



Government of Western Australia  
Energy Policy WA

# TDOWG Meeting 45

29 November 2022

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**brighter** energy future.

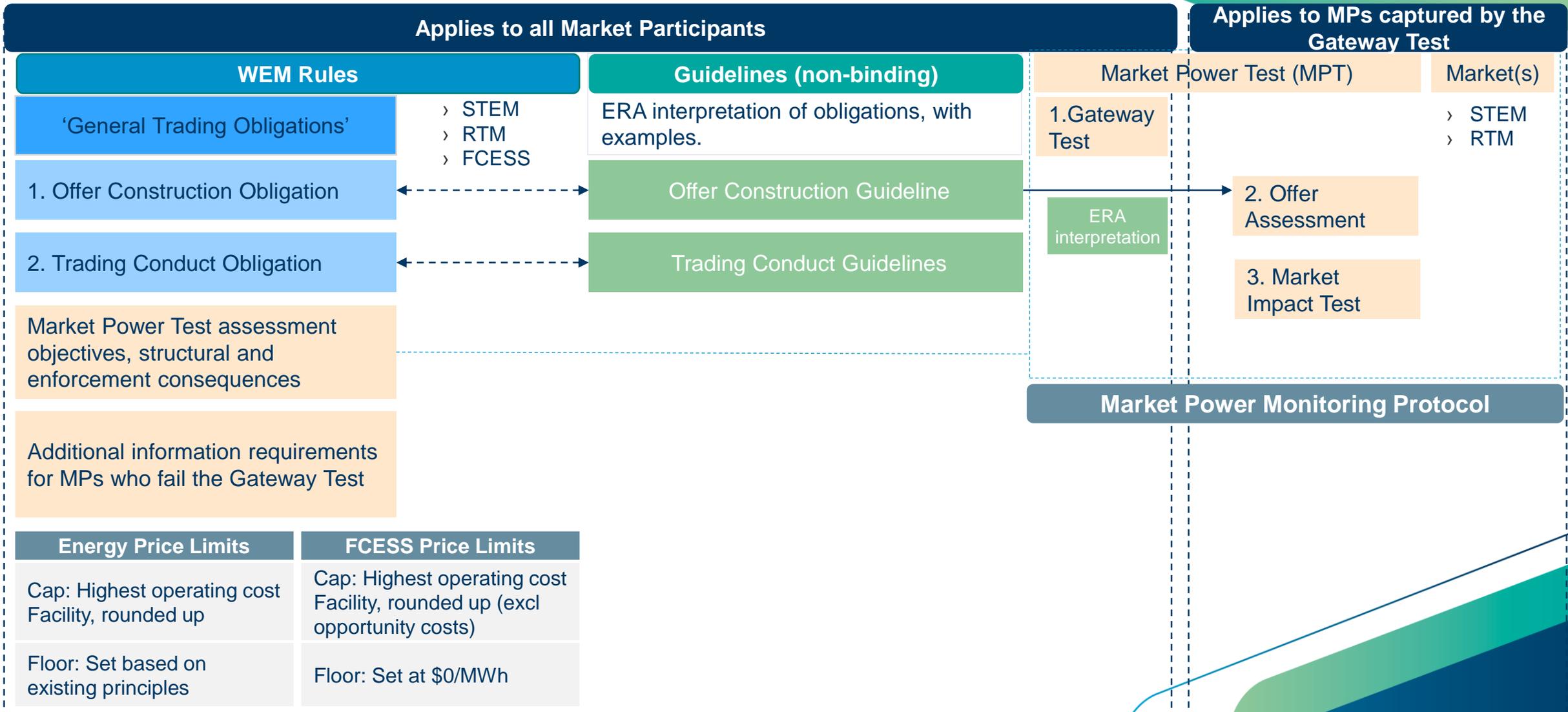
# Ground rules

- Please place your microphone on mute, unless you are asking a question or making a comment.
- Please keep questions relevant to the agenda item being discussed.
- If there is no break in discussion and you would like to say something, you can 'raise your hand' by typing 'question' or 'comment' in the meeting chat. Questions and comments can also be emailed to [energymarkets@energy.wa.gov.au](mailto:energymarkets@energy.wa.gov.au) after the meeting.
- If you are having connection/bandwidth issues, you may want to disable the incoming and/or outgoing video.

