

# RULE CHANGE PROPOSAL

## RESERVE CAPACITY MECHANISM – PRUDENTIAL IMPACTS

14 June 2017

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1. Update to MAC
2. Background
  - Prudentials (Credit Limit and Outstanding Amount)
  - Reserve Capacity Mechanism (IRCR and bilaterals)
3. Issue and Example
4. Proposed Solution and Example
5. Status of Proposed Rule Change Proposal

- The WEM Prudential Requirements are an essential risk management mechanism in the rules, intended to protect all Market Participants operating in the WEM.
- While exploring opportunities to improve the Outstanding Amount calculation, AEMO identified that the prudential calculations in the WEM Rules underestimate capacity liabilities. There are two issues:
  1. The WEM Rules restrict AEMO to **past periods** when calculating Outstanding Amount. Market Participants are liable for **past and future periods**. This is an additional three months of capacity charges due to the IRCR calculation.
  2. The Outstanding Amount calculation assumes historic capacity credit allocations are replicated in current and future periods even though these may change.
- Due to these rule issues, the Outstanding Amount calculation can underestimate Market Participant capacity liability in a number of scenarios.
- **As a result, all Market Participants have a heightened exposure to default levies in the event of a Market Participant default.**

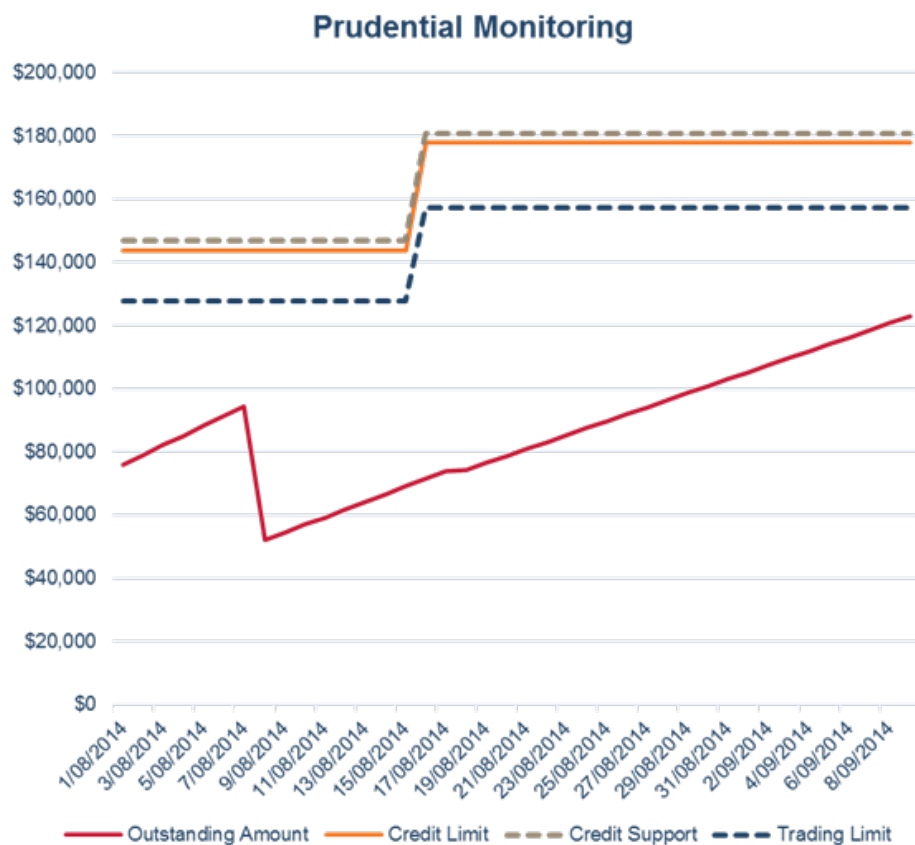
- AEMO has developed a Rule Change Proposal in consultation with Stakeholders that reduces the risk of default levies by:
  - mitigating the capacity cost prudential risk in a timely manner;
  - minimising increase to prudentials;
  - minimising change to existing rules, systems and processes; and
  - is consistent with the market objectives and market reform.

- Market Participants have been generally supportive of the proposal.
- AEMO has engaged as follows:
  - Overview of issue at the WA-ECF on 7 February
  - Market Participant detailed workshop on 3 March. (22 attendees from 10 Market Participants)
  - Written feedback from 5 Market Participants.
  - Engaged closely with the PUO in the development of the proposal to ensure it aligns with broader reforms
  - Overview of proposed solution at WA-ECF on 4 April.
- AEMO has completed a draft Rule Change Proposal. This is currently under internal review and is expected to be complete in the next several weeks.
- The following slides present a detailed overview of the rule change proposal for comment from MAC.

