CREDIT LIMIT PROCEDURES – MODELLING PARAMETER AND MNSP PRUDENTIAL REQUIREMENT CHANGES

DRAFT REPORT AND DETERMINATION

Published: **29 November 2017**

AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

NOTICE OF SECOND STAGE CONSULTATION – CREDIT LIMIT PROCEDURES – MODELLING PARAMETER AND MNSP PRUDENTIAL REQUIREMENT CHANGES

National Electricity Rules – Rule 8.9

Date of Notice: 29 November 2017

This notice informs all Registered Participants and interested parties (Consulted Persons) that AEMO is commencing the second stage of its consultation on proposed amendments to Credit Limit Procedures.

This consultation is being conducted under clause 3.3.8 of the National Electricity Rules (NER), in accordance with the Rules consultation requirements detailed in rule 8.9 of the NER.

Invitation to make Submissions

AEMO invites written submissions on this Draft Report and Determination (Draft Report).

Please identify any parts of your submission that you wish to remain confidential, and explain why. AEMO may still publish that information if it does not consider it to be confidential, but will consult with you before doing so.

Consulted Persons should note that material identified as confidential may be given less weight in the decision-making process than material that is published.

Closing Date and Time

Submissions in response to this Notice of Second Stage of Rules Consultation should be sent by email to prudentials@aemo.com.au, to reach AEMO by 5.00pm (Melbourne time) on 22 December 2017.

All submissions must be forwarded in electronic format (both pdf and Word). Please send any queries about this consultation to the same email address.

Submissions received after the closing date and time will not be valid, and AEMO is not obliged to consider them. Any late submissions should explain the reason for lateness and the detriment to you if AEMO does not consider your submission.

Publication

All submissions will be published on AEMO's website, other than confidential content.

EXECUTIVE SUMMARY

The publication of this Draft Report and Determination (Draft Report) commences the second stage of the Rules consultation process considering proposed amendments to Credit Limit Procedures (CLP) – Modelling Parameter and MNSP Prudential Requirement Changes.

This consultation encompasses two separate issues:

- Part A - Modelling parameter changes in the CLP – outlining proposed amendments to the CLP allowing market participant prudential requirements to better reflect short- to- medium-term market conditions and ensure the 2% prudential standard is met.
- Part B - Changes to Market Network Service Provider (MNSP) prudential requirements in the CLP - outlines the proposed amendments to clause 10.3 of the CLP relating to the use of reallocations in calculating MNSP prudential requirements.

Part A – Modelling parameter changes

AEMO received five written submissions in response to the first stage consultation from the Australian Energy Council, Origin Energy, Alinta Energy, EnergyAustralia and a joint submission from Red Energy and Lumo Energy. All five submissions commented on Part A of the proposed amendments only. The key issues arising from the submission were:

- Costs associated with increased Maximum Credit Limits (MCL).
- Barriers to entry for small entrants.
- Adequacy of modelling.
- Modelling of MCL increases.
- Forecast drop in prices.

To provide clarity on the proposed parameter amendments, AEMO provided additional information on the modelling undertaken for the proposal in this report (see section 4.3 and 4.4). Further modelling was also completed (15% parameter change, modelling for summer 2015 and forecast modelling of prices to 2020) to better demonstrate the effects of the proposed parameter changes.

After reviewing the submissions received, and the results of the additional modelling undertaken, AEMO considers that the 20% proposed parameter changes remain appropriate. They do not by themselves represent an increase to MCL levels (and hence increased costs to market participants), but rather make the CLP model more responsive to price and volatility changes. As is currently the case, any future season MCLs will be determined by forecast prices and volatilities, which will be based on a combination of forecast and actual data. MCLs will only increase if actual prices and volatilities are higher than forecast prices and volatilities.

While the proposed amendments may lead to increased prudential requirements for some market participants if prices and volatilities remain above historical levels, they are necessary to ensure that MCLs more accurately reflect market participant credit risk. This will help to meet the 2% prudential standard going forward, benefiting the market as a whole.

AEMO's draft decision is to make amendments to the CLP in relation to the modelling parameter changes in the form published with this Draft Report. In summary, the proposed amendments to the CLP are:

- Changing the weighting factor for average regional price ($W_{P,R}$) from 10% to 20%.
- Changing the weighting factor for volatility factors ($W_{VF,R}$) from 10% to 20%.
- Changing the capping factor (for price and volatility factors) from +/-10% to +/-20%.

Part B - MNSP prudential requirements

There were no submissions received in relation to the proposed Part B changes. AEMO's draft decision is to make amendments to the CLP in relation to MNSP prudential requirements in the form published with this Draft Report. In summary, the proposed amendments to the CLP are:

- To amend clause 10.3 of the CLP to allow MNSPs to use reallocations, to give MNSPs greater flexibility in meeting their prudential requirements.

CONTENTS

1. STAKEHOLDER CONSULTATION PROCESS

As required by clause 3.3.8 of the NER, AEMO is consulting on proposed amendments to the Credit Limit Procedures (CLP) in accordance with the Rules consultation procedures in rule 8.9 of the NER.

AEMO's indicative timeline for this consultation is outlined in Table 1. Future dates may be adjusted depending on the number and complexity of any issues raised in submissions.

Table 1 – Consultation timeline

Deliverable	Indicative date
Notice of first stage consultation and Issues Paper published	28 August 2017
First stage submissions closed	6 October 2017
Draft Report & Notice of second stage consultation published	29 November 2017
Submissions due on Draft Report	22 December 2017
Final Report published	29 January 2018

The publication of this Draft Report marks the commencement of the second stage of consultation.

2. BACKGROUND

2.1 NER requirements

Under NER clause 3.3.8, AEMO is responsible for developing and publishing the CLP, which may be amended or replaced from time to time. AEMO must comply with the 'Rules consultation procedures' set out in NER rule 8.9 when making or amending the CLP.

2.2 Context for this consultation

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 CLP[1], 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.

This consultation examines two separate issues relating to the CLP. The substantive topic, which most of this consultation has dealt with, is proposed modelling parameter changes in the CLP.

The second issue relates to changes to MNSP prudential requirements.