# Market Power Mitigation

## Exposure Draft WEM Amending Rules

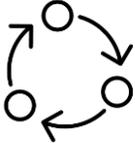
# High-level overview of final design



# Market Power Mitigation Detailed Design – Consultation Process Overview

<b>Consultation Paper and feedback</b>	Consultation Paper published - 1 August 2022 TDOWG meetings - 23 June 2022, 18 August 2022 Submissions closed - 29 August 2022
<b>Information Paper and Exposure Draft</b>	Information Paper and Exposure Draft published - 10 November 2022 TDOWG meeting - 29 November 2022 <b>Submissions close - 8 December 2022</b>
<b>Rules submitted to Minister for approval</b>	January 2023

# Final design elements and provisions in the Draft Amending Rules

Design Element		WEM Rules section
General Trading Obligations		Section 2.16A
Market Power Test (MPT)		Sections 2.16B to 2.16E
Price Limits		Sections 2.26
FCESS Uplift Payments		Section 9.10

**Additional consequential changes have been introduced to other sections of the WEM Rules, as set out in these slides**

# Monitoring the Effectiveness of the Market

## Response to stakeholder feedback: enhanced oversight role of Coordinator of Energy

**Clause 2.16.13B** has been expanded in sub-clause (a) and new sub-clause (d) to provide independent oversight by the Coordinator of:

- the effectiveness of the ERA's surveillance activities under the MPM framework; and
- the efficiency and effectiveness of the Market Price Limits framework, and its application.

# Provisions to be deleted from the WEM Rules

**Note: clause references relate to the Consolidated 'Companion' Version for the new WEM**

- Existing references to SRMC, offer price monitoring and market power
  - Deletion: clauses 2.16.9A, 2.16.9B, 2.16.9C, 2.16.9D, 2.16.9G, 6.6.3
  - Partial deletion: clauses 2.16.9E, 2.16.9F
- 5-yearly review of Energy Price Limits methodology: clause 2.26.3
- Processes and obligations related to dual energy price caps: clauses 6.6.2A(d), 6.6.9 to 6.6.12
- References to Enablement Losses in the SESSM: clauses 3.15A.20, 3.15A.22, 3.15A.27, 7.4.5
- Glossary definitions related to previous price limits: Alternative Maximum STEM Price, Maximum STEM Price, Minimum STEM Price, Energy Price Limits, Price Cap

# General Trading Obligations

# General Trading Obligations

## Offer Construction Obligation and Trading Conduct Obligation

**Section 2.16A (new section)** has been added to outline the General Trading Obligations, which will apply to the STEM and RTM (including FCESS markets)

**Clause 2.16A.1** describes the Offer Construction Obligation

“A Market Participant with market power must offer prices for Market Services in each of its STEM Submissions and Real-Time Market Submissions that reflect only the costs that a Market Participant without market power would include in forming profit-maximising price offers in a STEM Submission or Real-Time Market Submission.”

**Clause 2.16A.2** describes the Trading Conduct Obligation

“A Market Participant must not engage in conduct in offering to supply or supplying, or in failing to offer to supply or supplying, a Market Service that:

- (a) is false, misleading, or likely to mislead;
- (b) is fraudulent, dishonest or in bad faith; or
- (c) distorts or manipulates, or is likely to distort or manipulate, prices in the Wholesale Electricity Market”

# General Trading Obligations

## ERA considerations and guidance

**Clause 2.16A.3** describes matters the ERA may take into account when determining whether a Market Participant has engaged in any conduct prohibited by clause 2.16A.2.

**Clauses 2.16A.4 – 2.16A.6** have been added to clarify the circumstances where a breach of clause 2.16A.2 has occurred. These provisions are similar to clauses 7A.2.14 to 7A.2.16 in the current WEM Rules with respect to Balancing Submissions.

**Clause 2.16D.1** requires the ERA to develop the Offer Construction Guideline, and trading conduct guidelines providing clarity and guidance to Market Participants regarding the General Trading Obligations at clauses 2.16A.1 and 2.16A.2.

