2 WEMS-5264 Validation

In WEMS 3.11 Patch 4, the Resource Plan validation will allow Market Participants with **only** Non-Scheduled Generators to enter an expected output without having to conform to the validation in clause 6.11.3, which is intended for Market Participant with both Scheduled and Non-Scheduled Generators. This enables Market Participants who only have Non-Scheduled Generators to accurately submit their expected output in accordance with clause 6.11.1(a).

All Market Participants, including those with only Non-Scheduled Generators, must ensure that a valid Resource Plan submission is made within the Resource Plan window, between 11:00AM and 12:50PM to meet the requirements of clause 6.5.1A.

For Market Participants with both Non-Scheduled Generators and Scheduled Generators the Resource Plan validation for clause 6.11.3 still apply and there are no changes to the Resource Plan validations.