

5MS & GS Program Consultative Forum #34

Thursday, 17 June 2021

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AEMO Competition Law Meeting Protocol

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Participants in AEMO discussions must:

- 1. Ensure that discussions are limited to the matters contemplated by the agenda for the discussion
- 2. Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO
- 3. Immediately and clearly raise an objection with AEMO or the Chair of the meeting if a matter is discussed that the participant is concerned may give rise to competition law risks or a breach of this Protocol

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- 1. Which customers they will supply or market to
- 2. The price or other terms at which Participants will supply
- 3. Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participant will participate in the bid
- 4. Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services)
- 5. Refusing to supply a person or company access to any products, services or inputs they require

Under no circumstances must Participants share Competitively Sensitive Information. Competitively Sensitive Information means confidential information relating to a Participant which if disclosed to a competitor could affect its current or future commercial strategies, such as pricing information, customer terms and conditions, supply terms and conditions, sales, marketing or procurement strategies, product development, margins, costs, capacity or production planning.



Agenda

#	Time	Topic	Presenter
1	10:00 – 10:05	Welcome	Peter Carruthers
2	10:05 -10:10	Actions from Previous Meetings	Anne-Marie McCague
3	10:10 - 10:40	Program Update	Rowena Leung & Graeme Windley
5	10:40 – 10:50	Industry Risks and Issues Review	Anne-Marie McCague
6	10:50 – 11:00	NCONUML Delay	Greg Minney
7	11:00 – 11:30	Contingency Approach	Peter Carruthers
8	11:30 – 11:40	Readiness Results	Greg Minney
9	11:40 - 11:55	Forward Meeting Plan	Anne-Marie McCague
10	11:45 - 12:00	General Questions	Peter Carruthers
11	12:00	Meeting Close	Peter Carruthers



Welcome

Peter Carruthers



Actions from Previous Meetings

Anne-Marie McCague

PCF Actions

No.	Status	Action	Comment
32.7.1	Closed	AEMO to consider how the timeline could be compressed if an unknown issue arises that could impact 01-Oct-21 rule commencement.	Compressed timeline no longer being considered given the confirmation of the Retail Go-Live on 21 June.
33.3.1	Open	AEMO to discuss the impacts of the change in the Retail Go-Live date and Market Trial dates with WDR and Customer Switching Programs and report to PCF.	WDR: implications are being reviewed and will be discussed at the July WDR CG. Customer Switching: CS team has advised that testing is for participants to arrange, with CS updates provided through the ERCF. As discussed with ITWG, participants may utilise / extend some of the 5MS Market Trial test scenarios to incorporate their Customer Switching tests or may organise bilateral testing during the Market Trial period. Any issues identified should be raised through Support Hub as normal. 5MS Program will not track Customer Switching related issues.
33.4.1	Closed	AEMO to consider including an interim Retail checkpoint meeting with PCF in advance of 14 June 2021.	Meeting took place on 4 June
33.4.2	Closed	AEMO to consider how to engage with Executive Forum if a No-Go notice is issued for the Retail Go-Live on 21 June 2021.	Go notice was provided. Ongoing communication with EF to be discussed in later section.
33.4.3	Closed	AEMO to confirm that the NCONUML functionality will be available from 21 June 2021.	Confirmed on 4 June that NCONUML functionality will not be available. More detail to be provided in this session.
33.5.1	Closed	AEMO to consider whether Readiness Survey Round 8 should include questions on the impact of Retail not going live on 21 June 2021 on participant readiness programs.	Readiness Survey Round 8 complete. Questions on impact of missing 21 June were not included due to the overhead for participants of assessing the hypothetical scenario.
33.8.1	Closed	AEMO to update the Industry Risk and Issues Register in line with the discussion at PCF 33.	Available on website

