

Market power mitigation in the WEM

Clarifying SRMC Bidding Obligations

Market Advisory
Committee meeting –
28 July 2020

Energy Policy WA





1. Introduction
2. Consultancy – The Brattle Group
3. Clarifying the SRMC Concept in the WEM
4. Market power mitigation in the WEM
5. Changes to the Market Rules



Introduction

Minister for Energy has requested that Energy Policy WA (EPWA) consider potential changes to the Market Rules to clarify Short Run Marginal Cost (SRMC) bidding obligations.

EPWA intends to recommend to the Minister that Market Rule changes are made to:

- Clarify the SRMC concept in the Market Rules by inserting a definition.
- Clarify related market power mitigation processes.



Consultancy – The Brattle Group

- EPWA engaged The Brattle Group to:
 - Review the SRMC concept in the Market Rules (building on previous analysis previously commissioned by Public Utilities Office).
 - Advise on the need for any changes to the Market Rules to improve certainty relating to SRMC and Market Power.
- Recommendations:
 - SRMC remains an effective and necessary part of the market power mitigation mechanism in the WEM.
 - Insertion of a definition of SRMC in the Market Rules.
 - Revise references to Market Power in the Market Rules.
 - Analysis considered the complexities of the WEM.
 - Fuel prices and other non-fixed costs (start-up, LFAS market).



Short Run Marginal Cost



A new SRMC definition in the Market Rules.

- Proposed definition - “all costs that a supplier without market power would include in forming its profit-maximising offer”.
- Definition does not set out the building blocks of SRMC because:
 - A generator’s SRMC will depend on the particular circumstances surrounding that generator’s position in the market.
 - The state of the market is fluid and may change over time, particularly in relation to fuel prices.
- Brattle Group Report - SRMC includes all costs of generating energy that are marginal over a dispatch cycle, in that they would not have been incurred if the generator had been available but not running.
- SRMC would therefore include, but not be limited to:
 - fuel and non-fuel start-up costs amortised over a reasonable expectation of output;
 - all fuel costs incurred once the unit is started up;
 - variable operating and maintenance costs; and
 - any opportunity costs, such as the opportunity cost of fuel that could otherwise have been sold.



Short Run Marginal Cost

- Fuel prices and opportunity costs:
 - Not prescribing any mechanical relationship in the Market Rules between fuel prices (and other input costs) and offers, other than that a generator with market power should not exploit that market power to raise prices above competitive levels.



Market Power mitigation



Market Rule changes to remove phrase “when such behaviour relates to market power”.

- Intended that ERA should focus ex-post enforcement on generators who have market power and who use that market power to raise prices above competitive levels.

- Market Rules not to include a definition of “Market Power”.
 - ERA monitoring and enforcement.
 - Informed by general competition law concepts and legal precedent.



Market Rule changes

Definition of SRMC

The following definition of SRMC to be inserted in Chapter 11 (Glossary) of the Market Rules (as the term is used in Rules 2.16.9, 2.16.9B, 2.16.9G, 6.6.3, 6.6.10, 6.20.7, 7A.2.17, 7B.2.15):

- “**Short Run Marginal Cost:** All costs that a Market Participant without market power would include in forming its profit-maximising offer”.
- Clarify Market Rules – offers which **exceed** reasonable expectation of the SRMC of generating etc.



Market Rule changes

Amendment to Rule 2.16.9(b)

Rule 2.16.9(b) will be amended as follows:

“2.16.9. The Economic Regulation Authority is responsible for monitoring the effectiveness of the market in meeting the Wholesale Market Objectives and must investigate any market behaviour if it considers that the behaviour has resulted in the market not functioning effectively. The Economic Regulation Authority, with the assistance of AEMO, must monitor:

(a) Ancillary Service Contracts that System Management enters into and the criteria and process that System Management uses to procure Ancillary Services from other persons;

(b) inappropriate and anomalous market behaviour, including ~~behaviour related to the~~ exploitation of market power and the exploitation of shortcomings in the Market Rules or Market Procedures by Rule Participants including, but not limited to:

- i. prices offered by a Market Generator in its Portfolio Supply Curve that ~~exceed do not reflect~~ the Market Generator’s reasonable expectation of the Short Run Marginal Cost of generating the relevant electricity;
- ii. prices offered by a Market Generator in its Balancing Submission that exceed the Market Generator’s reasonable expectation of the Short Run Marginal Cost of generating the relevant electricity;
- iii. prices offered by a Market Generator in its LFAS Submission that exceed the Market Generator’s reasonable expectation of the ~~incremental change in~~ Short Run Marginal Cost incurred by the LFAS Facility in providing the relevant LFAS;
- iv. Availability Declarations that may not reflect the reasonable expectation of a Facility’s availability, beyond outages of which System Management has been notified;
- v. Ancillary Service Declarations that may not reflect the reasonable expectation of the Ancillary Services to be provided by a Facility; and
- vi. Fuel Declarations that may not reflect the reasonable expectation of the fuel that a Facility will be run on in real-time;

(c) market design problems or inefficiencies; and

(d) problems with the structure of the market.”



