



WHOLESALE ELECTRICITY MARKET

PROCEDURE CHANGE PROPOSAL: AEPC_2017_08

POWER SYSTEM OPERATING PROCEDURE: NETWORK
MODELLING DATA

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EXECUTIVE SUMMARY

The publication of this Procedure Change Proposal and accompanying call for submissions commences the Procedure Change Process conducted by AEMO to consider a proposed new Power System Operating Procedure: Network modelling data under the Wholesale Electricity Market Rules (WEM Rules).

The proposed new Power System Operating Procedure is required by clause 2.28.3A of the WEM Rules, which commenced on 1 July 2016 and which requires AEMO¹ to develop a Power System Operation Procedure specifying:

- (a) Information that a Network Operator must provide to System Management, for each of its Networks.
- (b) The processes to be followed by a Network Operator to enable System Management to have access to the information.
- (c) Technical and communication criteria that a Network Operator must meet with respect to System Management's ability to access the information.
- (d) The processes to be followed by AEMO when accessing the information.

This Procedure Change Proposal includes this document, which outlines the reason for the proposed Market Procedure, and the proposed Market Procedure itself, which is available at:

http://www.aemo.com.au/Stakeholder-Consultation/Consultations/AEPC_2017_08.

AEMO invites stakeholders to suggest alternative options or drafting where they consider that these would improve the procedure or better meet the Wholesale Market Objectives in section 122(2) of the *Electricity Industry Act 2004* (Electricity Industry Act) (and clause 1.2.1 of the WEM Rules).

Stakeholders are invited to submit written responses on the proposed Power System Operating Procedure by 5.00 pm Australian Western Standard Time (AWST) on 16 August 2017, in accordance with the call for submissions published with this Procedure Change Proposal.

¹ In this Procedure Change Proposal, unless the context requires otherwise, references to AEMO include AEMO in its System Management capacity.



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1. PROCEDURE CHANGE PROCESS

Section 2.10 of the WEM Rules outlines the Procedure Change Process.

AEMO may initiate the Procedure Change Process in respect of Market Procedures (including Power System Operation Procedures and the Monitoring and Reporting Protocol) for which it is responsible, by developing a Procedure Change Proposal. Rule Participants may notify AEMO where they consider an amendment or replacement of an AEMO Market Procedure would be appropriate (Clauses 2.10.1 and 2.10.2).

If an Amending Rule requires AEMO to develop new Market Procedures or amend or replace existing Market Procedures, then AEMO is responsible for the development, amendment or replacement of Market Procedures to comply with the Amending Rule (Clause 2.10.3).

Under clause 2.9.3 of the WEM Rules, Market Procedures:

- (a) must:
 - i. be developed, amended or replaced in accordance with the process in the WEM Rules;
 - ii. be consistent with the Wholesale Market Objectives; and
 - iii. be consistent with the WEM Rules, the Electricity Industry Act and the WEM Regulations; and
- (b) may be amended or replaced in accordance with section 2.10 of the WEM Rules and must be amended or replaced in accordance with section 2.10 of the WEM Rules, where a change is required to maintain consistency with Amending Rules.

The Wholesale Market Objectives are:

- (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
- (b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- (c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

AEMO has published this Procedure Change Proposal in accordance with the Procedure Change Process in clause 2.10 of the WEM Rules.

AEMO’s indicative timeline for this consultation is outlined below. Dates may be adjusted depending on the number and complexity of issues raised in submissions and any meetings with stakeholders.

Process Stage	Indicative date
Procedure Change Proposal published	19 July 2017
Submissions due on Procedure Change Proposal	16 August 2017
Procedure Change Report published	12 October 2017
Proposed commencement of new Market Procedure	13 October 2017

Prior to the submissions due date, stakeholders may request a meeting with AEMO to discuss the issues and proposed changes raised in this Procedure Change Proposal.



2. BACKGROUND

2.1 Regulatory requirements

Clause 2.28.3A of the WEM Rules, which commenced on 1 July 2016, provides that:

2.28.3A. System Management must develop a Power System Operation Procedure specifying:

(a) information that a Network Operator must provide to System Management, for each of its Networks, including:

i. positive, negative and zero sequence network impedances for the network elements;

ii. information on the network topology;

iii. information on transmission circuit limits;

iv. information on security constraints;

v. overload ratings, including details of how long overload ratings can be maintained; and

vi. the short circuit capability of facility equipment;

(b) the processes to be followed by a Network Operator to enable System Management to have access to the information specified in clause 2.28.3A(a);

(c) technical and communication criteria that a Network Operator must meet with respect to System Management's ability to access the information specified in clause 2.28.3A(a); and

(d) the processes to be followed by System Management when accessing the information specified in clause 2.28.3A(a).