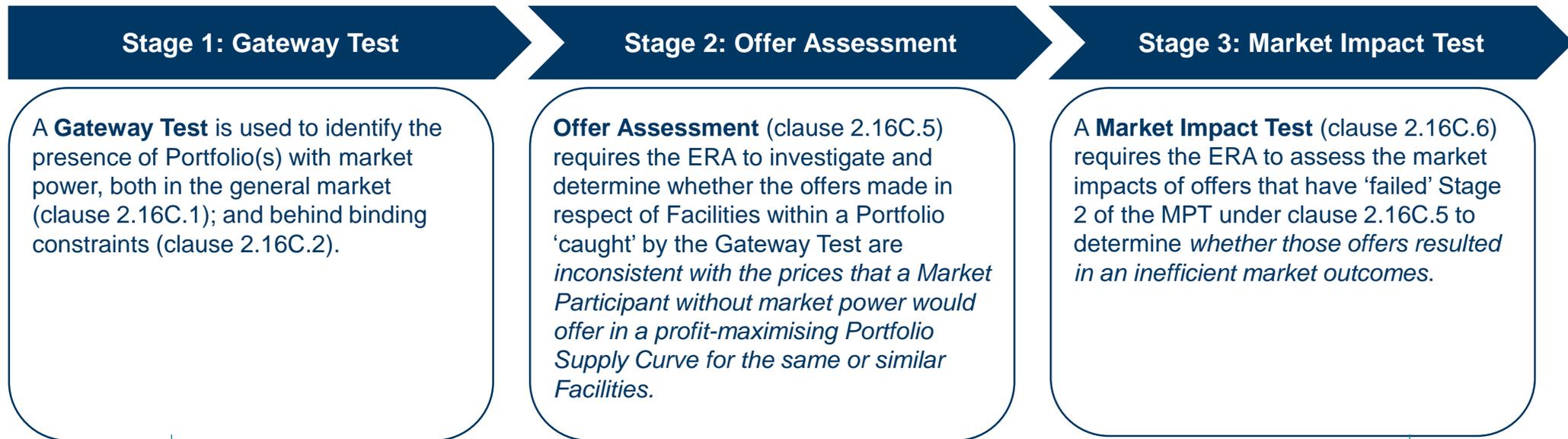
- The Offer Construction Guideline is also relevant to the Market Power Test which is discussed below.

# Market Power Test

# Three-part Market Power Test

## Overview of the Market Power Test

**Section 2.16C (new section)** establishes a three-part Market Power Test (MPT) that the ERA will undertake to identify where a Market Participant has exercised market power through offers made in Submissions in the STEM and RTM, and such offers have resulted in inefficient market outcomes.



- *The ERA must set out procedural details of the Gateway Test in its Market Power Monitoring Protocol;*
- *The ERA must outline how it expects to consider the assessment requirements under Stages 2 and 3 of the Market Power Test in a guideline (the Offer Construction Guideline).*

# Portfolio Assessment

## Identification of Portfolios and Constrained Portfolios identify relevant Registered Facilities for the MPT

**Section 2.16B (new section)** allows for the grouping of Registered Facilities into Portfolios and Constrained Portfolios, for the purpose of the conducting the three-part MPT in section 2.16C.

- **Clause 2.16B.1** requires the ERA to identify each Portfolio operating in the market twice in each year after AEMO has conducted Reserve Capacity Testing and publish the Portfolios, and MPs in each Portfolio, on its website.
- **Clause 2.16B.2** provides for a similar identification requirement in relation to Portfolios located behind a Network Constraint (Constrained Portfolios).
- **Clause 2.16B.3** clarifies that a Facility may be part of more than one Constrained Portfolio.

# Portfolio Assessment

## Portfolio assessment – defined terms

**Portfolio:** Means:

- (a) each Registered Facility that is owned by the same entity and each Registered Facility that is owned by an associated entity of that entity (as those expressions are defined in the Corporations Act); or
- (b) if paragraph (a) does not apply, each Registered Facility that is owned by the same entity (as that expression is defined in the Corporations Act); or
- (c) if neither paragraphs (a) or (b) applies, a Registered Facility.

For the avoidance of doubt, at all times, a Registered Facility cannot be contained in more than one type of Portfolio described in paragraphs (a), (b) or (c).

**Constrained Portfolio:** The group of Registered Facilities within a Portfolio located behind a particular Network Constraint.

# MPT Stage 1: Gateway Test

## General Gateway Test, including new defined terms

**Clause 2.16C.1 establishes the general gateway test (Stage 1) and the concept of a Material Portfolio:**

- Calculated based on the Declared Sent Out Capacity (DSOC) of each Portfolio as a percentage of the sum of the DSOC for all Portfolios in the Wholesale Electricity Market.
- Where a Portfolio has a DSOC proportion equal to or greater than 10%, it has failed Stage 1 of the MPT and is considered to be a 'Material Portfolio'.
- The ERA will subsequently notify the relevant MPs and publish the details on its website.