# BACKGROUND PRUDENTIALS



The WEM Prudential Requirements outlined in Chapter 2 of the WEM Rules are an essential risk management mechanism, intended to protect all Market Participants operating in the WEM from levies arising from a default event.



### Credit Support [WEM Rule 2.38]

A Bank Guarantee or cash Security Deposit, in the form specified by AEMO, to the level of the most recently determined Credit Limit.

### Credit Limit [WEM Rule 2.37]

AEMO's calculation of the maximum net amount owed by a Market Participant over a 24 month period determined by:

- 70 day maximum NSTEM exposure; plus
- 15 day maximum STEM exposure

### Trading Limit [WEM Rule 2.39]

The amount of Credit support held by AEMO multiplied by 0.87.

### Outstanding Amount [WEM Rule 2.40]

AEMO's estimate of the amount owed by a Market Participant at any time.

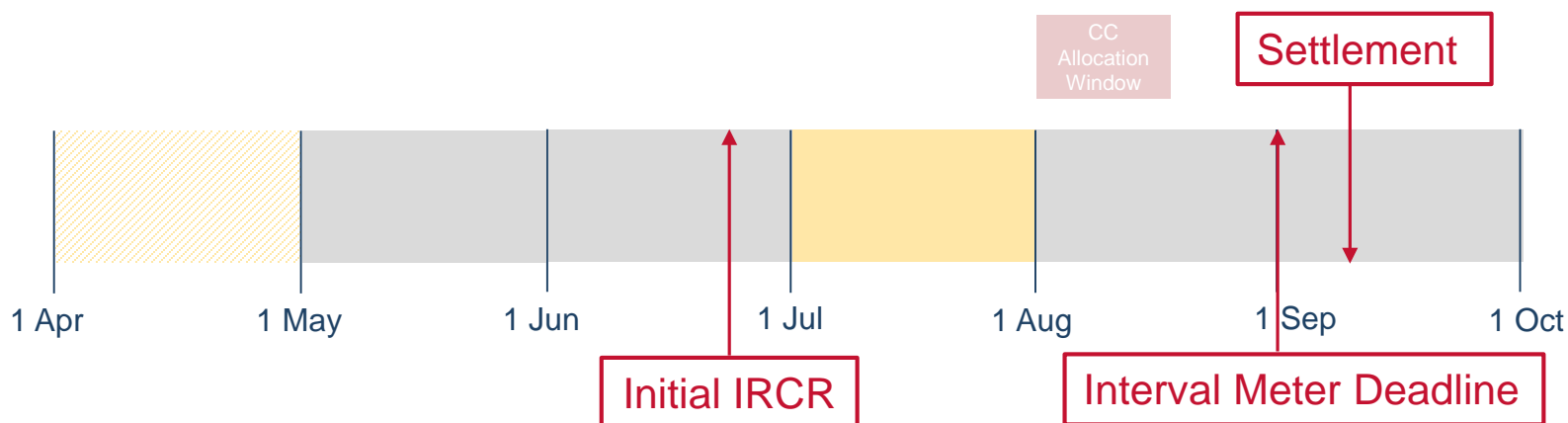
- Clause 2.40.1 of the Market Rules defines **Outstanding Amount (OA)** as:
  1. Invoices not paid
  2. Plus AEMO's reasonable estimate of amounts payable to AEMO for all past periods for which no Settlement Statement has yet been issued
  3. Less AEMO's reasonable estimate of amounts payable to the participant for all past periods for which no Settlement Statement has yet been issued
  4. Less any prepayments made by the participant to AEMO
- AEMO's calculation is outlined in the Prudentials Market Procedure and defines **OA** as:
  1. The number of STEM days exposed multiplied by their average daily STEM exposure (using their last invoice)
  2. Plus the number of NSTEM days exposed multiplied by their average daily NSTEM exposure (using their latest invoice)

# BACKGROUND

## IRCR AND CC ALLOCATIONS



- To fund Capacity Credits allocated to Market Generators, AEMO allocates an IRCR to every Market Customer.
- The IRCR is a MW quantity of capacity and represents the aggregated contribution of a Market Customer's Loads to total system load during the previous Hot Season (1 December to 31 March) to the current Capacity Year.
- If a Market Customer is the Responsible Party for a NMI in Trading Month n-3 they will receive capacity charges in Trading Month n and settle the liability in month n+2.
- There is nothing the Market Customer can do to avoid receiving a liability once they are responsible for the NMI in Trading month n-3.
- Market Customers may settle their capacity liabilities off-market through a process called Capacity Credit Allocations.
- Capacity Credit Allocations are made after the Trading Month.



