

PROPOSED DELAYED IMPLEMENTATION OF FIVE MINUTE AND GLOBAL SETTLEMENT

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Purpose of, and protocol for, today's workshop

- The rule change process will not address whether 5MS and GS will be implemented – they both will - the only open question is timing of when they will commence.
- Today's workshop will outline the AEMC's approach to the rule change process and AEMO's 5MS/GS implementation scenarios, to inform stakeholders in preparing submissions.
- The discussion today will not cover:
 - the merits - or otherwise – of the proposed delay. That discussion will be had as part of the rule change process
 - detailed technical issues that are being addressed separately through AEMO's 5MS/GS implementation work streams
- Stakeholder questions are welcome through the chat function. If you are asking a question, please add your name and organisation with the question in the chat function.
- AEMC and AEMO staff will endeavour to address your questions in stages during the workshop.
- If you would like to organise a meeting with the AEMC to discuss, please contact the project team.

Agenda

1. Introduction
Michael Bradley – A/Executive General Manager – Retail & Wholesale Markets, AEMC
2. The rule change rationale, scope and key issues
Prabpreet Calais, AEMC
3. The rule change process
Andrew Pirie, AEMC
4. Questions
4. AEMO – potential 5MS/GS implementation scenarios
Peter Carruthers, AEMO
5. Questions
6. Next steps – conclusion

THE RULE CHANGE RATIONALE SCOPE AND KEY ISSUES

PRABPREET CALAIS, AEMC

Background: 5MS and GS

Five Minute Settlement

- Moves wholesale market settlement from being settled every 30 minutes (based on the average of 6, 5-minute pricing periods), to being settled every 5 minutes, aligning dispatch and settlement.
- Five minute settlement has the benefits of improving signals for efficient investment and operation of the NEM.

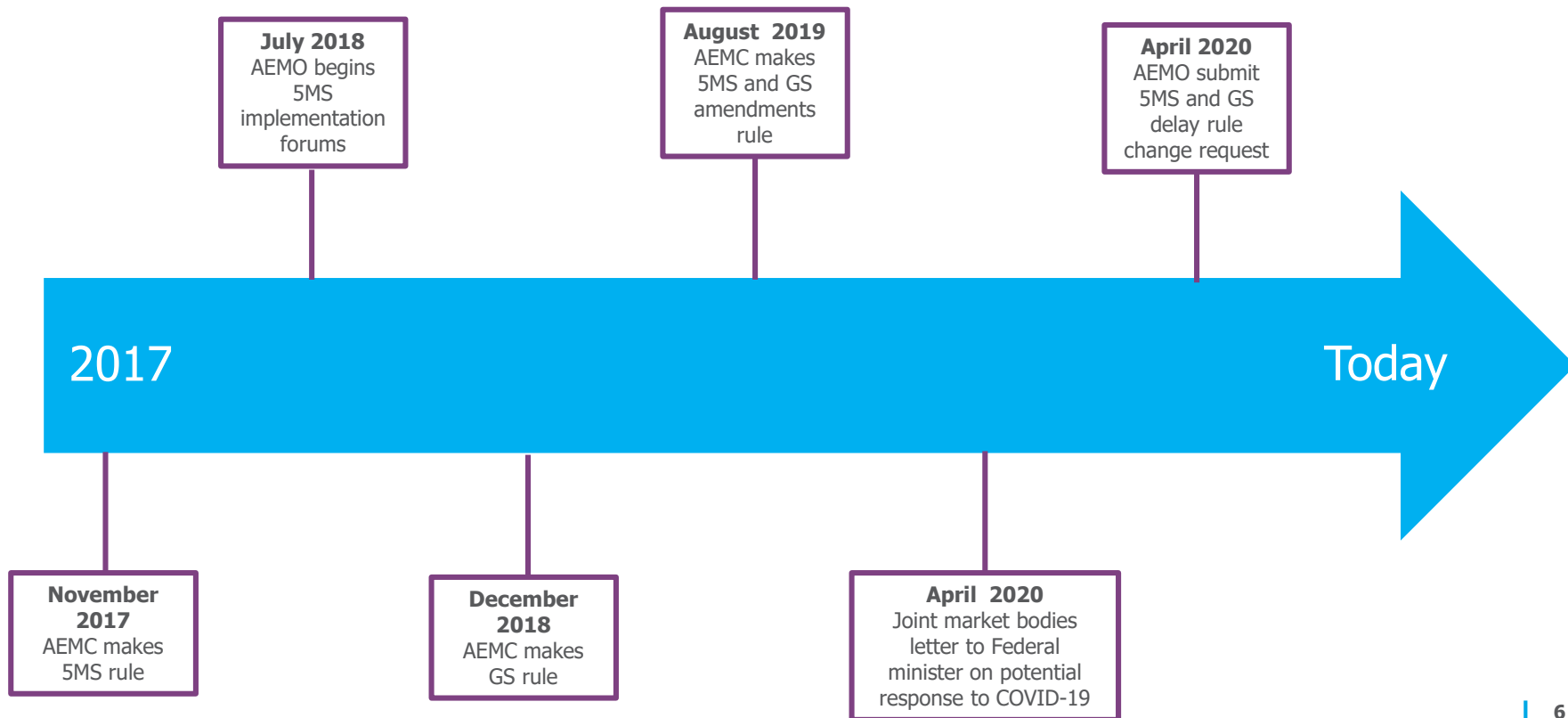
Global Settlement

- Changes the way the retail market is settled, moving from settlement by difference (technical losses, commercial losses, and meter profiling errors unknown and paid for by local retailer) to global settlement (errors known and pro-rated).

