

# 5MS & GS Readiness Working Group #9

Tuesday 14<sup>th</sup> April, 2020

**WebEx only: \*\*Please disconnect from your workplace VPN  
once on the WebEx call\*\***

**PLEASE NOTE THIS MEETING WILL BE RECORDED FOR THE  
PURPOSE OF PREPARING MINUTES**

# Agenda **\*\*Please disconnect from your workplace VPN once on the WebEx call\*\***

NO	TIME (AEDT)	AGENDA ITEM	RESPONSIBLE
<b>PRELIMINARY MATTERS</b>			
1	10:00am – 10:10am	Welcome, introduction and apologies	Greg Minney
2	10:10am – 11:00am	Covid-19 and proposed 5MS deferral	Greg Minney
<b>FOR NOTING</b>			
3	11:00am – 11:05am	Notes, actions and feedback from previous meeting	Greg Minney
4	11:05am – 11:15am	Readiness milestones and MTP update	Greg Minney
5	11:15am -11:20am	Industry testing update	Tui Grant
6	11:20am – 11:25am	Metering procedures update	Emily Brodie
7	11:25am – 11:30am	Industry readiness update	Emily Brodie
<b>BREAK 11:30am – 11:40am</b>			
<b>FOR DISCUSSION</b>			
8	11:40am – 11:55am	Critical mass criteria and go-live decisions	Greg Minney
9	11:55am – 12:25pm	Risks, issues and contingencies workshop	Greg Minney
10	12:25pm – 12:40pm	Debrief: Transition Focus Group meeting #6	Blaine Miner
11	12:40pm – 12:45pm	Debrief: Reallocations release	Greg Minney
12	12:45 - 12:55pm	Readiness reporting update	Austin Tan
13	12:55pm – 13:00pm	Forward meeting plan and general questions	Greg Minney

# COVID-19 and proposed 5MS deferral

Greg Minney

# Proposed Industry Deferral

- On 6-Apr-20 the Market Bodies (AEMO, AEMC and AER) wrote to the COAG Energy Council to advise them that, in light of the impact of Covid-19, it is proposed:
  - Industry be provided with a 12 month delay to five-minute settlement implementation
  - The AEMO program will progress internally as planned
  - AEMO will prepare a rule change required to give effect to this change and submit to the AEMC
- Next steps:
  - AEMO is currently drafting a rule change to be submitted to the AEMC as a matter of priority
  - AEMO will keep market participants informed through the usual 5MS channels

# Coronavirus (Covid-19) Risk

- Risk was raised at March PCF in relation to the impact Covid-19 may have on Industry's and AEMO's 5MS and GS implementation programs
- Risk was discussed at Executive Forum in March and the following actions were taken:
  - Risk to be monitored through PCF
  - Question(s) to be added to the Industry Readiness Questionnaire in relation to the impacts of Covid-19 and the mitigation measures
- Purpose of today's discussion:
  - Review risk – description, rating, trend
  - AEMO update
  - Participants' experiences, mitigation measures and expected impacts
- AEMO will update Industry Risks and Issue Register and publish

# Coronavirus (Covid-19) Risk

↑ Improving  
↔ Stable  
↓ Worsened

Risk No.	Title	Description	Trend	Mitigations	Residual Likelihood	Residual Consequence	Residual Risk Rating
New	Impact of Covid-19 resulting in participants and / or AEMO being unable to meet SMS Program timelines	There is a risk that the spread of Covid-19 may result in an increase of participants' employees needing to take leave or working from home resulting in a reduced rate of productivity or difficulty performing systems changes.	↓	<ul style="list-style-type: none"> <li>Monitor risk through PCF and RWG.</li> <li>Add questions in relation to risk to Industry Readiness Questionnaire.</li> </ul>	Likely	Major	Critical

# Suggested approach to developing RWG advice to PCF on proposed deferral

## Background

PCF requested RWG to work through impacts and risks of a potential 12-month 5MS deferral

- Working assumption is 12 month delay. Unproductive to debate the length of delay as subject to the rule change process.

## Suggested approach

- Develop strawperson transition approach to achieve proposed deferral, affecting:
  - Go-lives and rule commencements (milestones)
  - Metering transition plan (activities)
- Via in-session and out-of-session RWG, SWG and TFG meetings over next 1-2 months
- Enables participants and AEMO to perform impact assessments on the proposed delay as their own inputs into the rule change process

# High-level assumptions and principles for potential delay

## Assumptions

- Proposed 5MS and UFE soft start commencement is 1 July 2022
- Proposed GS financial commencement is 5 Feb 2023
- Other?

## Principles

- Where feasible, use existing transition strategy and plans as the basis for developing the strawperson “deferral” transition approach
- Participants will be involved in testing in accordance with AEMO’s testing approaches e.g. minimum of 4 weeks in pre-production to provide the industry with the opportunity for testing
- Other?



# Outputs

- Propose that use updates to existing strategies and plans as templates for developing the advice
- Collate dissenting views from within the RWG for PCF's consideration
- Highlight any risks associated with strawperson transition approach

# Initial PCF feedback

## RWG to address:

- Scope of proposed change:
  - What can continue to current timelines?
  - What can be deferred?
- Including:
  - Timing and scope of participant testing for AEMO platform deployments
  - Procedural update process and impacts
  - Metering:
    - B2M via API delivery dates
    - MDFF acceptance: 30 minute/5 minute/Register level datastreams
  - Settlement
    - Deployment approach and timing
  - Dispatch and Bidding
    - Deployment approach and timing
  - Global Settlement
    - Metering standing data and updates
  - Participant deployment/ rollout plans for type 4/4A and VicAMI meters
  - Other?

# Proposed approach to deferred 5MS/GS transition and testing

Approach	Timing
Based on 12 month deferral, AEMO to provide RWG updated: <ul style="list-style-type: none"><li>• Transition and go-live strategy</li><li>• Industry testing and market trial strategy</li></ul> Use key (timing) sections of strategies as basis for developing deferral scenarios.	TBC – for discussion
RWG to consider “deferral scenario strategies” and provide feedback prior to and at its out-of-session meeting	
Out-of-session RWG meeting	
AEMO to make updates to “deferral scenario strategies” resulting from RWG discussions	
AEMO to consolidate “deferral strategies” and “deferral MTP” for review by the RWG	
RWG to provide PCF with deferral advice for its consideration	

# Proposed approach to deferred 5MS/GS metering transition

Approach	Timing
AEMO to provide updated MTP to TFG based on 12 month deferral scenario (by email) <ul style="list-style-type: none"><li>• Use MTP as basis for developing "deferral scenario MTP"</li><li>• Would include a column for TFG feedback for each change</li></ul>	TBC – for discussion
TFG to consider updated "deferral scenario MTP" prior to and at its meeting	
TFG meeting	
Post TFG meeting, AEMO to provide TFG with updated "deferral scenario MTP" for final input	
AEMO consolidate TFG responses and refer the "deferral scenario MTP" to the RWG for its consideration and consolidation into the overarching transition strategy	

