

Rule Change Notice: New Notional Wholesale Meter Manifest Error (RC_2018_01)

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

Submitter: Rule Change Panel

Date submitted: 24 April 2018

The Rule Change Proposal

The Rule Change Panel has identified a manifest error in the method for annually setting and monthly adjustment of Individual Reserve Capacity Requirements (**IRCRs**) as set out in Appendix 5 of the Market Rules. The methodology currently:

- accounts for all new interval meters that were not registered during all of the “preceding Hot Season”¹ but were registered by the end of Trading Month n-3 (Step 5 of Appendix 5); but
- only accounts for the growth of non-interval meters in Trading Month n-3 (Step 5A of Appendix 5).

Step 5A of Appendix 5 determines the calculation of the “New Notional Wholesale Meter’s” contribution to IRCR, which is intended to account for new non-interval meters that did not exist during all of the 12 peak SWIS Trading Intervals of the relevant “preceding Hot Season”.

Step 5A was introduced by RC_2008_32 and intended for Step 5A of Appendix 5 to treat non-interval and interval meters in the same way. However, the methodology for calculating the growth of non-interval meters inadvertently did not achieve this outcome, and Rule Change Proposal RC_2018_01 seeks to correct this error. More details on the precise nature of the manifest error is detailed in the Proposal (Appendix 1).

Rule Change Proposal RC_2018_01 seeks to change the calculation of Non Interval Meter Growth in Step 5A of Appendix 5. The proposal is to calculate the growth of non-interval meters by subtracting the total number of non-interval meters disconnected over the period from the end of the preceding Hot Season up to the end of Trading Month n-3 from the total number of non-interval meters connected during the same time period. No other sections of the Market Rules are proposed to be amended.

Appendix 1 contains the Rule Change Proposal and gives complete information about:

- the proposed amendments to the Market Rules;

¹ The “preceding Hot Season” is defined in Step 1 of Appendix 5 as the Hot Season preceding the initial calculation of IRCR for a Reserve Capacity Cycle.

- 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.

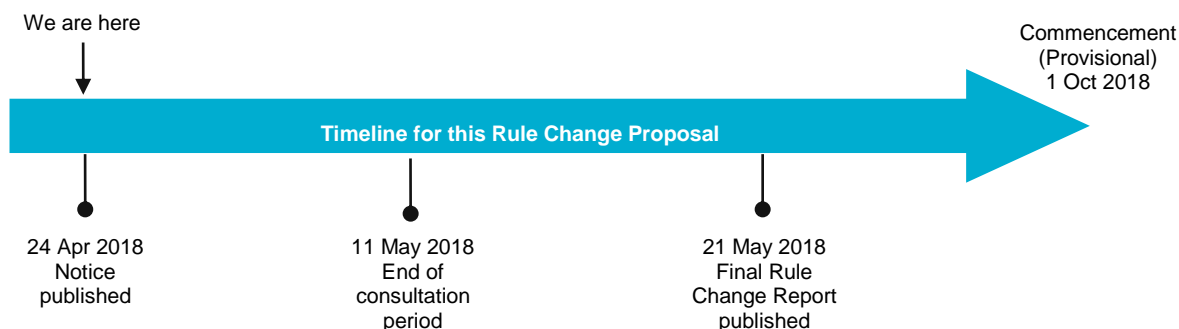
Timeline

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; so the proposal satisfies the criteria in clauses 2.5.9(a) and 2.5.9(b) of the Market Rules.

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 timeline for progressing this proposal is:



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 **2 May 2018**.

The consultation period is up to 12 Business Days from the Rule Change Notice publication date. Submissions must be delivered to the RCP Secretariat by **5:00 PM on Friday, 11 May 2018**.

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.

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

Wholesale Electricity Market Rule Change Proposal

Rule Change Proposal ID: RC_2018_01
Date received: 24 April 2018

Change requested by: Rule Change Panel

Name:	Rule Change Panel
Phone:	(08) 6557 7900
Email:	rcp.secretariat@rcpwa.com.au
Organisation:	Rule Change Panel
Address:	Albert Facey House 469 Wellington Street Perth WA 6000
Date submitted:	24 April 2018
Urgency:	High
Rule Change Proposal title:	New Notional Wholesale Meter Manifest Error
Market Rule(s) affected:	Appendix 5 Step 5A

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

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.

