



Government of Western Australia
Department of Mines, Industry Regulation and Safety
Energy Policy WA

Final Rule Change Report: Capacity Credit Allocation Methodology for Intermittent (RC_2018_03)

Standard Rule Change Process

15 August 2023

Working together for a **brighter** energy future.

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Capacity Credit Allocation Methodology for Intermittent
(RC_2018_03)*

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1. The Rule Change Proposal, Process and Timeline

On 1 March 2018, Collgar Wind Farm (Collgar) submitted a Rule Change Proposal to the Rule Change Panel titled “Capacity Credit Allocation Methodology for Intermittent Generators” (RC_2018_03).

This Rule Change Proposal sought to remove the concept of Load for Scheduled Generation (LSG) from the Wholesale Electricity Market (WEM) Rules and replace it with intervals selected from the actual system peak periods. The LSG is derived as the total metered load on the system less the metered output of all Non-Scheduled Generators.

Collgar suggested that this proposal will provide a more direct link between the requirement for capacity in peak periods and the ability of intermittent generators to provide capacity during periods with the highest demand on the system.

This proposal is being processed using the Standard Rule Change Process described in section 2.7 of the WEM Rules.

The Rule Change Notice and all other documents related to this Rule Change Proposal can be found on the Coordinator’s website at [Rule Change: RC_2018_03 \(www.wa.gov.au\)](http://www.wa.gov.au)

Extension notices were previously granted for this Rule Change Proposal on:

- 26 April 2018;
- 18 April 2019;
- 9 December 2019;
- 2 December 2020;
- 25 June 2021;
- 21 December 2021; and
- 31 December 2022.

The timeline for assessment of this Rule Change Proposal was initially extended until after the Economic Regulation Authority (ERA) had completed its three-yearly review of the Relevant Level Methodology (RLM) in 2018 and until after the Rule Change Panel had processed the ERA’s subsequent Rule Change Proposal titled “Method used for the assignment of Certified Reserve Capacity to Intermittent Generators” (RC_2019_03). Assessment of Rule Change Proposal RC_2018_03 was further extended during the Energy Transformation Strategy work.

Responsibility for administration of the WEM Rules was transferred from the Rule Change Panel to the Coordinator of Energy (Coordinator) on 1 July 2021 and the Coordinator granted further extensions to allow time for consideration of both RC_2018_03 and RC_2019_03.

The Coordinator has completed a Reserve Capacity Mechanism (RCM) Review,¹ which (among other things) addressed the matters considered by RC_2018_03 and RC_2019_03. Stages 1 and 2 of the RCM Review are complete and the Review Outcomes have been published. In Stage 3 of the RCM Review, WEM Amending Rules are being drafted to reflect the outcomes of the review and the Minister for Energy is expected to make the WEM Amending Rules to give effect to these outcomes in late 2023.

¹ Full information on the RCM Review is available at <https://www.wa.gov.au/government/document-collections/reserve-capacity-mechanism-review>, including the Scope of Work for the review, the *Reserve Capacity Mechanism Review Stage 1 Consultation Paper*, the *Reserve Capacity Mechanism Review: Information Paper (Stage 1) and Consultation Paper (Stage 2)*, all submissions to both consultation papers and the *Reserve Capacity Mechanism: Information Paper (Stage 2)*.

This proposal is being processed using the Standard Rule Change Process, described in section 2.7 of the WEM Rules.

The key dates for progressing this Rule Change Proposal are:



This Final Rule Change Report has been developed under clause 2.7.6 of the WEM Rules on the basis that the reader has read all of the related documents, including the Rule Change Proposal and the first period submissions.

The Rule Change Notice and all other documents related to this Rule Change Proposal can be found on the Coordinator's website at [Rule Change: RC_2018_03 \(www.wa.gov.au\)](http://www.wa.gov.au).

2. The Coordinator's Decision

The Coordinator's final decision is to reject the Rule Change Proposal.

2.1 Reasons for the Coordinator's Decision

The Coordinator has made its final decision on the basis that the issues raised in this Rule Change Proposal were addressed by the RCM Review.