Market Rule changes

Amendment to Rule 2.16.9B

Rule 2.16.9B be amended as follows:

“2.16.9B. Where the Economic Regulation Authority concludes that—

(a) prices offered by a Market Generator in its Portfolio Supply Curve may ~~exceed not reflect~~ the Market Generator’s reasonable expectation of the Sshort Rrun Mmarginal Cost of generating the relevant electricity;

(aA) prices offered by a Market Generator in its Balancing Submission may exceed the Market Generator’s reasonable expectation of the Sshort Rrun Mmarginal Cost of generating the relevant electricity; or

(b) prices offered by a Market Generator in its LFAS Submission may exceed the Market Generator’s reasonable expectation of the ~~incremental change in~~ Sshort Rrun Mmarginal Cost incurred by the LFAS Facility in providing the relevant LFAS,

and the Economic Regulation Authority considers that the Market Generator had market power and may have exploited its market power to raise prices above competitive levels~~behaviour relates to market power~~, the Economic Regulation Authority must as soon as practicable, request an explanation from the Market Participant which has made the relevant STEM Submission, Balancing Submission, or LFAS Submission and investigate the identified behaviour.”



Market Rule changes

Amendment to Rule 2.16.9G

Rule 2.16.9G be amended as follows:

“2.16.9G. Where the Economic Regulation Authority determines pursuant to the investigation under clause 2.16.9B that:

- (a) prices offered in the Portfolio Supply Curve, the subject of the investigation, ~~exceeded~~did not reflect the Market Generator’s reasonable expectation of the Sshort Run Mmarginal Cost of generating the relevant electricity;
 - (b) prices offered in a Balancing Submission, the subject of the investigation, exceeded the Market Generator’s reasonable expectation of the Sshort Run Mmarginal Cost of generating the relevant electricity; or
 - (c) prices offered in the LFAS Submission, the subject of the investigation, exceeded the Market Generator’s reasonable expectation of the ~~incremental change in~~Sshort Run Mmarginal Cost incurred by the LFAS Facility in providing the relevant LFAS,
- ~~and that the behaviour related to market power and the Economic Regulation Authority considers that the Market Generator had market power and exploited its market power to raise prices above competitive levels, the Economic Regulation Authority may bring proceedings before the Electricity Review Board.”~~



Market Rule changes

Amendment to Rule 6.6.3

Rule 6.6.3 be amended as follows:

“6.6.3. A Market Generator must not, for any Trading Interval in which the Market Generator has market power, offer prices within its Portfolio Supply Curve in excess of that do not reflect the Market Generator’s reasonable expectation of the Short Run Marginal Cost of generating the relevant electricity ~~when such behaviour relates to market power.~~”

Amendment to Rule 6.6.10

Rule 6.6.10 be amended as follows:

“6.6.10. AEMO must assess an application made under clause 6.6.9 and inform the Market Participant whether or not the application is approved. AEMO must approve the application only where the Market Participant provides evidence satisfactory to AEMO that:

- (a) the Market Participant has an arrangement with a user of fuel (“Fuel User”) to release a quantity of fuel for use in a Scheduled Generator which is not Liquid Fuel capable and is registered by the Market Participant;
- (b) the use of fuel released under the arrangement would result in the Fuel User using Liquid Fuel in a Facility or other equipment; and
- (c) as a consequence of clause 6.6.10(a) and (b), the Short Run Marginal Cost of generating electricity using the Scheduled Generator using fuel released under the arrangement would be above the Maximum STEM Price.”



Market Rule changes

Amendment to Rule 6.20.7

Rule 6.20.7(a) be amended as follows:

“6.20.7. In conducting the review required by clause 6.20.6 AEMO:

(a) may propose revised values for the following:

i. the Maximum STEM Price, where this is to be based on AEMO’s estimate of the Sshort Rrun Mmarginal Cost of the highest cost generating works in the SWIS fuelled by natural gas and is to be calculated using the formula in paragraph (b); and

ii. the Alternative Maximum STEM Price, where this is to be based on AEMO’s estimate of the Sshort Rrun Mmarginal Cost of the highest cost generating works in the SWIS fuelled by distillate and is to be calculated using the formula in paragraph (b);”



Market Rule changes

Amendment to Rule 7A.2.17

Rule 7A.2.17 be amended as follows:

“7A.2.17. Subject to clauses 7A.2.3, 7A.2.9(c) and 7A.3.5, a Market Participant must not, for any Trading Interval in which the Market Participant has market power, offer prices in its Balancing Submission in excess of the Market Participant’s reasonable expectation of the Short Run Marginal Cost of generating the relevant electricity by the Balancing Facility, ~~when such behaviour relates to market power.~~”

Amendment to Rule 7B.2.15

Rule 7B.2.15 will be amended as follows:

“7B.2.15. A Market Participant must not, for any Trading Interval in which the Market Participant has market power, offer prices within its LFAS Submission in excess of the Market Participant’s reasonable expectation of the ~~incremental change in~~ Short Run Marginal Cost incurred by the LFAS Facility ~~providing to provide LFAS when such behaviour relates to market power.~~”



Next steps

- Initial comments on slidepack by COB Tuesday 4 August to submissions@epwa.wa.gov.au
- EPWA finalises Directions Report and submits to Minister (with consultant report and draft Market Rule changes) for approval to release for stakeholder feedback
- Directions Report and supporting documents published on EPWA website - stakeholder feedback as to any unintended consequences
- EPWA considers feedback and finalises Market Rule changes to be made by the Minister using temporary rule-making powers
- EPWA staff remain available to discuss this proposal
 - Andrew Rayner - 6551 4704/andrew.rayner@energy.wa.gov.au