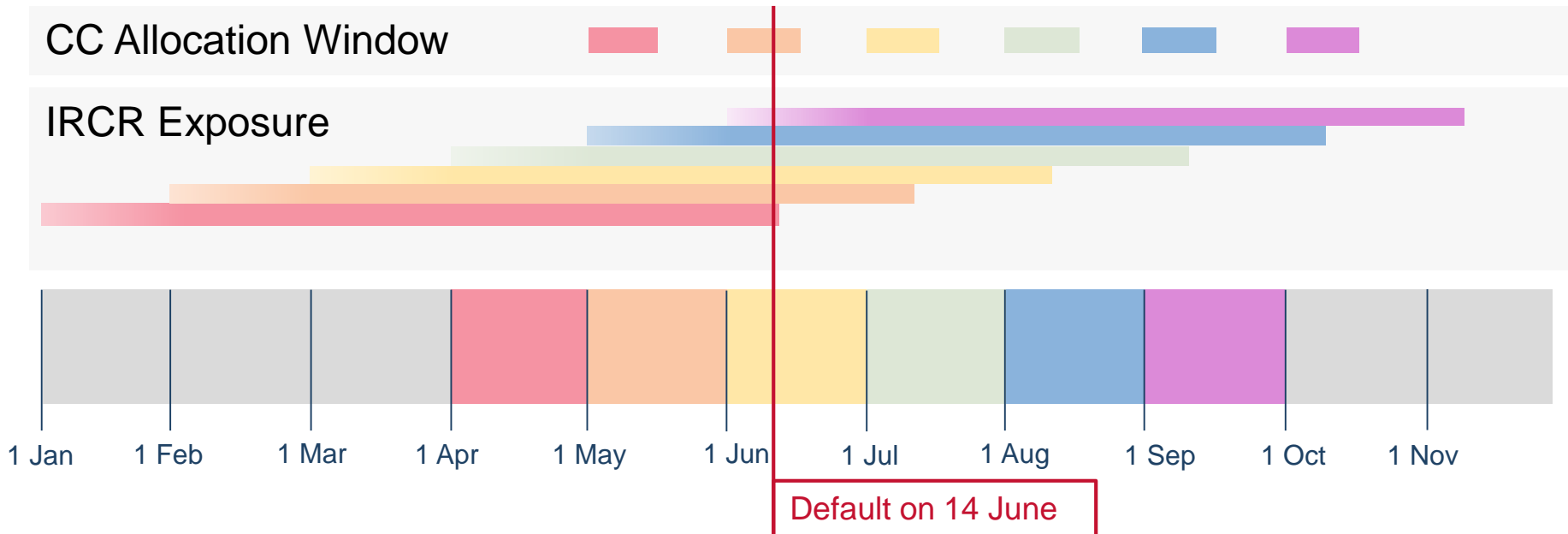


# ISSUE

## PROSPECTIVE CAPACITY LIABILITIES



- Ownership in month n-3 impacts IRCR in month n which is invoiced in month n+2.
- Capacity Credit allocations can only be made after the completion of the trading month.



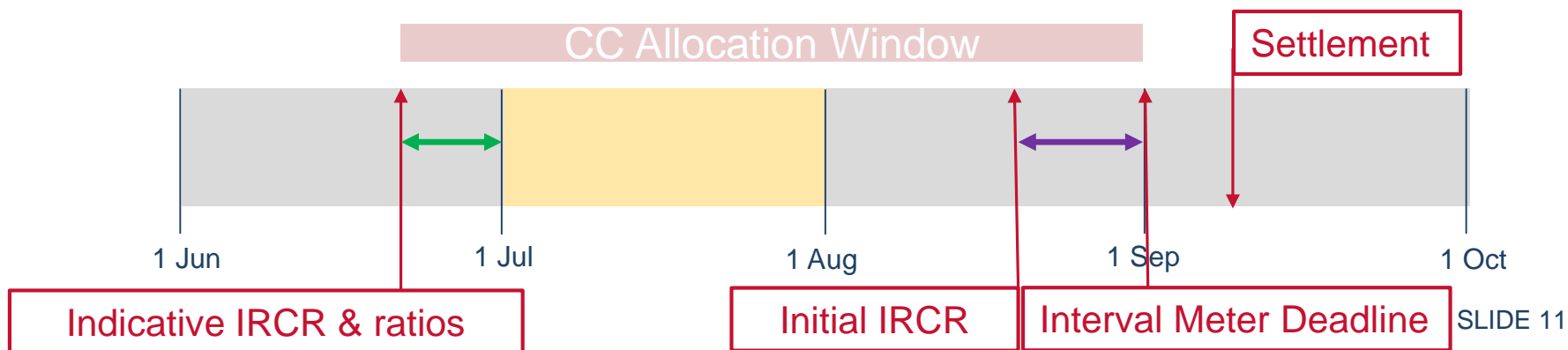
- Consider a Market Customer's liabilities as at 14 June:
  - They are liable for IRCR for Apr, May, Jun, Jul, Aug and 14/30 of Sep
  - If they traded bilaterally their counter-party:
    - may not have entered any capacity credit allocations with AEMO for May; and
    - could not have entered any capacity credit allocations for Jun, Jul, Aug and Sep.
  - Market Generators may not make Capacity Credit Allocations in the event of a Market Customer default.