Collgar's Rule Change Proposal proposed to amend the methodology for allocating Capacity Credits to Intermittent Generators by removing the LSG Trading Intervals and replacing them with the system peak Trading Intervals. Collgar indicated that his will provide a more direct link between the requirement for capacity to meet system peak demand and the ability of capacity providers to make capacity available during the peak demand periods.

Collgar indicated that a more significant reform of the RCM may be required and that it would support a coordinated reform process.

The Coordinator, in consultation with the Market Advisory Committee (MAC), has conducted the RCM Review under clause 2.2D.1 of the WEM Rules.² The RCM Review has been conducted in three stages. Stages 1 and 2 of the RCM Review are complete and addressed the issues raised in the Rule Change Proposal regarding the allocation of Certified Reserve Capacity (CRC) to Intermittent Generators. The Coordinator:

- consulted on the appropriate method to allocate CRC to Intermittent Generators in the *Reserve Capacity Mechanism Review – Stage 1 Consultation Paper*,³
- confirmed the Review Outcomes from Stage 1 of the Review in the *Reserve Capacity Mechanism Review: Consultation Paper (Stage 2) and Information Paper (Stage 1)*,⁴ and
- made further changes to the reserve capacity certification arrangements in Stage 2 of the review, as indicated in the *Reserve Capacity Mechanism Review: Information Paper (Stage 2)*.⁵

Review Outcome 11 in the *Reserve Capacity Mechanism Review: Information Paper (Stage 1)* deal with the allocation of CRC to Intermittent Generators and address the matters raised in RC_2018_03. The Minister for Energy is expected to make WEM Amending Rules to give effect to the outcomes of the RCM Review in late 2023.

The Coordinator considers that:

- the RCM Review addressed the issues raised in RC_2018_03, and that the Review took account of the Wholesale Market Objectives; and

² The MAC established the RCM Review Working Group (RCMRWG) to support the RCM Review. Further information on the RCMRWG is available at <https://www.wa.gov.au/government/document-collections/reserve-capacity-mechanism-review>, including the Terms of Reference for the RCMRWG, membership of the RCMRWG, and the meeting papers and minutes for all RCMRWG meetings.

³ <https://www.wa.gov.au/system/files/2022-08/EPWA%20-%20Reserve%20Capacity%20Mechanism%20review%20-%20consultation%20paper%201.pdf>.

⁴ https://www.wa.gov.au/system/files/2023-05/epwa_reserve_capacity_mechanism_review_information_and_consultation_paper.pdf.

⁵ https://www.wa.gov.au/system/files/2023-08/reserve_capacity_mechanism_review_information_paper_stage_2.pdf.

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- the Relevant Level Methodology (RLM) will be amended as a result of the RCM Review and it would be impractical to make further changes to the RLM at this time, as making such changes would come at a cost and will have no benefit.

The detailed analysis regarding the Coordinator's decision is provided in section 6 of this report.

3. Proposed Amendments

3.1 The Rule Change Proposal

This section provides a summary of Rule Change Proposal RC_2018_03. The full Rule Change Proposal can be found on the Coordinator's website.

On 1 March 2018, Collgar submitted a Rule Change Proposal to the Rule Change Panel titled "Capacity Credit Allocation Methodology for Intermittent Generators" (RC_2018_03).

Collgar indicated that it considers that the RLM is flawed as the approach appears arbitrary and overly conservative in allocating Capacity Credits to intermittent generators.

Collgar considered that LSG does not provide a direct link between the requirement for capacity to meet system peak demand and the ability of capacity providers to make capacity available during the peak demand periods.

Collgar proposed to remove the concept of LSG from the WEM Rules and to replace it with intervals selected from the actual system peak periods. Collgar considered that this will provide a more direct link between the requirement for capacity in peak demand periods and the ability of intermittent generators to provide capacity during the periods with the highest demand on the system.

Collgar also expressed the view that further and more significant reform of the mechanism for allocating Capacity Credits may be required and that it would support a coordinated review.