New defined term:

- **Material Portfolio:** Has the meaning given in clause 2.16C.1(b) (each Portfolio with a Declared Sent Out Capacity proportion equal to or greater than 10% percentage of the sum of the Declared Sent Out Capacity for all Portfolios in the Wholesale Electricity Market as calculated under clause 2.16C.1(a))

# MPT Stage 1: Gateway Test

## Constrained Gateway Test

Clause 2.16C.2 sets out how the gateway test applies behind network constraints

- Allows the ERA to identify **Material Constrained Portfolios**.
- The ERA will assess Energy Uplift Payments that have been made in respect of Registered Facilities that are part of a Constrained Portfolio.
- Where a Registered Facility that is part of a Constrained Portfolio has received Energy Uplift Payments in 10% or more of Dispatch Intervals within a Rolling Test Window (3 months) and/or a Fixed Assessment Period (at least 7 consecutive days) when the relevant Network Constraint bound, those Facilities will progress to Stage 2 of the MPT.

# MPT Stage 1: Gateway Test

## Constrained Gateway Test – defined terms

**Constrained Uplift Payment Ratio:** Has the meaning given in clause 2.16C.2.

**Material Constrained Portfolio:** A Constrained Portfolio with a Constrained Uplift Payment Ratio equal to 10 percent or greater as calculated under clause 2.16C.2(a).

**Rolling Test Window:** A rolling consecutive three-month period of Trading Days, with a successive three-month period beginning on the first Trading Day after the last Trading Day falling within the immediately prior three-month period.

**Fixed Assessment Period:** A period of at least seven consecutive Trading Days in which the Network Constraint relevant to the identification of a Constrained Portfolio under clause 2.16B.2(a) has continuously bound within a Rolling Test Window. A Rolling Test Window may contain multiple Fixed Assessment Periods.

# MPT Stage 1: Record-keeping obligations

Additional obligations apply to Market Participants responsible for relevant Portfolios identified through the Gateway Test

Clause 2.16C.3 details record-keeping obligations

- Specifies the records to be retained by a MP in respect of its Registered Facilities that have been identified in a Material Portfolio or a Material Constrained Portfolio.
  - Internal governance arrangements for compliance with clause 2.16A.1.
  - Methods, assumptions and cost inputs the Market Participant used to develop the prices in STEM Submission and Real-Time Market Submissions.
- The Offer Construction Guideline will provide further guidance to MPs on the records to be recorded, verified and maintained.
- The ERA must document in a WEM Procedure the types, format and extent of information to be maintained or recorded by a Market Participant to enable the ERA to carry out price monitoring activities.
- Similar amendments have been made to existing **clauses 7.4.26(b) and 7.4.27(b)**.

# MPT Stage 2: Offer Assessment

## Applies to Registered Facilities within Material Portfolios and Material Constrained Portfolios

Clauses 2.16C.4 to 2.16C.5 outline Stage 2 (offer assessment) of the MPT.

- **Clause 2.16C.4** requires the ERA to monitor price offers made for a Registered Facility (or Facilities) within Material Portfolios and Material Constrained Portfolios for compliance with clause 2.16A.1.
- **Clause 2.16C.5** requires the ERA to investigate and determine a potential breach of clause 2.16A.1, in accordance with the WEM Procedure specified in clause 2.16D.14 and clause 2.13.27, and having regard to the Offer Construction Guideline, if it considers that:
  - prices offered by a MP in its Portfolio Supply Curve for each of its Registered Facilities within a Material Portfolio are inconsistent with the prices that a MP without market power would offer in a profit-maximising Portfolio Supply Curve for the same or similar Facilities; or
  - prices offered by a MP in its Real-Time Market Submissions for each of its Registered Facilities within a Material Portfolio or a Material Constrained Portfolio are inconsistent with the prices that a MP without market power would offer in a profit-maximising Real-Time Market Submission for the same or similar Facilities.

# MPT Stage 2: Offer Assessment

## Offer assessment – defined terms

**Irregular Price Offer:** A price described in clauses 2.16C.5(a) or 2.16C.5(b).

**Offer Construction Guideline:** The guideline published by the Economic Regulation Authority under clause 2.16D.1(a), as may be amended in accordance with clause 2.16D.2.

# MPT Stage 3: Market Impact Test

Investigation of whether Irregular Price Offers have resulted in inefficient market outcomes

Clauses 2.16C.6 to 2.16C.10 outline Stage 3 of the MPT.