# Notes, actions and feedback from previous meeting

Greg Minney

# Responses to RWG meeting actions

#	Topic	Action	Response
9.3.1	Industry readiness reporting	AEMO to consider adding MC as a new Participant Type for readiness reporting purposes	Complete
9.4.1	Industry testing	RWG to inform AEMO if they are able to assist with shake out of the latest settlements deployment into the staging environment	Complete
9.4.2	Industry testing	AEMO to organise industry testing Q&A session	Complete
9.4.3	Industry testing	AEMO to update table on industry testing, on RWG 9 slide 16.	Complete
9.7.1	Transition focus group debrief	Ausnet to raise ICF through the ERCF regarding the potential removal of the RegisterID field from the CATS CRI table	Complete
9.7.2	LR and FRMP fields	AEMO to invite SWG rep to the next RWG or TFG to discuss potential approaches to updating the applicable LR and FRMP fields to GLOPOOL	Complete

# Responses to RWG meeting actions

#	Topic	Action	Response
9.8.1	Industry readiness reporting	AEMO to organise Q&A session on interpretation of readiness reporting round 1 results	Complete: Monday 30 March
9.8.2	Industry readiness reporting	RWG to provide explanation when a n/a response is provided for MTP activities.	Ongoing as part of readiness reporting
9.8.3	Industry readiness reporting	TFG to update MTP sub-category/activity descriptions to ensure there is enough detail to report against (e.g. A39)	Will be addressed in TFG meeting (Mon 6 Apr). To be discussed in this RWG #9 (TFG meeting debrief)
9.8.4	Industry readiness reporting	AEMO to follow up with participants that are yet to complete MTP activities by transition end date	Complete
9.8.5	Industry readiness reporting	RWG to raise any further risk and issues for discussion at the next risks and issues workshop in April	One response received: <i>Quantifying impact of changes to the way of working and impact of border closures on participants.</i>
9.8.6	Industry readiness reporting	RWG to provide feedback regarding the presentation approach and format of readiness reporting	No responses received

# Responses to RWG meeting actions

#	Topic	Action	Response
9.8.7	Industry readiness reporting	RWG to provide feedback regarding extent that AEMO should make individual survey responses transparent to the industry	Two responses received: one in favour and one against.
9.8.8	Industry readiness reporting	RWG to provide feedback regarding any other changes to the readiness report/plan	<p>One response received: <i>Can AEMO explain how the "Critical Mass" defined in the Contingency Draft Plan will be applied to AEMO Readiness Reporting? Further what actions can AEMO take if Critical mass is not achieved and when.</i></p> <p>To be discussed at this RWG #10</p>
9.8.9	Industry readiness reporting	AEMO to include in readiness report if critical mass for each participant type is on track	Complete – to be included in next report
9.9.1	Contingency plan	RWG to provide feedback on response end date on second Contingency draft plan.	Complete – to be discussed at this RWG #10
9.11.1	RWG Content	RWG to provide feedback on proposed content and suggest content for future RWGs	<p>One response received: <i>Impact of the Government and global pandemic controls on program velocity.</i></p> <p>To be discussed at this RWG #10 – current position is for PCF to manage covid-19 implications in context of proposed rule change to delay 5MS implementation by 12 months.</p>