Executive Forum Actions

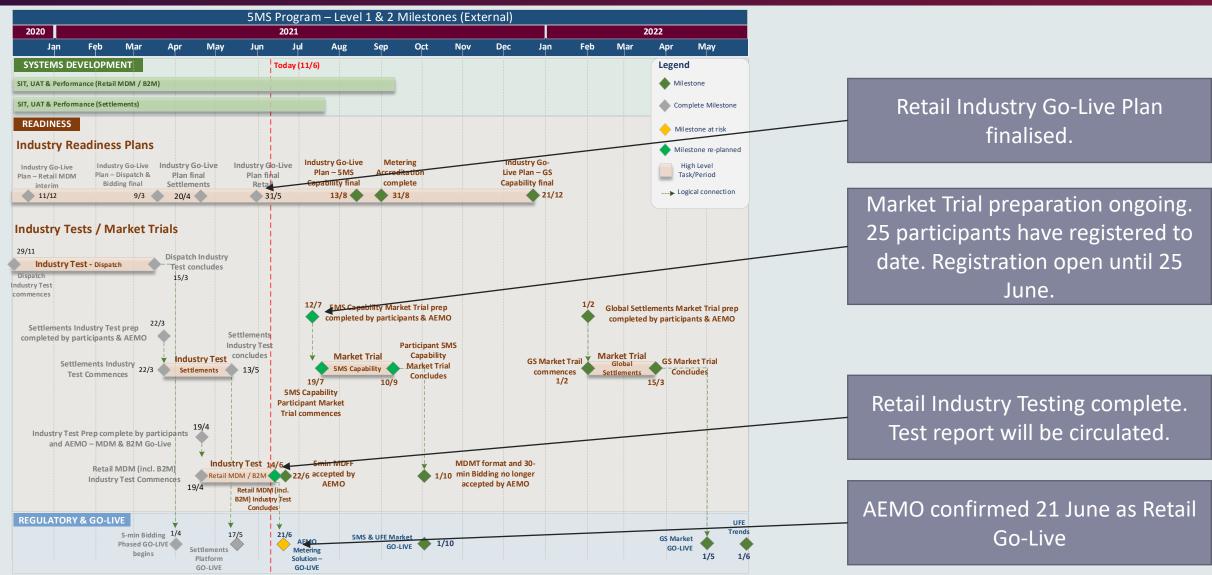
No.	Status	Action	Comment
12a.5.1	Closed	AEMO to confirm whether the consideration of bundling B2B with the 5MS and Customer Switching go-live (should 1 October 2021 be delayed) includes the B2B for gas.	This will be addressed in the Regulatory Implementation Roadmap. Date TBD but approximately early July.
12a.5.2	Closed	AEMO to include compression timeline in the contingency planning conclusion at PCF on 17 June 2021.	Compression timeline no longer required as a result of 21 June Retail Go-Live confirmation.
12a.6.1	Closed	AEMO to consider including additional Executive Forums in the 5MS stakeholder engagement schedule.	Discussed during this session.



Program Update

Rowena Leung

5MS Program Timeline Readiness and Go-Live





5MS Program – IT Systems Status

Stream	Status	Commentary
Retail		On track for go-live on 21 June – see next slides for more detail
Dispatch		 Change since last PCF in red 5MS Bidding Service went live on 1 April 2021. Participants may choose to submit 5-min bids (must be equal for a 30-min period). Pre-dispatch P5 – Fast Start Inflexibility Profile (FSIP) production go-live was scheduled for 03-May but has been delayed due to testing requirements by software certifiers. New go-live date is 07-July-21. 5MPD Price Sensitivity – on track for 07-July-21 (date confirmed since last PCF)
Settlements		 No change since PCF #32 Settlements systems was successfully deployed in the production environment on 16-May-21. Remains in 30-min mode until 01-Oct-21. Release included web changes, new APIs, dashboard for settlements direct and prudentials, and new look for invoices and statements.
Overall AEMO Status		 Overall, the AEMO 5MS program reverts to Green status as it is on track for 5MS Market Trial and Rule Commencement If issues arise that compromise Market Trial start dates, status will be reviewed.