3.2 The Rule Change Panel's Initial Assessment of the Proposal

The Rule Change Panel decided to progress this Rule Change Proposal on the basis that due consideration should be given to whether the proposal would allow the Market Rules to better address the Wholesale Market Objectives.

The WEM Rules require the ERA to undertake three-yearly reviews of the RLM. At the time that Collgar submitted RC_2018_03, the ERA's next review was due for completion by 1 April 2019 and the ERA had advised that it intended to commence its review in May 2018.

The ERA's review of the RLM was expected to include an assessment of the use of LSG and to potentially also result in more material changes to the RLM than those proposed by Collgar. The Rule Change Panel considered that it would be inefficient and potentially counter-productive to conduct an overlapping review of the RLM while the ERA's review was in progress.

Therefore, the Rule Change Panel decided to delay its assessment of RC_2018_03 until after the ERA had completed its review of the RLM.

On 1 July 2021, responsibility for the administration and rule-making functions for the WEM Rules was transferred from the Rule Change Panel to the Coordinator of Energy. As a result, the Coordinator became responsible for progressing this Rule Change Proposal.

4. Consultation

Section 4 of this Final Rule Change Report provides a summary of all consultation conducted with respect to RC_2018_03, including:

- consultation that has been conducted on the Rule Change Proposal with the MAC and the Coordinator's response to the views of the MAC; and
- submissions made in the first and second submission periods, and the Coordinator's response to the issues raised in those submissions.

Although a summary of these consultations is presented below, the Coordinator has considered and taken into account each matter raised in making a decision on RC_2018_03.

4.1 Pre-Rule Change Proposal

Collgar did not make use of the informal Pre-Rule Change Process to seek advice on the development of its Rule Change Proposal.

4.2 The Market Advisory Committee

A summary of the consultation conducted with the MAC regarding this Rule Change Proposal prior to publication of the Draft Rule Change Report can be found in section 5.2 of the Draft Rule Change Report.

The MAC has not provided advice to the Coordinator since the publication of the Draft Rule Change Report regarding RC_2018_03, or the evolution or development of the WEM or the WEM Rules that is relevant to the issues addressed in RC_2018_03.

4.3 The Coordinator's Response to the Market Advisory Committee

Section 5.3 and section 6 of the Draft Rule Change Report provides the Coordinator's response to the MAC's advice that was provided prior to publication of the Draft Rule Change Report regarding Rule Change Proposal RC_2018_03.

The MAC did not provide specific advice to the Coordinator regarding Rule Change Proposal RC_2018_03 subsequent to publication of the Draft Rule Change Report. However, the MAC has provided advice relevant to the Rule Change Proposal on a number of occasions during the Coordinator's RCM Review.

4.4 Submissions Received during the First Submission Period

The first submission period for this Rule Change Proposal was between 7 March 2018 and 20 April 2018. The Rule Change Panel received submissions from:

- AEMO;
- Community Electricity;
- Mr Shane Cremin;
- Perth Energy;
- the Public Utilities Office (PUO) (now Energy Policy WA);
- Mr Noel Schubert; and
- Synergy.

A summary of these submissions is provided in section 5.4 of the Draft Rule Change Report.

4.5 The Coordinator's Response to Submissions Received during the First Submission Period

The Coordinator's assessment of the issues raised in the first period submissions is presented in section 6 of the Draft Rule Change Report.

4.6 Submissions Received during the Second Submission Period

The second submission period for this Rule Change Proposal was between 30 June 2023 and 28 July 2023. The Coordinator received one submission from Perth Energy.

Perth Energy supported the Coordinator's draft decision to reject the Rule Change Proposal.

A copy of Perth Energy's submission is available on the Coordinator's website.

4.7 Advice on the WEM Technical Standards

The Coordinator considered that the RC_2019_03 would not directly or indirectly affect the WEM Technical Standards and therefore did not seek advice from AEMO or a Network Operator.

