



Credit Limit Procedures - Reassessing MCL in Extreme Market Conditions

Final Report – Standard consultation
for the National Electricity Market

Published: 12 May 2023

aemo.com.au

New South Wales | Queensland | South Australia | Victoria | Australian Capital Territory | Tasmania | Western Australia
Australian Energy Market Operator Ltd ABN 94 072 010 327

© 2023 Australian Energy Market Operator Limited. The material in this publication may be used in accordance with the [copyright permissions on AEMO's website](#).

Executive summary

The publication of this final report concludes the standard consultation procedure conducted by AEMO to consider proposed amendments to the Credit Limit Procedures (**Procedures** or **CLP**), to add a process to reassess market participant prudential settings during extreme market conditions (the **proposal**) under the National Electricity Rules (**NER**).

AEMO thanks all stakeholders for their feedback on the proposal, which was undertaken as required by NER **3.3.8(g)**, following the procedure in NER 8.9.2.

The original proposal

AEMO's proposal in the consultation paper was to amend the Procedures to assist in re-establishing the prudential standard for the National Electricity Market (**NEM**). The amendments would allow AEMO to reassess a market participant's maximum credit limit (**MCL**), which sets its minimum level of credit support, to better align with actual accrued liabilities. The key amendments of the proposal are:

- AEMO may reassess a market participant's MCL when its average current accrued liabilities over the prior 21 days exceeds the amount of credit support held by AEMO for the market participant.
- In these circumstances, the MCL can be increased in line with the average current accrued liabilities.
- A market participant can ask AEMO to review their revised MCL if their current accrued liabilities are on a downward trend and below their outstandings limit.

The conditions for MCL reassessment will not be triggered for any short periods of high prices or participant liabilities, thus the proposed amendments will not remove the ability for market participants to provide security deposits to manage changes in their prudential position on a short term basis.

The amendments will address a gap in the current Procedures, which allow AEMO to revise credit support requirements for load and reallocation changes, but not for significant market price changes. This gap was highlighted during a sustained period of very high NEM prices across the middle of 2022, resulting in the probability of a shortfall following a market participant default exceeding the prudential standard of 2%.

Stakeholder feedback

There was one submission to the consultation paper from Zen Energy, which supported a backwards-looking trigger using average accrued liabilities over 21 days, but raised some concerns, including:

- The cost to market participants of having to source additional credit support (bank guarantees).
- The time needed to put additional credit support in place, suggesting that a longer notice period or lead time should be provided.

AEMO also received a number of questions from stakeholders at an information session held in December 2022. Most of these related to the utility and practicality of bank guarantees as a

form of credit support. The requirements for acceptable credit support are prescribed in the NER and are beyond the scope of this consultation or the Procedures themselves.

In response to stakeholder feedback, in its draft report AEMO noted that under the proposal:

- MCL would only be reassessed under extreme market conditions, and only for market participants who do not take proactive steps to manage their prudential obligations. Having considered alternative options, as outlined in the consultation paper, AEMO considers this is an efficient way to meet the prudential standard while ensuring that credit support requirements (and hence market participant costs) are not increased under normal market conditions.
- Revising the MCL under extreme market conditions would follow the same principles in relation to the review process and timing for the provision of credit support as an MCL revision for any other reason under the existing framework. This is necessary because the elevated prudential risk is immediate and ongoing when average current accrued liabilities over an extended period have already exceeded the amount of credit support.

After considering the feedback received to the consultation paper, AEMO in its draft report, proposed to implement all elements of the proposal as originally set out in the consultation paper.

AEMO received no submissions in response to the draft report and has not identified any further issues. Accordingly AEMO has made no further changes to the amended version of the Procedures published with the draft report.

AEMO's final determination on the proposal is to amend the **Credit Limit Procedures** in the form published with this final report, with an effective date of **12 May 2023**.

Contents

Executive summary	3
1. Stakeholder consultation process	6
2. Background	7
2.1. Context for this consultation	7
2.2. NER requirements	7
2.3. The national electricity objective	8
3. Discussion of material issues	9
3.1. Summary of issues and submissions	9
3.2. AEMO's assessment	9
3.3. AEMO's conclusion	10
4. Final determination on proposal	11
Appendix A. Glossary	12

Tables

Table 1 Consultation process and timeline.....	6
------------------------------------------------	---

1. Stakeholder consultation process

As required by National Electricity Rules (**NER**) 3.3.8(g), AEMO has consulted on proposed amendments to the Credit Limit Procedures (Procedures or CLP) in accordance with the standard rules consultation procedure in NER 8.9.2 (the **proposal**).