- There are two aspects to any Rule Change Proposal:
  1. Reducing participant exposure, and therefore reducing prudential impact; **and**
  2. Developing a better estimate of participants' prudential exposure.

# PROPOSED SOLUTION SUMMARY



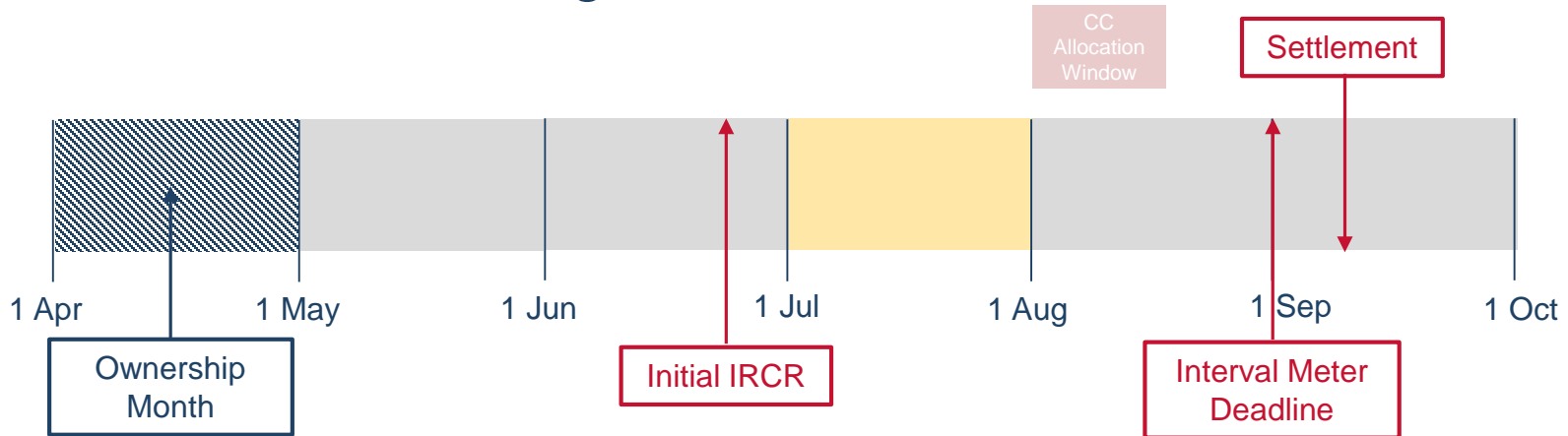
#	Item	Current Rules	Proposed Change	Rules
1	Target Month	n-3	n	App 5 – Step 6
2	Capacity Credit Allocations	Start of n+1	Open window at least 10 Business Days prior to month. Close window on the Interval Meter Deadline. Require binding handshake.	9.4 & Procedure
3	IRCR Timelines	n-1	Indicative IRCR <b>10 Business Days</b> before month n. Initial <b>5 Business Days</b> before CC Allocations close.	4.1.24, 4.1.28
4	Recalculation of IRCR	IRCR is not adjusted.	IRCR recalculated according to normal adjustment cycle.	9.16.3 Lock peaks – App5, 4.1, 4.28
5	Capacity Credit Over-Allocations	Allocations reduced to zero.	Settle Market Customer over-allocations at RCP. Allow Market Generators 2 Business Days to resolve over-allocations, then proportionally reduce.	9.4.12, 9.7
6	Outstanding Amount Calculation	Linear projection based on historic invoice amounts.	Outstanding Amount is better estimate of individual settlement components. (including IRCR, CC allocations & energy charges).	Procedure Only



