

CREDIT LIMIT PROCEDURES - 5MS AND SEASON DEFINITION CHANGES

FINAL REPORT AND DETERMINATION

Published: **16 August 2019**





EXECUTIVE SUMMARY

The publication of this Final Report and Determination (Final Report) concludes the Rules consultation process conducted by the Australian Energy Market Operator (AEMO) to consider amendments to the Credit Limit Procedures (Procedures) under the National Electricity Rules (NER) for the implementation of Five-Minute Settlement (5MS).

On 12 April 2019, AEMO published the Notice of First Stage Consultation and the Issues Paper for the Procedures. The Issues Paper detailed key proposals involving:

- Changes to the Procedures to reflect the 5MS rule.
- Changes to the season definitions in the Procedures.

AEMO received one first stage submission from Origin Energy. On 20 June 2019, AEMO published the Notice of Second Stage Consultation and Draft Determination for the Procedures. AEMO received two stage two submissions from Origin Energy and Stanwell.

Considering the submissions, the requirements of the NER and the amending rules for 5MS, AEMO's final determination is to amend the Procedures in the form published with this Final Report with effect from 3 December 2019, reflecting the following outcomes:

- Amendments to the Procedures with respect to the 5MS rule:
 - Updating all in text references to half hourly load, price and reallocations to reference load, generation, price and reallocations per trading interval (TI¹).
 - Updating all references in formulas to half hourly load, generation, price and reallocations, typically denoted by the subscript "HH", to reference TI.
 - Removing all references to 48 periods per day.
- Amendments to season definitions:
 - Removing the month of April from the shoulder season.
 - Including the month of April in the winter season.

¹ As of 1 July 2021, trading interval (TI) will be defined as 5 minutes, according to the NER.



CONTENTS

EXECUTIVE SUMMARY	2
1. STAKEHOLDER CONSULTATION PROCESS	4
2. BACKGROUND	4
2.1. NER requirements	4
2.2. The Credit Limit Procedures	4
2.3. Context for this consultation	4
2.4. First stage consultation	5
2.5. Second stage consultation	5
3. SUMMARY OF MATERIAL ISSUES	5
4. DISCUSSION OF MATERIAL ISSUES	5
4.1. Changes consequent on the 5MS rule	5
4.2. Changes to season definitions	6
5. FINAL DETERMINATION	7
APPENDIX A. GLOSSARY	8



1. STAKEHOLDER CONSULTATION PROCESS

AEMO has consulted on the Credit Limit Procedures (Procedures) in accordance with clause 3.3.8 of the NER and the Rules consultation process in rule 8.9. AEMO's timeline for this consultation was as follows.

Deliverable	Date
Notice of first stage consultation and Issues Paper published	12 April 2019
First stage submissions closed	23 May 2019
Draft Report & Notice of second stage consultation published	20 June 2019
Submissions due on Draft Report	12 July 2019
Final Report published	16 August 2019

The publication of this Final Report marks the conclusion of this consultation. In addition to public consultation, AEMO consulted on the Procedures through various 5MS program engagement channels² including:

- Procedures Working Group (PWG)
- Settlements Focus Group (SFG)

Note that there is a glossary of terms used in this Final Report at **Appendix A**.

2. BACKGROUND

2.1. NER requirements

Under NER clause 3.3.8 (c), AEMO is responsible for developing and publishing the Procedures. The Procedures may be amended in accordance with the 'rules consultation procedures' set out in NER rule 8.9.

2.2. The Credit Limit Procedures

The New Prudential Standard and Framework was implemented in 2012 and sits under clause 3.3 of the NER. Its key features are outlined in the Procedures³, which has two main functions:

- To define the market's prudential risk appetite through the prudential standard.
- To determine the prudential settings for market participants with reference to the prudential standard. The prudential settings for a market participant comprise its maximum credit limit (MCL), outstandings limit (OSL) and prudential margin (PM). The MCL is the sum of the OSL and the PM. Market participants must provide AEMO with credit support for an amount greater than or equal to their MCL.

2.3. Context for this consultation

2.3.1. Five-Minute Settlement

In November 2017, the AEMC made a final rule that reduced the trading interval for financial settlement in the National Electricity Market (NEM) from 30 minutes to five minutes (5MS rule).⁴ The AEMC's determination considered that five-minute settlement would improve price signals for more efficient

² For more details on the forums and groups specific to the 5MS program: <http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement>

³ http://aemo.com.au/-/media/Files/PDF/Credit_Limit_Procedures_v2_Final_Determination_1_August.pdf

⁴ Final rule available at: <https://www.aemc.gov.au/rule-changes/five-minute-settlement>



generation and use of electricity, encourage efficient investment in capacity and demand response technologies, and improve bidding incentives.

Five-minute settlement will commence in the NEM on 1 July 2021. Settlement across the NEM will then be based on five-minute trading interval prices. 5MS will change many NEM processes, including energy and ancillary service bidding, online dispatch, intervention pricing, the calculation of trading amounts, the calculation of the cumulative price threshold, and periodic energy metering.