Implementation to date

- Rules may have resulted in a major update and redevelopment of IT systems for participants and AEMO, including changes to:
 - Metering systems
 - Bidding/Dispatch/pricing systems
 - Settlement systems
 - Operations systems
- Changes may impact systems of generators, retailers, meter data providers/metering providers, distribution network service providers.

Timeline of 5MS & GS rule changes

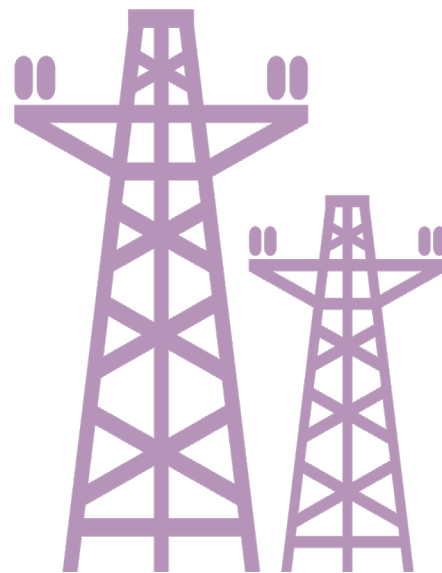


Rule change request and rationale

On 9 April 2020, AEMO submitted a rule change proposal seeking to delay the implementation of the Five minute settlement (5MS) and Global settlement and market reconciliation (GS) rules by 12 months.

Rationale

- Submitted in response to the potential impact of COVID-19 on the energy industry.
- Delaying commencement will prioritise the short-term safety, reliability and security of supply of electricity and the national electricity system, and the financial resilience of the energy industry due to the constraints and risks posed by COVID-19 over the potential for immediate economic benefits of 5MS.



Scope and purpose of rule change

Scope is narrow and defined to the specific issues raised in the rule change request.

The Commission will only consider:

- whether a delay to the implementation of 5MS and GS is necessary given the impact of COVID-19
- If the Commission deems the delay necessary, what is the appropriate time period of delay?



Note: The rule change request does not discuss the merits of 5MS or GS. There was an extensive two-year assessment of the merits of 5MS, and an 8-month assessment of the benefits of GS. This rule change is specifically focused on whether or not to delay the implementation of 5MS and GS.

Applying the National Electricity Objective (NEO)

Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the NEO:

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.*

Commission will assess the rule change request against the criteria in the assessment framework, which includes:



Deferring industry costs



Industry capability

Does the industry have the capacity to implement SMS/GS given COVID-19?



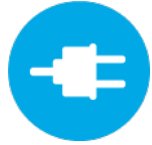
Delayed benefits



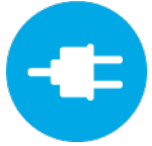
Contract market implications

If not, what are the costs of delay?

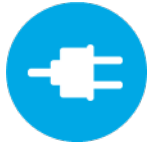
Key issues and questions to consider



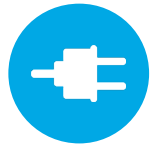
participant costs and capacity



contract market implications



delayed benefits



Potential delay period

Participant Costs

Key questions

- How COVID-19 has impacted market participants' cashflows?
- How would a delay impact participants' cashflows?

Context

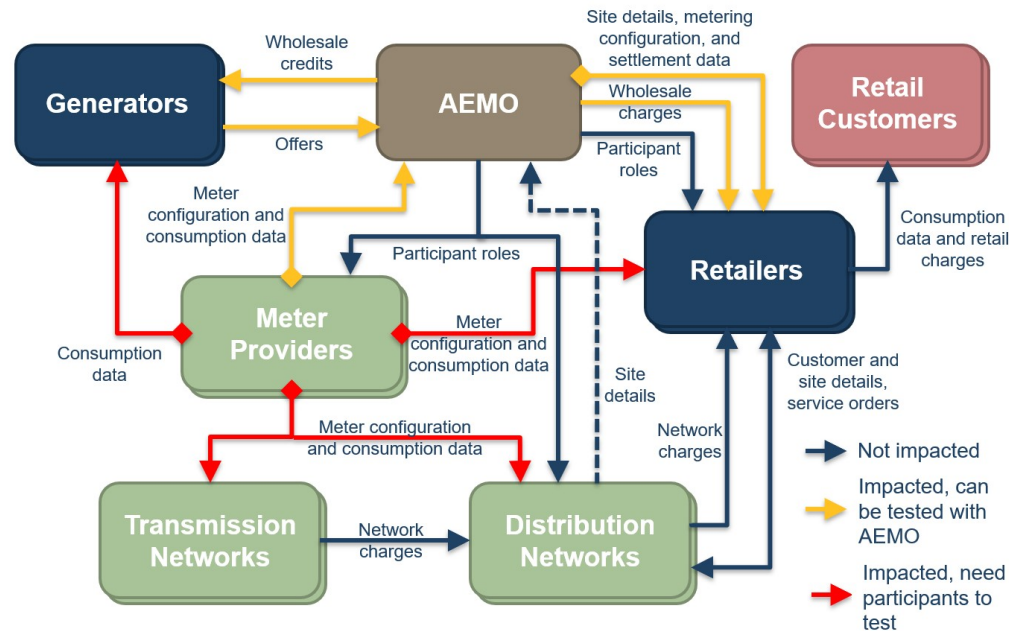
- One of the main issues raised in the rule change relates to the impact of COVID-19 on financial resilience of the NEM.
- If COVID impacts participants' cashflows significantly enough, it could lead to:
 - Participant exit, which impacts the competitive market structure and consumer outcomes
 - Financial contagion as the stress of bad debt spreads through the industry.

