





# WEM Procedure: WEM Submissions

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# **Version Release History**

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0.1		First version developed in accordance with clauses 7.4.21, 7.4.38, 7.4.57A, 7.4.62, 7.4A.12, 7.4A.20 and 7.4A.24 of the WEM Rules.

#### **IMPORTANT NOTICE - EXPLANATORY NOTES**

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AEMO | Doc Ref: | Page 2 of 11



# **Contents**

1.	Introduction	4
1.1.	Purpose and scope	4
1.2.	Definitions	5
1.3.	Interpretation	5
1.4.	Related documents	6
2.	Making submissions	7
2.1.	Real-Time Market Submissions	7
2.2.	DSP Withdrawal Profile Submisisons	9
2.3.	2.3. Real-Time Market Submission Acceptance Horizon	
3.	Receiving and processing submissions	9
3.1.	Acknowledging submissions	
3.2.	Validating and accepting or rejecting submissions	9
Appe	endix A. Relevant clauses of the WEM Rules	11
Tak	oles	
Table	1 Definitions	5
Table	2 Related documents	6
Table	Relevant clauses of the WEM Rules	11
Fia	ures	
. 19		
Figure	e 1 Example ESS trapezium showing differing angles	8



# 1. Introduction

## 1.1. Purpose and scope

- 1.1.1. This WEM Procedure: WEM Submissions (Procedure) is made in accordance with AEMO's functions under clause 2.1A.2(h) of the Wholesale Electricity Market Rules (WEM Rules).
- 1.1.2. The *Electricity Industry Act 2004* (WA), the WEM Regulations and the WEM Rules prevail over this Procedure to the extent of any inconsistency.
- 1.1.3. In this Procedure, where obligations are conferred on a Rule Participant, that Rule Participant must comply with the relevant obligations in accordance with clause 2.9.7A, 2.9.7D or 2.9.8 of the WEM Rules, as applicable.
- 1.1.4. The purpose of this Procedure is to:
  - (a) Specify the Real-Time Market Acceptance Horizon [clause 7.4.21].
  - (b) Document the format and methodology to be followed by Market Participants for making Real-Time Market Submissions and Standing Real-Time Market Submissions, including the options to submit multiple Real Time Market Submissions and Standing Real-Time Market Submissions for multiple Registered Facilities and Market Services in a single submission [clauses 7.4.38 and 7.4.57A].
  - (c) Specify any relevant minimum tranche size for offers, the maximum allowable number of Price-Quantity Pairs for a Dispatch Interval and any specific requirements for Registered Facilities that offer Essential System Services and not energy [clause 7.4.38].
  - (d) Document the processes AEMO must follow when:
    - (i) Acknowledging receipt of a Real-Time Market Submission under clause 7.4.48(a) or Standing Real-Time Market Submission under clause 7.4.58(a);
    - (ii) validating a Real-Time Market Submission in accordance with clause 7.4.48(b) or a Standing Real-Time Market Submission in accordance with clause 7.4.58(b); and
    - (iii) accepting or rejecting a Real-Time Market Submission in accordance with clause 7.4.49 or a Standing Real-Time Market Submission in accordance with clause 7.4.59 [clause 7.4.62].
  - (e) Document the the format and methodology to be followed by Market Participants for making DSP Withdrawal Profiles Submissions and Standing DSP Withdrawal Profile Submissions, including the options to submit multiple DSP Withdrawal Profile Submissions and Standing DSP Withdrawal Profile Submissions for multiple Demand Side Programmes in a single electronic submission [clauses 7.4A.12 and 7.4A.20].
  - (f) Document the processes it must follow when:
    - (i) acknowledging receipt of a DSP Withdrawal Profile Submission under clause 7.4A.14(a); or a Standing DSP Withdrawal Profile Submission under clause 7.4A.21(a);
    - (ii) validating a DSP Withdrawal Profile Submission in accordance with clause 7.4A.14(b) or a Standing DSP Withdrawal Profile Submission in accordance with clause 7.4A.21(b); and



- (iii) accepting or rejecting a DSP Withdrawal Profile Submission in accordance with clause 7.4A.15 or a Standing DSP Withdrawal Profile Submission in accordance with clause 7.4A.22 [clause 7.4A.24].
- 1.1.5. Appendix A of this Procedure outlines the head of power clauses that this Procedure is made under, as well as other obligations in the WEM Rules covered by this Procedure.

#### 1.2. Definitions

- 1.2.1. Terms defined in the *Electricity Industry Act 2004* (WA), the WEM Regulations and the WEM Rules have the same meanings in this Procedure unless the context requires otherwise.
- 1.2.2. The following definitions apply in this Procedure unless the context requires otherwise.

Table 1 Definitions

Term	Definition
DSP	Demand Side Programme
DSP Submission Schema	The submission format applicable to DSP Withdrawal Profile Submissions and Standing DSP Withdrawal Profile Submissions, outlined in section 2 of the WEMS Real-Time Market Submission Specification.
FCESS	Frequency Co-optimsed Essential System Service
RTM Submission Schema	The submission format applicable to Real-Time Market Submissions and Standing Real-Time Market Submissions, outlined in section 2 of the WEMS Real-Time Market Submission Specification.
WEM Submission	A Real-Time Market Submission, Standing Real-Time Market Submission, DSP Withdrawal Profile Submission, or Standing DSP Withdrawal Profile Submission
Wholesale Electricity Market System (WEMS)	An interface system that AEMO uses to administer and operate the Wholesale Electricity Market.