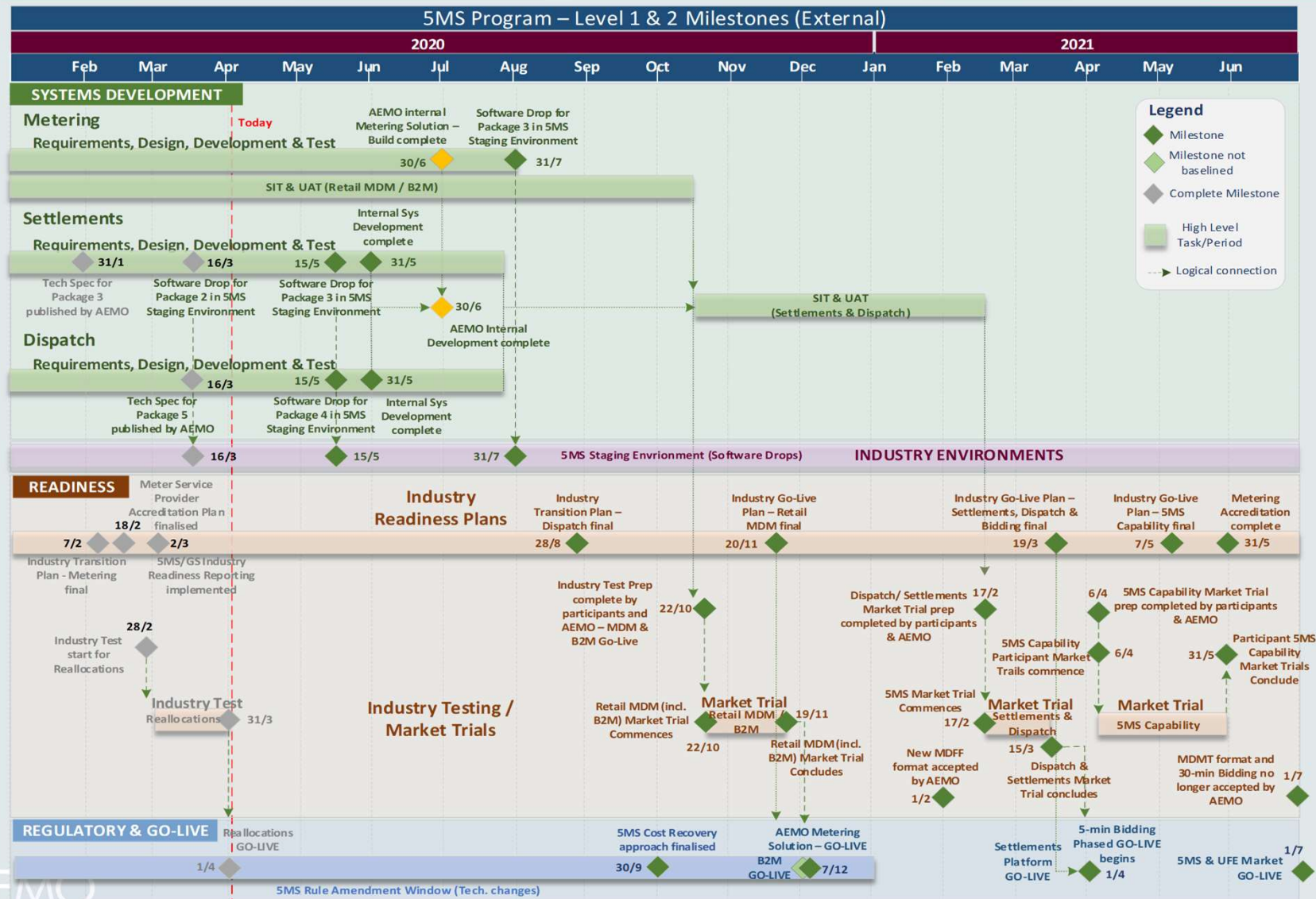
# Readiness milestones and MTP update

Greg Minney

# 5MS Program Timeline (Jan '20 to Jul '21)

## Level 1 and External Level 2 Milestones

Current as at 02-04-2020



# Level 1 Milestones Change Report

Current as at 03-04-2020

## Current L1 Milestone

ID	Stream	Milestone	Planned Date	Expected Date	%	Comments
L1-M6	Systems	AEMO Internal Systems Development – Build Complete	30 June 2020	See below	70%	Dispatch and Settlement on time. Metering solution development likely not to be fully complete by 30 June.

### Issues impacting the delivery of milestone L1-M6

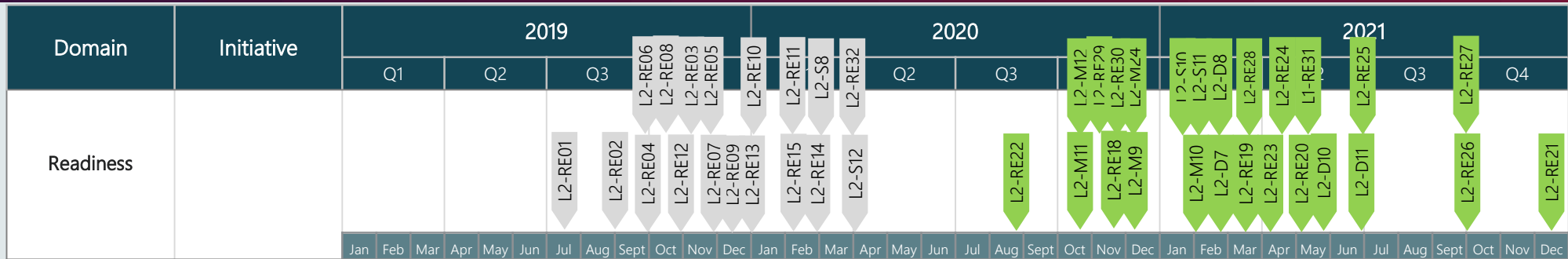
- Increase in complexity of the solution (under-estimation of effort in some areas)
- Technology issues which have impacted on productivity
- Security
- COVID-19

### Mitigation & Consequence

- Functionality required for AEMO Metering solution go-live on 7 Dec 2020 will be prioritised and delivered on time by 30 June 2020.
- Functionality not essential for 7 Dec 2020 will be completed after 30 June 2020 – a new milestone will be added to track this.
- This strategy is intended to enable AEMO Metering Solution go-live to continue as scheduled on 7 Dec 2020, with a second internal AEMO drop in Feb 2020.
- On this basis, no impact to participants and no consequence to participant dates.
- Note: Re-planning currently being finalised to validate this, if there is change the PCF will be

# Level 2 Milestones – Readiness

Current as at 02-04-2020



## Key Milestones (Program)

ID	Milestone	Target Date	Expected Date	Owner	Status
L2-RE01	Industry Working Group Established	15-Jul-2019	15-Jul-2019	AEMO	Complete
L2-RE02	Market Readiness Strategy Industry Draft	30-Aug-2019	30-Aug-2019	AEMO	Complete
L2-RE03	Market Readiness Strategy Finalised	29-Nov-2019	30-Oct-2019	AEMO	Complete
L2-RE04	Industry Test Strategy Industry Draft Released	30-Sep-2019	30-Sep-2019	AEMO	Complete
L2-RE05	Industry Test Strategy Finalised	29-Nov-2019	29-Nov-2019	AEMO	Complete
L2-RE06	Transition and Go Live Strategy Industry Draft Released	30-Sep-2019	30-Sep-2019	AEMO	Complete
L2-RE07	Transition and Go Live Strategy Finalised	29-Nov-2019	29-Nov-2019	AEMO	Complete
L2-RE08	Market Trial Strategy Industry Draft	30-Sep-2019	30-Sep-2019	AEMO	Complete
L2-RE09	Market Trial Strategy Finalised	29-Nov-2020	29-Nov-2019	AEMO	Complete
L2-RE10	Metering Service Provider Accreditation Update Plan Industry Draft	29-Nov-2019	29-Nov-2019	AEMO	Complete
L2-RE12	Industry Readiness Reporting Plan Industry Draft	31-Oct-2019	31-Oct-2019	AEMO	Complete
L2-RE13	Industry Readiness Reporting Plan Finalised	13-Dec-2019	13-Dec-2019	AEMO	Complete
L2-RE15	Industry Transition Plan – Metering final complete	07-Feb-2020	07-Feb-2020	AEMO	Complete
L2-RE14	5MS / GS Industry Readiness Reporting Implemented	28-Feb-2020	02-Mar-2020	AEMO	Complete
L2-S8	Industry Test start for Reallocations	01-Mar-2020	28-Feb-2020	AEMO	Complete

# Level 2 Milestones – Readiness

Current as at 02-04-2020

Domain	Initiative	2019												2020												2021											
		Q1			Q2			Q3			Q4			Q1	L2-RE32	Q2			Q3			L2-M12	L2-RE29	L2-RE30	L2-M24	L2-D8	Q2			Q3			Q4				
Readiness																																					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

## Key Milestones (Program)

ID	Milestone	Target Date	Expected Date	Owner	Status
L2-RE11	Metering Service Provider Accreditation Plan Finalised	13-Mar-2020	18-Feb-2020	AEMO	Completed
L2-S12	Reallocations Go-Live	01-Apr-2020	01-Apr-2020	AEMO	Completed
L2-RE32	Industry Test for Reallocations Concludes	31-Mar-2020	31-Mar-2020	AEMO	Completed
L2-RE22	Industry Transition Plan – Dispatch final complete	28-Aug-2020	28-Aug-2020	AEMO	
L2-M11	Market Trial preparation completed by participants for MDM and B2M Go-Live	22-Oct-2020	22-Oct-2020	Participants	
L2-M12	Market Trial preparation completed by AEMO for MDM and B2M Go-Live	22-Oct-2020	22-Oct-2020	AEMO	
L2-RE29	Retail MDM (incl. B2M) Market Trial Commences	22-Oct-2020	22-Oct-2020	AEMO	
L2-RE30	Retail MDM (incl. B2M) Market Trial Concludes	19-Nov-2020	19-Nov-2020	AEMO	
L2-RE18	Industry Go-Live Plan Retail MDM finalised	20-Nov-2020	20-Nov-2020	AEMO	
L2-M24	B2M Go-Live	17-Mar-2020	07-Dec-2020	AEMO	
L2-M10	New MDFF format accepted by AEMO	01-Feb-2021	01-Feb-2021	AEMO	
L2-D7	Dispatch Market Trial preparation completed by participants	17-Feb-2021	17-Feb-2021	Participants	
L2-D8	Dispatch Market preparation completed by AEMO	17-Feb-2021	17-Feb-2021	AEMO	