Retail Checkpoint Criteria against 21 June Go-Live

Criteria	Description	Status	Commentary
Testing	All UAT test cases executed with no critical defects that cannot be remedied for 21 June go-live.	Being finalised	Overall Retail test summary results are strong for such a large, complex solution 100% executed and a 99% pass rate. Final re-tests are in the process of being completed.
Solution Stability	End-to-end solution operating stably in Test with no process blockers or unexplainable pauses/interruptions to processing.	✓	Stability has improved, and enabled testing execution to progress. Improvements (i.e. defensive programming) introduced have been successful. Some initial stability issues were experienced in Pre-Production however AEMO is confident this has been tuned and therefore rectified.
Remediation	Known remediation work (internal reports performance, business activity monitoring) completed and remediation for any new defects scheduled.	Being finalised	There are no showstoppers for the key internal solution components to proceed with the approach to go live. Workarounds are being finalised.
Performance	"Day in the Life Testing" completed with no performance issues identified that cannot be remedied for 21 June go-live.	✓	All Day In The Life testing now completed, with the volumes ingested / outputted matched live industry requirements.
Production Cutover	Data migration on track and no blockers to meeting criteria/schedule for pre-production deployment.	In Progress	Data Migration to Production is progressing on schedule to 21 June, noting adjustments were required due to the MSATS data issues.
Industry Test	Performance of the solution within industry test meets expectations.	Being finalised	Industry Test report being finalised. Delivery of 3 x Settlement runs is complete. The Open defects list is known and work arounds exist, and will be distributed to industry participants with the Release notes. 5MS is setting up a discussion on Monday 21 June to work through the details.
Overall			Retail Platform is proceeding on 21 June. Amber rating is due to the late finalisation of final test cases and known limitations being carried into the go-live.

Retail Testing Progress

Retail test metrics for go-live are provided for additional level of transparency and will help participants understand AEMO's Retail platform progress towards go-live.

As at 16-Apr			As at 14-May			As at 15-June			
	% Executed	% Executed Passed	% Total Pass	% Executed	% Executed Passed	% Total Pass	% Executed	% Executed Passed	% Total Pass
System Test	100	100	100	100	100	100	100	100	100
System Integration Test	96	99	95	100	99	99	100	100	100
User Acceptance Test	95	96	91	100	98	98	100	99	99

Observations:

- All UAT test cases have now been executed with a two week regression cycle completed. Final re-tests are in the process of being completed.
- AEMO has now run Settlement runs in the MDM Pre-Production environment. An issue, now resolved, caused the delay of the final two runs.

Retail Platform Support Arrangements

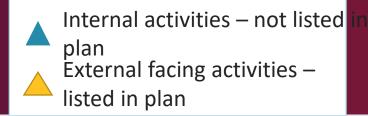
Cutover Preparation Support

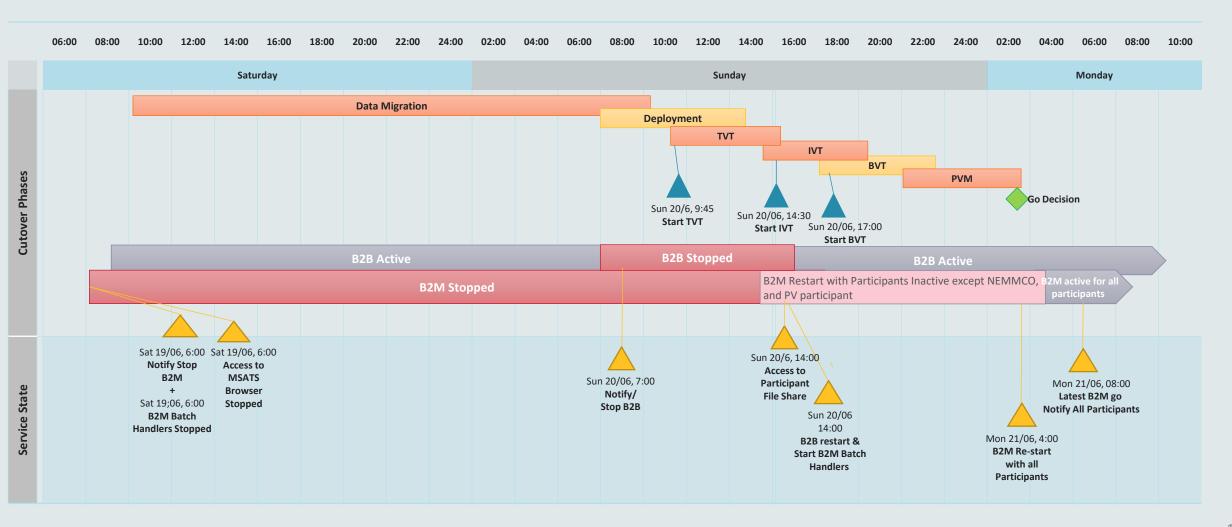
- Walkthrough of cutover timings took place with RWG, SWG and ITWG on 2 June. Meeting pack and Q&A available on RWG webpage
- Daily ITWG check-ins are taking place in the week prior to cutover
- Retail Industry Go-Live Plan is available on the 5MS website