2.3 First stage consultation

AEMO issued a Notice of First Stage Consultation and Issues Paper on **28 August 2017**. The proposal was to amend the CLP by:

- Changing the weighting factor for average regional price ($W_{P,R}$) from 10% to 20%. This will give more weight to actual average regional prices than is currently the case.
- Changing the weighting factor for volatility factors ($W_{VF,R}$) from 10% to 20%. This will give more weight to actual volatility than is currently the case.
- Changing the capping factor (for price and volatility factors) from +/-10% to +/-20%. This will allow the weighting factor changes to take full effect in the model.
- Updating clause 10.3 to allow the use of reallocations in calculating MNSP prudential requirements.

Overview of the First Stage Consultation process:

- The Issues Paper set out details of the proposed amendments, and is available on the AEMO website: https://aemo.com.au/Stakeholder-Consultation/Consultations/CLP-Modelling-Parameter-and-MNSP-Prudential-Requirement-Changes
- AEMO received five written submissions as a result of the first stage of consultation.
- Submissions were received from Australian Energy Council, Origin Energy, Red Energy and Lumo Energy, Alinta Energy and EnergyAustralia.
- AEMO had discussions with Origin Energy about their submissions after the first stage closure.
- Copies of all written submissions have been published on AEMO's website at: https://aemo.com.au/Stakeholder-Consultation/Consultations/CLP-Modelling-Parameter-and-MNSP-Prudential-Requirement-Changes

[1] http://aemo.com.au/-/media/Files/PDF/Credit_Limit_Procedures_v2_Final_Determination_1_August.pdf

2.4 Proposed CLP amendments

AEMO proposes the following amendments to the CLP.

Part A – Modelling parameter changes

- Proposed change of the weighting factor for average regional price ($W_{P,R}$) from 10% to 20%.
- Proposed change of the weighting factor for volatility factors ($W_{VF,R}$) from 10% to 20%.
- Proposed change of the capping factor (for price and volatility factors) from +/-10% to +/-20%.

Part B - MNSP prudential requirements

- Proposed amendments to clause 10.3 of the CLP to allow MNSPs to use reallocations to meet their prudential requirements.

It is intended that the proposed changes for Part A and Part B be implemented in AEMO's systems and be effective for the 2018 Winter season (effective from 1 May 2018).

3. SUMMARY OF MATERIAL ISSUES

The key material issues arising from the proposal and raised by Consulted Persons are summarised in Table 2.

Table 2 – Summary of material issues

No.	Issue	Raised by
PART A – Modelling Parameter Changes		
1.	Cost of increased MCL	**Australian Energy Council, Origin Energy, Red Energy and Lumo Energy, Alinta Energy, EnergyAustralia**
2.	Barriers to entry for small entrants	**Australian Energy Council, Origin Energy, Alinta Energy**
3.	Adequacy of modelling	**Australian Energy Council, Origin Energy, EnergyAustralia**
4.	Modelling of MCL Increases	**Australian Energy Council, Origin Energy, Red Energy & Lumo Energy, Alinta Energy**
5.	Forecast drop in prices	**Australian Energy Council, Origin Energy, EnergyAustralia**
PART B – MNSP PRUDENTAIL CHANGES		
1.	No issues raised	

A detailed summary of issues raised by Consulted Persons in submissions, together with AEMO's response, is contained in **Appendix A**.

4. DISCUSSION OF MATERIAL ISSUES – PART A – MODELLING PARAMETER CHANGES

There were five key issues that were raised in multiple submissions that will be discussed in this section in detail. These are:

- Cost of increased MCL
- Barriers to entry for small entrants
- Adequacy of modelling
- Modelling MCL increases
- Forecast drop in prices

4.1 Costs associated with increased MCL

4.1.1 Issue summary

All five submissions raised a concern regarding the cost increases the proposed parameter changes would impose on market participants through increased borrowing costs resulting from higher MCLs, which would ultimately increase costs for electricity customers.

4.1.2 AEMO's assessment

While it is possible that the proposed changes will result in MCL increases for some market participants, these increases are not a direct result of the proposed changes. The proposed changes only increase the CLPs responsiveness to price and volatility changes. Thus any MCL increases would be due to increased prices and volatilities within the electricity market. If prices and volatilities return to levels that are in-line with long term trends, the proposed changes will not materially impact MCL levels.

The purpose of MCLs is to mitigate the credit risk that market participants with net load or liabilities (typically retailers) pose to the NEM, but not entirely eliminate it (thus a 2% prudential standard). The MCL provides a degree of certainty that payment will be made to creditors (typically generators) if a debtor does not meet its payment obligations. If a default on payment occurs, and the credit support held by AEMO for that debtor is insufficient to cover the default, the resultant shortfall is borne proportionally by market participants due to be paid by AEMO in that billing cycle.

The 2% prudential standard (i.e. 2% probability of loss given default (LGD)) accepts the risk that low-probability high-consequence events can occur and this could result in a shortfall. To date, a shortfall has never occurred, including under the handful of retailer of last resort (RoLR) events.

If prices and/or volatility remain higher than they have been historically (even if they do not reach the highs of 2016/2017), the increased responsiveness of the CLP to prices and volatilities could increase MCL levels for market participants and ultimately increase costs. AEMO is cognisant of the need to keep any cost increases to market participants to a minimum. However, it is imperative that MCLs are set at appropriate levels to meet the 2% prudential standard for two key reasons:

- Accurately reflecting the credit risk associated with trading in the NEM (i.e. through forecasts prices and volatilities that reflect actual market conditions), decreases the likelihood of a market participant failing without having sufficient credit support in place to mitigate losses and reduces the risk of a shortfall in the market.
- A critical element of the operation of the NEM, and the setting the spot market prices, is the level of confidence market participants have in the financial settlement of spot electricity transactions. A shortfall in the NEM would undermine this confidence in the market, and may lead to increased

costs as generators price in the perceived additional risks. This in turn would increase costs to end-use customers.

4.1.3 AEMO's conclusion

Based on the assessment above, AEMO believes that while the proposed parameter changes may increase MCLs for some market participants if high prices and volatilities continue, they will also ensure that MCLs more accurately reflect market participant credit risk, helping to meet the 2% prudential standard going forward.

4.2 Barriers to entry for small entrants

4.2.1 Issue summary

Multiple submissions argued that an increase in MCL levels will disproportionally affect smaller market participants who face higher borrowing costs, and will act as a barrier to entry for new participants, thus reducing competition in the NEM.