Considerations

- A delay could impact different participants differently, depending on:
 - The extent to which their IT systems are impacted by SMS and GS
 - How progressed the participant is on upgrades
 - How they have structured their IT upgrade contracts with vendors
- Therefore a delay has the potential to:
 - Decrease costs – as IT upgrades are restructured and costs deferred
 - Increase costs – if participants need to extend the IT resources for deferral period
- There may also be cashflow timing impacts – e.g. cost less now, but more in long term

IT system upgrade paths – participants can choose a lower cost option

- If there were a delay, AEMO would still have systems ready on the original time line. This could allow participants to:
 - **Continue as planned** – proceed on original testing schedule if it is more efficient to do so
 - **Go slow** – proceed on a slower IT implementation schedule, and test systems at a later point in time.
- This scenario will be discussed later in this presentation by AEMO.
- This optionality may be impacted by ability to test 5MS/GS business-to-business data flows on both schedules.



Source: Adapted from AEMO 5MS High level design document

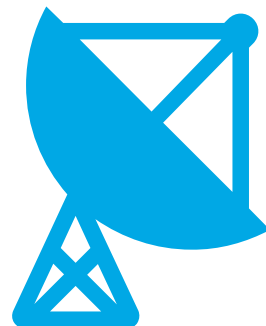
Participant capacity

Key Question

- Has COVID-19 impacted participants' capacity to implement 5MS and GS reforms on scheduled timing?

Considerations

- COVID-19 lockdowns and international travel restrictions may have impacted participants ability to implement the system changes required for 5MS and GS, or the ability of their staff or contractors to undertake the implementation work necessary
- This may be impacted by the use of IT vendors that have returned overseas in light of travel restrictions.



Contract market implications

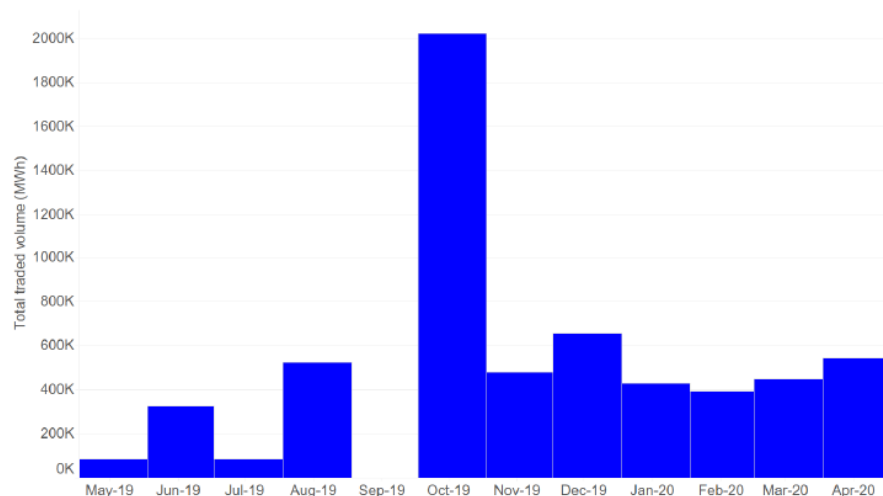
Key Question

- Would a delay to 5MS impact contracts already traded for FY2021-22?

Considerations

- While the ASX has not listed a 5-min cap product, they are trading on the OTC market. Would a delay to 5MS impact the value of those and other contracts?

Figure 4.2: ASX traded swaps in NSW for FY2021-22



Source: AEMC analysis of ASX data.

Note: The chart shows the volume of swaps traded on the ASX in NSW for the period after 5MS is scheduled to start.

Delayed benefits of 5MS and GS

Key Question

- What is the impact of a 12 month delay on the market-wide benefits of 5MS and GS?

Considerations

- The 5MS and GS rules were made as they create benefits that are in the long term interests of consumers such as:
 - Improved signals for investment and operation of the market (5MS)
 - Improved bidding behaviour (5MS)
 - Increased transparency on UFE errors and incentives to reduce the errors (GS)
- A delay in the commencement of these rules, would likely result in an equivalent delay in these benefits eventuating



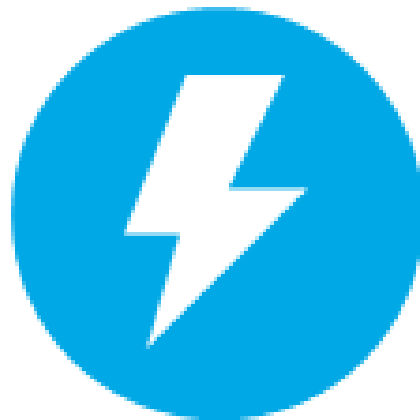
Potential delay period

Key Question

- If there was a delay, is 12 months the most optimal delay length?
If not, what is?

