

## **Rule Change Notice: Reserve Capacity Mechanism - Minor Changes 2017 (RC\_2017\_04)**

This notice is given under clause 2.5.7 of the Wholesale Electricity Market Rules (Market Rules).

**Submitter:** Zaeen Khan, Public Utilities Office

**Date submitted:** 15 August 2017

### **The Rule Change Proposal**

The Public Utilities Office proposes to amend the Market Rules to address various manifest, minor and typographical errors and change inconsistent formatting arising from the *Wholesale Electricity Market Rules Amending Rules 2016* that were gazetted on 31 May 2016 (2016 WEM Amending Rules).

The Public Utilities Office also proposes some minor amendments to remove ambiguity and improve clarity.

The proposed changes affect clauses of the current Market Rules as well as the amending rules in Schedule B, Part 3 of the 2016 WEM Amending Rules, which will commence on 1 October 2017. The Public Utilities Office proposes to commence the changes at 8:00 AM on 1 October 2017, immediately after the commencement of the amending rules in Schedule B, Part 3.

The attached Rule Change Proposal gives complete information about:

- the proposed amendments to the Market Rules;
- relevant references to the Market Rules and any proposed specific amendments to those clauses; and
- the submitter's description of how the proposed amendments would allow the Market Rules to better address the Wholesale Market Objectives.

### **Decision to progress the Rule Change Proposal**

The Rule Change Panel has decided to progress this Rule Change Proposal on the basis that its preliminary assessment indicates that the proposal is consistent with the Wholesale Market Objectives.

## Timeline

This Rule Change Proposal will be progressed using the Fast Track Rule Change Process, described in section 2.6 of the Market Rules, on the grounds that the proposed changes are required to correct minor and manifest errors or are of minor or procedural nature and therefore the proposal satisfies the criteria in clauses 2.5.9(a) and 2.5.9(b) of the Market Rules. Appendix A contains a table outlining the proposed amendments and the Rule Change Panel's assessment against the criteria in clause 2.5.9.

2.5.9. *The Rule Change Panel may subject a Rule Change Proposal to the Fast Track Rule Change Process if, in its opinion, the Rule Change Proposal:*

- (a) *is of a minor or procedural nature; or*
- (b) *is required to correct a manifest error; or*
- (c) *is urgently required and is essential for the safe, effective and reliable operation of the market or the SWIS.*

The projected timelines for progressing this proposal are:



\* immediately after the commencement of Schedule B, Part 3

## Call for submissions

Any Rule Participant wishing to be consulted regarding this Rule Change Proposal is invited to notify the Rule Change Panel within 5 Business Days of the Rule Change Notice publication date (**28 August 2017**).

The consultation period is 15 Business Days from the Rule Change Notice publication date. Submissions must be delivered to the RCP Secretariat by **5:00 PM on Monday, 11 September 2017**.

The Rule Change Panel prefers to receive submissions by email, using the submission form available at: <https://www.erawa.com.au/rule-change-panel/make-a-rule-change-submission> sent to [rcp.secretariat@rcpwa.com.au](mailto:rcp.secretariat@rcpwa.com.au).

Submissions may also be sent to the Rule Change Panel by post, addressed to:

### Rule Change Panel

Attn: Executive Officer  
C/o Economic Regulation Authority  
PO Box 8469  
PERTH BC WA 6849