4.2.2 AEMO's assessment

AEMO acknowledges that any increase in MCL levels will have a proportionately greater impact on market participants who are unable to leverage an integrated energy portfolio, or to negotiate favourable credit terms with banks due to their size. However, there are three key reasons why AEMO believes that a market participants MCL should accurately reflect the credit risk associated with trading in the NEM:

- It reduces the likelihood of a market participant failing without sufficient credit support in place to mitigate losses. This is vital irrespective of the size of a market participant.
- It promotes economic efficiency by ensuring all parties (including small entrants) face price-signals that accurately convey to them the cost of all their actions. This also includes assisting market participants in the identification of changing economic conditions or circumstances that affect credit risk in the NEM.
- It requires small market participants to obtain appropriate credit support. Small market participants have indicated to AEMO that it is important to them to have MCLs that accurately reflect their likely obligations. Such participants use AEMO's MCL letter to secure credit support from financial institutions. They may not (like larger market participants) have the option of asking financial institution for a guarantee above their MCL levels, even if they know that their MCL is likely to be inadequate to cover their outstandings and would like to provide voluntary guarantees as an additional safety mechanism.

Ultimately, AEMO believes that the 2% prudential standard is unlikely to be met without changes to the modelling parameters, and AEMO has an obligation to determine CLP settings that achieve the prudential standard.

4.2.3 AEMO's conclusion

After considering submissions, AEMO acknowledges that the proposed parameter changes are likely to increase MCLs for market participants if high prices and volatilities continue into the future, and this may increase costs for smaller participants in particular. However, MCLs should accurately reflect the credit risk associated with trading in the NEM irrespective of the size of the market participant. This, all things being equal, will be beneficial for all market participants and the market as a whole.

4.3 Adequacy of modelling

4.3.1 Issue summary

Multiple submissions argued that the modelling undertaken was inadequate as it only modelled the outcomes for the summer 2017 season, and the methodology was inadequately tested for long term suitability.

4.3.2 AEMO's assessment

The modelling undertaken for the Issues Paper:

- Covered over 10 different scenarios, including different combination of weighting and capping factors as well as step change in price.
- Encompassed over 17 years of price, load and volatility data over the life of the NEM. It is this modelling over the Life of the NEM that resulted in the price and volatility factor forecasts which were then used to illustrate the total MCL changes in comparison to actual MCLs for the 2017 summer season.
- Used additional modelling approaches (see Figure 4 in the Issues Paper) to demonstrate how changing weighting and capping factors affect MCL parameters going forward.

The modelling undertaken for this proposal is complex, as through the Life of NEM model it looks at past data (i.e. prices and volatilities) to determine forecast prices and volatilities, as well as whether the 2% prudential standard is being met. This by necessity is a backward looking exercise. However, to demonstrate the potential effects of the proposed changes, a comparison was made between different scenario outputs and a particular season's (summer 2017) actual prudential data.

This comparison by its nature is illustrative only, to enable the visualisation of the relative magnitude of MCL changes for different scenarios. However it is not predictive, as future MCLs will always be based on both forecast and actual prices and volatilities which are yet to be determined. This inherent unpredictability is the reason the CLP is reviewed on an annual basis, to ensure that the settings are correct, and the prudential standard is met.

Understanding this complexity is key to understanding that the proposed changes do not alter the CLPs current methodology in any way. Rather, by adjusting some modelling parameters, they make the modelling of forecast prices and volatilities more responsive to actual changes in prices and volatilities, and more reflective of current prices and volatilities than under the current parameter settings.

As we don't know for certain what the prices and volatilities will be in coming seasons, it is not possible to predict the exact MCL levels that any of the scenarios will entail. However, due to the large current gap between forecast and likely actual prices, we do know that without making the proposed changes, it is very likely that in the short term MCL levels will not be adequate to meet the 2% prudential standard.

4.3.3 AEMO's conclusion

AEMO considers that the modelling undertaken for the Issues Paper was sufficiently comprehensive.

As requested by the submissions, further modelling was undertaken to give market participants a better understanding of the proposed changes and their impacts. This further modelling is outlined in the following sections.

4.4 Modelling of MCL increases

4.4.1 Issue summary

A number of submissions referenced, or had questions and comments in relation to the increase in total MCLs for various scenarios for the 2017 summer MCL season. The relevant figures, (Figure 3 and Figure 5 from the Issues Paper) are reproduced in Figure 1 and Figure 2 below.

Figure 1 - Effects of various scenario parameter changes on total MCL for the 2017 summer season