-  Milestone complete
-  Milestone on track
-  Milestone at risk
-  Milestone not achieved

# Level 2 Milestones – Readiness

Current as at 02-04-2020

Domain	Initiative	2019												2020												2021											
		Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
Readiness																																					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

## Key Milestones (Program)

ID	Milestone	Target Date	Expected Date	Owner	Status
L2-S10	Settlements Market Trial preparation completed by participants	17-Feb-2021	17-Feb-2021	Participants	
L2-S11	Settlements Market Trial preparation completed by AEMO	17-Feb-2021	17-Feb-2021	AEMO	
L2-RE28	Dispatch and Settlements Market Trial concludes	15-Mar-2021	15-Mar-2021	AEMO	
L2-RE19	Industry Go-Live Plan Settlements, Dispatch & Bidding finalised	19-Mar-2021	19-Mar-2021	AEMO	
L2-RE23	5MS Capability Market Trial preparation completed by participants	06-Apr-2021	06-Apr-2021	Participants	
L2-RE24	5MS Capability Market Trial preparation completed by AEMO	06-Apr-2021	06-Apr-2021	AEMO	
L2-RE31	5MS Capability Market Trial commences	06-Apr-2021	06-Apr-2021	AEMO	
L2-RE20	Industry Go-Live Plan – 5MS Capability final complete	07-May-2021	07-May-2021	AEMO	
L2-D10	5MS Capability Market Trial concludes	31-May-2021	31-May-2021	AEMO	
L2-D11	30-min Bidding no longer accepted by AEMO	01-Jul-2021	01-Jul-2021	AEMO	
L2-RE25	MDMT format no longer accepted by AEMO for interval meters	01-Jul-2021	01-Jul-2021	AEMO	
L2-RE26	GS Market Trial preparation completed by participants	01-Oct-2021	01-Oct-2021	Participants	
L2-RE27	GS Market Trial preparation completed by AEMO	01-Oct-2021	01-Oct-2021	AEMO	
L2-RE21	Industry Go-Live Plan – GS Capability final complete	21-Dec-2021	21-Dec-2021	AEMO	

- Milestone complete
- Milestone on track
- Milestone at risk
- Milestone not achieved

# Metering transition plan past and upcoming activities: Meter installation and reconfiguration

Sub-Category	Activities	Responsible	Transition end date
S01 Bulk/Wholesale meters	<ul style="list-style-type: none"> <li>Identify which meters need replacing or reconfiguring...</li> <li>Initial assessment of whether data storage exemptions may be required</li> </ul>	MP	31 Mar 2020
S02 Type 1-3			
S03 Subset of type 4			
S04 Cross boundary (known)			
	<ul style="list-style-type: none"> <li>Provide visibility of approach / timeframe for required meter replacement or reconfiguration [to AEMO]</li> </ul>	MC	31 Mar 2020
S05 Cross boundary (unknown)	<ul style="list-style-type: none"> <li>Identify which meters need to be installed, replaced or reconfigured</li> </ul>	MP	1 Jul 2020
	<ul style="list-style-type: none"> <li>Provide visibility of approach / timeframe for required meter replacement or reconfiguration [to AEMO]</li> </ul>	MC	31 Dec 2020

# Metering transition plan upcoming activities: Metering data delivery

Sub-Category	Activities	Responsible	Transition end date
S17 New and replacement type 4 S18 New and replacement type 4A S19 New and replacement VIC AMI meters S20 New and replacement SAMPLE meters S21 Pre-1 Dec 2018/19 Type 4, 4A, VICAMI and SAMPLE meters	Provide forward plan to AEMO and industry	MDP	1 Jul 2020



# Metering transition plan past and upcoming activities: MSP accreditation updates

Sub-Category	Activities	Responsible	Transition end date
MP/MDP accreditation (for 1 July 2021)	<ul style="list-style-type: none"> <li>Assess level of change required for people, process and systems to facilitate 5MS/GS implementation</li> </ul>	MP/MDP	28 Feb 2020
	<ul style="list-style-type: none"> <li>Confirm scope/scale of change with AEMO</li> </ul>		30 Jun 2020
	<ul style="list-style-type: none"> <li>If needed, apply for accreditation update</li> </ul>		In accordance with Roadmap agreed with AEMO
MP/MDP accreditation (for 1 Dec 2022)	<ul style="list-style-type: none"> <li>Assess level of change required for people, process and systems to facilitate 5MS/GS implementation</li> </ul>	MP/MDP	31 Mar 2020
	<ul style="list-style-type: none"> <li>Confirm scope/scale of change with AEMO</li> </ul>		30 Sep 2020
	<ul style="list-style-type: none"> <li>If needed, apply for accreditation update</li> </ul>		In accordance with Roadmap agreed with AEMO

# Metering transition plan: Past activities

Sub-Category	Activities	Responsible	Transition end date	Reported completion rate
		MC		e.g. 9/10 MCs have completed
		Retailer		8/10 retailers who participated in survey... (out of 40(?) registered in NEM)

# Industry testing update

Tui Grant

# ITWG

- ITWG #4 conducted on 25 March 2020
- Focus on scope delivered in MDM release (including B2M via API), on the relationship with Metering Transition Plan and developing test scope for that test phase.
  - ITWG is establishing focus group to advance test plans for this release
  - Nominations by 10 April 2020 via [5MS@aemo.com.au](mailto:5MS@aemo.com.au)
  - Initial meeting 24 April 2020 via Webex
- Consideration of the capability included in Release 4, Dispatch and Settlement as basis for developing test scope was provided
- ITWG discussed potential for moving GS market trial forward – no participants supported shift of test phase from current planned dates