# 1.3. Interpretation

- 1.3.1. The following principles of interpretation apply in this Procedure unless the context requires otherwise.
  - (a) Clauses 1.3 to 1.5 of the WEM Rules apply in this Procedure.
  - (b) References to time are references to Australian Western Standard Time.
  - (c) Terms that are capitalised, but not defined in this Procedure, have the meaning given in the WEM Rules.
  - (d) A reference to the WEM Rules or WEM Procedures includes any associated forms required or contemplated by the WEM Rules or WEM Procedures.
  - (e) Words expressed in the singular include the plural and vice versa.
  - (f) A reference to a paragraph refers to a paragraph of this Procedure.
  - (g) A reference to a clause refers to a clause or section of the WEM Rules.
  - (h) References to WEM Rules in this Procedure in bold and square brackets [Clause XXX] are included for convenience only, and do not form part of this Procedure.



- (i) Text located in boxes and headed as Explanatory Note X in this Procedure is included by way of explanation only and does not form part of this Procedure. The Procedure prevails to the extent of any inconsistency with the explanatory notes contained within it.
- (j) The body of this Procedure prevails to the extent of any inconsistency with the figures, diagrams, appendices, schedules, annexures or attachments contained within this document.

### 1.4. Related documents

1.4.1. The documents in Table 2 are associated with this Procedure.

Table 2 Related documents

Reference	Title	Location
Specification	WEMS Real-Time Market Submission Specification	WEM Website
RTM Submission Schema	RTM Submission Schema	WEM Website
DSP Submission Schema	DSP Submission Schema	WEM Website





# 2. Making submissions

## 2.1. WEMS Real-Time Market Submission Specification

- 2.1.1. AEMO must create and publish on the WEM Website, a WEMS Real-Time Market Submission Specification outlining the formats required for WEM Submissions in the Real-Time Market.
- 2.1.2. Where AEMO revises the WEMS Real-Time Market Submission Specification, AEMO must publish the revised document on the WEM Website and must notify Market Participants of the details of the changes to the document as soon as practicable.

#### 2.2. Real-Time Market Submissions

- 2.2.1. A Market Participant must make a Real-Time Market Submission or Standing Real-Time Market Submission through WEMS.
- 2.2.2. When making a Real-Time Market Submission or Standing Real-Time Market Submission, a Market Participant must ensure:
  - (a) the submission format conforms with the WEMS Real-Time Market Submission Specification; and
  - (b) the number of Price-Quantity Pairs for a single Facility and Market Service in any Dispatch Interval is not more than:
    - (i) for a Non-Scheduled Facility, one Price-Quantity Pair; or
    - (ii) for all other Facility Classes, ten Price-Quantity Pairs.
- 2.2.3. A Market Participant must ensure offers made for an FCESS Market Service contain a minimum tranche size of 0 MW.
- 2.2.4. A Market Participant must ensure offers made for the RoCoF Control Service contain a minimum tranche size of 0 MW.
- 2.2.5. A Market Participant may make an offer for the energy Market Service containing any tranche
- 2.2.6. When a Market Participant makes a submission in WEMS for a Facility that offers one or more FCESS Market Services, but not energy, in a Dispatch Interval, the values for Enablement Minimum, Low Breakpoint, High Breakpoint, and Enablement Maximum must be zero for those FCESS Market Services in that Dispatch Interval.
- 2.2.7. A Market Participant may submit a single electronic submission in WEMS containing one or more Real-Time Market Submissions, or one or more Standing Real-Time Market Submissions, which may contain submission for multiple Registered Facilities and Market Services.



#### E[A] Explanatory note – Minimum tranche size for energy Market Service

With regard to the energy Market Service, a positive offer quantity is an Injection offer while a negative quantity is a Withdrawal offer. Therefore, there is no minimum tranche size for the energy Market Service.

For the avoidance of doubt:

- An offer quantity for Withdrawal in the energy Market Service must be less than 0 MW.
- An offer quantity for Injection in the energy Market Service must be more than 0 MW.
- An offer quantity of precisely 0 MW in the energy Market Service is allowed but cannot meaningfully be defined as an offer for Withdrawal or Injection.
- An offer quantity for RoCoF Control Serve must be 0 MWs or more.
- An offer quantity for any other FCESS Market Service must be 0 MW or more.
- 2.2.8. A Market Participant must ensure that offers made for an FCESS Market Service for a Semi-Scheduled Facility respect any limitations specified by AEMO as a result of FCESS accreditation for that Facility.