The proposed Power System Operating Procedure would be the first version of this Procedure. AEMO, in its System Management capacity, proposes to commence the new procedure on 13 October 2017 as part of the transition of System Management from Western Power to AEMO.

2.2 Context for this consultation

On 31 May 2016, the Minister for Energy gazetted in the Western Australian Government Gazette No. 89 in Schedule A, Section 14(3) amending rules to the WEM Rules related to the network information that a Network Operator must provide to System Management for each of its Networks.² The amendments commenced on 1 July 2016.

² See Government Gazette No.89 dated 31 May 2016, *Electricity Industry (Commencement of Electricity Industry (Wholesale Electricity Market) Amendment Regulations) Order 2016*.

3. PROPOSED PROCEDURE CHANGE

3.1 Detail of the proposed procedure change

The proposed procedure change outlines a new Power System Operation Procedure that AEMO is required to develop under the requirements of the WEM Rules [Clause 2.28.3A].

The new Power System Operation Procedure specifies:

- (a) The information that a Network Operator must provide to AEMO for each of its Networks.
- (b) The processes to be followed by a Network Operator to enable AEMO to have access to the information.
- (c) The technical and communication criteria that a Network Operator must meet with respect to AEMO's ability to access the information.
- (d) The processes to be followed by AEMO when accessing the information.

This Procedure will apply to:

- (a) AEMO, in following the processes to access the information provided by Network Operators.
- (b) Network Operators in:
 - (i) Providing network modelling data.
 - (ii) Abiding by the processes to be followed.
 - (iii) Meeting the technical and communication criteria to provide access to the information;

to enable AEMO to meet its obligations in the WEM Rules.

3.2 Proposed drafting

AEMO has published a draft of the proposed Market Procedure: Network modelling data for consultation, which is available at: http://www.aemo.com.au/Stakeholder-Consultation/Consultations/AEPC_2017_08. AEMO has not provided a marked-up version of the Procedure as it is new.

3.3 Consultation to date

A draft version of the Market Procedure was presented at the AEMO WEM Procedure Change workshop held on 26 June 2017. Details of this forum are available at: <http://aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/WA-Forums>.

Minor changes to improve clarity were recommended by stakeholders. Stakeholders were advised of document format and numbering changes to match Market Procedure standards. These minor changes have been incorporated into the proposed Market Procedure that forms part of this Procedure Change Proposal.

3.4 Consistency with WEM Rules, Electricity Industry Act and WEM Regulations

The proposed new WEM Market Procedure has been reviewed as a whole by AEMO to ensure compliance with the relevant provisions in the:

- Electricity Industry Act.
- WEM Regulations.



- WEM Rules.

3.5 Consistency with Wholesale Market Objectives

The steps outlined in this new Power System Operating Procedure specify:

- The information that a Network Operator must provide to System Management, for each of its Networks, including:
 - o Positive, negative and zero sequence network impedances for the network elements.
 - o Information on the network topology.
 - o Information on transmission circuit limits.
 - o Information on security constraints.
 - o Overload ratings, including details of how long overload ratings can be maintained.
 - o The short circuit capability of facility equipment.
- The processes to be followed by Network Operators and AEMO.
- The technical and communication criteria that must be met.

AEMO considers that the steps are drafted in a way that does not change the objectives of the Market Rules. As a result, AEMO considers that the new Procedure, as a whole, is consistent with the Wholesale Market Objectives.



4. CONSULTATION PROCESS

AEMO invites stakeholders to suggest alternative options or drafting where they consider that these would improve the procedure or better meet the Wholesale Market Objectives in section 122(2) of the Electricity Industry Act (and clause 1.2.1 of the WEM Rules).

Stakeholders are invited to submit written responses on the proposed Power System Operating Procedure by 5.00 pm (AWST) on 16 August 2017, in accordance with the call for submissions published with this paper.

Stakeholders with questions in relation to the proposed Power System Operating Procedure or this Procedure Change Proposal can contact AEMO via email to wa@aemo.com.au.

All correspondence in relation to this Procedure Change Proposal must be entitled “AEPC_2017_08 Network modelling data - [Name of the submitting company or individual]”.