## Appendix A. Fast Track Assessment of the Proposed Amending Rules

Clause	Public Utilities Office's Comments	The Rule Change Panel's Assessment
<b>Proposed amendments affecting clauses of the current Market Rules (that are not affected by Schedule B, Part 3)</b>		
Glossary 'DSM Reserve Capacity Price'	Remove the unnecessary use of the unit "MWh" (as formulas in the Market Rules do not usually specify the units of the operands).	Minor or procedural changes – Clause 2.5.9(a)
<b>Proposed amendments affecting clauses that are affected or introduced by Schedule B, Part 3 of the 2016 WEM Amending Rules</b>		
4.5.14C	Amend clause 4.5.14C to clarify that the denominator specified in clause 4.5.14C(d) should be the total number of DSM Capacity Credits assigned for that Capacity Year at the time of the calculation (or else forecast to be assigned, for Capacity Years for which Capacity Credits have not yet been assigned). The current drafting of clause 4.5.14C(d) could be interpreted as referring to the total number of DSM Capacity Credits actually assigned at the start of the relevant Capacity Year. However, due to the possibility of late reductions in the number of assigned DSM Capacity Credits it would not be possible for AEMO to be sure of this value at the time it is required to calculate the Expected DSM Dispatch Quantity. Further amendments are also proposed to this clause to clarify that each Expected DSM Dispatch Quantity is calculated for a specific Capacity Year.	Manifest error – Clause 2.5.9(b)
4.26.3(b)	Correct inconsistent formatting of a formula. Clarify that the calculation of the weighted average of the Trading interval Refund Rate relates to a Market Participant's Facilities.	Minor or procedural changes – Clause 2.5.9(a)
4.26.3(b)	Correct the name of a variable used in the calculation.	Manifest error – Clause 2.5.9(b)
4.28.4(bA)	Clarify which Tranche 2 DSM Dispatch Payments are used for the calculation of the Shared Reserve Capacity Cost of a Trading Month	Minor or procedural changes – Clause 2.5.9(a)

Clause	Public Utilities Office's Comments	The Rule Change Panel's Assessment
6.11A.2	Clarify that only Market Customers can nominate a Consumption Decrease Price and an Extra Consumption Decrease Price.	Minor or procedural changes – Clause 2.5.9(a)
6.17.6(a)(i)(1), 6.17.6(b)(i)(1), 6.17.6C and Glossary 'Maximum Participant Generation Refund'	Correct cross referencing errors.	Manifest errors – Clause 2.5.9(b)
6.17.6(c)	Remove the word “product” in front of the word sum as the Non-Balancing Facility Dispatch Instruction Payment for a Market Participant's Demand Side Programmes is calculated as the sum of the different DSM dispatch payments.	Manifest error – Clause 2.5.9(b)
7.6.10 and 7.13.5	Correct the references to the defined term Power System Operation Procedure.	Manifest errors – Clause 2.5.9(b)
9.7.1B	Correct manifest errors and inconsistent formatting in the formula.	Manifest errors – Clause 2.5.9(b) and Minor or procedural changes – Clause 2.5.9(a)
Glossary 'Consumption Decrease Price' 'Consumption Increase Price' and 'Extra Consumption Decrease Price'	Correctly refer to Appendix 1, where all Standing Data is listed, instead of the defined term Standing Data.	Minor or procedural changes – Clause 2.5.9(a)

## Wholesale Electricity Market Rule Change Proposal

**Rule Change Proposal ID:** *RC\_2017\_04*  
**Date received:** *15 August 2017*

**Change requested by:**

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<b>Date submitted:</b>	<i>15 August 2017</i>
<b>Urgency:</b>	<i>3-high – Fast Track Rule Change Process</i>
<b>Rule Change Proposal title:</b>	Reserve Capacity Mechanism - Minor Changes 2017
<b>Market Rule(s) affected:</b>	Clauses 4.5.14C, 4.26.3, 4.28.4, 6.11A.2, 6.17.6, 6.17.6C, 7.6.10, 7.13.5, 9.7.1B and the Glossary.

### Introduction

Clause 2.5.1 of the Wholesale Electricity Market (WEM) Rules (Market Rules) provides that any person may make a Rule Change Proposal by completing a Rule Change Proposal form that must be submitted to the Rule Change Panel.

This Rule Change Proposal can be sent by:

Email to: [rcp.secretariat@rcpwa.com.au](mailto:rcp.secretariat@rcpwa.com.au)

Post to: Rule Change Panel  
 Attn: Executive Officer  
 C/o Economic Regulation Authority  
 PO Box 8469  
 PERTH BC WA 6849

The Rule Change Panel will assess the proposal and, within 5 Business Days of receiving this Rule Change Proposal form, will notify you whether the Rule Change Proposal will be further progressed.

In order for the proposal to be progressed, all fields below must be completed and the change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the Wholesale Market Objectives.