Note that this document uses terms defined in the NER, which are intended to have the same meanings. There is a glossary of additional terms and abbreviations in Appendix A.

AEMO's process and timeline for this consultation are outlined below.

Table 1 Consultation process and timeline

Consultation steps	Dates
Initial stakeholder presentation and opportunity for feedback	11 October 2022
Consultation paper published	18 November 2022
Follow-up stakeholder presentation and opportunity for feedback	12 December 2022
Submissions closed on consultation paper	27 January 2023
Draft report published	10 March 2023
Submissions CLOSED on draft report	14 April 2023
Final report published	12 May 2023

AEMO's consultation webpage for the proposal is at: <https://aemo.com.au/consultations/current-and-closed-consultations/credit-limit-procedures-reassessing-mcl-in-extreme-market-conditions>

It contains all previous published papers and reports, written submissions, and other consultation documents or reference material.

In response to its November 2022 consultation paper on the proposal, AEMO received one late submission, from ZEN Energy (ZEN), which AEMO considered in preparing the draft report.

AEMO also held two information sessions, one before and one after the consultation paper was published, on 11 October 2022¹ and 12 December 2022. A number of questions were raised at the second session, to which AEMO also responded in the draft report.

AEMO's draft report on the proposal was published in March 2023, together with the draft amendments to the Procedures. AEMO received no submissions in response to its draft report.

AEMO thanks all stakeholders for their feedback on the proposal throughout this consultation.

¹ At a meeting of the AEMO-convened Settlement Managers Working Group. Presentation available at: <https://aemo.com.au/en/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/settlement-managers-working-group>

2. Background

2.1. Context for this consultation

The Procedures establish the methodology by which AEMO determines the credit support requirements for each market participant – represented by the maximum credit limit (MCL) - so that the 2% prudential standard is met for the NEM. The prudential standard represents the probability of a market participant's credit support being insufficient to cover its outstanding liabilities by the time of suspension, following a payment default.

The Procedures use forecast regional market prices and associated volatilities in the calculations to determine market participant MCL. The methodology for determining forecast regional prices and volatilities relies on a complex statistical calculation based on past NEM data, which aims to smooth changes in MCLs resulting from one-off changes to price and volatility, while responding to longer-term trend changes. The methodology cannot accurately incorporate sustained very high market prices under extreme market conditions, into the forecasts, and under certain circumstance can result in forecast prices and volatilities being significantly below actual market conditions. The MCL methodology is described in more detail in section 3.

Market conditions in the NEM from May 2022 onwards resulted in a mismatch of market participant prudential settings and market participant accrued liabilities, as actual spot prices were significantly higher (for an extended period of time) than the forecast regional prices (and volatilities) used in the MCL calculations for the same period.

This meant the MCL for a significant number of market participants (and hence their minimum credit support requirement) was below their outstandings for extended periods. In these cases there was a 100% probability of the market participant's outstandings exceeding its MCL if it failed to rectify a breach of its OSL.

This highlighted a gap in the Procedures, which allow AEMO to reassess MCLs for any load and reallocation changes, but not for significant price changes, increasing the probability of a shortfall beyond the prudential standard.

The proposed changes aim to reduce the risk of loss given default to a level commensurate with the prudential standard going forward.

2.2. NER requirements

Under NER 3.3.8, AEMO is responsible for developing, publishing and maintaining the Procedures. The Procedures may be made or amended in accordance with the Rules consultation procedures set out in NER 8.9.

The Procedures establish the methodology by which the AEMO determines the prudential settings for each market participant so that the 2% prudential standard is met for the NEM. The prudential settings for a market participant are its maximum credit limit (MCL), outstandings limit (OSL) and prudential margin (PM). The MCL is the sum of the OSL and the PM (under NER 3.3.8(k)), and each market participant is required to procure credit support (typically bank guarantees) equal to or greater than its MCL. AEMO may draw down on the credit support and apply it against the market participant's liabilities in the event of a default.

The prudential standard of 2% is set in NER 3.3.4A, and refers to the 'prudential probability of exceedance'. That is, the probability of a market participant's MCL being exceeded by its outstandings within 7 days after a payment default (being the 'reaction period' within which the market participant is likely to be suspended).

NER 3.3.8(d) sets out the factors that AEMO must take into account when determining the prudential settings methodology, which are:

- Regional reference prices.
- Time of year.
- Volatility of load and regional reference price for a region.
- AEMO's estimate of a market participant's generation and load.
- The relationship between average load and peak load for a market participant.
- Prospective reallocations for the assessment period.
- Correlations between energy, reallocations and the regional reference price,
- Statistical distribution of any accrued amounts owing to AEMO.
- The time period for which the prudential settings are being calculated.
- Any other factors AEMO considers relevant having regard to the objective of the Procedures to meet the prudential standard for the NEM.