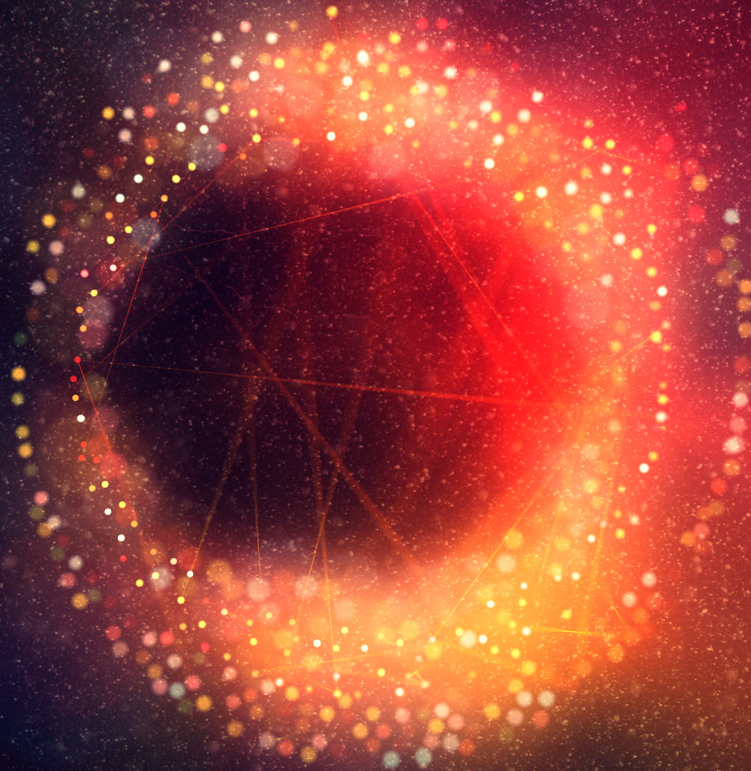
Considerations

- The rule change request proposes a 12 month delay, however other options may provide better outcomes for the market. For example, a:
 - 3 month delay – could provide temporary relief for the lockdown period
 - 6 month delay – could provide additional relief, but would mean the commencement would be mid-summer and when workforce participation is low
 - 9/12 month delay – could help manage a potential second wave of COVID-19.
- Another consideration is whether a delay would need to align with financial quarters to minimise liquidity impacts on derivative contracts.



THE RULE CHANGE PROCESS

Andrew Pirie, AEMC



Request for an expedited rule change process

AEMO's proposal

AEMO proposed that the rule change request be treated as an urgent rule and processed on an expedited basis.

AEMO's reasons

AEMO's request was made on the basis that, if the rule change request was not made as a matter of urgency, it may imminently prejudice or threaten the effective operation and administration of the wholesale electricity market or the safety, security and reliability of the interconnected electricity system.

AEMO suggested impacts of COVID-19:

- restricting the movement of people to attend work
- reducing the availability of healthy people to perform tasks
- threatening the financial resilience of the energy industry.

Commission's reasons to apply an expedited rule change process

Commission's decision

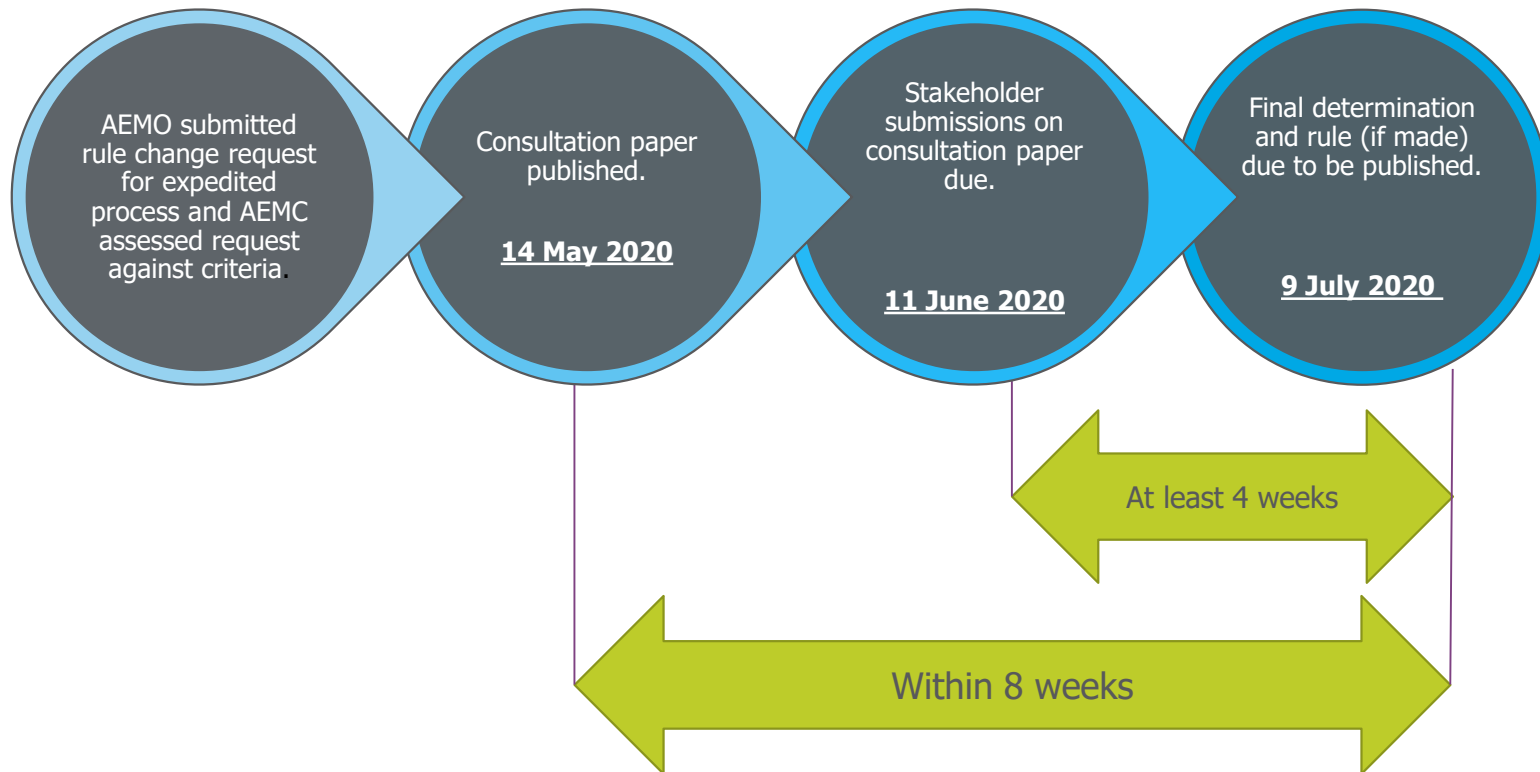
The Commission considered that the rule change should be subject to an expedited rule making process.

