

WEM PROCEDURE: ELECTRIC STORAGE RESOURCE OBLIGATION INTERVALS

PREPARED BY: AEMO

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1. INTRODUCTION

1.1. Purpose and scope

- 1.1.1. This WEM Procedure: Electric Storage Resource Obligation Intervals (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:
 - (a) the processes to be followed by AEMO for determining the Trading Intervals that will be classified as Electric Storage Resource Obligation Intervals in a Trading Day;
 - (b) the processes to be followed by AEMO for publishing the Trading Intervals classified as Electric Storage Resource Obligation Intervals on the WEM Website;
 - (c) the circumstances, if any, that allow AEMO to amend the Trading Intervals classified as Electric Storage Resource Obligation Intervals; and
 - (d) the obligations on AEMO to consult with Market Participants.
- 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.
- 1.2.2. The following definitions apply in this Procedure unless the context requires otherwise.

Table 1 Definitions

| Term | Meaning |
|--------------------|--|
| Peak Demand Period | A set of contiguous Trading Intervals when peak demand is forecast to occur based on the scenarios specified in clause 4.5.10(a)(iii) or 4.5.10(a)(iv) of the WEM Rules. |
| Shoulder Season | Either of the following periods of consecutive Trading Days in each Capacity Year: 1 April to 31 May, inclusive; or 1 September to 30 November, inclusive. |
| Summer | The period of consecutive Trading Days between 1 December and 31 March, inclusive, in each Capacity Year. |
| Winter | The period of consecutive Trading Days between 1 June and 31 August, inclusive, in each Capacity Year. |



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. This 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 |
|---------------|---|--------------------------|
| WEM Rules | WEM Rules | Energy Policy WA Website |
| WEM Procedure | Market Procedure: Notices and Communications | WEM Website |
| WEM Procedure | Market Procedure: Certification of Reserve Capacity | WEM Website |
| WEM Procedure | Market Procedure: Reserve Capacity Testing | WEM Website |
| WEM Procedure | Market Procedure: Undertaking the LT PASA and conducting a review of the Planning Criterion | WEM Website |
| WEM Procedure | Power System Operation Procedure: Facility Outages | WEM Website |



2. DETERMINING THE ELECTRIC STORAGE RESOURCE OBLIGATION INTERVALS

- 2.1.1. AEMO must determine the Trading Intervals in each Trading Day that are classified as Electric Storage Resource Obligation Intervals [Clause 4.11.3A(a)].
- 2.1.2. AEMO must determine the Electric Storage Resource Obligation Intervals, for each Trading Day in the Capacity Year commencing on 1 October of Year 3 of a Reserve Capacity Cycle under paragraph 2.1.1, in Year 1 of the relevant Reserve Capacity Cycle.
- 2.1.3. AEMO must determine a Peak Demand Period for each of the following seasons using the forecasts developed in accordance with clauses 4.5.10(a)(iii) and 4.5.10(a)(iv) of the WEM Rules for the Capacity Year specified in paragraph 2.1.2:
 - (a) Shoulder Season;
 - (b) Summer; and
 - (c) Winter.
- 2.1.4. Based on the Peak Demand Periods determined in paragraphs 2.1.3(a), 2.1.3(b), and 2.1.3(c), AEMO may determine that the Electric Storage Resource Obligation Intervals for a Capacity Year will:
 - (a) Be the same for each Trading Day; or
 - (b) vary according to whether the Trading Day falls within the Shoulder Season, Summer, or Winter.
- 2.1.5. In making its determination under paragraph 2.1.4, AEMO must take the following factors into account:
 - (a) any consistency between the timing of each Peak Demand Period in the Shoulder Season, Summer, and Winter seasons, where the degree of consistency may indicate that there is no need to seasonally vary the Electric Storage Resource Obligation Intervals;
 - (b) any operational requirements of the SWIS, including evaluation of Outage Plans; and
 - (c) any other factors that AEMO considers relevant.
- 2.1.6. AEMO must determine the Electric Storage Resource Obligation Intervals to be eight contiguous Trading Intervals by following paragraph 2.1.7 or 2.1.8, as applicable.
- 2.1.7. If AEMO determines that the Electric Storage Resource Obligation Intervals will be the same for each Trading Day for the relevant Capacity Year under paragraph 2.1.4(a), then it must determine the Trading Intervals in each Trading Day that are classified as Electric Storage Resource Obligation Intervals. The total number of Electric Storage Resource Obligation Intervals will be eight, including the Trading Intervals that correspond to the Peak Demand Period determined in paragraph 2.1.3(c).
- 2.1.8. If AEMO determines that the Electric Storage Resource Obligation Intervals will be seasonally variable under paragraph 2.1.4(b), then it must determine the Trading Intervals in each Trading Day that are classified as Electric Storage Resource Obligation Intervals for each season as follows:
 - (a) for the Shoulder Season, by adding Trading Intervals at either side of the Peak Demand Period determined in paragraph 2.1.3(a) until there are eight Trading Intervals;



