Reassessing MCL under extreme market conditions

Why is credit support needed?

- Adequate credit support is critical to the operations of the market and participant confidence.
- AEMO can only pay out what is received, with any shortfall shared proportionally by market participants due payments in that billing cycle (i.e. generators).
- Under the Rules, credit support arrangements need to be set so that in 98 out of 100 of participant default events, AEMO holds enough credit support to avoid a shortfall (2% prudential standard).

How does AEMO determine MCL?

- Methodology outlined in the Credit Limit Procedures (CLP).
- Participants have to provide credit support (i.e. unconditional guarantee) to the maximum credit limit (MCL) value.

MCL=OSL+PM

- Outstandings limit (OSL) - prudential cover for the average 35 day settlement period.
- Prudential margin (PM) - prudential cover for a 7 day default/suspension process.
- AEMO uses complex statistical calculation to determine the regional forecast prices and volatilities used MCL calculations 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.
- AEMO can and routinely does reassess a market participants MCL, if the Market Participant’s load, generation or reallocations change.
- Currently there is no process outlined in the CLP for AEMO to reassess a Market Participant’s MCL if actual prices/volatility are higher than those used in the MCL calculation.

What happens when liabilities > trading margin?

- In some cases (i.e. high prices) participant liabilities significantly exceed what is allowed under their MCL (i.e. trading margin breaches).
- Participants can use additional guarantees, security deposits or reallocations to manage trading margin breaches.
- Security deposits are envisaged under the Rules/Procedures as **short term and marginal** ways to manage liabilities, as they are a lesser form of security.
- Under the Rules, security deposits cannot be used for MCL, which need to be covered by an unconditional guarantee.

What is the problem?

- Review of the 2022 winter season
  - Very high prices, very high liabilities, comparatively low credit support held.
  - MCL significantly below what is required under the 2% prudential standard.
  - Extremely high number of trading margin breaches.
  - Some participant defaults and shortfall events.

- Why were MCLs too low?
  - Low MCLs due to overall low forecast volatility adjusted prices (2 to 4 times lower than actuals) used in the MCL calculations.
  - Forecast volatility adjusted prices are based on long term, seasonal statistical averages.
  - Cannot take account of long running extreme market conditions, such as those experienced over May to July 2022.

Consequences of low MCLs

- Larger risk of a shortfall, significantly above the 2% prudential standard (see next page).
- Very large number of trading limit breaches (more breaches in May to June 2022 than for all of 2018, 2019, 2020).
- To manage trading limits, participants had to provide large amount of cash (nearly 1 billion dollars, see below).
- Significantly reduced time for AEMO to act on participant default (i.e. prudential margin doesn't cover 7 days of liabilities).
- AEMO held a very large amount of a lesser form of security (i.e. SDAs), for extended time periods.
- Rules/Procedures intends that the bulk of participant accrued liabilities are covered with unconditional guarantees.

MCL	Guarantees	Security Deposits	Guarantees + Security deposits
~1.2 $B	~2.2 $B – 1.8 times the total MCL	> 900 $M – 30% of total collateral held	~ 3.2 $B – 2.5 times the total MCL requirements

Proposed solution

Key considerations:

- Should act as a **safety valve** and only be triggered after a protracted period of a participants liabilities significantly exceeding their credit support.
- Should **not be triggered** under normal market conditions or under short lived price spikes (i.e. heatwaves).
- Should give the **option** for AEMO to reassess MCL, but not compel it to do so.
- Should be **easy to understand and plan for** ahead of time (i.e. no surprise MCL revisions).
- Should allow for a **staged exit** from the reassessed MCL, where if liabilities are falling, but are not yet at the pre-reassessed MCL level, the market participant can request an MCL review, and have part of their guarantee returned by AEMO.

Proposed solution has 3 parts:

1. Triggering an MCL reassessment
2. Calculating a revised MCL
3. Exit from revised MCL

Triggering an MCL reassessment

Key variables for considering an MCL reassessment:

1. Amount owed by participant
2. Amount of collateral held for participant

Proposed trigger for MCL reassessment:

AEMO may reassess MCL when a market participant’s average current accrued liabilities over the prior three week (21 day) period is above the amount of guarantees ($) held by AEMO for that market participant.