4.8 Public Forums and Workshops

The Coordinator did not hold a public forum or workshop for this Rule Change Proposal.

5. The Coordinator's Draft Decision

The Coordinator's draft analysis of the Rule Change Proposal and its draft assessment of the proposal against clauses 2.4.2 and 2.4.3 of the WEM Rules is presented in section 6 of the Draft Rule Change Report, which is available on the Coordinator's website.

The Coordinator's draft decision was to reject the Rule Change Proposal. The reasons for the Coordinator's draft decision are set out in section 2.1 of the Draft Rule Change Report.

6. The Coordinator's Final Assessment

In preparing its Final Rule Change Report, the Coordinator must assess the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3.

Clause 2.4.2 states:

The Coordinator must not make Amending Rules unless it is satisfied that the WEM Rules, as proposed to be amended or replaced, are consistent with the Wholesale Market Objectives.

Clause 2.4.3 sets out the matters that the Coordinator must have regard to in deciding whether to make Amending Rules, including:

- (a) any applicable statement of policy principles given to the Coordinator under clause 2.5.2;
- (aA) any advice provided by the MAC regarding the evolution or the development of the WEM or these WEM Rules;
- (b) the practicality and cost of implementing the Rule Change Proposal;
- (c) the views expressed in any submissions on the Rule Change Proposal;
- (d) any advice by the MAC where the MAC met to consider the Rule Change Proposal;
- (dA) whether the advice from the MAC provided under clause 2.4.3(d) reflects a consensus view or a majority view, and, if the latter, any dissenting views included in or accompanying the advice and how these views have been taken into account by the Coordinator;
- (e) any technical studies that the Coordinator considers are necessary to assist in assessing the Rule Change Proposal; and
- (f) any advice or information provided by AEMO or a Network Operator under clause 2.4.3C.

When making its draft decision, the Coordinator has had regard to each of the matters identified in clauses 2.4.2 and 2.4.3 as follows:

- the Coordinator's overall assessment of the Rule Change Proposal is presented in section 6.1;
- the Coordinator's assessment of the Rule Change Proposal against the Wholesale Market Objectives can be found in section 6.3;
- the Minister has not provided a statement of policy principles to the Coordinator in respect of this Rule Change Proposal;
- the Coordinator's assessment of the practicality and cost of implementing the Rule Change Proposal can be found in section 6.7;
- a summary of the views expressed by the MAC is in section 4.2 of this Final Rule Change Report and section 5.2 of the Draft Rule Change Report;
- the Coordinator's responses to the views of the MAC are provided in sections 4.3 and 6.1 of this Final Rule Change Report; and in sections 5.3 and 6.1 of the Draft Rule Change Report;
- a summary of the first period submissions is provided in section 4.4 of this Final Rule Change Report and section 5.4 of the Draft Rule Change Report;
- the Coordinator's responses to the first period submissions are provided in sections 4.5 and 6.1 of this Final Rule Change Report, and sections 5.5 and 6.1 of the Draft Rule Change Report;

- a summary of the second period submissions is provided in section 4.6 this Final Rule Change Report;
- the Coordinator does not consider that a technical study in respect of this Rule Change Proposal is required and therefore has not commissioned one;
- the Coordinator does not consider that the Amending Rules will directly or indirectly affect a WEM Technical Standard and therefore did not seek advice from AEMO or a Western Power on the WEM Technical Standards.

6.1 Assessment of the Proposed Changes

Collgar proposed to remove the concept of LSG in determining the Relevant Level and to replace it with Trading Intervals selected from the actual system peak periods. Collgar noted that further and more significant reforms of the RCM mechanism may be required and indicated that it would support a coordinated review process.

AEMO, Community Electricity and Perth Energy did not support this Rule Change Proposal and proposed deferring any decision until after the ERA had completed its 2018 RLM Review.

AEMO considered that Collgar's proposal is premised on a historical assessment of reliability risk. The use of LSG accounts for the need for dispatchable firm capacity to ensure that reliability is maintained when capacity availability is reduced. By changing the RLM from periods of highest LSG to periods of highest demand, the proposal would remove the consideration of reduced capacity availability and likely overvalue the contribution of Intermittent Generators to whole-of-system reliability. This would have the effect of undervaluing dispatchable capacity.