- (b) for Winter, by adding Trading Intervals at either side of the Peak Demand Period determined in paragraph 2.1.3(b) until there are eight Trading Intervals; and
- (c) for Summer, by adding Trading Intervals at either side of the Peak Demand Period determined in paragraph 2.1.3(c) until there are eight Trading Intervals.
- 2.1.9. AEMO must publish the Electric Storage Resource Obligation Intervals by following the processes in paragraphs 5.1.1 and 5.1.2.
- 2.1.10. The Electric Storage Resource Obligation Intervals determined under paragraph 2.1.7 or 2.1.8 in Year 1 of the relevant Reserve Capacity Cycle apply for the Capacity Year commencing on 1 October of Year 3 of the relevant Reserve Capacity Cycle.

3. FORECASTING FUTURE ELECTRIC STORAGE RESOURCE OBLIGATION INTERVALS

- 3.1.1. In addition to the obligations in clause 4.11.3A of the WEM Rules and for information purposes only, AEMO may (but is not required to) prepare a forecast of the Electric Storage Resource Obligation Intervals for the remainder of the period of the relevant Long Term PASA Study Horizon that has not yet been determined under paragraph 2.1.2, by the time and date specified in clause 4.1.8 of the WEM Rules.
- 3.1.2. For the avoidance of doubt, any forecast of the Electric Storage Resource Obligation Intervals, prepared under paragraph 3.1.1, is not binding on AEMO or Market Participants.
- 3.1.3. In preparing a forecast of the Electric Storage Obligation Intervals under paragraph 3.1.1, AEMO may follow the same methodology specified in paragraphs 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7 and 2.1.8 for each Capacity Year in the Long Term PASA Study Horizon, excluding the Capacity Year specified in paragraph 2.1.2.
- 3.1.4. If AEMO prepares a forecast of the Electric Storage Resource Obligation Intervals under paragraph 3.1.1, it may publish the following information in the Statement of Opportunities Report published in accordance with clause 4.5.11 of the WEM Rules:
 - (a) the forecast of the Electric Storage Resource Obligation Intervals for each Capacity Year in the relevant Long Term PASA Study Horizon, excluding the Capacity Year specified in paragraph 2.1.2; and
 - (b) any supporting analysis, information, or data that AEMO considers to be relevant.

4. AMENDING THE ELECTRIC STORAGE RESOURCE OBLIGATION INTERVALS

- 4.1.1. In accordance with clause 4.11.3A(b) of the WEM Rules, AEMO may only amend the Trading Intervals classified as Electric Storage Resource Obligation Intervals as permitted under the WEM Rules and in consultation with Market Participants.
- 4.1.2. Each year, when preparing the Statement of Opportunities Report, AEMO must review the Electric Storage Resource Obligation Intervals (if any) that AEMO has previously determined for the first Capacity Year in the Long Term PASA Study Horizon to which the Statement of Opportunities Report relates.