Commission's reasons

The economic impact of COVID-19 threatens the financial viability of participants and potentially the financial resilience of the energy industry. There is evidence that this impact could be reduced if a decision on deferring the implementation of 5MS and GS is made as soon as possible.

- The COVID-19 pandemic has caused a severe economic downturn and there has been a material decrease in total wages and increase in unemployment.
- Government and industry consensus over the economic impact of COVID-19 has resulted in a range of measures to support people, businesses and the energy sector.
- The potential for a material reduction in revenues may cause financial stress for retailers and financial contagion in the energy sector.
- Delaying the major industry reforms of 5MS and GS may defer implementation costs for some participants at a time when all cash flow is needed to deal with the impacts of COVID-19.

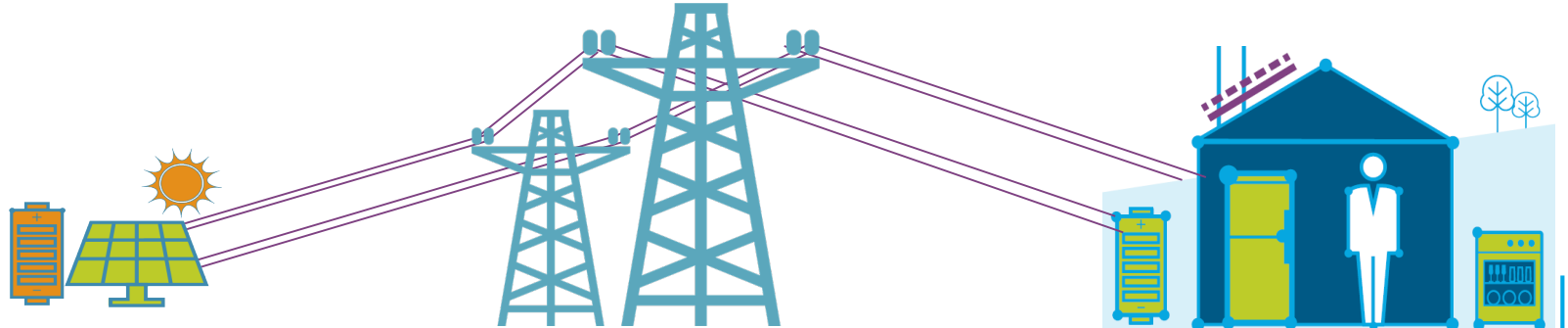
Timeline for this expedited rule change process



Note: Valid objections to the Commission's decision to proceed under an expedited rule change process close 28 May 2020.

Stakeholder submissions

- Emphasis on providing evidence of impact of delay.
- Submissions can be treated as confidential.
- Expedited rule change timeframe means that the AEMC may not have time to consider any later submissions.