Details of the Proposed Rule Change

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

Background

AEMO determines the Individual Reserve Capacity Requirement (**IRCR**) for every Market Customer for each Trading Month. Market Customers must acquire Reserve Capacity Credits based on their share of the total IRCR of all Market Customers.

A Market Customer's IRCR is calculated using the methodology specified in Appendix 5 of the Market Rules for each Trading Month, based on the Meter Registry data (including details of the responsible party for each meter) and the associated energy data. This means that a meter is attributed to a Market Customer as the responsible party for every day, and that Market Customer incurs IRCR liabilities related to that meter, with a time lag of three calendar months.

Issue

The Rule Change Panel has identified a manifest error in the method for annually setting and monthly adjustment of IRCRs as set out in Appendix 5 of the Market Rules. The methodology currently:

- accounts for all new interval meters that were not registered during all of the "preceding Hot Season"¹ but were registered by the end of Trading Month n-3 (Step 5 of Appendix 5); but
- only accounts for the growth of non-interval meters in Trading Month n-3 (Step 5A of Appendix 5).

¹ The "preceding Hot Season" is defined in Step 1 of Appendix 5 as the Hot Season preceding the initial calculation of IRCR for a Reserve Capacity Cycle.

The current operation of Step 5 of Appendix 5 is to identify meters that were:

- (a) not registered with AEMO during one or more of the 12 peak South West interconnected system (**SWIS**) Trading Intervals in the “preceding Hot Season”; and
- (b) were registered by the end of Trading Month n-3.

Each of these identified new meters contributes to the relevant Market Customer’s IRCR.

Step 5A of Appendix 5 determines the calculation of the “New Notional Wholesale Meter’s” contribution to IRCR, which is intended to account for new non-interval meters that did not exist during the 12 peak SWIS Trading Intervals of the relevant “preceding Hot Season”.

Step 5A was introduced by Rule Change Proposal RC_2008_32: Calculation of IRCR,² which was commenced on 1 May 2009, and was developed by the Independent Market Operator (**IMO**) based on the recommendations of the IRCR Working Group. The Working Group had concluded that “...new non-interval meters entering the Notional Wholesale Meter were not being treated in the same way as new interval meters for the purposes of IRCR and that this should be corrected. Accordingly it was decided that a rule change proposal be drafted to address this inequality.”

The operation of the relevant parts of Step 5A of Appendix 5 is as follows:

- (a) calculate the “Median Notional Wholesale Meter” by doubling the median value of metered consumption for the Notional Whole Meter during the 4 peak SWIS Trading Intervals of Trading Month n-3;
- (b) divide the “Median Notional Wholesale Meter” by the number of non-interval or accumulation meters that existed at the end of Trading Month n-3 to find the “Average Non-Interval Meter”;
- (c) subtract the number of non-interval or accumulation meters disconnected during Trading Month n-3 from the number of non-interval or accumulation meters connected over the same period to determine the “Non-Interval Meter Growth” (see below for commentary);
- (d) multiply the “Non-Interval Meter Growth” (c) by the “Average Non-Interval Meter” (b) to arrive at the “New Notional Wholesale Meter”; and
- (e) set the “New Notional Wholesale Meter” as designated in Appendix 5.

Therefore, the non-interval meter growth for the “New Notional Wholesale Meter” only accounts for the net growth during a single Trading Month (n-3), and does not include the net growth of non-interval meters prior (starting from the “preceding Hot Season”). Relative to Step 5 of Appendix 5, which identifies all new interval meters that were not registered for all of the 12 peak SWIS Trading Intervals but were registered by the end of Trading Month n-3, the Rule Change Panel considers that the failure of Step 5A of Appendix 5 to consider non-interval meter growth over all the months since the “preceding Hot Season” up to Trading Month n-3 is a manifest error in the Market Rules.