The objectives of the market 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.

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## Details of the Proposed Rule Change

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### 1. Describe the concern with the existing Market Rules that is to be addressed by the proposed rule change:

Following approval by the previous Minister for Energy, the Public Utilities Office progressed amendments to the Wholesale Electricity Market Rules through gazettal of the *Wholesale Electricity Market Rules Amending Rules 2016* on 31 May 2016.

The rule amendments implemented transitional reforms to the Reserve Capacity Mechanism and the transfer of System Management functions from Western Power to the Australian Energy Market Operator (AEMO). The Public Utilities Office has subsequently identified manifest, minor, administrative and typographical errors in the Market Rules.

The Public Utilities Office proposes the following amendments:

- a. Amend clause 4.5.14C to clarify that the denominator specified in clause 4.5.14C(d) should be the total number of DSM Capacity Credits assigned for that Capacity Year at the time of the calculation (or else forecast to be assigned, for Capacity Years for which Capacity Credits have not yet been assigned). The current drafting of clause 4.5.14C(d) could be interpreted as referring to the total number of DSM Capacity Credits actually assigned at the start of the relevant Capacity Year. However, due to the possibility of late reductions in the number of assigned DSM Capacity Credits it would not be possible for AEMO to be sure of this value at the time it is required to calculate the Expected DSM Dispatch Quantity. Further amendments are also proposed to this clause to clarify that each Expected DSM Dispatch Quantity is calculated for a specific Capacity Year.
- b. Amend clause 4.26.3(b) to:
  - correct inconsistent formatting of a formula;
  - clarify that the calculation of the weighted average of the Trading interval Refund Rate relates to a Market Participant's Facilities; and
  - correct the name of a variable used in the calculation.

- c. Amend clause 4.28.4(bA) to clarify which Tranche 2 DSM Dispatch Payments are used for the calculation of the Shared Reserve Capacity Cost of a Trading Month.
- d. Amend clause 6.11A.2 to clarify that only Market Customers can nominate a Consumption Decrease Price and an Extra Consumption Decrease Price.
- e. Amend clause 6.17.6(c) to remove the word “product” in front of the word sum as the Non-Balancing Facility Dispatch Instruction Payment for a Market Participant’s Demand Side Programmes is calculated as the sum of the different DSM dispatch payments.
- f. Amend clauses 7.6.10 and 7.13.5(b) to correct the reference to the defined term Power System Operation Procedures.
- g. Amend clause 9.7.1B to correct manifest errors and inconsistent formatting in the formula.
- h. Amend the definitions of the defined terms Consumption Decrease Price, Consumption Increase Price and Extra Consumption Decrease Price in the Glossary to correctly refer to Appendix 1, where all Standing Data is listed, instead of the defined term Standing Data.
- i. Amend the defined term DSM Reserve Capacity Price in the Glossary to remove the unnecessary use of the unit “MWh” (as formulas in the Market Rules do not usually specify the units of the operands).
- j. Correct cross referencing errors in clauses 6.17.6(a)(i)(1), 6.17.6(b)(i)(1), 6.17.6C and the definition of Maximum Participant Generation Refund in the Glossary.

The Public Utilities Office requests that this Rule Change Proposal be progressed using the Fast Track Rule Change Process on the basis that all of the proposed amendments seek to correct manifest, minor and typographical errors.

The proposed changes do not seek to change the intended market outcomes following gazettal of the Market Rule amendments on 31 May 2016. These outcomes are as described in the *Final Report: Reforms to the Reserve Capacity Mechanism* released by the Public Utilities Office on 7 April 2016 and the Information Paper: *Transfer of system management and market operation functions to the Australian Energy Market Operator* released by the Public Utilities Office on 30 September 2015.

## **2. Explain the reason for the degree of urgency:**

The proposed amendments in this Rule Change Proposal correct manifest, minor, administrative and typographical errors. These proposed amendments will improve the integrity of the Market Rules and do not seek to amend the operation or intended meaning of the Market Rules.

On this basis, the proposed amendments meet the requirements set out in clause 2.5.9(a) of the Market Rules to apply the Fast Track Rule Change Process.