- 4.1.3. If, as part of its review under paragraph 4.1.2, AEMO determines a new Peak Demand Period which differs by more than two Trading Intervals to the Peak Demand Period previously determined by AEMO, then AEMO must consult with Market Participants (in accordance with paragraph 4.1.4) regarding a proposal to amend the relevant Electric Storage Resource Obligation Intervals to reflect the updated Peak Demand Period [Clause 4.11.3A(b)].
- 4.1.4. AEMO (when consulting with Market Participants for the purposes of paragraph 4.1.3) must publish the following on the WEM Website:
 - (a) the proposed amended Electric Storage Resource Obligation Intervals;
 - (b) an invitation for written submissions on the proposed amended Electric Storage Resource Obligation Intervals;
 - (c) the closing date for consultation, which must be at least 10 Business Days after the date of publishing the proposed amended Electric Storage Resource Obligation Intervals on the WEM Website; and
 - (d) the method by which submissions should be provided.
- 4.1.5. Market Participants may provide a submission in response to AEMO's invitation under paragraph 4.1.4(b) by the closing date published on the WEM Website under paragraph 4.1.4(b).
- 4.1.6. In determining whether to amend the Electric Storage Resource Obligation Intervals, AEMO must consider any submissions received in accordance with paragraph 4.1.5 and may, at its discretion, consider any submissions received after the closing date published on the WEM Website under paragraph 4.1.4(c).
- 4.1.7. AEMO may contact Market Participants who provide a submission under paragraph 4.1.5 to request clarification or further information in relation to their submissions, specifying a due date for this request.
- 4.1.8. AEMO must use the method specified in paragraph 2.1.1(d) of the WEM Procedure: Notices and Communications when contacting Market Participants under paragraph 4.1.7.
- 4.1.9. A Market Participant may, but is not obliged to, provide a response to a request by AEMO under paragraph 4.1.7.
- 4.1.10. If a Market Participant does not provide a response to AEMO's request under paragraph 4.1.7, AEMO will consider the original submission for the purposes of paragraph 4.1.6.
- 4.1.11. If AEMO, in its sole discretion, and after considering all submissions received under paragraph 4.1.5, decides to amend the Electric Storage Resource Obligation Intervals, it must:
 - (a) publish a notice on the WEM Website at least 20 Business Days before the start of the relevant Capacity Year; and
 - (b) within two Business Days after publishing the notice in paragraph 4.1.11(a), and using the method specified in paragraph 2.1.1(d) of the WEM Procedure: Notices and Communications, notify each Market Participant who owns, controls, or operates a Facility that contains an Electric Storage Resource, and which was assigned Capacity Credits for the relevant Reserve Capacity Cycle, of the amended Electric Storage Resource Obligation Intervals.



5. PUBLISHING THE ELECTRIC STORAGE RESOURCE OBLIGATION INTERVALS

- 5.1.1. AEMO must publish details, on the WEM Website, of the Trading Intervals in each Trading Day that are classified as Electric Storage Resource Obligation Intervals by the date and time specified in clause 4.1.8 of the WEM Rules [Clause 4.11.3A(a)].
- 5.1.2. AEMO may publish the following information in the Statement of Opportunities Report or in a separate document, at AEMO's sole discretion:
 - (a) the Peak Demand Periods used to determine the Electric Storage Resource Obligation Intervals, as identified in paragraph 2.1.3;
 - (b) any supporting analysis that AEMO conducted under paragraph 2.1.5; and
 - (c) any other information used to determine the Electric Storage Resource Obligation Intervals that AEMO considers relevant.



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 |
|--|
| 4.11.3A(c)(i) |
| 4.11.3A(c)(ii) |
| 4.11.3A(c)(iii) |
| Chapter 11 definition: Electric Storage Resource Obligation Duration |