- **Clause 2.16C.10** – deems that an Irregular Price Offer (i.e. failure of the offer assessment under clause 2.16C.5 (MPT Stage 2)) is a breach of the offer construction obligation.
- **Clause 2.16C.6** requires the ERA to investigate **and determine** whether Irregular Price Offers, as determined under clause 2.16C.5 and in accordance with the WEM Procedure specified in clause 2.16D.14 and clause 2.13.27, have resulted in inefficient market outcomes
  - **Note:** this clause will be made a civil penalty provision.
- **Clause 2.16C.7** provides the ERA with 6 months to make the determinations above.

# MPT Stage 3: Market Impact Test

- **Clause 2.16C.8** establishes that the ERA, as part of any investigation under clause 2.16C.6:
  - Must consider any changes to the STEM Clearing Price or Reference Trading Price; Energy Uplift Payments; or quantities of energy scheduled in the STEM Auction, or the Dispatch of Facilities in the Real-Time Market, that are likely to have occurred as a result of the Irregular Price Offer; and
  - May consider any other matter it considers relevant.

**Clause 2.16C.9** requires the ERA to publish details of determinations where a MP has failed all stages of the MPT.

**Clause 2.16E.1** precludes the ERA from taking enforcement action or undertaking an investigation for a breach of clause 2.16A.1 if it has determined that a price offer does not constitute an Irregular Price Offer under clause 2.16C.5, or that the Irregular Price Offer has not resulted in an inefficient market outcome under clause 2.16C.6.

# MPT – Compliance and Enforcement

## Related WEM Rules provisions

- **Clause 2.13.27 – Compliance investigation**
  - Outlines the process the ERA must follow when the ERA becomes aware of an alleged breach.
- **Clause 2.13.36 – Enforcement Action**
  - Where the ERA determines there has been a breach the ERA has a range of enforcement actions available (i.e. warnings, civil penalties, orders and ERB proceedings).
- **Clause 2.13.42 – Civil Penalties and Orders**
  - Before the ERA issues a civil penalty notice or makes an order, the ERA must have regard to all relevant matters (e.g. nature and extent of breach, impact caused).

## Reviewable Decisions

- Any determination by the ERA under the new MPM framework will be made a reviewable decision
- Where a rules participant has been negatively impacted by a determination – they may apply for review of the decision in accordance with the regulations

# ERA guidelines

## Offer Construction Guideline and trading conduct guidelines

### Section 2.16D (new section)

**Response to stakeholder feedback**: consultation requirements for both development and amendment of the guidelines and have been strengthened based on stakeholder feedback.

**Clause 2.16D.1**: Requires the ERA to develop:

- The Offer Construction Guideline, setting out guidance in relation to clause 2.16A.1 (including examples of prohibited conduct), and offer assessment under clause 2.16C.5; and
- Trading conduct guidelines that must provide clarity and guidance to Market Participants regarding the prohibited conduct described in clause 2.16A.2 (including examples).

**Clause 2.16D.2** allows the ERA to amend the above guidelines.

**Clauses 2.16D.3 to 2.16D.4** outline the requirements for consultation for making and amending the guidelines under 2.16D.1.

# Consultation Framework

## Framework to seek guidance from the ERA on offer parameters contained in the Offer Construction Guideline

**Clause 2.16D.5** allows MPs responsible for Registered Facilities within a Material Portfolio or a Material Constrained Portfolio to seek guidance from the ERA in relation to the matters contained in the Offer Construction Guideline, including applicability to a specific Facility or circumstance.

**Clause 2.16D.6** sets out how such a request must be made.

**Clause 2.16D.7** provides the timeframe for the ERA to respond (using reasonable endeavours).

**Clause 2.16D.8** allows the ERA to request further information, and cancels the request if the information is not provided.

**Clause 2.16D.9** resets the timeframe in 2.16D.7 when all additional information requested under 2.16D.8 is provided.

# Consultation Framework

## Framework to seek guidance from the ERA on offer parameters contained in the Offer Construction Guideline

**Clause 2.16D.10** gives the ERA discretion not to provide guidance under certain circumstances (i.e. where it would be unnecessary, duplicative, or entail excessive cost).

**Clause 2.16D.11** acknowledges the non-binding nature of any guidance provided by the ERA.

**Clause 2.16D.12** creates an obligation for the ERA to consider whether amendments to the Offer Construction Guideline are necessary to account for the guidance it has provided to a MP.

**Clause 2.16D.13** requires the ERA to publish on its website a copy of any guidance provided to a MP under this Section. Confidentiality is to be maintained through redaction, or otherwise non-publication.