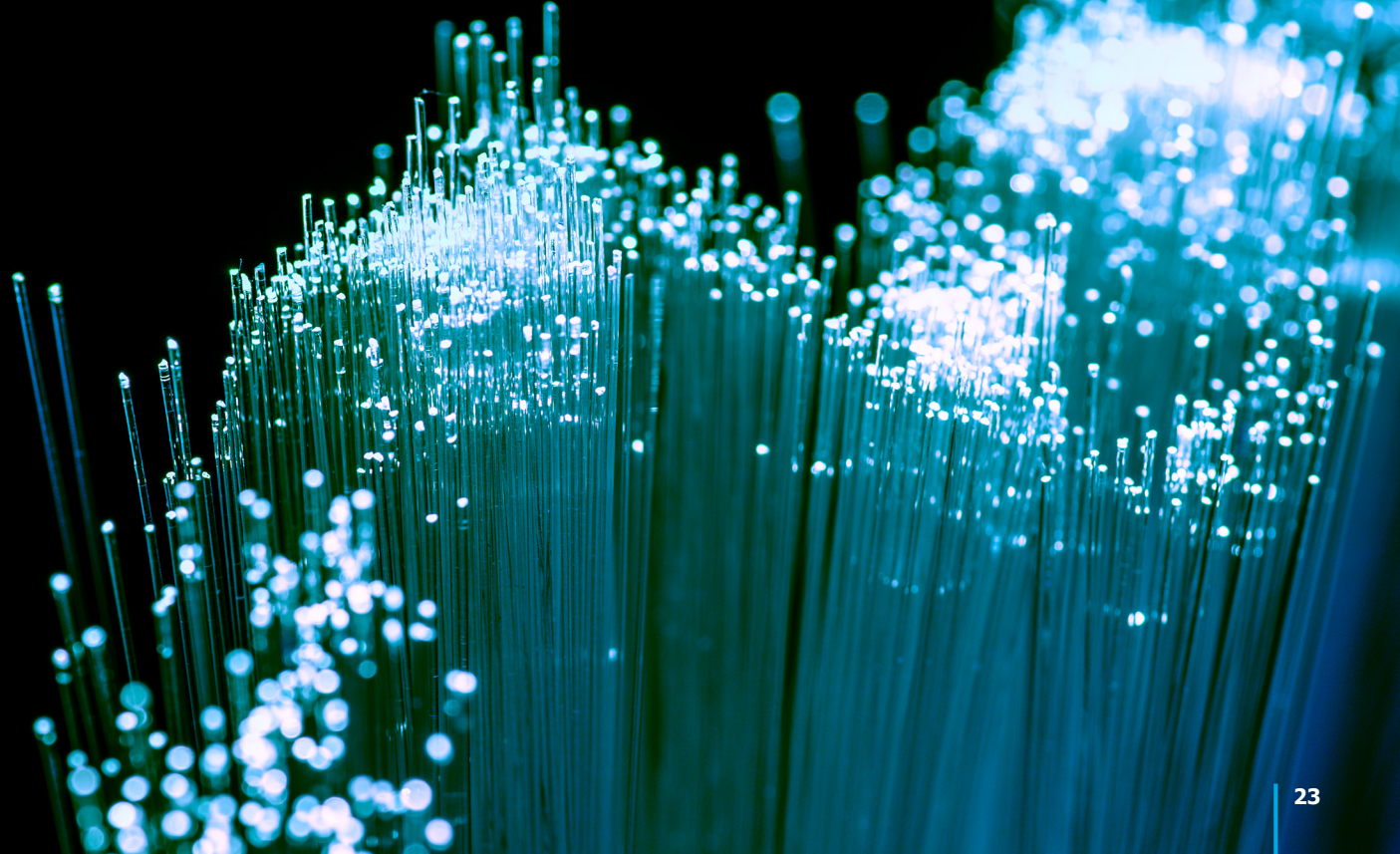
Next Steps

- Submissions close **11 June 2020**
- To set up a meeting with the AEMC contact:
 - Prabpreet Calais Prabpreet.Calais@aemc.gov.au
 - Andrew Pirie Andrew.Pirie@aemc.gov.au



STAKEHOLDER QUESTIONS

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Implementation of 12 Month Deferral Scenario

Thursday 21 May, 2020

Background

- Purpose of this section is to consider how implementation would occur under a 12 month deferral scenario
 - ✓ Provides a sound basis for stakeholders to consider impacts to their own program, and make submissions to AEMC accordingly
 - ✓ Objective is to offer participants with flexibility to maintain their current timelines, or pause their programs – to the extent practicable.
- Key assumptions for implementation scenario are in line with the rule change proposal:
 - ✓ 5MS commencement date for 5MS moves to 1 Jul 2022
 - ✓ GS “soft” start date moves to 1 Jul 2022
 - ✓ GS “hard” start date moves to 5 Feb 2023
 - ✓ A transitional rule to allow AEMO to change the effective date of already-determined procedures (updated for 5MS and GS) without further consultation.
 - ✓ No change to the 5-min data delivery date of 1 Dec 2022 for new and replacement type 4/4A meters.
- Acknowledge this is subject to AEMC decision.

Impact to AEMO's 5MS program

- AEMO has reviewed the potential impact of the proposed 12-month deferral on the 5MS Program
- This review confirmed that AEMO will not change its approach or timeline for core IT development or deployment activities as a consequence of the deferral
 - ✓ AEMO IT systems will be developed according to current timelines, no change regardless of whether the rule change proceeds or not
 - ✓ Backwards compatible design – AEMO systems designed to operate in both 30m and 5m mode under the 5MS program. This enables AEMO to deploy its IT systems on the current timeline, operate in 30m mode, and 'switch-on' 5MS capabilities without further software development.
- Some limited impacts to IT systems will need to be managed
 - ✓ Reallocations solution has already gone live, and would need to be updated to reflect any new 5MS commencement date
- Procedures impact is expected to be very low
 - ✓ Proposed procedure transitional rule to change effective date reduces administrative burden on both AEMO and participants
 - ✓ Normal Procedures management channels can provide visibility over the effective date change process and ensure integration with effective date of other Procedure changes