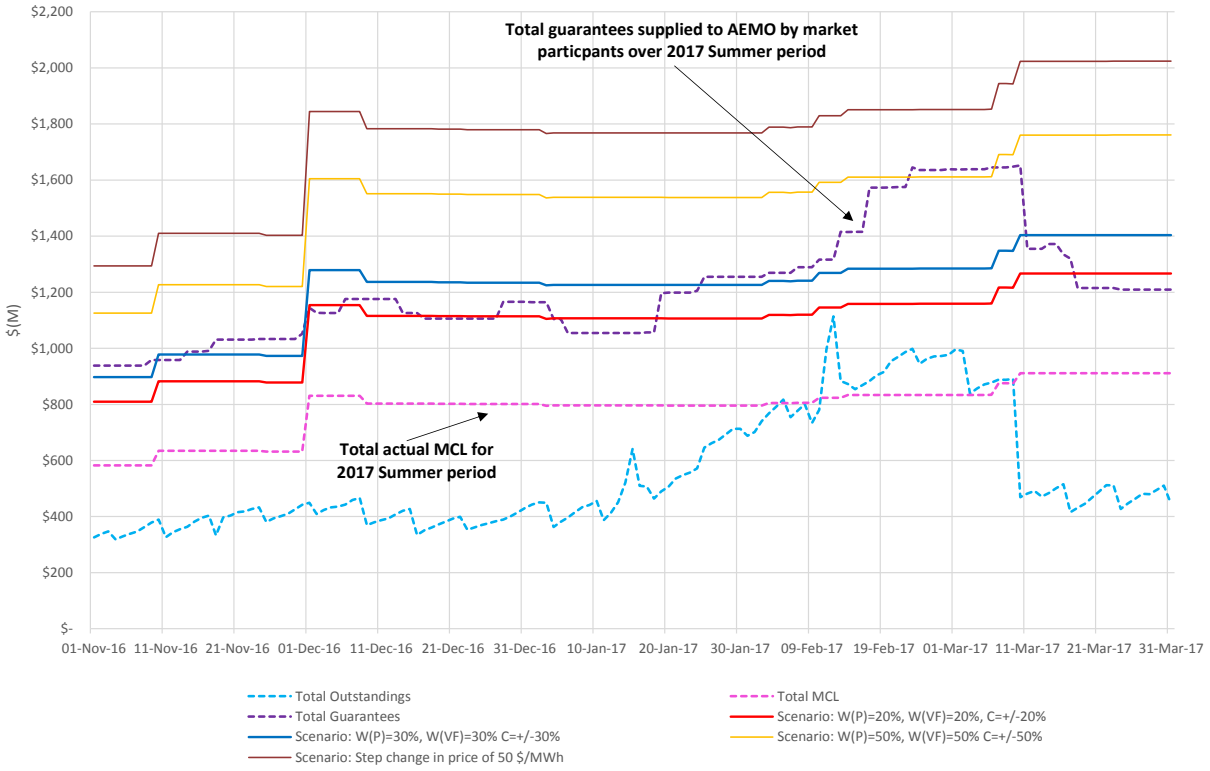
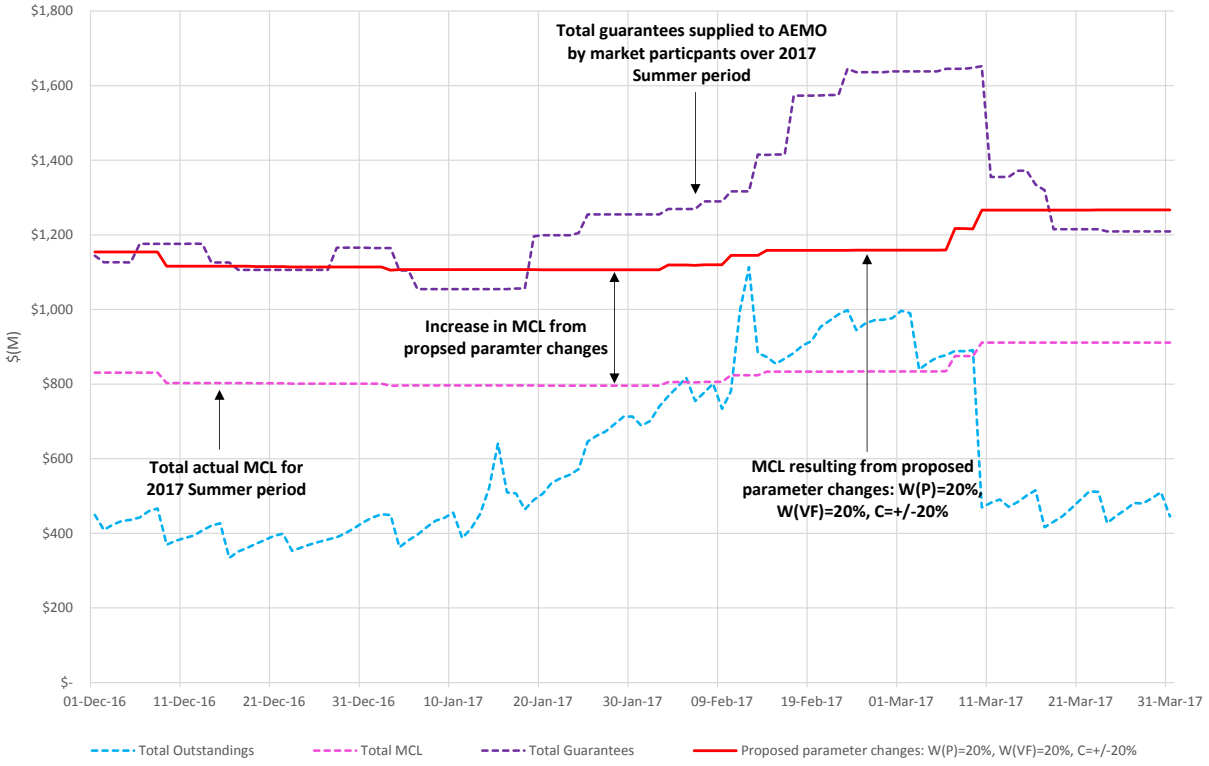


Figure 2 – Effects of proposed parameter changes on total MCL for the 2017 summer season



4.4.2 AEMO's assessment

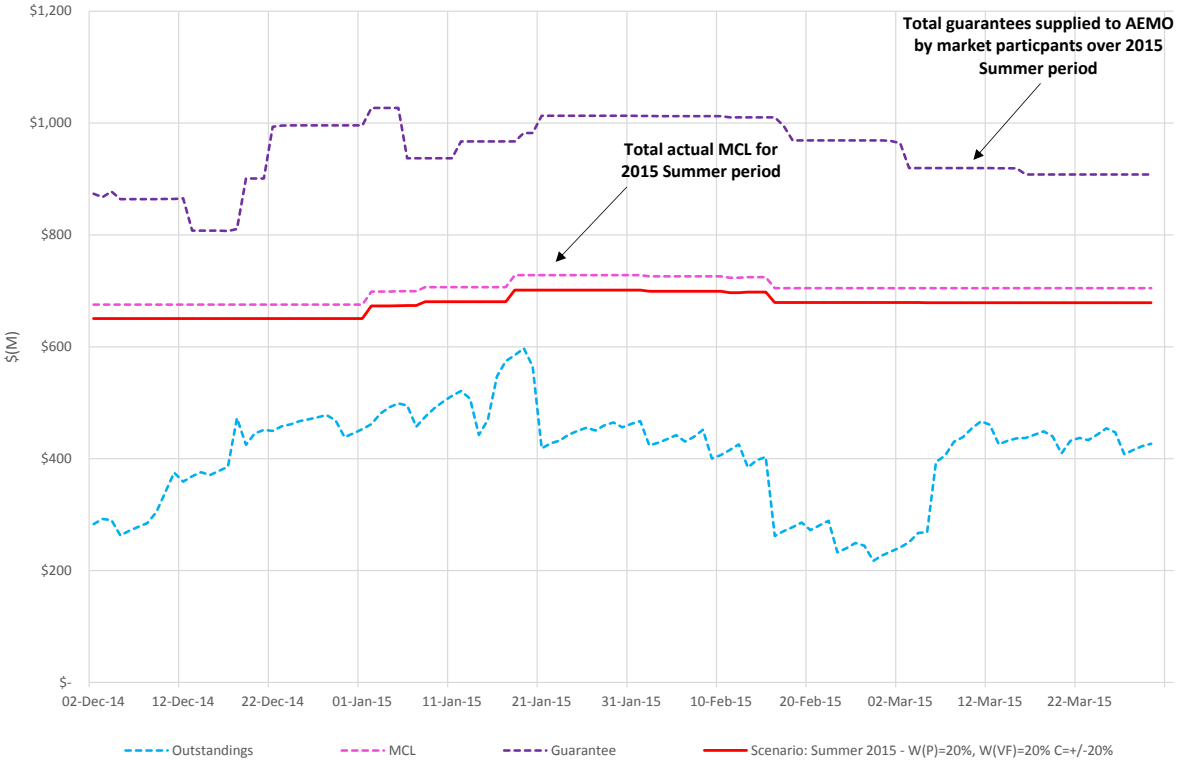
The following clarifications are offered in regard to this modelling and the figures:

- The outputs from the Life of NEM model are not predictive. The above figures give an order of magnitude assessment of what total MCLs could have looked like under different scenarios compared to the actual MCLs for summer 2017. While not a perfect comparison (for reasons listed below) the alternative would have been to make no attempt to assess the MCL impacts as they are not the output of the Life of NEM model.
- The 2017 summer total MCL used as a comparison to the scenarios was calculated using 2016 forecast and actual price and volatility data.
- The total MCLs calculated for the scenarios used 2017 summer forecast, and 2017 summer actual data (a year of significant price increases).
- As referred to in several submissions, there were particularly large increases in prices and volatilities between 2016 and 2017. Hence the MCL increases represented in the scenarios reflect these large price jumps from 2016 to 2017. The large increases in MCL shown in Figure 1 and Figure 2 are unlikely to be repeated in subsequent years if prices and volatility rise moderately as expected. Hence it should **not** be surmised that if the proposed changes are implemented, there would be a similar increase in MCL for summer 2019 as illustrated for summer 2017.
- The graph represents a total potential MCL increase for the NEM for each scenario. For individual market participants, any MCL increase would be dependent on the particular season assessed, the load in each region and the forecast prices and volatility factors.
- The volatility factor percentiles in the Life of NEM model were updated in June 2017 and have an effect of increasing MCL through increasing the Volatility Factors (VFOSL and VFPM). The

scenario modelling used these revised volatility factor percentiles, while the actual total MCL for 2017 summer used the original volatility factor percentiles.

- The modelling only looked at MCLs for the 2017 summer season, as summer is where the greatest discrepancy is evident between forecast and actual prices. Thus, this season was seen as the most relevant to illustrate the greatest potential for MCL changes. Any change in MCL levels for other seasons will again be commensurate with actual and forecast prices in that season, with the proposed changes only impacting to the degree to which actual prices affect forecast prices.
- If at any time actual prices/volatilities are lower than forecast prices and volatilities, then the MCL for the subsequent same season will decrease. This effect is illustrated in Figure 3, where the same proposed parameter changes (i.e. 20%) were applied to 2015 summer data.

Figure 3 – Modelling, summer 2015 - weighting and capping factors all at 20%



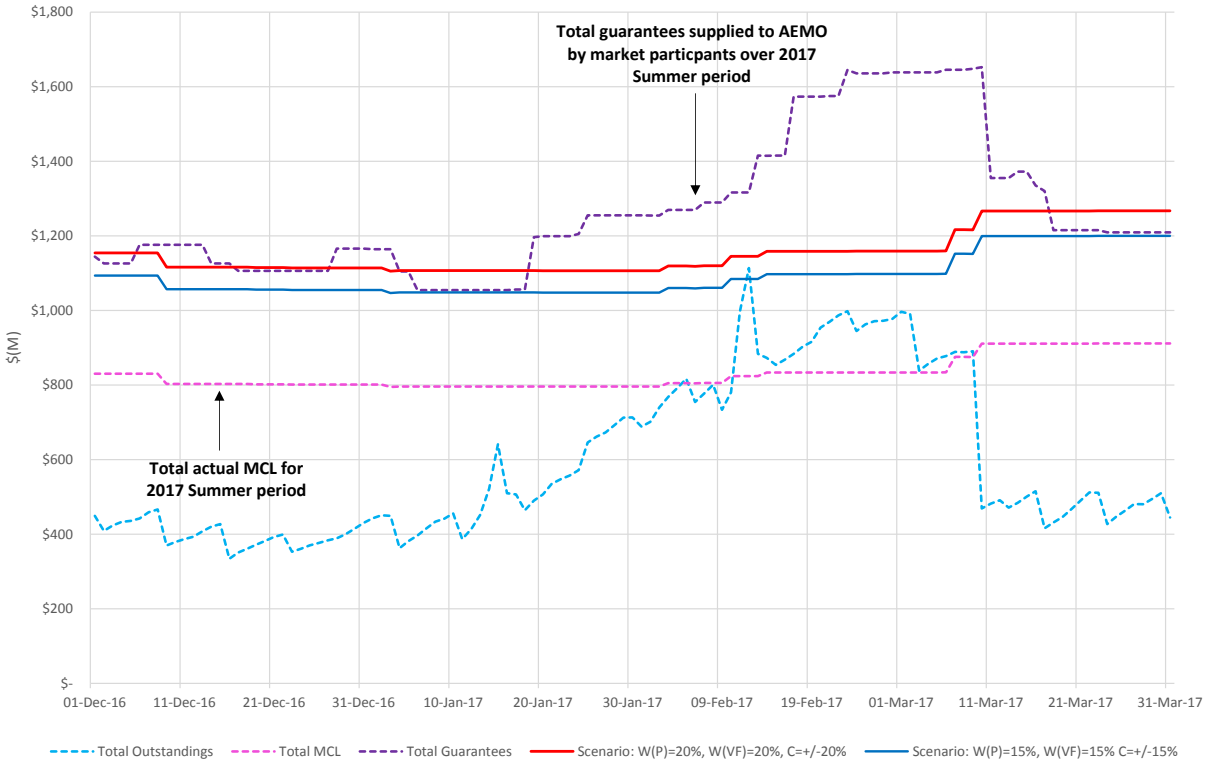
The graph above shows the proposed 20% weighting and capping factors applied to the 2015 summer season. As shown, in this case, the increased weighting and capping factors would have resulted in a reduced total MCL. In this scenario the following occurs:

- The Life of NEM model is now slightly more responsive to actual prices and volatilities when calculating forecast prices and volatility factors.
- In general, the summer 2014 actual prices/volatilities were lower than the summer 2014 forecast prices/volatilities.
- Summer 2015 forecast prices and volatilities are calculated based on summer 2014 forecast prices/ volatilities (80%) and 2014 actual prices/volatilities (20%).
- The actual prices/volatilities from summer 2014 now make up 20% of the 2015 forecast prices volatilities (as opposed to the pervious 10%).