*Clause 2.5.9 states:*

*The Rule Change Panel may subject a Rule Change Proposal to the Fast Track Rule Change Process if, in its opinion, the Rule Change Proposal:*

- (a) *is of a minor or procedural nature; or*
- (b) *is required to correct a manifest error; or*
- (c) *is urgently required and is essential for the safe, effective and reliable operation of the*

market or the SWIS.

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**3. Provide any proposed specific changes to particular Market Rules:** (for clarity, please use the current wording of the rules and place a ~~strikethrough~~ where words are deleted and underline words added)

Proposed Commencement: 1 October 2017 after the commencement of Schedule B Part 3

Amend clause 4.5.14C:

The Market Procedure under clause 4.5.14B(a) is to provide for the Expected DSM Dispatch Quantity for a Capacity Year to be calculated by:

- (a) estimating the amount of Unserved Energy which would be expected to occur in ~~a the~~ Capacity Year if no Demand Side Programmes were dispatched; and
- (b) estimating the amount of Unserved Energy which would be expected to occur in the Capacity Year if each Demand Side Programme to which DSM Capacity Credits are (or are forecast to be) assigned, were dispatched for 200 hours; and
- (c) determining the difference between the estimates in clauses 4.5.14C(a) and (b); and
- (d) dividing the difference in clause 4.5.14C(c) by the total of all DSM Capacity Credits assigned (or forecast to be assigned) to Demand Side Programmes for the Capacity Year ~~to all Demand Side Programmes as at 1 October of Year 3 of the relevant Reserve Capacity Cycle.~~

Amend clause 4.26.3(b):

- (b) the Generation Reserve Capacity Deficit Refund for Market Participant p and Trading Interval t, plus the Net STEM Refund in Trading Interval t for Market Participant p,

where the Net STEM Refund is calculated as follows—

$$\text{Net STEM Refund}(p,t) = \text{TIRR weighted}(p,t) \times \text{Net STEM Short}(p,t)$$

Where—

- i. Net STEM Refund(p,t) is the Net STEM Refund for Market Participant p in Trading Interval t;
- ii. TIRR weighted(p,t) is the weighted average of the Trading Interval Refund Rate in Trading Interval t for each Facility that Market Participant p holds Capacity Credits for and is calculated as follows—

$$\text{TIRR weighted}(p,t) = \frac{\sum_{f \in F} \text{TIRR}(f,t) \times \text{CC}(f,t)}{\sum_{f \in F} \text{CC}(f,t)}$$

where—

1. F is the set of Scheduled Generators registered to Market Participant p and f is a Facility within that set;
  2. TIRR(f,t) is the Trading Interval Refund Rate for Facility f in Trading Interval t; and
  3. CC(f,t) is the number of Capacity Credits associated with Facility f in Trading Interval t; and
- iii. N STEM ~~ShortRefund~~(p,t) is the Net STEM Shortfall for Market Participant p in Trading Interval t.

Amend clause 4.28.4(bA):

- (bA) the Tranche 2 DSM Dispatch Payments made ~~infor~~ that Trading Month; less

Amend clause 6.11A.2:

When AEMO receives a submission under clause 6.11A.1 from a Market ~~CustomerParticipant~~, it must as soon as practicable—

- (a) if the received data complies with, as applicable, clauses 6.11A.3 or 6.11A.4—
  - i. accept the received data and communicate the acceptance to the Market ~~CustomerParticipant~~; and
  - ii. revise the Standing Data accordingly; or
- (b) if the received data does not comply with, as applicable, clauses 6.11A.3 or 6.11A.4—reject the received data and communicate the rejection to the Market ~~CustomerParticipant~~.

Amend clause 6.17.6(a)(i)(1):

1. the Loss Factor adjusted quantity of the value determined by System Management under clause ~~6.17.6A(a)~~6.17.6A; or

Amend clause 6.17.6(b)(i)(1):

1. the Loss Factor adjusted quantity of the value determined by System Management under clause ~~6.17.6A(a)~~6.17.6A; or

Amend clause 6.17.6(c):

- (c) the sum over all Demand Side Programmes registered to Market Participant p of the amount that is the ~~product~~ sum of—
  - i. the Tranche 2 DSM Dispatch Payments; and
  - ii. the Tranche 3 DSM Dispatch Payments.