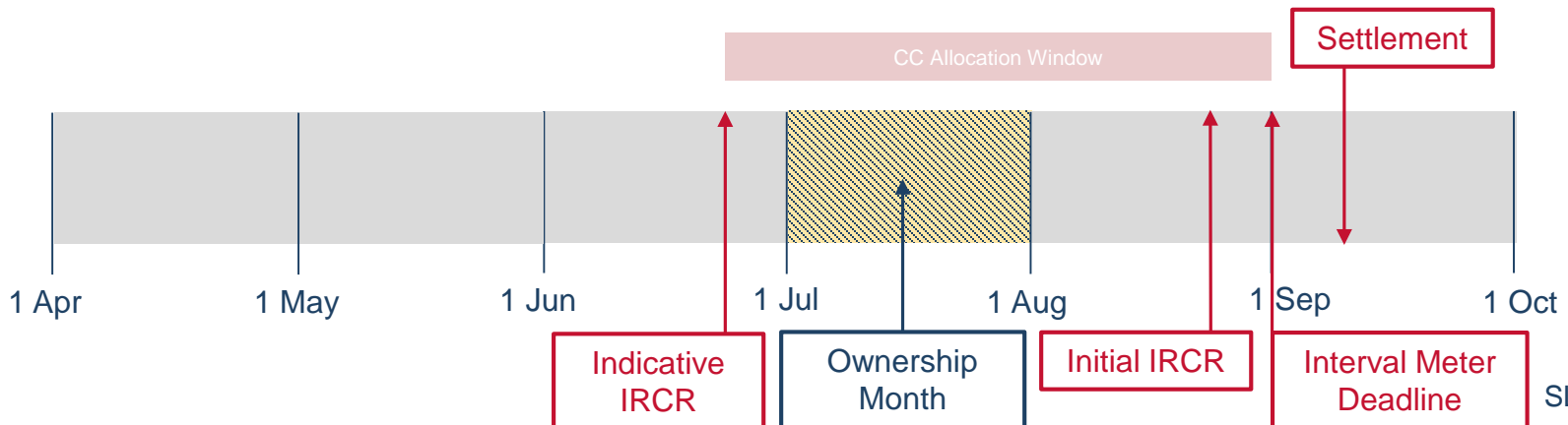
# PROPOSED SOLUTION TIMELINE COMPARISON



- Prior to Rule Change



- After Rule Change



# PROPOSED SOLUTION

## 1 – TARGET MONTH



- **Change:** Change target month from n-3 to n, for meter ownership only.
- **Purpose:** To reduce exposure from 160 days to 70 days, reducing overall market risk.
- **Implications:**
  - The first three months of capacity charges for New Meters will be shared by all Market Customers. (0.55% increase for all Market Customers). Correspondingly, Market Customers no longer pay for New Meters.
  - Timelines must change.
  - Meter data will be less accurate at Initial Settlement.

# PROPOSED SOLUTION

## 2 – CAPACITY CREDIT ALLOCATIONS



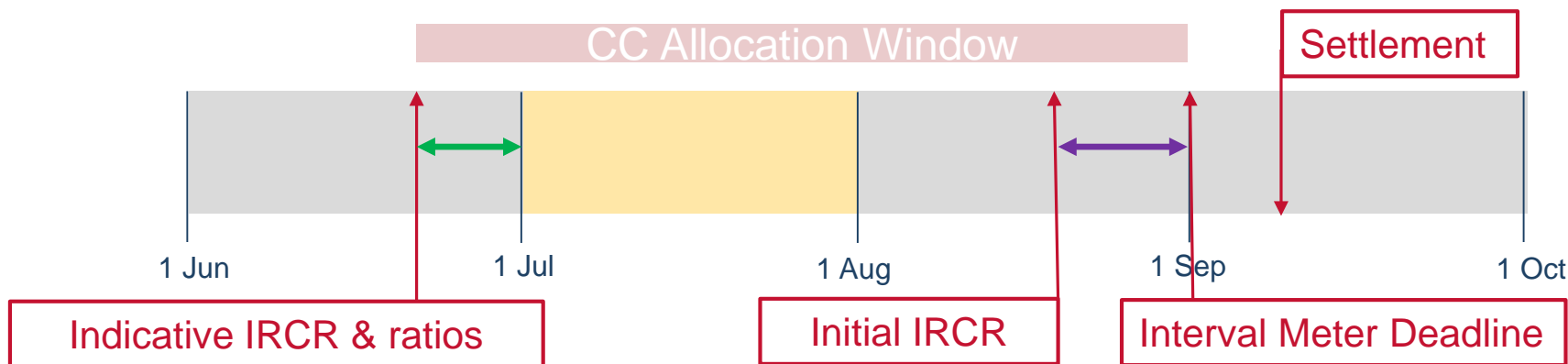
- **Change:**
  - Open CC allocation window at least 10 Business Days prior to each Trading Month.
  - Require a “handshake” agreement between Market Participants.
  - Commitment can only be reversed by AEMO. (e.g. error correction, on request by Market Participants, suspension event). AEMO must consider the impact on both Participant's Trading Margins.
- **Purpose:**
  - To allow Market Participants to manage their Outstanding Amount by entering Capacity Credit Allocations prior to incurring the exposure.
  - To ensure both parties accept the allocation, after which it will be binding.
- **Implications:**
  - Market Generators may have their Capacity Credits reduced after they have allocated them.