# Market Power Monitoring Protocol

The ERA must publish a WEM Procedure setting out certain procedural matters

**Clause 2.16D.14** provides the ERA with the power to develop a WEM Procedure (the **Market Power Monitoring Protocol**) that will set out procedural matters associated with the identification and calculations required for the MPT and associated elements, including:

- The methodologies and process that the ERA must follow to:
  - Identify each Portfolio and Constrained Portfolio;
  - Carry out the calculations in relation to identifying Material Portfolios and Material Constrained Portfolios; and
  - Monitor prices offered by a MP under clause 2.16C.4, and making determinations under clauses 2.16C.5 and 2.16C.6 in relation to those price offers;
- The types, format and extent of records that a MP must maintain; and
- Details of the processes the ERA and MPs must follow in respect to a request for guidance under clause 2.16D.5.

# Supplementary Essential System Services Mechanism (SESSM)

Response to stakeholder feedback: increased transparency on FCESS price benchmarks for SESSM

**Clauses 3.15A.2A and 3.15A.5** are amended to reflect the ERA obligation to publish, every six months, FCESS price benchmarks that reflect the ERA's expectation of efficient FCESS prices for the relevant forward six-month period. This is intended to enhance ex-ante certainty for MPs.

# Market Price Limits

# Market Price Limits

## Overview of amendments

**Section 2.26** is substantially updated to include the reviews of the Market Price Limits.

- The ERA is provided with flexibility to conduct reviews of each Market Price Limit separately or concurrently.
- Previous clauses regarding the Energy Price Limits were contained in Chapter 6 (STEM). This is no longer appropriate with Market Price Limits extending to Essential System Service markets.
- Where applicable (particularly in respect of the Energy Offer Price Floor), clauses have been relocated from section 6.20.
- Section 6.20 is deleted.
- New defined term **Market Price Limits** (and removing the existing term **Price Cap**): “The set of price limits comprising the Energy Offer Price Ceiling, the Energy Offer Price Floor and the FCESS Offer Price Ceiling.”

# Market Price Limits – Energy Offer Price Ceiling

## Review process and formula

**Clause 2.26.1** requires the ERA to review the Energy Offer Price Ceiling at least once every three years, taken from the date of publication of the final report from the preceding review.

**Clause 2.26.2** sets out the formula for determining the Energy Offer Price Ceiling.

- The base formula is taken from existing clause 6.20.7(b).
- New requirements are included to determine formula components consistently with the Offer Construction Guideline, and to round the result up to the nearest \$100/MWh.

Updated defined term:

- **Energy Offer Price Ceiling:** The price in \$/MWh determined in accordance with clause 2.26.2, and as may be escalated in accordance with clause 2.26.2U as applicable, that is the maximum price that may be associated with a Portfolio Supply Curve forming part of a STEM Submission or Standing STEM Submission, and with a Real-Time Market Submission or Standing Real-Time Market Submission for Injection or Withdrawal by a Registered Facility.

# Market Price Limits – FCESS Offer Price Ceiling

## Review process and approach

**Clause 2.26.2A** requires the ERA to review the FCESS Offer Price Ceiling at least once every three years, taken from the date of publication of the final report from the preceding review.

**Clause 2.26.2B** sets out the approach to determining the Energy Offer Price Ceiling, which is:

- to be based on the ERA's estimate of variable costs of providing FCESS (not compensated through other market mechanisms) for the highest cost provider;
- determined consistently with the Offer Construction Guideline; and
- rounded up to the nearest \$50/MW or \$50/MWs, as applicable.

New defined term:

- **FCESS Offer Price Ceiling:** The price, in \$/MW or \$/MWs, as applicable, determined in accordance with clause 2.26.2B and as may be escalated in accordance with clause 2.26.2U, that is the maximum price that may be offered in a Real-Time Market Submission or Standing Real-Time Market Submission for the provision of a Frequency Control Essential System Service.

# Market Price Limits – Energy Offer Price Floor

## Review process and principles/considerations

**Clause 2.26.2C** requires the ERA to review the Energy Offer Price Floor at least once every three years, taken from the date of publication of the final report from the preceding review.

**Clause 2.26.2D** sets out the principles for the review of the Energy Offer Price Floor (based on existing clauses 6.20.15 and 6.20.16).

- The ERA must only revise the Energy Offer Price Floor if it determines that the current value is not appropriate under clause 2.26.2E.
- If the current value is determined to be not appropriate, any revised value must allow the energy price to clear above the Energy Offer Price Floor in most circumstances, and limit threats to the financial viability of prudent MPs.