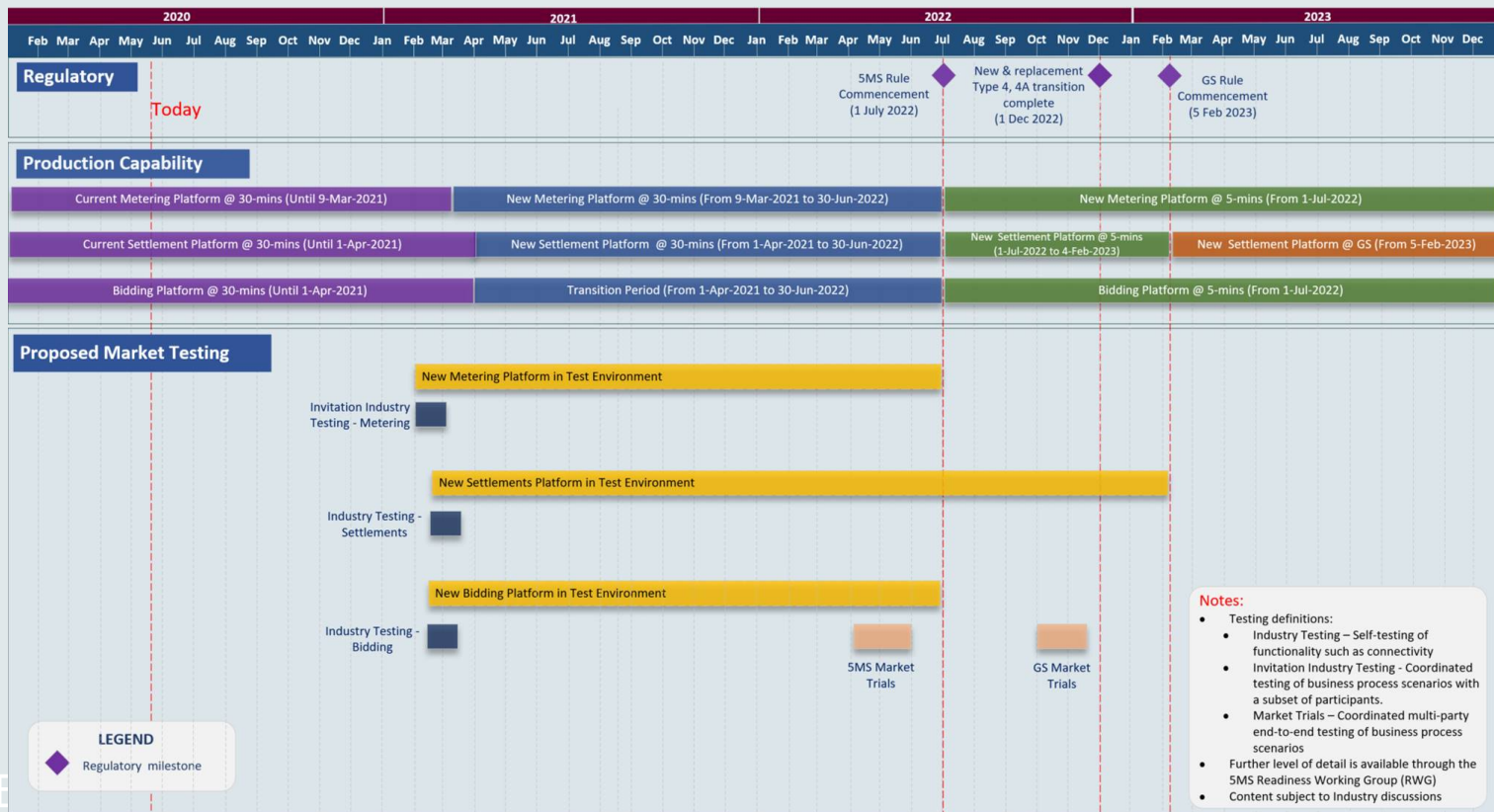
Facilitating industry transition

- Transition and testing scenario has been developed to reflect the deferral timeframes proposed in the rule change request
- AEMO internal program continues to its current milestones i.e. staged platform deployments to support current 5MS timeframes.
- Participants should be provided with implementation flexibility where possible (5MS/GS *Transition and go-live strategy* principle) i.e. transition and testing scenarios should support participants' abilities to implement their programs **with or without** a deferral.