Trigger values

Why use the average of 21 days of current accrued liabilities?

- Current accrued liabilities is the actual amount of money owed by the participant to AEMO at any one time (doesn't include SDAs).
- 21 days is a long enough time to assess whether price event is short/transitory or a significant uplift in prices over a long time period.
- Any short periods of high prices/high participant liabilities will **not trigger** the MCL revision.
- Want to avoid a situation where by the time AEMO recalculates MCL, issues MCL letter, and participant provides new guarantee, participant liabilities fall significantly to the point where the revised MCL is no longer necessary.

Why use the guarantee amount?

- When MCL is inadequate compared to participant liabilities, many participants voluntarily choose to provide additional guarantees to AEMO to manage their prudential obligations.
- The guarantee held by AEMO is proposed as part of the trigger for MCL revision, as the MCL may only need reassessment if participant has not taken proactive steps to manage their prudential obligations.

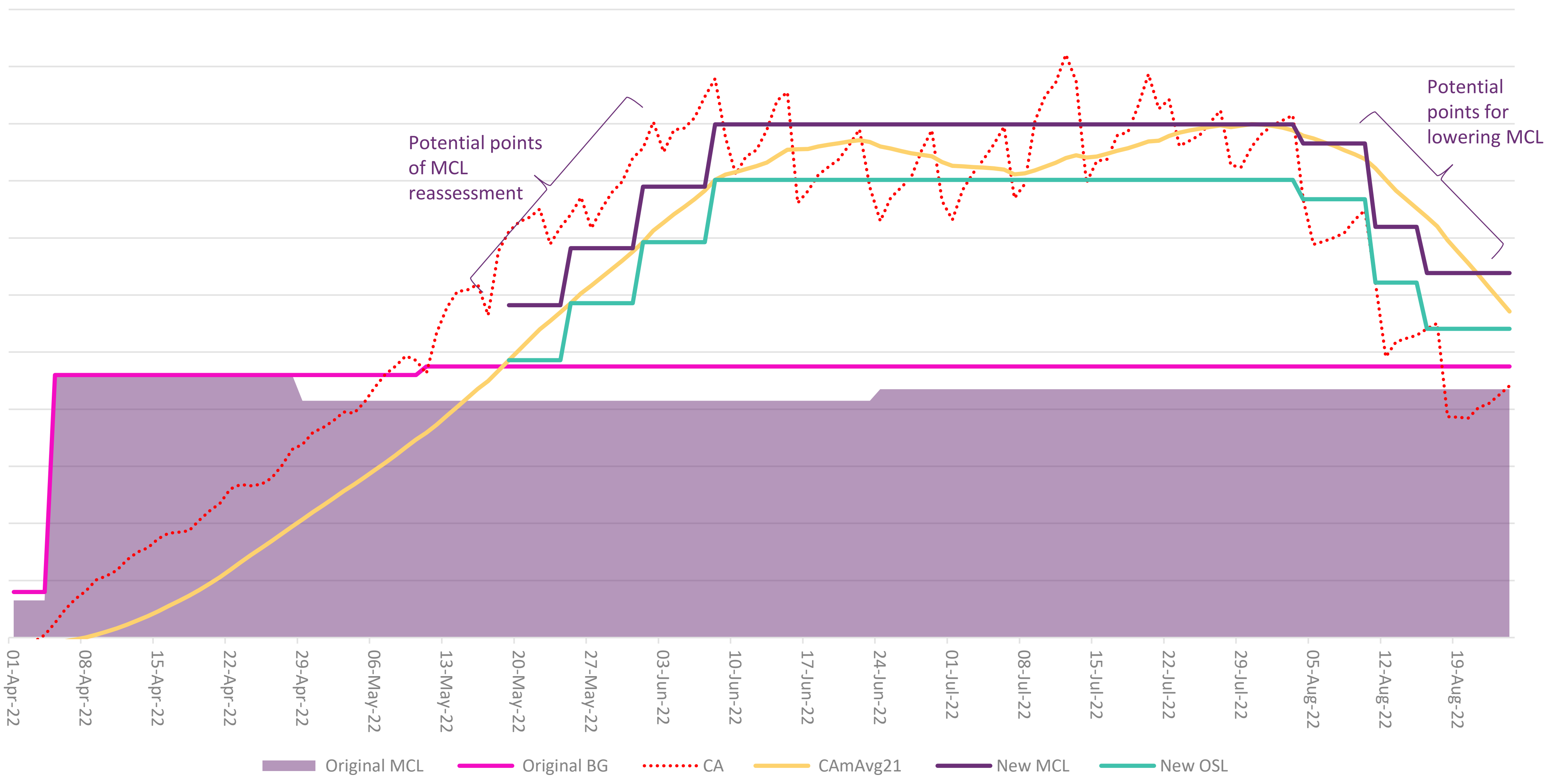
Calculating revised MCL

- **Proposal:** for MCL to be increased in line with average **current accrued liabilities**.
- **MCL calculation:**
    - Reassessed Outstandings Limit (OSL) = average 21 day current accrued liabilities
    - Prudential Margin (PM) = unchanged
    - Reassessed MCL = Reassessed OSL + PM
- Ensures MCL is adequate and once guarantee is provided participant will not be in an trading margin breach (if liabilities keep increasing MCL may need to be reassessed again).
- Once new MCL is calculated, the standard process for an ad-hoc MCL reviews applies.
- Participant to receive MCL letter and then provide a guarantee to meet MCL.
- Once AEMO has received the guarantee, any SDAs not required can be applied to settlement.

Exiting from revised MCL

- Intention is a **‘staged**’ exit from revised MCL.
- AEMO to reduce MCL once participant accrued liabilities fall, allowing part of the guarantee to be returned as liabilities fall.
- Participant won't necessarily have to wait till liabilities return to below original MCL levels before can lower MCL.
- **Proposal:** a participant can ask AEMO to review their revised MCL if their current accrued liabilities are on a **downward trend and below their OSL**.
- Please note that the ‘standard’ MCL calculation is the **floor** on MCL requirements. The proposed MCL reassessment process will allow AEMO to increase collateral requirements at times of extreme market conditions. It cannot be used to reduce MCL requirements.

MCL reassessment example



Benefits of the proposed changes