Amend clause 6.17.6C:

The methodology described in 6.17.6B must ensure that, subject to clauses 6.17.6D and ~~6.16.6E~~6.17.6E, the Non-Balancing Facility Dispatch Instruction Payment is determined as follows—

Amend clause 7.6.10:

If a Power System Operationg Procedure is published under clause 7.6.10A, then a Market Participant who has been assigned DSM Capacity Credits must, in the time and manner specified in the Power System Operationg Procedure, provide System Management with, for each Trading Interval—

- (a) the then current consumption, in MW, of each Associated Load of the Demand Side Programme; and
- (b) the then current consumption, in MW, of the Demand Side Programme, which must equal the sum of the consumption of all Associated Loads of that Demand Side Programme provided in clause 7.6.10(a).

Amend clause 7.13.5(b):

- (b) develop a Power System Operationg Procedure that details how it will calculate the amount in clause 7.13.5(a).

Amend clause 9.7.1B:

~~For the purposes of clause 9.7.1, Capacity Purchaser Payment is—~~

~~CPP(p,m) =~~

~~Targeted Reserve Capacity costs(p,m)~~

~~+ Shared Reserve capacity costs (p,m)~~

~~-LF\_Capacity\_Cost(p,m)~~

~~Where—~~

~~Targeted Reserve Capacity costs(p,m) =~~

~~Targeted Reserve Capacity Cost(m) × Shortfall Share(p,m)~~

~~Where—~~

~~Targeted Reserve Capacity Cost(m) is the cost of Reserve Capacity to be shared amongst those Market Participants who have not had sufficient Capacity Credits allocated to them for Trading Month m where this cost is specified for Trading Month m under clause 4.29.3(b)~~

~~Shortfall Share(p,m) =~~

~~(IRCR(p,m) — Allocated Capacity Credits(p,m)) /~~

~~Sum(p ∈ P, (IRCR(p,m) — Allocated Capacity Credits(p,m)))~~

~~Where—~~

~~IRCR(p,m) is the Individual Reserve Capacity Requirement for Market Participant p and Trading Month m expressed in units of MW;~~

~~Allocated Capacity Credits (p,m) equals the capacity credits allocated to Market Participant p in month m in accordance with sections 9.4 and 9.5~~

~~Shared Reserve Capacity Cost(p,m) =~~

~~—Shared Reserve Capacity Cost(m) × Capacity Share(p,m)~~

~~Where—~~

~~Shared Reserve Capacity Cost(m) is the cost of Reserve Capacity to be shared amongst all Market Participant for Trading Month m where this cost is specified for Trading Month m under clause 4.29.3(c)~~

~~Capacity Share(p,m) =~~

~~—IRCR(p,m) / Sum(p ∈ P, IRCR(p,m))~~

~~LF\_Capacity\_Cost(p,m)~~

~~—LF\_Capacity\_Cost(m) × Capacity Share (p,m))~~

~~Where—~~

~~LF\_Capacity\_Cost(m) is the total Load Following Service capacity payment cost for Trading Month m as specified in clause 9.9.2(q);~~

~~P is the set of all Market Participants where p is a member of that set~~

For the purposes of clause 9.7.1, Capacity Purchaser Payment(p,m) is—

CPP(p,m) = Targeted Reserve Capacity Cost(p,m) +  
Shared Reserve Capacity Cost(p,m) - LF\_Capacity\_Cost(p,m)

Where—

Targeted Reserve Capacity Cost(p,m) = Targeted Reserve Capacity Cost(m) × Shortfall Share(p,m)

Shared Reserve Capacity Cost(p,m) = Shared Reserve Capacity Cost(m) × Capacity Share(p,m)

LF\_Capacity\_Cost(p,m) = LF\_Capacity\_Cost(m) × Capacity Share(p,m)