AEMO is required to update and publish a number of specified relevant procedures by 1 December 2019, to apply from the 5MS commencement date.⁵ The Procedures were identified as one of the publicly consulted documents that require amendment for 5MS implementation. They include references to half-hourly data as inputs to prudential calculations.

2.3.2. Season definitions

Clause 4.3.1 of the Procedures defines three distinct seasons for market participant prudential requirements; summer (December to March), winter (May to August) and shoulder, split into two parts (shoulder 1 - April and shoulder 2 - October to November). This feature of the Procedures, with the shoulder 1 season covering a short time period (April only) creates administrative complexities and timing issues for market participants.

2.4. First stage consultation

On 12 April 2019, AEMO issued a Notice of First Stage Consultation, and published an Issues Paper and the Draft Procedures. AEMO received one submission in response to the first stage consultation from Origin Energy.

2.5. Second stage consultation

On 20 June 2019, AEMO issued a Notice of Second Stage Consultation, and published a Draft Report and Determination (Draft Report) and the Draft Procedures. AEMO received two submission to the second stage consultation from Origin Energy and Stanwell.

3. SUMMARY OF MATERIAL ISSUES

The key material issues arising from the proposal are summarised in the following table:

No.	Issue	Raised by
1.	Changes consequent on the 5MS rule	AEMO
2.	Changes to season definitions	AEMO

Section 4 discusses each of these material issues, including a summary of the views expressed in submissions at each consultation stage, AEMO's draft and final assessment of the issues and AEMO's final determination on each of them.

4. DISCUSSION OF MATERIAL ISSUES

4.1. Changes consequent on the 5MS rule

4.1.1. Issue summary

The Procedures set out the methodology which determines the prudential settings for market participants. Under the current methodology, the prudential calculations are performed at a 30-minute resolution. The

⁵ NER clause 11.103.2



5MS rule updates the definition of a trading interval to five minutes, resulting in misalignment with the current methodology.

AEMO proposed updating the prudential calculations to five-minute resolution in line with 5MS, with the underlying methodology remaining unchanged to minimise implementation risks and costs.

4.1.2. First stage submissions summary

Origin Energy supported AEMO's proposed approach and did not propose any alternatives.

4.1.3. AEMO's draft determination

AEMO's draft determination was to maintain its proposed approach, to update the prudential calculations to five-minute resolution while maintaining the underlying methodology.

4.1.4. Second stage submissions summary

Origin Energy and Stanwell agreed with AEMO's proposed amendments and had no additional feedback. No other submissions were received.

4.1.5. AEMO's final determination

After considering all submissions, AEMO has determined that updating the prudential calculations to five-minute resolution while maintaining the underlying methodology is the most appropriate approach for updating the Procedure in line with the commencement of 5MS.

4.2. Changes to season definitions

4.2.1. Issue summary

The current Procedures define three distinct seasons for market participant prudential requirements; summer (December to March), winter (May to August) and shoulder, split into two parts (shoulder 1 - April and shoulder 2 - October to November). This feature of the Procedures, with the shoulder 1 season covering a short time period (April only) creates administrative complexities and timing and compliance issues for market participants.

AEMO proposed to update the Procedures to change the season definitions, removing April from the shoulder season and moving it to the winter season.

4.2.2. First stage submissions summary

Origin Energy supported AEMO's proposed approach and did not propose any alternatives.

4.2.3. AEMO's draft determination

AEMO noted that the changes will significantly reduce the administrative burden of seasonal MCL reviews, both on market participants and AEMO. In terms of costs, the proposed changes will result in minimal (if any) additional costs to market participants in the form of increased MCL levels due to the way average prices and volatilities are calculated for each season. AEMO's draft determination was therefore to maintain its proposed approach, as set out in the Issues Paper, to change the season definitions by moving the month of April from the shoulder season to the winter season.

4.2.4. Second stage submissions summary

Origin Energy and Stanwell agreed with AEMO's proposed amendments and had no additional feedback.



4.2.5. AEMO's Final Determination

After considering all submissions, AEMO has determined to amend the Procedures by moving the month of April from the shoulder season to the winter season.

5. FINAL DETERMINATION

Having considered the matters raised, AEMO's final determination is to amend the Procedures in the form of the Procedures document published with this Final Report, reflecting the following outcomes:

- Amendments to the Procedures with respect to the 5MS rule:
 - All in text references to half hourly load, price and reallocations updated to reference load, generation, price and reallocations per TI.
 - All references in formulas to half hourly load, generation, price and reallocations, typically denoted by the subscript "HH", updated to reference TI.
 - All references to 48 periods per day removed.
- Amendments to season definitions:
 - The month of April removed from the shoulder season.
 - The month of April included in the winter season.

The amendments will take effect on 3 December 2019.

**APPENDIX A. GLOSSARY**

Term or acronym	Meaning
5MS	Five minute settlement
5MS rule	National Electricity Amendment (Five Minute Settlement) Rule 2017 No. 15
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
IT	Information Technology
NEM	National Electricity Market
NER	National Electricity Rules
PCF	Program Consultative Forum
PWG	Procedures Working Group