- Will help to meet the prudential standard
- Reduce the likelihood and size of any shortfall
- Reduce the number of trading limit breaches
- Increase the security of collateral held by AEMO
- Lead to more efficient prudential processes

Alternative options considered

- Current proposal relies on increasing market participant MCL after a sustained increase in participant liabilities (i.e. post event).
- Alternative options rely on ensuring the forecast prices used in seasonal MCL calculations are more reflective of actual market conditions.
- This could be achieved by:
  1. Changing the adjustable variables (i.e. weighting factors/cap) currently in the CLP. As longer term average prices have tended to be lower, and recent seasonal prices higher, it is likely that an increase to either weighting factors or the cap on PR would result in an increased regional forecast prices and increase seasonal MCLs for all market participants.
  2. Moving away from the current forecast price/volatility methodology and using an alternative methodology to forecast seasonal prices.
     - Redesign of price forecasting methodology to be more responsive to market movements.
     - Use other sources of price information such as futures prices in MCL calculations.
- Assuming current price trends continue, at least in the near future, these options would invariably increase the seasonal MCL level for all market participants.

Issues raised

Continued use of security deposits

- Proposed changes will not impact market participant ability to provide security deposits to manage trading margin breaches.
- Once valid credit support is provided to AEMO to cover a reassessed MCL under the proposal, any further trading limit breaches will continue to be managed as they are currently, though the use of security deposits.

Time for providing additional credit support

- AEMO will work with participants, as it does now when ad-hoc MCL reviews are undertaken, to ensure that they are aware an MCL review will be happening and what options they may have for managing their prudential position.
- AEMO will also work with participants, as it currently does, to allow a reasonable notice period to provide any additional credit support required to cover a revised MCL.

Consultation

- Consultation page/documents:
  https://aemo.com.au/consultations/current-and-closed-consultations/credit-limit-procedures-reassessing-mcl-in-extreme-market-conditions
- Submission due – **27 January 2023**

Consultation steps	Dates
Consultation paper published	18 November 2022
Submissions due on consultation paper	27 January 2023
Draft report published	3 March 2023
Submissions due on draft report	7 April 2023
Final report published	5 May 2023