# PROPOSED SOLUTION

## 3 – IRCR TIMELINES



- **Changes:**
  - Provide an Indicative IRCR **10 Business Days** prior to the month.
  - Publish IRCR **5 Business Days** prior to the Interval Meter Deadline.
- **Purpose:**
  - To provide Market Customers with an indication of their IRCR contribution, TDL and NTDL ratios prior to the IRCR month to assist their billing processes and guide them with CC allocations.
  - The current publication of IRCR, 5 business days prior to month n, would not pick up any changes in meter ownership for month n.



- **Change:** Recalculate IRCR and Ratios as part of settlement adjustments.
- **Purpose:** To compensate for the reduced accuracy of meter ownership data in the IRCR calculation. IRCR adjustments will be driven by changes to meter data, which is consistent with energy adjustments.
- **Details:**
  - The 12 peak intervals will be fixed after March's Interval Meter Deadline.
  - The 4 peak intervals will be fixed after the relevant Trading Month's Interval Meter Deadline.



# PROPOSED SOLUTION

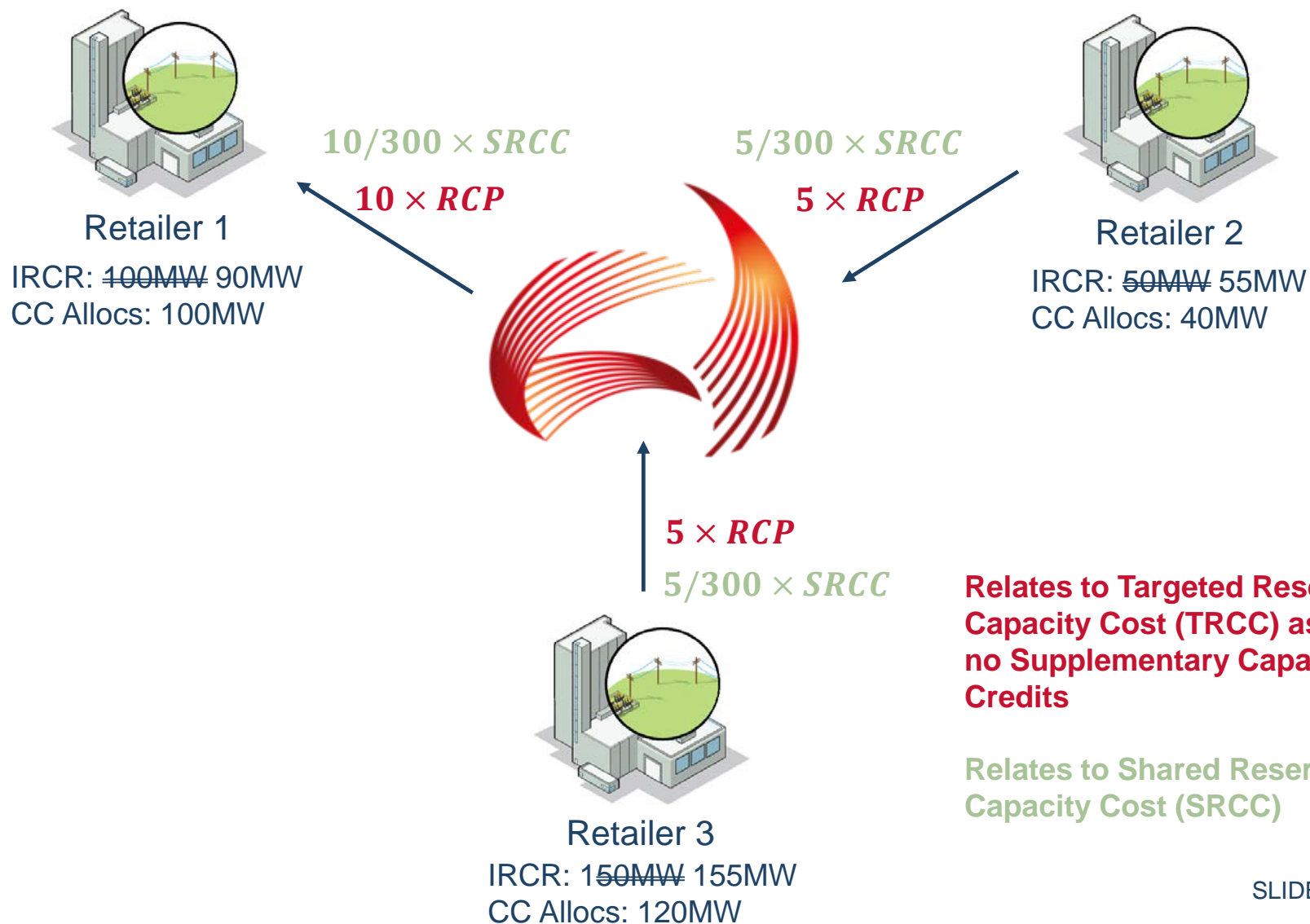
## 5 – CAPACITY CREDIT OVER-ALLOCATIONS



- **Changes:**
  - Settle Market Customer over-allocations at the Reserve Capacity Price (see following slides).
  - Allow Market Generators 2 Business Days to resolve the over-allocation, after which proportionally reduce Capacity Credit Allocations (see following slides).