- As actual prices/volatilities were lower in 2014 than the forecast, this means that the 20% weighting and capping factors result in a reduced MCL in this case.

Several submissions asked AEMO to model a 15% change in weighting and capping factors. The results of this additional modelling are shown in Figure 4 below.

Figure 4 - Modelling, summer 2017 - comparison of scenarios - weighting and capping factors 15%/20%



Several observations can be made:

- The 15% weighting/capping change results in a slightly smaller MCL increase than the 20% weighting/capping change.
- There was minimal change in the meeting of the prudential standard between the two scenarios.
- However, all other aspects of the discussion above apply to this modelling. That is, this is an illustrative example only for one particular season. The change (whether 15% or 20%) will only change the models responsiveness to actual prices, and any change in MCL levels will be dependent on future actual prices/volatilities used in the calculations.
- Additionally, as outlined in Section 4.5 below, even under the proposed 20% parameter changes, the forecast prices used in MCL calculations going forward are likely to be below actual market prices. Under a 15% parameter change, this gap would be even larger, making it more likely that market participants MCLs will be insufficient to cover liabilities in the NEM and resulting in the 2% prudential standard being unmet.

4.4.3 AEMO's conclusion

Based on the assessment above, AEMO believes that the proposed parameter changes are appropriate. They do not by themselves represent a long term increase to MCL levels, but rather make the model more responsive to price and volatility changes. As is currently the case, any future season MCLs will be

determined by forecast prices and volatilities, which will be based on a combination of forecast and actual data for the previous like season. MCLs will only increase if there is a trend of increasing volatility and prices.

For example, if this proposal is implemented for the summer 2019 season, the summer 2019 forecast prices and volatilities will be based on 80% of the summer 2018 forecast price (i.e. the price (PR) used in the determination of summer 2018 MCLs) and volatility data (already available on AEMO website[2]) and 20% of the actual price and volatility data for summer 2018. If price and volatility rises moderate, then any change in MCL will be commensurate.

4.5 Forecast drop in prices

4.5.1 Issue summary and submissions

Some submissions posited that 2017 saw historical price highs, with forward price curves (referencing the Australian Energy Regulator's (AER) quarterly base futures prices[3]) indicating that prices are likely to fall.

4.5.2 AEMO's assessment

Price falls may well occur, and the AER, in its State of the Energy Market Report published in May 2017[4], expected NEM prices to soften to around $80–90 per MWh by 2020. However, this is still significantly above historical prices for most regions.

Even at this lower price, there still remains a significant difference between forecast prices in the CLP (which are based on data trends from the entire life of the NEM) and actual prices going forward. To illustrate this, the forecast prices under the CLP, both under the current and proposed 20% parameter settings are shown against actual prices (to 2017) and the AER quarterly base futures prices going forward (see Figure 5, Figure 6 below). Please note that only the prices for the NSW and VIC regions are shown, but all other NEM regions follow a similar pattern.

[2] https://aemo.com.au/Electricity/National-Electricity-Market-NEM/Settlements-and-payments/Prudentials-and-payments/Maximum-Credit-Limit/NEM-Regional-Volatility-and-Price
[3] Available at: https://www.aer.gov.au/wholesale-markets/wholesale-statistics/quarterly-base-futures-prices
[4] AER (2017) State of the Energy Market, available at: https://www.aer.gov.au/system/files/AER%20State%20of%20the%20energy%20market%202017%20-%20A4.pdf

