

WEM PROCEDURE: DATA AND IT INTERFACE REQUIREMENTS

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Approved for distribution and use by:

APPROVED BY: Cameron Parrotte
TITLE: Executive General Manager – Western Australia

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VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	21 September 2006	Procedure for Data and IT Interface Requirements
2.0	1 July 2011	Amendments to Procedure resulting from PC_2011_02
3.0	13 August 2012	Amendments to align Procedure with the new Balancing Market requirements
4.0	30 November 2015	Changes resulting from the transfer of functions from the IMO to AEMO
5.0	18 April 2017	Changes resulting from the transfer of System Management functions to AEMO
6.0	29 July 2021	Amendments to align Procedure with updated requirements.

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1. INTRODUCTION

1.1. Purpose and scope

- 1.1.1. This WEM Procedure: Data and IT Interface Requirements (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*, 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 or 2.9.8 of the WEM Rules, as applicable.
- 1.1.4. The purpose of this Procedure is to document the data and IT interface requirements, including security standards in respect of systems required for Market Participants to operate in the Wholesale Electricity Market (WEM).
- 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*, the WEM Regulations and the WEM Rules have the same meanings in this Procedure unless the context requires otherwise.

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.

2. SYSTEM OVERVIEW

2.1. Wholesale Electricity Market System

Generally, the Wholesale Electricity Market System (WEMS) provide the following functions in support of the administration of the WEM:

- (a) Market Participant and Facility registration;
- (b) to receive information on bilateral contracts and bids;
- (c) to clear the STEM;
- (d) to facilitate the Balancing Market;
- (e) to facilitate the Load Following Ancillary Services (LFAS) Market;
- (f) to interface with Network Operators;
- (g) to interface with Metering Systems;
- (h) Settlements and commercial reconciliations;
- (i) to publish reports and information as required; and
- (j) to facilitate the Reserve Capacity Mechanism.

2.2. Market Participant Interface

The Market Participant Interface (MPI) is part of the WEMS and provides the online communication mechanism between Market Participants and AEMO. It is a web-based application that:

- (a) provides forms for data submission and review;
- (b) supports the upload and download of data in files;
- (c) provides reports on-screen and to download; and
- (d) provides a web service API.

3. MARKET PARTICIPANT REQUIREMENTS

Market Participants must ensure that they have suitable IT infrastructure to meet their obligations under the WEM Rules and their participation in the Wholesale Electricity Market.

3.1. Redundancy

- 3.1.1. It is recommended that Market Participants have one or more primary workstation computers and one or more secondary workstation computers configured for access to the MPI.
- 3.1.2. Market Participants' primary and secondary workstations should not use the same IT infrastructure. Separation of infrastructure provides redundancy in the event of internet connection problems or cyber security breaches.

3.2. Hardware requirements

- 3.2.1. The following minimum workstation requirements are recommended:
 - (a) 2 GHz processor or equivalent;
 - (b) 4 GB memory or equivalent;

- (c) graphics supporting a resolution of 1280 x 1024 or better; and
- (d) reliable (broadband speed 2Mb/s+) connection to the internet.

3.3. Software requirements

- 3.3.1. To access the MPI, it is recommended that Market Participants maintain their internet browser such that it is no more than two versions behind current release.

3.4. Network requirements

- 3.4.1. Market Participants must:

- (a) have an internet connection with HTTP access to TCP port 80 and HTTPS access to TCP ports 443 and 563 on the WEM Website; and
- (b) ensure the security and availability of their own network connections.

- 3.4.2. It is recommended Market Participants:

- (a) use an appropriate high-speed (broadband speed, 2Mb/s or more) internet connection as a minimum to ensure adequate service to access the MPI; and
- (b) implement an appropriate firewall technology to ensure the security of their networks.

3.5. Time synchronisation

- 3.5.1. Market Participants' workstations must be synchronised with a 'Network Time Server'. A Network Time Server is a server that provides time synchronisation services to workstations and other appliances. For example, a default Windows 10 installation with internet connection will synchronise to the Microsoft time server.

3.6. WEMS Security Policy

- 3.6.1. Digital Certificates and RSA Token access are the current mechanisms required to meet security access requirements to the MPI. AEMO may, at its discretion replace these mechanisms with suitable technology that provides appropriate security measures.
- 3.6.2. Market Participants must use the most current security mechanisms determined by AEMO to access the MPI and must ensure that any password, token, certificate or other data that forms part of that security mechanism is protected from inappropriate or unauthorised use.
- 3.6.3. AEMO must notify a Market Participant of changes to security mechanisms required to access the MPI.

APPENDIX A. RELEVANT CLAUSES OF THE WEM RULES

Table 1 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 1 Relevant clauses of the WEM Rules

Clause
2.36.5