Synergy did not support this Rule Change Proposal and considered that the existing RLM supports the main objectives of the RCM and should not be changed. Synergy argued that Collgar's proposal does not take into account all of the commercial implications of the RCM and does not address important exemptions Intermittent Generators receive under the RCM.

The PUO and Mr Schubert supported the Rule Change Proposal because it provided improved alignment of capacity certification for Intermittent Generators with their likely generation output during peak demand periods.

Mr Cremin supported the proposed changes to the extent that this proposal is simple and cost effective but indicated that it should be balanced against the likely timeframes expected for the ERA to complete its RLM Review.

The ERA completed its 2018 RLM Review on 31 March 2019 with the publication of its final report.⁶ The ERA's report found that the current RLM is flawed and recommended changes to the RLM. The ERA subsequently submitted Rule Change Proposal RC_2019_03, on 30 September 2019, with proposed changes to the RLM that reflected the outcomes of its review.

The Coordinator agrees with the ERA's findings that the current RLM is flawed, but also recognised that there were broader concerns with the RCM than just the issues raised in either RC_2018_03 or RC_2019_03 and, as result, commenced the RCM Review in November 2021.

The Coordinator has completed Stages 1 and 2 of the RCM Review, which have addressed the issues raised by Collgar in the Rule Change Proposal and in the first period submissions.

⁶ All documents relating to the ERA's review, including the final report, are available on the ERA's website at <https://www.erawa.com.au/electricity/wholesale-electricity-market/methodology-reviews/review-of-methodused-to-assign-capacity-to-intermittent-generators-2018>.

6.2 Additional Amendments to the Proposed Amending Rules

The Coordinator's final decision is to reject the Rule Change Proposal and therefore did not make any changes to the proposed Amending Rules following the first submission period.

6.3 Wholesale Market Objectives

The Coordinator considers that the RCM Review has addressed the issues in raised RC_2018_03, that the Review Outcomes of the RCM Review took account of the Wholesale Market Objectives and that there would be no benefit to making further changes to the RLM.

6.4 Protected Provisions

The Coordinator's final decision is to reject the Rule Change Proposal, so this proposal will not impact on any Protected Provisions.

6.5 Civil Penalty Provisions

The Coordinator's final decision is to reject the Rule Change Proposal, so this proposal will not impact on any Civil Penalty Provisions.

6.6 Reviewable Decisions

The Coordinator's final decision is to reject the Rule Change Proposal, so this proposal will not impact on any Reviewable Decisions.

6.7 Cost and Practicality of Implementation

AEMO indicated that it would need to make moderate changes to its Relevant Level Calculation Tool to implement RC_2018_03. The Relevant Level Calculation Tool was developed to automate the calculation of the Relevant Level in accordance with Appendix 9 of the WEM Rules. AEMO estimated the cost of making these changes at \$160,000.

Community Electricity and Synergy did not provide views about any potential impact of the Rule Change Proposal on costs for their organisations, and Perth Energy stated that it would not be impacted by the Rule Change Proposal from a cost perspective.

The PUO did not consider that the Rule Change Proposal will have any material implications for the electricity sector reform initiatives, including implementation of a constrained network access model for Western Power's network and potential improvements to the reserve capacity pricing arrangements.

AEMO indicated that it would take approximately 9 weeks from the date of publication of the Final Rule Change Report to implement the proposed Amending Rules.

The Coordinator has made a final decision to reject RC_2018_03 because the issues raised in this Rule Change Proposal were addressed by Stages 1 and 2 of the RCM Review.

The Coordinator considers that the RCM Review addresses the issues in RC_2018_03 and that the RCM Review took account of the Wholesale Market Objectives.

The RLM will be amended as a result of the RCM Review and it would be impractical to make further changes to the RLM at this time because making further changes would come at a cost and will have no benefit.

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