# 5MS Staging Environment Update

Dispatch	Settlements	Metering
<u>DROP ONE – 29 November 2019</u> Submit 5-Min Bids, via new web interface, API and/or FTP Bidding Data Model changes as per technical specifications released July 2019 Case Loaders for PASA, Dispatch, 5-minute Pre-Dispatch & 30-minute Pre-Dispatch data	<u>DROP ONE – 1 November 2019</u> Reallocations: available at both 30 and 5-min intervals New Web UI Calendar selection Alerts	<u>DROP ONE – 1 December 2019</u> Test connection to Staging Test MDFF validations Validate data exchange
<b>Status:</b> Live <b>Participant interaction:</b> at least 6 participants accessing in Jan 2020. <b>Issues:</b> issues related to the tech specs, now addressed. API connectivity issues for some participants.	<b>Status:</b> Live <b>Participant interaction:</b> at least 6 participants accessing in Jan 2020. <b>Issues:</b> incorrect setup by participants of their user roles.	<b>Status:</b> Live <b>Participant interaction:</b> 2 participants accessing in Jan 2020. <b>Issues:</b> None identified.
<u>DROP TWO – 15 May 2020</u>	<u>DROP TWO – 16 Mar 2020</u>	<u>DROP TWO – 31 July 2020</u>
Status: On track	Status: See next slide	Status: On track (noting some functionality will be introduced earlier)

# Metering procedures update

Emily Brodie

# 5MS/GS-related procedure change log

Procedure issue	Status
MDFF file size and transaction limit in file	<p>Initial feedback to first and second stage B2B procedures consultation showed majority support for:</p> <ul style="list-style-type: none"> <li>MDFF file size 10MB</li> <li>MDFF 1,000 transaction limit in file</li> <li>non-contestable unmetered loads – use of existing B2B transactions for this family of NMIs</li> </ul> <p>Third round of consultation occurring for other matters, however above matters are confirmed.</p>
Proposed procedural change to MDFF quality flag (N flag)	AEMO has submitted an ICF for ERCF consideration at March meeting (Thu 12 March). No objections presented at ERCF. Next steps: AEMO to compile a 'change information pack' for industry consultation.
Proposal for RWD[?]	<b>Meter read type code.</b> Consultation on issues paper closed Tue 31 March. Majority of responses support the concept to identify interval length. Suggestions have been received on what format this should be provided in to MSATS.
Removal of end user details from inventory table	AEMO will progress consultation. Dates TBC, likely to begin Aug/Sep. Follow up with ERCF rep for details.
TNI 2 for cross-boundary meters	While Participants don't have to populate the TNI2 field (AEMO will, similarly to NSP2), they will have to ensure that their systems can <b>receive</b> TNI2. Part of MSATS Standing Data Review. Consultation on issues paper closed Tue 31 March. Majority of responses support AEMO's proposal. Draft determination due Thu 30 Apr.
Obligation for MC to provide updated or substitution data in the cases of theft or fraud	Original ICF lodged by AGL. Discussed at ERCF March meeting. Relates to UFE calculation. Next steps: more analysis to be done and amended ICF needs to be submitted before it can proceed.
★ <b>New:</b> Removal of register ID = suffix requirement	ICF lodged by AusNet to ERCF for its consideration at next meeting.
★ <b>New:</b> NCONUML objections to CR 2000/2001	ICF to be lodged by Origin. Gap in procedures to be filled. ICF proposes that if an LNSP sets up a new NCONUML NMI and assigns it to a contestable MC, then the contestable MC can object to it as the MC is always the initial MC.

# Metering procedures update

## Electricity Retail Consultative Forum - next meeting Fri 15 May

- 5MS/GS ICFs
- Update on MSATS standing data review
- ADL discussions - ongoing
- <https://aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/Retail-meetings/Electricity-Retail-Consultative-Forum>

## B2B Working Group - next meeting Tue 7 Apr

- Second draft stage (3<sup>rd</sup> round) of release v3.4 of B2B procedures consultation. All initial response agree with proposals for:
  - MDFF file size 10MB
  - MDFF 1,000 transaction limit in file
  - non-contestable unmetered loads – use of existing B2B transactions for this family of NMLs
- <https://aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/Retail-meetings/B2B-Working-Group>



# Industry readiness update

Emily Brodie

# Readiness stakeholder engagement (1/2)

## Past events (since prior RWG meeting)

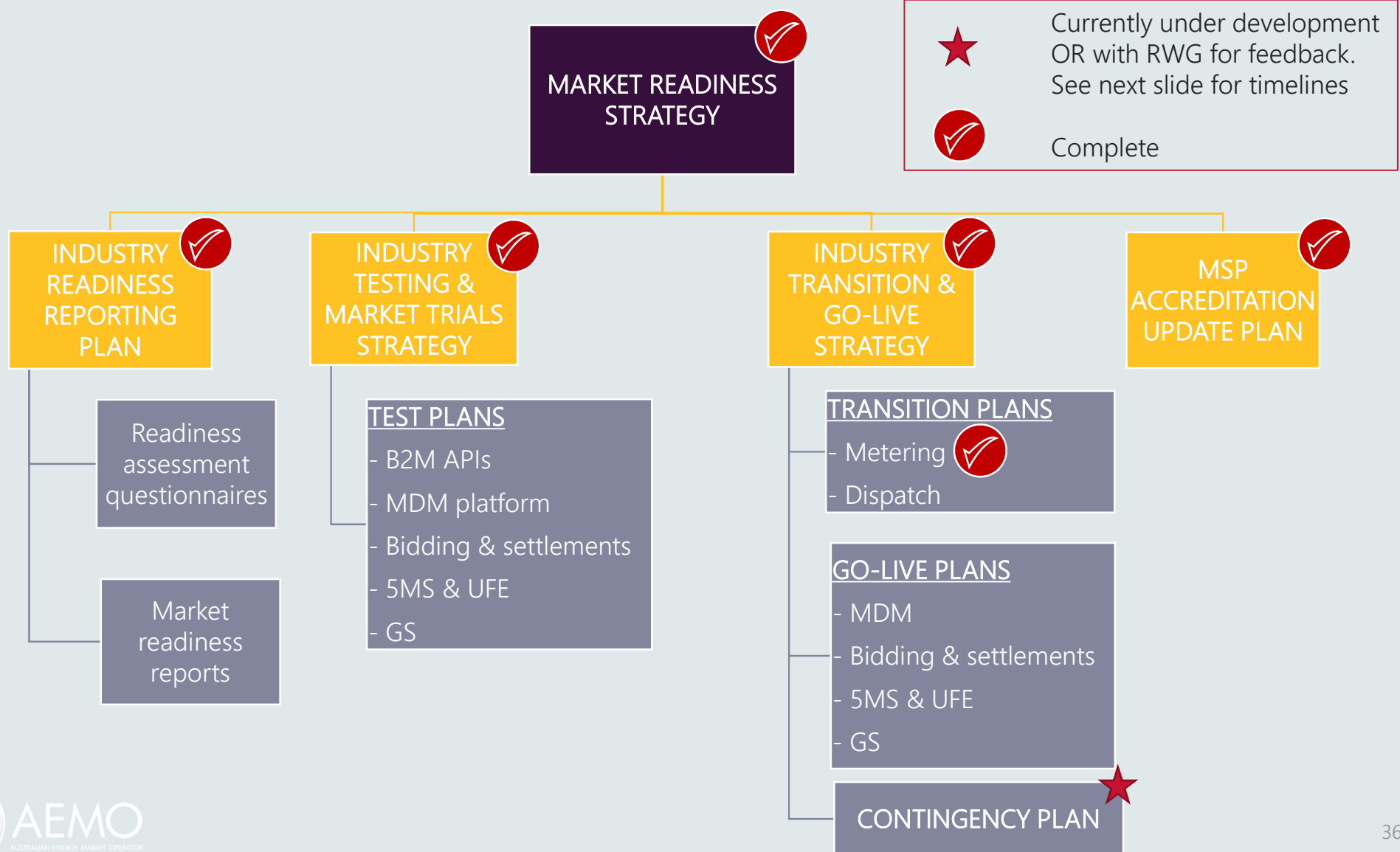
- Industry testing working group
  - ITWG #3 Wed 25 Mar 2020
  - WebEx
- Staging environment Q&As
  - Tue 24 Mar 2020; Fri 27 Mar 2020; Wed 1 Apr
  - WebEx
- Reallocations Q&A
  - Mon 23 Mar 2020
  - WebEx
  - For anyone who had questions about the reallocations system deployment
- RWG – Readiness reporting Q&A
  - Mon 30 Mar 2020
  - WebEx
  - For RWG members who had questions on the round #1 readiness reporting results
- 5MS Q&A session
  - Tue 31 Mar
  - Webex
  - For anyone with questions on the 5MS Program.
- Transition Focus Group #6
  - Mon 6 Apr
  - Webex
  - Clarifying MTP and confirming where AEMO support may be required