A numerical example demonstrating the issue is detailed in Appendix 1.

As stated above, Appendix 5 is currently inconsistent with the originally proposed intent of RC_2008_32. Historically, Step 5A of Appendix 5 was developed by the IMO on the recommendations of the IRCR Working Group. The IRCR Working Group stated –

“that new non-interval meters entering the Notional Wholesale Meter were not being treated in the same way as new interval meters for the purposes of IRCR and that this should be corrected. Accordingly it was decided that a rule change proposal be drafted

² See Rule Change: RC_2008_32 on the Economic Regulation Authority Western Australia website for details: https://www.erawa.com.au/rule-change-panel/market-rule-changes/rule-change-rc_2008_32.

to address this inequality” (RC_2008_32 – Original Submission).

The RC_2008_32 Final Report stated that “... the addition of Step 5A in Appendix 5 [is] to bring about a more equitable treatment of non-interval or accumulation meters and interval meters in the calculation of a retailer’s IRCR.” This clearly demonstrates that the intention of RC_2008_32 was to provide better equity in the treatment of non-interval meters and interval meters, which would include assessing the growth in new meters in a consistent fashion.

Although RC_2008_32 intended for Step 5A of Appendix 5 to level the treatment of non-interval and interval meters, the methodology for calculating the growth of non-interval meters inadvertently did not achieve this outcome, which is sought to be corrected by this Rule Change Proposal. Thus conceptually, the methodology for calculation of the “Non-Interval Meter Growth” as defined in Step 5A of Appendix 5 departs from the principle used in Step 5 of Appendix 5, which determinatively demonstrates a manifest error.

Consultation

The issue with the “Non-Interval Meter Growth” in Step 5A of Appendix 5 was raised and discussed with the Market Advisory Committee (**MAC**) on 8 November 2017. The MAC was asked to provide further feedback on whether this issue is a manifest error, and eight of the nine responses received agreed that this part of Step 5A of Appendix 5 represents a manifest error. One response suggested that this issue should not be progressed as a manifest error due to the lack of information and time available to assess the impact and perform a cost benefit analysis.

At the MAC meeting on 15 February 2018, the MAC supported progressing this Rule Change Proposal with no suggested amendments, via the fast track process.

The Rule Change Panel considers that Step 5A of Appendix 5 contains a manifest error given:

- the original intent of Step 5A of Appendix 5 in RC_2008_32;
- the conceptual difference of assessing the growth of non-interval meters for Step 5A of Appendix 5 relative to how Step 5 of Appendix 5 operates for new interval meters; and
- that the majority of the MAC respondents agreed that this issue is a manifest error.

Proposed Solution

This Rule Change Proposal seeks to change the calculation of Non-Interval Meter Growth in Step 5A of Appendix 5. The proposal is to calculate the growth of non-interval meters by subtracting the total number of non-interval meters disconnected over the period from the end of the preceding Hot Season up to the end of Trading Month n-3 from the total number of non-interval meters connected during the same time period. No other sections of the Market Rules are proposed to be amended.

Explain the reason for the degree of urgency:

The Rule Change Panel considers that this Rule Change Proposal should be progressed under the Fast Track Rule Change Process as it seeks to correct a manifest error (satisfying the condition in clause 2.5.9(b) of the Market Rules).

Also, the proposed Amending Rules should commence as soon as practicable to give effect to the original intent of Step 5A of Appendix 5, which will ensure that growth in interval and non-interval meters are treated fairly, and translates into more equitable IRCR calculations.

After consultation with AEMO, the current IRCR calculation in the Market Rules results in an approximate cross-subsidy to Synergy ranging between 3MW/month and 10MW/month (figures rounded) based on 2016-17 Capacity Year figures, since Synergy is the only entity

with non-interval meter customers. This Rule Change Proposal will reduce the cross-subsidy that Synergy receives from other Market Participants, and will cause IRCRs to be calculated in a consistent and fair manner for the entire market.