#### E[B] Explanatory note – FCESS Offers by Semi-Scheduled Facilities

One of the potential restrictions that may apply to a Semi-Scheduled Facility providing a FCESS is that it has a smaller trapezium angle than would be true for a Scheduled Facility providing the same service. This would typically be an angle of 45 degrees for a Scheduled Facility, reflecting a one for one trade-off of MW of energy for MW of FCESS. However, a Semi-Scheduled Facility may be required to submit values that give effect to a smaller angle to reflect a buffer to account for the intermittency of the Self-Scheduled Facility's energy provision.

For example, a 100MW Semi-Scheduled Facility may be required to make Real-Time Market Submissions with a trapezium angle of 22.5 degrees between the High Breakpoint and the maximum ESS Enablement Quantity as a result of its accreditation for Contingency Reserve Raise, representing a two for one trade-off of energy to Contingency Reserve Raise provision. As such, for a forecast output of 100MW, when providing 80 MW of energy Injection, the Facility could only be cleared for a maximum of 10 MW of Contingency Reserve Raise, to account for intermittency.

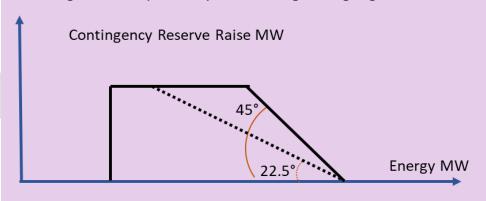


Figure 1 Example ESS trapezium showing differing angles



#### 2.3. DSP Withdrawal Profile Submissions

- 2.3.1. A Market Participant must make a DSP Withdrawal Profile Submission or Standing DSP Withdrawal Profile Submission through WEMS.
- 2.3.2. A Market Participant must ensure DSP Withdrawal Profile Submissions and Standing DSP Withdrawal Profile Submissions conform with the WEMS Real-Time Market Submission Specification.
- 2.3.3. A Market Participant may submit a single electronic submission containing one or more DSP Withdrawal Profile Submissions, or one or more Standing DSP Withdrawal Profile Submissions, which may contain submissions for multiple Demand Side Programmes..

## 2.4. Real-Time Market Acceptance Horizon

2.4.1. The Real-Time Market Submission Acceptance Horizon for a Dispatch Interval is the commencement time of the Dispatch Interval that commences 28 days before the start of the relevant Dispatch Interval [clause 7.4.21].

# 3. Receiving and processing submissions

## 3.1. Acknowledging submissions

3.1.1. When issuing an acknowledgement in accordance with clause 7.4.48(a), 7.4.58(a), 7.4A.14(a) or 7.4A.21(a) (as applicable), AEMO will provide the acknowledgement and a unique submission ID to a Market Participant through WEMS.

# 3.2. Validating Submissions

- 3.2.1. In addition to its obligations under clause 7.4.48(b), 7.4.58(b), 7.4A.14(b) or 7.4A.21(b) (as applicable), as soon as reasonably practicable after receipt of a WEM Submission, AEMO will validate a WEM Submission in accordance with the requirements under:
  - (a) paragraphs 2.2 and 2.3, as applicable; and
  - (b) the WEMS Real-Time Market Submission Specification.

# 3.3. Rejecting Submissions

- 3.3.1. Where validations under paragraph 3.2.1 result in one or more failures or AEMO is required to reject an electronic submission under clause 7.4.49(b), 7.4.59(b), 7.4A.15(b) or 7.4A.22(b) (as applicable), it will reject the whole electronic submission and provide any required information in WEMS.
- 3.3.2. Where an error causes one or more validations conducted under 3.2.1 to fail, AEMO may reject the whole electronic submission in WEMS without completing all validations.
- 3.3.3. Where AEMO rejects a whole electronic submission under paragraphs 3.3.1 or 3.3.2, AEMO will provide the Market Participant with an error response for each failed validation, including an error code and an error message as outlined in the WEMS Real-Time Market Submissions Specification.



- 3.3.4. Where multiple identical error responses are required, AEMO may send a single error response under paragraph 3.3.3 referring to all relevant errors.
- 3.3.5. AEMO will reject a WEM Submission if AEMO is unable to process the WEM Submission for any reason.
- 3.3.6. Where AEMO rejects a WEM Submission in accordance with paragraph 3.3.1 or 3.3.2, AEMO will send a failure response, which complies with clause 7.4.49(b)(ii), to the Market Participant via WEMS.

# 3.4. Accepting Submissions

3.4.1. Where AEMO provides notification to a Market Participant under clause 7.4.49(a)(i), 7.4.59(a)(i), 7.4A.15(a) or 7.4A.22(a) (as applicable), or determines an electronic WEM Submission in WEMS complies with the applicable validations required under paragraph 3.2.1, AEMO will provide the Market Participant with an acceptance response via WEMS as soon as practicable.





# Appendix A. Relevant clauses of the WEM Rules

#### Table 3 details:

- (a) the head of power clauses in the WEM Rules under which the Procedure has been developed; and
- (b) each clause in the WEM Rules requiring an obligation, process or requirement be documented in a WEM Procedure, where the obligation, process or requirement has been documented in this Procedure.

Table 3 Relevant clauses of the WEM Rules

Clause
7.4.21
7.4.38
7.4.57A
7.4.62(a)
7.4.62(b)
7.4A.12
7.4A.20
7.4A.24