# Readiness stakeholder engagement (2/2)

## Upcoming events

- Staging environment open forums
  - To be reconvened in-line with upcoming deployments (15 May)
  - WebEx
  - Specifically to assist with releases in the 5MS staging environment
- AEMO may convene out-of-session RWG, SWG and TFG meetings to respond as needed to the 5MS deferral proposal.

# Readiness papers - status



# Update on Contingency plan

- Contingency plan finalisation is on hold as a result of proposed 5MS deferral
- No shift in draft positions from Industry feedback
- Further discussion of 'critical mass' later in agenda

# Maintaining readiness papers

- Subject to the proposed 5MS deferral rule change, readiness papers will all need reviewing and likely need updating to reflect any changes.
- These will be tracked through the document control log

# Readiness reporting - timelines

Readiness reporting	Survey released	Survey responses due	Distribute results	Discuss at RWG	Discuss at PCF	Discuss at EF
Round #1	05-Feb-20	14-Feb-20	2-Mar-20	11-Mar-20	05-Mar-20	12-Mar-20
Round #2	14-Apr-20	23-Apr-20	07-May-20	14-May-20	02-Jun-20	Proposed 11-Jun-20
Round #3	07-Jul-20	16-Jul-20	30-Jul-20	13-Aug-20	03-Sep-20	Proposed 07-Sep-20
Round #4	01-Sep-20	10-Sep-20	24-Sep-20	08-Oct-20	05-Nov-20	19-Nov-20
Round #5	03-Nov-20	12-Nov-20	26-Nov-20	09-Dec-20	tbc	tbc

	FEB			MAR		APR		MAY		JUN	JUL			AUG	SEP			OCT	NOV			DEC
Round #1	Wed 5 Feb	Fri 14 Feb	Fri 28 Feb	Thu 5 Mar	Wed 11 Mar																	
Round #2						Tue 14 Apr	Thu 23 Apr	Thu 7 May	Thu 14 May	Tue 2 Jun												
Round #3											Tue 7 Jun	Thu 16 Jun	Thu 30 Jul	Thu 13 Aug	Thu 3 Sep							
Round #4															Tue 1 Sep	Thu 10 Sep	Thu 24 Sep	Thu 8 Oct	Thu 5 Nov			
Round #5																			Tue 3 Nov	Thu 12 Nov	Thu 26 Nov	Thu 9 Dec

Survey released
Responses due
Results distributed
Discuss at RWG
Discuss at PCF

*Round #2 will go ahead as planned despite proposed 5MS deferral rule change*

BREAK

**\*\*Please disconnect from  
your workplace VPN once  
on the WebEx call\*\***



# “Critical mass” and go-no-go decisions

Greg Minney

# Defining “critical mass”

Critical participant type	Critical capability to enable 5MS/GS	Critical capability to support uninterrupted NEM operations	Critical mass	Monitoring	Available remedies
Generators MNSPs	Submit 5-min bids	Pay market invoices	<b>Submit 5-min bids</b> Determined by reference to AEMO’s thresholds for suspending the spot market in System Operating Procedure SO_OP_3706: cumulative effect of a participant bidding failure affects > 20% of regional load	Readiness reporting and AEMO analysis	Individual follow-up  Contingency responses (as per 5MS contingency plan)
Retailers	-	Pay settlement invoices	Sufficient ROLR capability and retailers in a NEM region representing: <ul style="list-style-type: none"> <li>80% of annual settlement volume, or</li> <li>More than 80% of annual settlement volume, determines this level is required for wholesale market operations to be uninterrupted and reliable under 5MS and GS.</li> </ul>	Readiness reporting and AEMO analysis	
MPs MCs	Essential meters* reading and communicating 5-min data	-	All MPs/MCs who are responsible for these essential meters*	<ul style="list-style-type: none"> <li>Readiness reporting</li> <li>Accreditation updates</li> </ul>	
MDPs	Deliver 5-min metering data from essential meters*	-	All MDPs who are responsible for delivering metering data from these essential meters*	<ul style="list-style-type: none"> <li>Readiness reporting</li> <li>Accreditation updates</li> </ul>	
TNSPs	Update the NMI Classification Code to “BULK” for transmission network to distribution network connection points	-	All TNSPs who are responsible for updating the NMI Classification Code to “BULK” for transmission network to distribution network connection points	Readiness reporting	