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)

NOTE – Appendix 5 will be more extensively modified in RC_2017_06 (Reduction of the prudential exposure in the Reserve Capacity Mechanism), and the changes proposed to Appendix 5 in this Rule Change Proposal do not overlap with those in RC_2017_06.

Appendix 5: Individual Reserve Capacity Requirements

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STEP 5A: When determining the Individual Reserve Capacity Requirements for Trading Month n.

Find the MW figure formed by doubling the median value of the metered consumption for the Notional Wholesale Meter v*, during the 4 peak SWIS Trading Intervals of Trading Month n-3 (“Median Notional Wholesale Meter”).

Divide the Median Notional Wholesale Meter by the number of non-interval or accumulation meters that existed at the end of Trading Month n-3 (“Average Non-Interval Meter”).

Subtract the number of non-interval or accumulation meters disconnected ~~between the end of the preceding Hot Season and the end of~~during Trading Month n-3 from the number of non-interval or accumulation meters connected ~~between the end of the preceding Hot Season and the end of~~during Trading Month n-3 (“Non-Interval Meter Growth”).

...

Describe how the proposed rule change would allow the Market Rules to better address the Wholesale Market Objectives:

The Rule Change Panel considers that the proposed amendments will better achieve Wholesale Market Objective 1.2.1(b) – *‘to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;’* by ensuring the IRCR liability calculation is more equitably calculated as non-interval meter growth and interval meter growth will be accounted for more consistently and equitably.

Provide any identifiable costs and benefits of the change:

Based on consultation with AEMO, Synergy received a cross-subsidy ranging from about 3MW/month to 10MW/month (figures rounded) across the 2016-17 Capacity Year. Removal of this subsidy will benefit the market more generally as it will allow the IRCRs to be

calculated more equitably.

AEMO has estimated the cost of implementing its component of the rule change at \$105,000, with a 3 month delivery time. AEMO also recommends that a commencement date of 1 October 2018 is determined, as this will reduce risks/costs related to data migration and overall project delivery (principally linked to the recent revision to Reserve Capacity Mechanism systems and 1 October being the start of the new Capacity Year). AEMO has advised that it will continue to engage with the Rule Change Panel to manage interactions between the rule change process and its implementation plan.

Appendix A. Numerical Illustration of the Issue with Step 5A of Appendix 5

The table below illustrates the issue with Step 5A of Appendix 5 numerically (figures are for illustrative purposes only and do not represent actual non-interval meter growth):

Period	Preceding Hot Season	Apr	May	Jun	Jul n-3= Apr	Aug n-3= May	Sep n-3= Jun	Oct n-3= Jul	Nov n-3= Aug	Dec n-3= Sep	Jan n-3= Oct	Feb n-3= Nov	Mar n-3= Dec	Apr n-3= Jan
Number of meters at end of period or Trading Month	10,000	10,100	10,200	10,300	10,400	10,500	10,600	10,700	10,800	10,900	11,000	11,100	11,200	11,300
Number of meters at end of Month n-3		n.a.	n.a.	n.a.	10,100	10,200	10,300	10,400	10,500	10,600	10,700	10,800	10,900	11,000
Net non-interval meter growth in Trading Month n-3 (as used in Step 5A of Appendix 5)		n.a.	n.a.	n.a.	100	100	100	100	100	100	100	100	100	100
Growth in non-interval meters between n-3 and the "preceding Hot Season"		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	400	500	600	700	800	900	1,000
<i>Difference in non-interval meter growth (actual vs calculated in Step 5A)</i>		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	300	400	500	600	700	800	900

For the first month of a Capacity Year, October, the New Notional Wholesale Meter is calculated based on the relevant information from Trading Month n-3 (i.e. the preceding July). In this example, July has 10,400 non-interval meters registered by the end of the month which demonstrates a total growth of 400 non-interval meters from the preceding Hot Season. The growth of non-interval meters in Step 5A of Appendix 5 currently references the change *during Trading Month n-3 only* (i.e. only 100). Thus the actual growth in non-interval meters becomes understated as the year progresses, as the New Notional Wholesale Meter does not include non-interval meter growth of all relevant prior months.