- **Purpose:** To manage CC over-allocations whilst minimising prudential impacts.

# PROPOSED SOLUTION

## 5 – MARKET CUSTOMER OVER-ALLOCATIONS



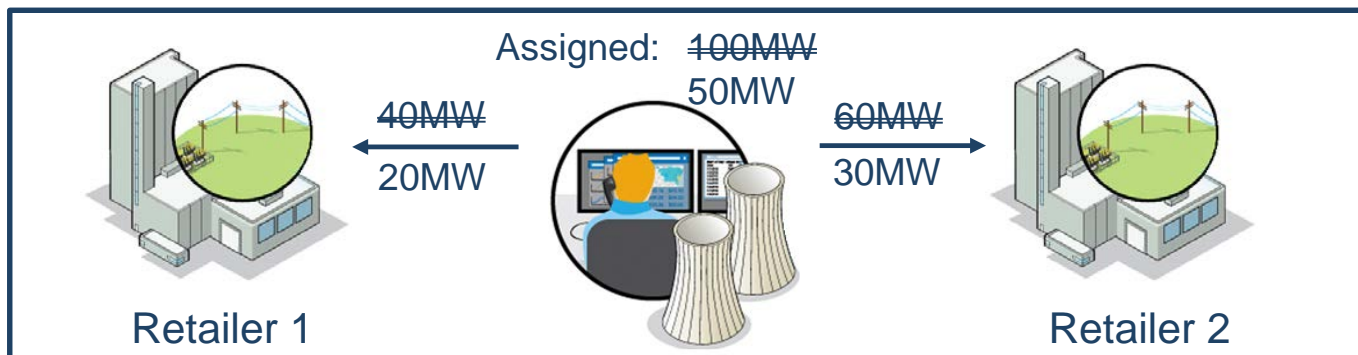
**Relates to Targeted Reserve Capacity Cost (TRCC) assuming no Supplementary Capacity Credits**

**Relates to Shared Reserve Capacity Cost (SRCC)**

# PROPOSED SOLUTION

## 5 – MARKET GENERATOR OVER-ALLOCATIONS

- If a Market Generator's Capacity Credits are reduced from 100MW to 50MW, their Allocations must be reduced accordingly.
- Market Generators will be given 2 Business Days to choose how to reduce the Allocations.
- If they fail to reduce the Capacity Credit Allocations, they will be reduced proportionally (see below).



- **Change:** Revise the Outstanding Amount calculation methodology in the Market Procedures (no rule change required) to:
  - use latest IRCR value and agreed CC Allocations;
  - consider better estimates for **all** components of Outstanding Amount (not just capacity costs); and
  - update the Outstanding Amount calculation on a daily basis.
- **Purpose:** To better estimate Outstanding Amount and manage prudential risk by allowing Market Participants to manage their Outstanding Amount by trading off-market (Capacity Credit Allocations).