# “Critical mass” and go/no-go decisions

Milestone	Timing	Go-live considerations
System go-live: MDM	7 Dec 2020	<ul style="list-style-type: none"> <li>AEMO ready to launch system into production (including availability for participant testing)</li> <li>All participants do not need to be ready: can still send and receive data as usual until 1 July 21</li> </ul>
System go-live: Dispatch	1 Apr 2021	<ul style="list-style-type: none"> <li>AEMO ready to launch system into production (including availability for participant testing)</li> <li>All participants do not need to be ready: can still bid as usual until 1 Jul 21</li> </ul>
System go-live: Settlements	1 Apr 2021	<ul style="list-style-type: none"> <li>AEMO ready to launch system into production (including availability for participant testing)</li> <li>Participants do not need to be ready: will all receive 30-min invoices up to 1 Jul 21</li> </ul>
5MS commencement  UFE reporting commencement	1 July 2021	<ul style="list-style-type: none"> <li>AEMO ready to complete change to: <ul style="list-style-type: none"> <li>5-min settlement (including 5-min profiling)</li> <li>5-min bidding only</li> </ul> </li> <li><b>Critical mass</b> of each critical participant type ready, where relevant, to: <ul style="list-style-type: none"> <li>Submit 5-min bids</li> <li>Manage/receive/deliver 5-min data <u>from essential meters</u></li> </ul> </li> <li>Platforms will have been proven through 3+ month transition</li> </ul>
GS commencement	6 Feb 2022	<ul style="list-style-type: none"> <li>AEMO ready to change FRMP to GLOPOOL in MSATS</li> </ul>

# Risks and issues workshop

Greg Minney

# Risk review

- Risk review still relevant irrespective of potential 5MS/GS deferral
- Suggest that RWG focuses on AEMO's proposed updates (column "y" in accompanying spreadsheet) as the basis for the RWG's recommendations to the PCF's risk review (May).

# Debrief: Transition focus group meeting #6

Blaine Miner

# Key Agenda Items

- Changes to the MTP since the previous meeting
- Transition of Net datastreams to register level datastreams
- Accreditation update activities
- Changes to AEMO's Meter Data Validation Framework
- MTP activities:
  - Reconfirming
    - Activity intent
    - Recommended approaches
    - AEMO support
- Readiness reporting:
  - How to reflect progress in responses
  - Past and upcoming activities

# Debrief

Agenda Item	Items of Interest	Actions/Next Steps
Changes to the MTP since the previous meeting	<ul style="list-style-type: none"> <li>Aligned the 'Transition Start Dates' relating to the creation of register level datastreams to AEMO being able to receive MDFF (1 Feb 2021)</li> <li>'Pre-1 Dec 2018/19 Type 4, 4A, VICAMI and SAMPLE meters' subcategory has been removed</li> <li>Alignment of RegisterIDs and 'Suffixes' has been moved to the activity level under each applicable meter type</li> <li>'Transition End Dates' for meter types that must deliver 5min metering data by 1 Dec 2022 (includes B2B and B2M related activities) have been updated to 30 Nov 2022</li> </ul>	<ul style="list-style-type: none"> <li>Monitor progress via Industry Readiness Surveys</li> </ul>
Transition of Net datastreams to register level datastreams	<ul style="list-style-type: none"> <li>AEMO will be publishing a 'clarification' document shortly to provide specific guidance on how this transition will occur</li> <li>AEMO provided the TFG insight as to what will be included in the document</li> </ul>	<ul style="list-style-type: none"> <li>AEMO aiming to publish this document to the TFG by mid-April</li> </ul>



# Debrief

Agenda Item	Items of Interest	Actions/Next Steps
Accreditation update activities	<ul style="list-style-type: none"> <li>• Most MSPs have returned their accreditation readiness surveys (AEMO following up those who have not)</li> <li>• About 1/3 of pre-accreditation meetings have been completed</li> <li>• AEMO resource planning, for accreditation processing, is currently underway</li> </ul>	<ul style="list-style-type: none"> <li>• AEMO to follow up participants as required</li> <li>• AEMO resource planning to continue</li> </ul>
Changes to AEMO's Meter Data Validation Framework	<p>AEMO currently rejects metering data where:</p> <ol style="list-style-type: none"> <li>a) NMIs are not established in CATS NMI Data (CND).</li> <li>b) Data Streams are not established in CATS NMI Datastream (CNDS).</li> <li>c) The sending participant is not associated to the NMI in CATS NMI Participant Relationships (CNPR)</li> </ol> <p>New framework will, for a) and b), accept the metering data and create an informational warning in the associated Transaction Acknowledgment. (c) will continue to be rejected to ensure ongoing Settlement integrity.</p>	<ul style="list-style-type: none"> <li>• TFG to come back with valid use cases for these scenarios.</li> </ul>