2.3. The national electricity objective

Within the specific requirements of the NER applicable to this proposal, AEMO will seek to make a determination that is consistent with the national electricity objective (NEO) and, where considering options, to select the one best aligned with the NEO.

The NEO is expressed in section 7 of the National Electricity Law as:

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.

3. Discussion of material issues

3.1. Summary of issues and submissions

Under the Procedures, AEMO can revise market participant credit support requirements for load and reallocation changes, but not for significant market price changes. The significance of this gap in the Procedures, and the resulting consequences, became apparent during a sustained period of very high NEM prices in 2022, resulting in the probability of a shortfall following a market participant default exceeding the prudential standard of 2%.

A detailed explanation of the issues and rationale for the proposal, together with alternative options considered, was provided in AEMO's consultation paper. The proposed amendments involve a backwards-looking trigger for MCL revision, where a market participant's average accrued liabilities over 21 days exceed its current MCL. This will allow AEMO to assess and revise a market participant's MCL where necessary to better align it with actual accrued liabilities during an extended period of extreme market conditions, with the aim of in re-establishing the prudential standard in the NEM.

AEMO received one late submission on the consultation paper. The submission supported the principle of a backwards-looking trigger mechanism using a 21-day averaging period, but raised some concerns, including:

- The cost to market participants of having to source additional credit support (bank guarantees).
- The time needed to put additional credit support in place, suggesting that a longer notice period or lead time should be provided.

AEMO also received a number of questions from stakeholders at an information session held in December 2022. Most of these related to the utility and practicality of bank guarantees as a form of credit support. The requirements for acceptable credit support are prescribed in the NER and are beyond the scope of this consultation or the Procedures themselves.

AEMO responded to these concerns and questions in its draft report, together with the draft amendments to the Procedures to implement the proposal.

AEMO did not receive any submissions in response to the draft report.

3.2. AEMO's assessment

In its draft report, AEMO's response to stakeholder feedback on the consultation paper noted that under the proposal:

- MCL would only be reassessed under extreme market conditions, and only for market participants who do not take proactive steps to manage their prudential obligations. Having considered alternative options, as outlined in the consultation paper, AEMO considered the proposal was an efficient way to meet the prudential standard in such conditions, while ensuring that credit support requirements (and hence market participant costs) are not increased under normal market conditions.
- Revising the MCL under extreme market conditions would follow the same principles in relation to the review process and timing for the provision of credit support as an MCL

revision for any other reason under the existing framework. This is necessary because the elevated prudential risk is immediate and ongoing when average current accrued liabilities over an extended period have already exceeded the amount of credit support.

Having received no further feedback and identified no further issues, AEMO remains of the view that the proposal is consistent with:

- The principles underpinning the NER prescribed 2% prudential standard.
- The principles for calculating prudential settings applicable to all market participants.

No more efficient, workable alternative options to preserve the prudential standard in extended extreme market conditions were identified either by AEMO or market participants.

3.3. AEMO's conclusion

AEMO considers that the proposed amendments for reassessing market participant MCL under extreme market conditions is fit for purpose and is consistent with all rules requirements. As such, AEMO will amend the Procedures in the form published with this final report, which is consistent with the original proposal and the draft report.

4. Final determination on proposal

Having considered all the matters raised in submissions and at consultation meetings, AEMO's final determination is to amend the **Credit Limit Procedures** in the form published with this final report, in accordance with **NER 3.3.8**.

The final amendments do not differ from the version published with the draft report. AEMO's determination amends the CLP to allow AEMO, during extreme market conditions, to review MCLs where necessary, so that the credit support held for market participants is in line with actual accrued liabilities will assist in keeping prudential risk within the rules prescribed 2% prudential standard. Once the MCL reassessment is triggered, all other aspects relating to credit support provision of the NER and the Procedures will apply.

Under the final proposal, market participant MCL reassessment will only occur under extreme market conditions, allowing for better prudential risk management outcomes while keeping MCL increases and costs to market participants as low as possible. AEMO considers this outcome is consistent with the NEO.

Effective date

The effective date of this determination is **12 May 2023**.

Appendix A. Glossary

Term or acronym	Meaning
AEMO	Australian Energy Market Operator
CLP	Credit Limit Procedures
MCL	Maximum credit limit
NEM	National electricity market
NEO	National electricity objective
NER	National Electricity Rules
OSL	Outstandings limit
PM	Prudential margin