Targeted Reserve Capacity Cost(m) is the cost of Reserve Capacity to be shared amongst those Market Participants who have not had sufficient Capacity Credits allocated to them for Trading Month m where this cost is specified for Trading Month m under clause 4.29.3(b);

Shortfall Share(p,m) = (IRCR(p,m) - Allocated Capacity Credits(p,m)) / Sum(p ∈ P, (IRCR(p,m) - Allocated Capacity Credits(p,m)))

Shared Reserve Capacity Cost(m) is the cost of Reserve Capacity to be shared amongst all Market Participants for Trading Month m where this cost is specified for Trading Month m under clause 4.29.3(c);

Capacity Share(p,m) =  $IRCR(p,m) / \text{Sum}(p \in P, IRCR(p,m))$

LF Capacity Cost(m) is the total Load Following Service capacity payment cost for Trading Month m as specified in clause 9.9.2(q);

P is the set of all Market Participants where p is a member of that set;

IRCR(p,m) is the Individual Reserve Capacity Requirement for Market Participant p for Trading Month m expressed in units of MW;

Allocated Capacity Credits(p,m) equals the Capacity Credits allocated to Market Participant p in Trading Month m in accordance with sections 9.4 and 9.5.

Amend the following existing definitions in Chapter 11 (Glossary):

**Consumption Decrease Price:** A price specified in items (h)(vi)(1) or (2), (i)(xA)(3) or (i)(xA)(4) of Appendix 1 Standing Data, accepted by AEMO under section 6.11A, to apply in forming the Non-Balancing Dispatch Merit Order for a Trading Interval for a Dispatchable Load or Demand Side Programme and in the calculation of the Non-Balancing Facility Dispatch Instruction Payment for that Dispatchable Load or Demand Side Programme for that Trading Interval.

**Consumption Increase Price:** A price specified in items (i)(xA)(1) or (i)(xA)(2) of Appendix 1 Standing Data, which must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price to apply in forming the Non-Balancing Dispatch Merit Order for a Trading Interval for a Dispatchable Load and in the calculation of the Non-Balancing Facility Dispatch Instruction Payment for that Dispatchable Load for that Trading Interval, which varies for Peak Trading Intervals and Off-Peak Trading Intervals.

**DSM Reserve Capacity Price:** The price that will be paid per DSM Capacity Credit for a Capacity Year.- It equals:

- (a) the Expected DSM Dispatch Quantity for that Capacity Year plus 0.5 ~~MWh~~;  
multiplied by
- (b) the DSM Activation Price for that Capacity Year.

**Extra Consumption Decrease Price:** A price specified in item (h)(vi)(3) and (4) of Appendix 1 Standing Data, accepted by AEMO under section 6.11A, to apply in forming the Non-Balancing Dispatch Merit Order for a Trading Interval for a Demand Side Programme and in the calculation of the Non-Balancing Facility Dispatch Instruction Payment for that Demand Side Programme for that Trading Interval.

**Maximum Participant Generation Refund:** The total amount of the Capacity Credit payments paid or to be paid under these Market Rules to a Market Participant in relation to its generating Facilities and in relation to a Capacity Year assuming that—

- (a) AEMO acquires all of the Capacity Credits held by the Market Participant in relation to its generating Facilities; and
  - (b) the cost of each Capacity Credit so acquired is determined in accordance with clauses ~~4.28.2(b)~~, 4.28.2(c) and 4.28.2(d) (as applicable).
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**4. Describe how the proposed rule change would allow the Market Rules to better address the Wholesale Market Objectives:**

The proposed changes provide clarity and consistency in the application of the Wholesale Electricity Market Rules and ensure that the market functions as intended. On this basis the amendments in this Rule Change Proposal are considered to be consistent with the Wholesale Market Objectives.

The Public Utilities Office considers that the proposed amendments will better achieve Wholesale Market Objective (a).

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**5. Provide any identifiable costs and benefits of the change:**

**Costs:**

There are no costs associated with implementing these proposed rule changes.

**Benefits:**

Removing the minor, administrative and typographical errors will improve the clarity of the Market Rules and ensure that the market functions as intended.

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