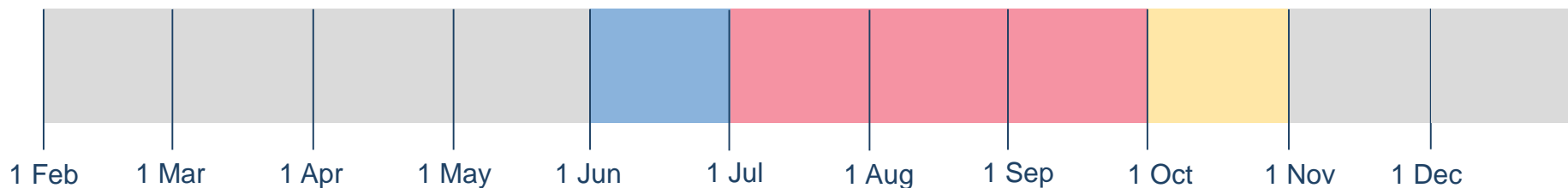
- **Summary:**
  - Assume the rule changes occurs on 1 October.
  - In September the IRCR will be calculated based on ownership in June.
  - In October the IRCR will be calculated based on ownership in October.
- **Proposal (See example):**
  - For the month of October base the ownership of each NMI as a % of the 4 month period July – October.

# PROPOSED SOLUTION

## 7 – TRANSITIONAL MEASURES



- The timeline below shows which retailer owned the NMI in June to August.

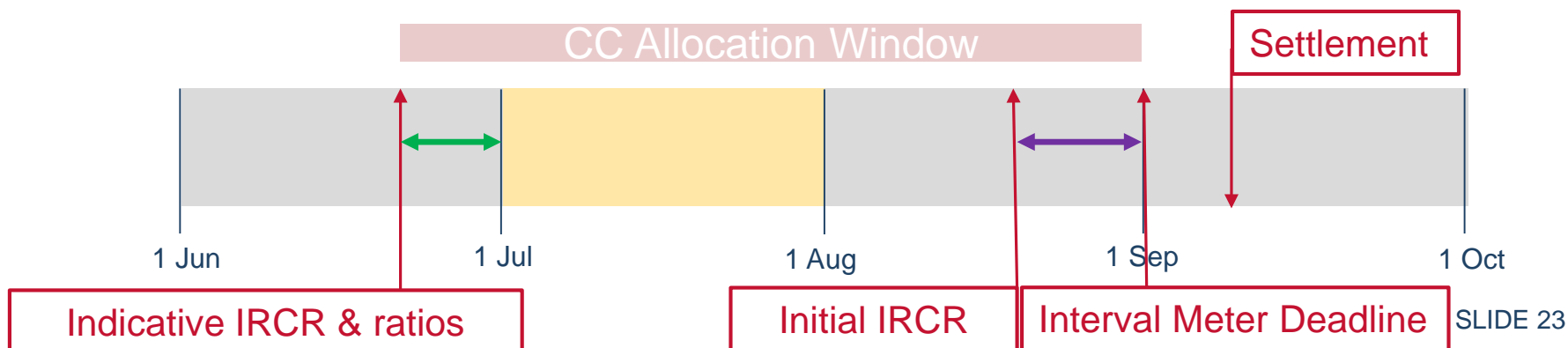


- In September, Retailer Blue will be charged IRCR.
- In October, with no transitional measure, Retailer Yellow will be charged all of the IRCR and Retailer Red will be charged nothing.
- In October, with a transitional measure, Retailer Red will be charged  $\frac{3}{4}$  of the IRCR and Retailer Yellow will be charged  $\frac{1}{4}$  of the IRCR.

# PROPOSED SOLUTION SUMMARY



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3	IRCR Timelines	n-1	Indicative IRCR <b>10 Business Days</b> before month n. Initial <b>5 Business Days</b> before CC Allocations close.	4.1, 4.28, 9.16, Appendix 5
4	Recalculation of IRCR	IRCR is not adjusted.	IRCR recalculated according to normal adjustment cycle.	4.1, 4.29, Appendix 5
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6	Outstanding Amount Calculation	Linear projection based on historic invoice amounts.	Outstanding Amount is better estimate of individual settlement components. (including IRCR, CC allocations & energy charges).	Procedure Only



- AEMO has completed its draft Rule Change Proposal. This is currently under internal review and is expected to be submitted in the next several weeks.
- The Rule Change Panel will consider the Rule Change Proposal through the consultation process.
- The timing of the implementation of any changes is a matter for the Rule Change Panel. AEMO proposes to implement as soon as possible noting the current constraints (e.g. RCM changes).



Thank you!

Questions?

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