**Clause 2.26.2E** sets out the minimum considerations for the ERA when determining whether the current Energy Offer Price Floor is appropriate (based on existing clause 6.20.14), being whether the Energy Offer Price Floor has been reached due to being set too high, or whether there has been a relevant change in the generation fleet.

# Market Price Limits – Energy Offer Price Floor

## Low demand scenarios and decommitment/cycling costs

**Clause 2.26.2F** requires the ERA to consider credible low demand scenarios and decommitment costs for the Facility with the highest cycling costs per MW, and to set the Energy Offer Price Floor to be lower than 95% of scenarios (based on existing clause 6.20.17).

**Clause 2.26.2G** guides the ERA for the development of credible low demand scenarios (based on existing clause 6.20.18).

**Clauses 2.26.2H and 2.26.2I** set out the matters the ERA must consider, and the data to be used, when determining plant cycling costs (based on existing clauses 6.20.19 and 6.20.20).

**Clauses 2.26.2J and 2.26.2K** allow MPs to provide the ERA with evidence regarding decommitment costs, and require the ERA to consider this information when determining a revised Energy Offer Price Floor (based on existing clauses 6.20.24 and 6.20.25).

# Market Price Limits – Energy Offer Price Floor

## Updated definition

Updated defined term:

- **Energy Offer Price Floor:** The price in \$/MWh determined in accordance with clauses 2.26.2D to 2.26.2K, and as may be escalated in accordance with clause 2.26.2U, that is the minimum price that may be associated with a Portfolio Supply Curve forming part of a STEM Submission or Standing STEM Submission, and with a Real-Time Market Submission or Standing Real-Time Market Submission for Injection or Withdrawal by a Registered Facility.

# Conducting a Review of a Market Price Limit

## General requirements

**Clause 2.26.2L** sets publication requirements for consultation materials associated with a review of a Market Price Limit: draft report and request for submissions, closing date for submissions (at least 4 weeks), and a copy of all submissions with confidential content redacted.

**Clause 2.26.2M** sets out the minimum contents of a final report in respect of a review of a Market Price Limit.

**Clauses 2.26.2N to 2.26.2Q** establish a process for a Rule Participant to request that the ERA brings forward a review of a Market Price Limit on the grounds that the relevant Market Price Limit is no longer appropriate, including an obligation for the ERA to publish its response to such a request.

**Clauses 2.26.2R to 2.26.2T** allow the ERA to request information from MPs in conducting a review of a Market Price Limit, specifying a response time of at least 10 Business Days, and oblige MPs to provide requested information by the response time (based on existing clauses 6.20.21 to 6.20.23).

**Clauses 2.26.2U to 2.26.2V** govern the commencement of revised Market Price Limits: requiring the ERA to publish escalated values according to the determined process and schedule, and specifying when revised values take effect.

# Transitional rules

## Switching off existing reviews of Energy Price Limits, and setting dates for the first reviews of the Market Price Limits

**Clause 1.35.4** switches off the requirement for the ERA to conduct reviews of the existing Energy Price Limits.

**Clause 1.35.5** switches off the requirement for the ERA to conduct reviews of Minimum STEM Price under clause 6.20.13 after 1 February 2023.

**Clause 1.35.6** requires the ERA to determine the FCESS Offer Price Ceiling before the New WEM Commencement Day. This is intended to provide an efficient transition to the updated price limits framework.

**Clauses 1.XX.1 – 1.XX.7** set out the specific transition provisions for Market Price Limits, including the dates for the first reviews of the Market Price Limits, at which time sufficient data about the performance of the market will be available, and set the initial values for the Market Price Limits.

# Application of Market Price Limits to clearing prices

Market Price Limits are applied to offer prices in Real-Time Market Submissions by AEMO shifting any offer prices outside the limits to be at the relevant Market Price Limit:

- **Clause 7.4.51** is amended to clarify that this process is also applied to Standing Real-Time Market Submissions; and
- **New clause 7.4.51A** is added to apply this process to FCESS offers.

In addition, **new clause 7.11B.3A** is added to cap the Energy Market Clearing Price at the Energy Offer Price Ceiling.

# Consequential amendments to reflect Market Price Limits

## Removing dual energy price caps and old defined terms

Various amendments have been made to reflect the change from two energy price caps to a single Energy Offer Price Ceiling:

- **Clauses 6.6.2A(d) and 6.6.5**, which stipulate requirements for STEM Portfolio Supply Curves; and
- **Clauses 6.6.9 to 6.6.12**, which are deleted to remove a redundant process to allow a Market Participant to bid above the lower of the two energy price caps for a Facility that is not liquid fuel capable.