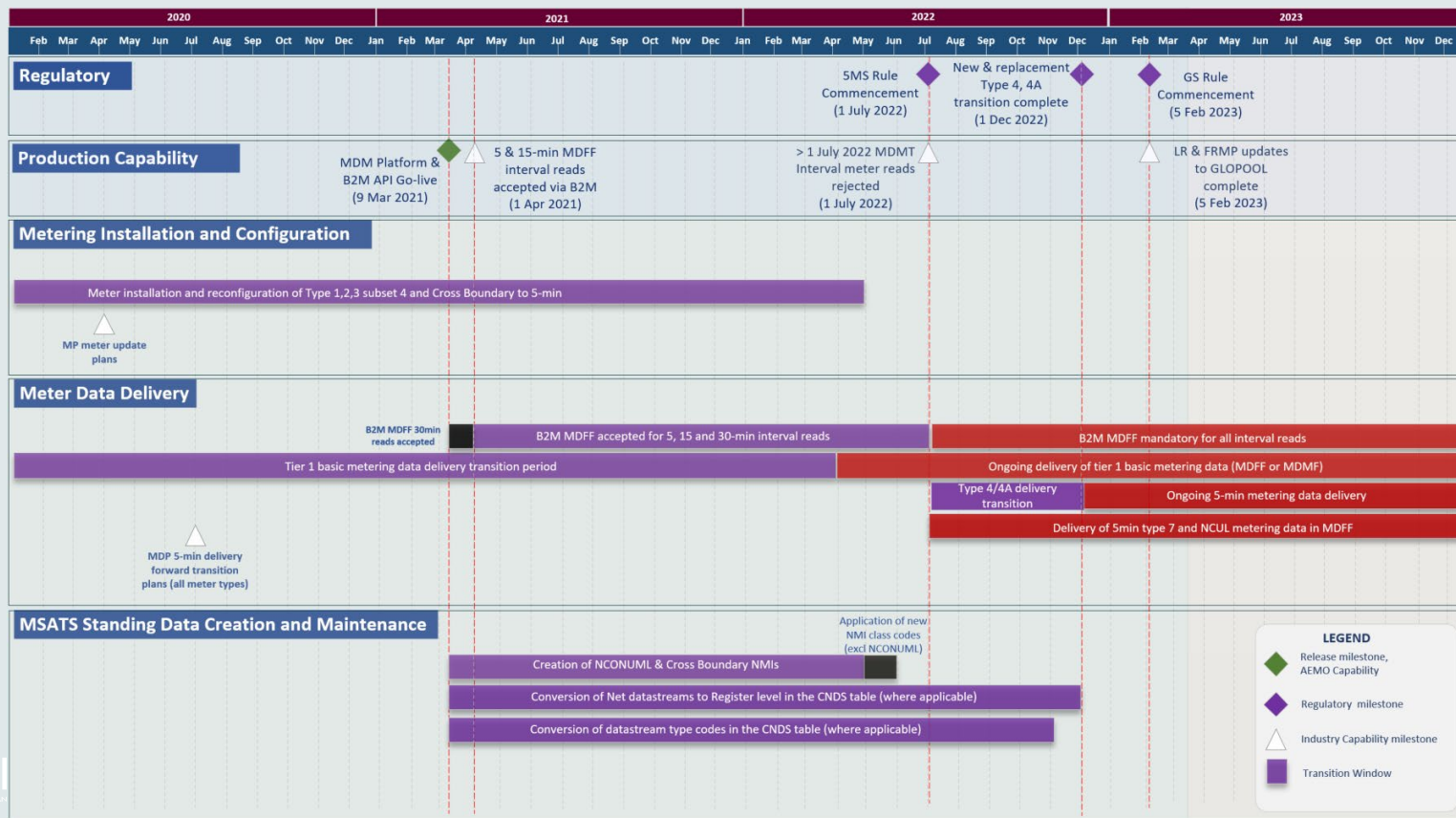
Deferral scenario – development approach

- Objective: To support participant impact assessment and response to proposed rule change
- The AEMO program with industry (through the 5MS consultative forums) has developed a “deferral scenario” for:
 - ✓ Transition
 - ✓ Participant testing
 - ✓ Metering transition approaches
- Engagement has been through the range of 5MS forums:
 - ✓ Systems Working Group 29-Apr
 - ✓ Program Consultative Forum 05-May
 - ✓ Transition Focus Group 06-May
 - ✓ Readiness Working Group 14-May
 - ✓ Meeting packs are available on AEMO [website](#)

High Level Deferral transition and testing approach



Proposed metering transition



Testing

Opportunity for Participants to Test their own 5MS and GS Changes

- AEMO to provide participants with access to test environments for the deferral period
- Enables participants to test against their own systems against AEMO's market systems – at a time that suits each participant
- Applies for Bidding/Dispatch, Settlements and Metering

Market testing

- The market testing approach for AEMO's IT Platform deployments in early 2021 is as for the current program timeframes
- A single 5MS market trial will be scheduled for first half 2022
- It is not proposed to run multiple 5MS and GS market trials due to the uncertainty in participant numbers
 - ✓ Environment support is provided for those participants in a position to perform Bi / Multilateral testing

Transition

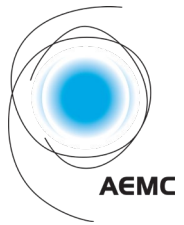
Bidding Transition

- Bidding transition commences 1 April 2021
- Participants may continue to submit bids at 30m granularity until 1 July 2022
- Participants may submit bids at 5m granularity (providing they are the same for the 30m interval) from 1 April 2021. 5-min bids can be unique from 1 July 2022 (5MS Rule commencement).

Metering Transition

- Meter installation and configuration timeline has flexibility to accommodate proceed or defer
- Metering data delivery transition
 - ✓ Window commences three weeks after Metering Platform Go-Live. i.e. AEMO able to accept 5m granularity data.
 - ✓ Capability deployment for participants may be subject to bilateral agreement with market partners.
 - ✓ B2B testing can be arranged bilaterally
- MSATS Standing Data
 - ✓ Longer period available to manage new standing data configuration associated with 5MS and GS in production.
 - ✓ Some transition constraints may need to be considered. This is because one group of participants can impact other participants. For example, a DNSP starts applying new NMI classification codes that other participants are not ready to receive. This would likely lead to an increase in exception management requirements for the effected Participant and a potential misalignment of standing data with MSATS.





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