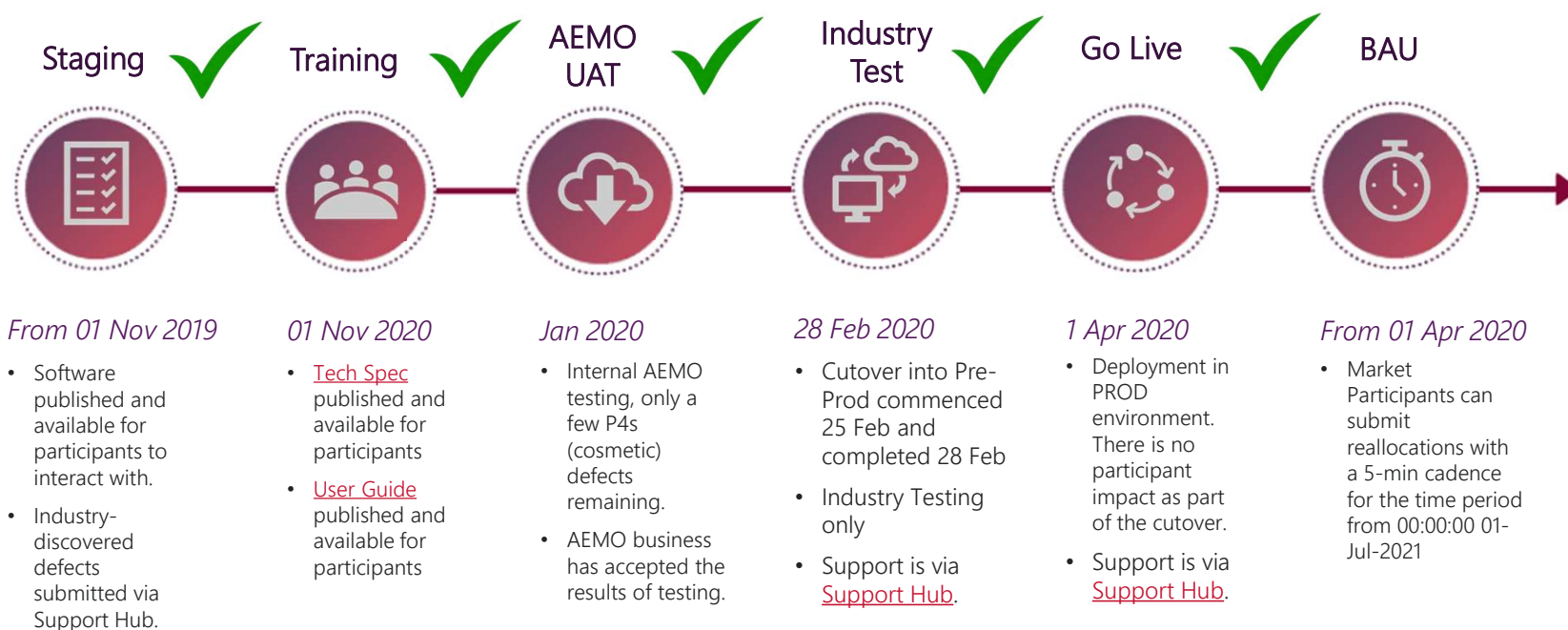
# Debrief

Agenda Item	Items of Interest	Actions/Next Steps
MTP activities	<p>Objective of the session:</p> <ul style="list-style-type: none"> <li>• To ensure Participants understand the intent of the activities contained in the MTP</li> <li>• To agree required Industry approaches where applicable</li> <li>• To confirm required support from AEMO</li> </ul> <p>A number of questions were asked and answered by AEMO. No changes to the wording of the MTP was required as a result of this agenda item.</p> <p>FRMP/LR updates (GLOPOOL):</p> <ul style="list-style-type: none"> <li>• No notifications to be sent out from MSATS</li> <li>• AEMO to provide 'Update logic' to Participants and Recon files to FRMPs</li> </ul>	<ul style="list-style-type: none"> <li>• AEMO to provide response templates to Participants, for applicable activities, to ensure a consistent level and format of information e.g. Dec 2022 meter conversion rollout plans</li> </ul>
Readiness reporting	<ul style="list-style-type: none"> <li>• AEMO reiterated the required approach to responding to the readiness surveys</li> <li>• AEMO suggested that TFG members should support RWG members in providing informed responses</li> <li>• AEMO detailed past and upcoming MTP activities                             <ul style="list-style-type: none"> <li>• AEMO stated that it could not independently confirm 'Completion' of MTP activities and that it was the responsibility of Industry to call out issues via survey responses and SMS channels where required</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• AEMO to monitor survey responses and callout 'inconsistences' where required</li> </ul>

# Debrief: Reallocations release

Greg Minney

# 5MS Release 1: Reallocations



# 5MS Release 1: Reallocations

- PROD Cutover completed 1 April 2020.
- Issues & Resolutions:
  - Identified a DB scripting error arising from Tuesday's DB changes to add two new columns in the database. Once the script was run the issue was resolved in a timely manner without impacting Compliance for either AEMO or the participant.
  - A second issue arose when the Prudentials run failed to start following the Reallocation. The fix was then deployed in production at 2pm Wednesday 1 April 2020. No further issue during Thursday's BAU activity in production.
  - During PVT there was an API Service configuration error (Supplied Reallocation ID not Valid) due to the Reallocation system. Fixed immediately and the PVT test completed successfully.
  - On Thursday 2 April 2020, a participant identified a label error that was showing 'MWH' instead of '\$' in a preview reallocation pop-up. The actual values are correct but the heading has the wrong label. To be fixed in the next software deployment.

# Industry readiness reporting update

Austin Tan

# Updates for Round #2

Update	Details
New survey questions	<ul style="list-style-type: none"> <li>MC added as a new participant type</li> </ul>
	<ul style="list-style-type: none"> <li>Specific criteria "Receive and reconcile 5-minute settlements data" is now split into:                             <ul style="list-style-type: none"> <li>Receive and process 5-minute metering data</li> <li>Receive and reconcile 5-minute settlements data</li> </ul> </li> </ul> <p>* Note that "Receive and reconcile 5-minute settlements data" is not applicable to DNSPs and TNSPS</p>
	<ul style="list-style-type: none"> <li>Addition of COVID-19 specific questions</li> </ul>
Additional analysis	<ul style="list-style-type: none"> <li>Comparison to previous survey results</li> </ul>
	<ul style="list-style-type: none"> <li>Comparison of survey participation rate to critical mass (for 5MS and GS commencements and for uninterrupted and reliable wholesale market operations)</li> </ul>
Presentation of readiness report	<ul style="list-style-type: none"> <li>More white space in layout of readiness report</li> </ul>
	<ul style="list-style-type: none"> <li>Include legend on every page to assist interpretation</li> </ul>
	<ul style="list-style-type: none"> <li>Simplifying the presentation of MTP monitoring criteria, focusing on calling out observations that require action from the industry</li> </ul>

# Industry participation rate – calculation methodology

Participant type	Industry coverage methodology
Generator	<ul style="list-style-type: none"><li>Generator respondents capacity / Total NEM capacity</li></ul>
Retailer	<ul style="list-style-type: none"><li>Retailer respondents settlement vol. / NEM settlement vol.</li></ul>
MP	<ul style="list-style-type: none"><li>MP respondents' total type 1-4,4A, VIC AMI meters / Total type 1-4,4A, VIC AMI meters</li></ul>
MDP	<ul style="list-style-type: none"><li>MDP respondents' total type 1-4,4A, VIC AMI meters / Total type 1-4,4A, VIC AMI meters</li></ul>
MC	<ul style="list-style-type: none"><li>MC respondents' total type 1-4 NMIs / Total type 1-4 NMIs</li></ul>
DNSP	<ul style="list-style-type: none"><li>Number of DNSP survey respondents / Total DNSPs</li></ul>
TNSP	<ul style="list-style-type: none"><li>Number of TNSP survey respondents / Total TNSPs</li></ul>



# Forward meeting plan

Greg Minney

# Upcoming RWG meetings: Proposed content

- Seeking feedback for proposed content/topic areas

Meeting Date	Meeting	Proposed Content
14-May-20	RWG #11	<ul style="list-style-type: none"><li>• PCF deferral advice development</li><li>• Industry readiness reporting – Round #2</li><li>• Dispatch Transition Plan approach</li><li>• Other: TBC in this RWG #10 meeting</li></ul>
10-Jun-20	RWG #12	<ul style="list-style-type: none"><li>• PCF deferral advice</li><li>• Other: TBC in this RWG #10 meeting</li></ul>

# Upcoming meetings

<https://aemo.com.au/initiatives/major-programs/nem-five-minute-settlement-program-and-global-settlement>

Current as 1 April 2020

## APRIL

Su	Mo	Tu	We	Th	Fr	Sa
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

## MAY

Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

## JUNE

Su	Mo	Tu	We	Th	Fr	Sa
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

Forums/Working Groups
Executive (EF)
Program Consult. (PCF)
Procedures (PWG)
Systems (SWG)
Readiness (RWG)
Industry Testing (ITWG)

Focus Groups
Dispatch
Metering
Settlements
Transition
Industry Testing
Reconciliation
Contingency

Other
Information sessions
General Q&A session
National Public Holiday
State Public Holiday*

\*Relevant state has been marked in a comment. WA, NT, TAS, ACT holidays have not been marked.

# General questions

Greg Minney