Figure 5 – NSW summer season – forward modelling of prices for two scenarios

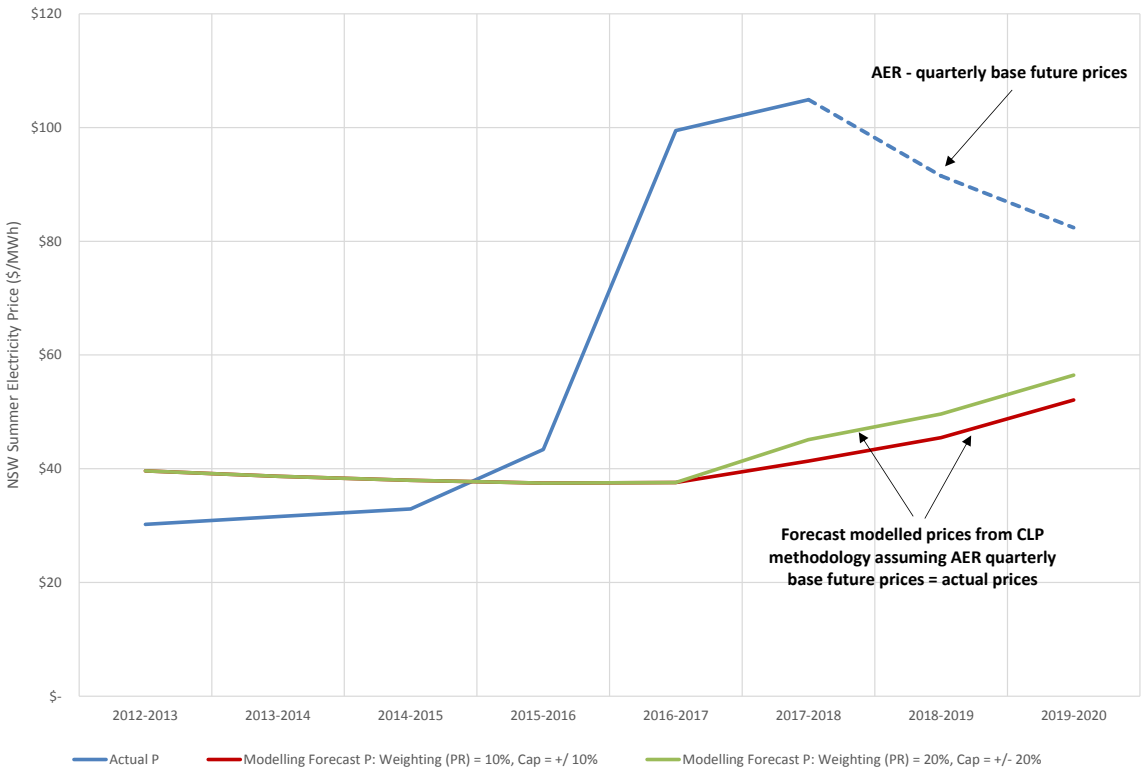
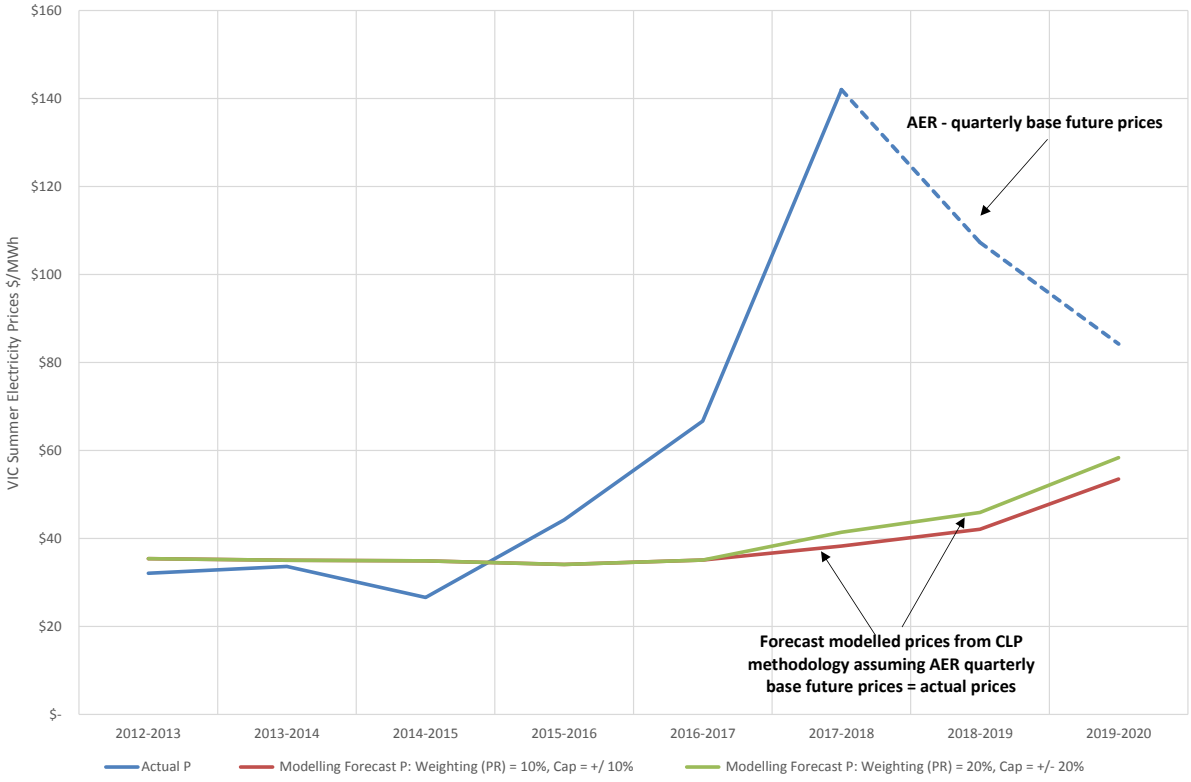


Figure 6 – VIC summer season – forward modelling of prices for two scenarios



The following observations can be made from the above:

- Prior to 2016, the CLP forecast prices were very similar to actual prices.
- There is a significant uplift in actual prices post 2016, but due to the inherent lag in the CLP methodology this is not reflected in the forecast prices.
- Even as high actual prices continue in 2017 and beyond (assuming the AER's quarterly base futures prices), the CLP methodology is slow to respond to the changes.
- The scenario with the 20% weighting/capping changes shows a faster rate of increase in prices than under the current parameter settings. However, in this scenario, even in 2020, when according to AER the prices moderate from their 2017 highs, the CLP forecast prices used in MCL calculations are still below the futures base prices. While not shown, a scenario with 15% weighting/capping changes would mean a larger gap between forecast prices (used in MCL calculations) and actual prices.

4.5.3 AEMO's conclusion

The discrepancy between forecast prices and actual prices is currently large. Because of this, and the inherent lag in the CLP methodology, AEMO believes that that even if prices moderate, under the proposed parameter changes forecast prices will still be below actual prices. Hence the proposed 20% change, is still more likely to understate prices rather than overstate them.

5. DISCUSSION OF MATERIAL ISSUES – PART B – MNSP PRUDENTAIL CHANGES

5.1 MNSP Prudential Changes

5.1.1 Issue summary and submissions

There were no comments in the five submissions received regarding Part B of the consultation.

5.1.2 AEMO's assessment and conclusion

It is AEMOs intention to amend clause 10.3 of the CLP in the form proposed in the Issues Paper. These changes will allow MNSPs to use reallocations, giving them greater flexibility in meeting their prudential requirements.

6. DRAFT DETERMINATION

Having considered the matters raised in submissions**,** AEMO's draft determination is to amend the **CLP** in the form of **Attachment 1**, in accordance with clause **3.3.8** of the NER.

APPENDIX A - SUMMARY OF SUBMISSIONS AND AEMO RESPONSES

No.	Consulted person	Issue	AEMO response
1.	Energy Australia	Methodology inadequately tested for long term suitability.	• Refer to Section 4.3 for a detailed response.
2.	Energy Australia	Unnecessarily increase in costs to market participants, and ultimately customers.	• Refer to Section 4.1 for a detailed response.
3.	Energy Australia	Modelling has been conducted and assessed on only one year of data.	• Refer to Section 4.3 for a detailed response.
	Energy Australia	Insufficient modelling to demonstrate that the new methodology will be fit for future purpose as prices are expected to vary considerably year-to-year.	• Refer to Sections 4.3 and 4.5 for a detailed response.
4.	Energy Australia	FY2017, was a year of historical price highs - Forward price curves for the NEM indicate that prices are likely to fall by up to 27% between 2017 and 2018, indicating that the recent high prices are likely to be an anomaly rather than a sustained structural change in the market that needs to be addressed.	• Refer to Section 4.5 for a detailed response.