Additional clauses are amended to reflect changes to defined terms for Market Price Limits:

- **Clause 6.6.8**, which stipulates requirements for STEM Portfolio Demand Curves;
- **Clause 6.9.5 and 6.9.6**, which describe the STEM Auction process;
- **Clause 7.11B.3**, which applies the price cap to Market Clearing Prices; and
- **Appendix 6**, which describes the process of STEM price curve determination.

# FCESS Uplift Payments

# FCESS Uplift Payments

## Settlement calculations

**Section 9.10 (Settlement Calculations – Essential System Services)** is amended to include FCESS Uplift Payments within ESS settlement.

- It is possible that a Facility provides multiple FCESSs in a Dispatch Interval in which it incurs Enablement Losses, so the Enablement Loss is calculated separately for each FCESS, with the FCESS Uplift Payment being the maximum Enablement Loss calculated for the Facility in that Dispatch Interval.
- FCESS Uplift Payments may not be attributable to a single FCESS. Consequently, cost allocation is according to Consumption Share.
- **Clause 9.10.3** is amended to include FCESS Uplift Payments into the aggregated ESS\_Payable(p,d) quantity.
- **New clause 9.10.27E** aggregates Facility-level Trading Interval FCESS Uplift Payments to the MP and the Trading Day.
- **New clause 9.10.27F** aggregates Facility-level Dispatch Interval FCESS Uplift Payments to the Trading Interval.

# FCESS Uplift Payments

## Settlement calculations

- **New clauses 9.10.27G to 9.10.27K** calculate the Enablement Losses by Facility by Dispatch Interval for each FCESS.

$$= \text{Max}(0, \textit{Switch} * 5/60 * \textit{LF} * \textit{Enablement Minimum} * (\textit{LF-adjusted Offer Price} - \textit{Clearing Price}))$$

*Switch* =        1, if Facility enabled to provide the relevant FCESS and is dispatched to minimum required level  
                      0, otherwise

Enablement Losses only apply to the Enablement Minimum; opportunity costs associated with energy dispatch above this level will be compensated in the FCESS Lower clearing price.

- **New clause 9.10.27L** calculates the FCESS Uplift Payment for a Facility in a Dispatch Interval as the maximum of the Enablement Losses calculated for each Facility.

# FCESS Uplift Payments

## Response to stakeholder feedback: publication of FCESS Uplift Payments

For transparency and to support market signals, **new clause 9.10.27M** requires AEMO to publish FCESS Uplift Payments by Facility and Dispatch Interval following settlement.

# Revised treatment of Enablement Losses

## Removal/replacement of references within SESSM rules

The new WEM Rules had been drafted on the assumption that MPs will include forecast Enablement Losses in their FCESS offers. This concept is being replaced by the FCESS Uplift Payment.

Consequently, amendments have been made to various clauses:

- **Clause 3.15A.20(c)**, in which the SESSM Offer Cap is determined;
- **Clause 3.15A.22**, which sets out requirements for SESSM Submissions;
- **Clause 3.15A.27(e)**, which describes the calculation of effective FCESS offer prices for SESSM Submissions; and
- **Clause 7.4.5(a)**, which sets requirements for Real-Time Market Submissions by a Market Participant holding a SESSM Award.

# FCESS Uplift Payments

## Defined terms

New defined terms have been added, and existing defined terms have been modified, to support the introduction of FCESS Uplift Payments:

- New term **FCESS Uplift Payment**: Is the Energy Uplift Payment in respect of a Facility and, in relation to a:
  - (a) Trading Interval, has the meaning given in clause 9.10.27F; and
  - (b) Dispatch Interval, has the meaning given in clause 9.10.27G.
- Modified **Enablement Losses**: For a Registered Facility operating in a Dispatch Interval at:
  - (a) the sum of its Enablement Minimum and its Essential System Service Enablement Quantity, in respect of Contingency Reserve Lower or Regulation Lower; or
  - (b) its Enablement Minimum, in respect of each other Frequency Co-optimised Essential System Service,the difference between energy revenue and the cost of providing that energy.

# Proposed Commencement

# Rule commencement timing

- Section 1.35 transitional rules are proposed to commence upon gazettal
- All other Amending Rules are proposed to commence on New WEM Commencement Day

*We're working for  
Western Australia.*