5.	Energy Australia	Change in methodology response to current short term deviations, rather than a consideration of how best to calculate appropriate credit limits in the future.	• Refer to Section 4.3 for a detailed response.
			• Additional comments:
			  • The proposal does not suggest a change in CLP methodology, but rather an adjustment of modelling parameters which allow the model to be somewhat more responsive to actual prices and volatilities.
			  • While the proposed change is a response to recent price increases, AEMO believes higher prices are likely to be around for the short to medium term at least, even if they do not again reach the highs of 2016/2017.
			  • The CLP is reviewed annually to ensure that it is performing as expected. If the model is not performing as expected than further changes may be considered in the future.

6.	Origin Energy	Will significantly increase prudential borrowing costs on all participants but especially smaller market participants.	• Refer to Section 4.2 for a detailed response.
7.	Origin Energy	Place an excessive prudential cost on participants to ensure that the prudential standard is never breached, rather than allow for fluctuations to occur based on market events, as currently allowed under the Rules.	• Refer to Section 4.1 for a detailed response.

No.	Consulted person	Issue	AEMO response
8.	Origin Energy	Increasing the weighting and capping factors accentuates the previous seasons volatility.	• Increasing the weighting and capping factors does not accentuate the previous seasons volatility, rather it allows the model to be more responsive to any volatility changes. Thus under the proposed solution, 20% of the forecast volatility would be made up of actually volatility as opposed to the previous 10%).
9.	Origin Energy	While high prices have been forecast to continue in the short to medium term by the AER, the change in average prices year on year is likely to lessen as higher prices stabilise.	• Refer to Section 4.5 for a detailed response.
10.	Origin Energy	There may be a case where a previous year's volatility is higher than the current year. If weighting and capping factors are increased, this would result in a 'higher high' scenario where participants would be required to fund excessive prudential requirements.	• This has always been a feature of the model and is not related to the proposed changes. The modelling has always used all previous years' data to forecast volatilities and prices. The methodology (including under the prosed changes of weighting and capping parameters) allows for a smoothing effect where a temporary spike in volatility and price will only have a small effect on forecast volatilities and prices.
11.	Origin Energy	AEMO could apply a prudential margin over any additional credit support that is provided to meet market exposures. The advantage of this approach is that it will allow participants to manage any excess exposure proactively, without increasing the minimum credit support required for the entire period.	• The suggested changes are outsides of the scope of the current consultation process which deal with modelling parameter changes allowed under the CLP. • Such changes would almost certainly need to be considered as part of a Rule change request.
12.	Alinta Energy	Significant increase MCL requirements and thus costs.	• Refer to Section 4.1 for a detailed response.
13.	Alinta Energy	Increase costs for consumer retail prices.	• Refer to Section 4.1 for a detailed response.
14.	Alinta Energy	Higher costs and thus barriers to entry for new participants.	• Refer to Section 4.2 for a detailed response.
15.	Alinta Energy	Request to model 15% change.	• Refer to Section 4.4 for a detailed response.
16.	Alinta Energy	Proposed procedure change appears to be proposed to cover a specific highly selective short summer time period. For the remaining time of the year, the 20% parameter change would result in participants MCLs being significantly raised above and beyond what is required to meet market outstandings. Alinta considers that AEMO's proposal would impose greater costs on the market than may be necessary.	• The proposed changes function to make the model somewhat more responsive to actual prices and volatilities. As prices and volatilities are calculated for each season, for seasons where the difference between forecast prices/volatilities and actual prices/volatilities are small (i.e. winter, shoulder) there will be commensurate changes in MCLs.

No.	Consulted person	Issue	AEMO response
17.	Alinta Energy	Alternative solution: • Aims to appropriately manage peaky price periods and tightened supply conditions in summer months; and which also ensures participants MCL's are as low as reasonably possible. • A dynamic approach in order to manage MCL's in the market. For example one approach may be to place a greater reliance on short term MCL top-up mechanisms in response to peak summer periods. • Operationally, participants could function as per standard practise through a third party such as Austraclear or financial banking institution at the direction of AEMO.	• AEMO already offers market participants the ability to manage high price periods through security deposits. If however MCL levels are set inappropriately (i.e. too low) the very large number of such transactions creates heightened prudential risks for the market.
18.	Australian Energy Council	Increased prudential costs to the industry.	• Refer to Section 4.1 for a detailed response.
19.	Australian Energy Council	Burden falling more heavily on small entities who have high risk premiums applied to them by financial markets, creating barriers to entry and making smaller entities less competitive.	• Refer to Section 4.2 for a detailed response.
20.	Australian Energy Council	Changes unnecessary as since closure of Hazelwood Power Station while prices are higher, volatility is lower.	• Increasing the weighting and capping factors allows the model to be more responsive to any volatility changes. If volatilities fall in any season then the forecast volatility for the subsequent season will be lower than under the current parameters, as 20% of the actual volatility will be used in the forecast calculations as opposed to the 10% currently used.
21.	Australian Energy Council	Current market data indicates proposed changes unnecessary, with future prices expected to decline.	• Refer to Section 4.5 for a detailed response.
22.	Australian Energy Council	Request to model 15% change.	• Refer to Section 4.4 for a detailed response.
23.	Red Energy and Lumo Energy	Increased prudential costs leading to increased costs for customers.	• Refer to Section 4.1 for a detailed response.

24.	Red Energy and Lumo Energy	Request to model a 13% and 15% change.	• Refer to Section 4.4 for a detailed response.
			• Additional comments:
			  ○ The 15% change was modelled as requested to show the relative difference between it and the proposed parameter changes.
			  ○ AEMO did not believe that modelling the 13% change would add any useful information to the discussion (beyond what was already apparent from the 15% scenario), as the summer modelling is illustrative only and does not predict MCL rises for any subsequent seasons.

ATTACHMENT 1 – DRAFT CREDIT LIMIT PROCEDURES

Published as a separate document at:

https://aemo.com.au/Stakeholder-Consultation/Consultations/CLP-Modelling-Parameter-and-MNSP-Prudential-Requirement-Changes