Post Go-Live Support

- The AEMO 5MS Program will be providing a heightened level support post Retail go-live to ensure that any issues encountered are investigated in a timely manner and that the appropriate course of action is determined and carried out
- This heightened level of support will continue until there is tangible evidence that the Retail solution is in a stable state e.g. number
 of issues being raised is within normal BAU volumes
- All issues/incidents should be raised through AEMO Support Hub
- Daily RWG, SWG, ITWGs to provide progress updates and discuss any issues issues/incidents should be logged with AEMO Support Hub prior to these meetings
- Known Defects session will take place 21 June. This will include information about the functionality included in the additional releases

Cutover Phases - B2M and B2B Service State





Next Steps

- Cutover will commence weekend beginning Friday 18 June with an outage from 06:00 Sat 19 June to 04:00 Mon 21 June
- Executive Forum will take place 7 July
- Contingency planning to be discussed during this session



Industry Risks and Issues Review

Anne-Marie McCague

Industry Risks and Issues - Trend

- The purpose of this session is to review the key risks and issues as a result of the Go-Live decision for Retail on 21 June.
- The changes assume a successful go-live. Register will be updated post cutover

- The risk review will take into account the three key areas of risk:
 - Retail delay
 - AEMO and industry readiness
 - Volume of regulatory change



Retail Risk

ID	Description	Rating	Mitigations
l12	No Remaining Contingency for Retail Deployment Issues identified during Dress Rehearsal 2 and Azure migration coupled with existing Retail timeline challenges mean that delays have occurred within the 5MS Retail workstream. There is no schedule contingency within this workstream to compensate for the time needed to remediate these issues therefore the scheduled go-live of 31-May-21 will not be met.	High ↑	 Remains High but trend is improving due to confirmation of the Retail go-live on 21 June Issue will be closed post successful go-live on 21 June
I13 NEW	Delay to NCONUML Functionality in Production The delay to the release on the NCONUML functionality in production has resulted in some participants reporting activity "Population and activation of NCONUML NMIs and Associated Metering Data Delivery from 1 Oct" as at risk/ late. This may cause a compliance risk for those participants.	High	See next section for mitigation
R33	Further delays to AEMO Retail Systems impact 5MS rule commencement critical path There is a risk that cutover issues or post go-live issues cause delays that impact on Market Trial start date thereby impacting the critical path to further delays beyond those identified put the critical path through market trial to 5MS rule commencement (01-Oct-21) at risk	Significant	 Residual Likelihood – unlikely Residual Consequence – extreme Residual rating – significant Trend: redefined, therefore neutral Risk description has been updated to reflect the 21 June go-live of Retail Platform Refer to Contingency Plan.



AEMO & Industry Readiness

Risk ID	Description	Residual Rating	Comments
R34	Delay to AEMO 5MS Retail impacts participants readiness There is a risk that the delayed availability of the 5MS Retail solution impacts participants readiness programs resulting in delays in some participants programs.	Significant	 Residual Likelihood – remains as possible. The functionality required for participants to continue their readiness programs will be available. The exception to this will be NCONUML. Issue I13 has been raised to address this. Participants have highlighted reduce remediation period available post Market Trial. Residual Consequence – remains major Residual rating – remains significant Trend: worsened – reflecting the reduced time post Market Trial
R11	The AEMO business and operations are not ready for 5MS Rule Commencement on 1 Oct 21 The AEMO business may not be ready to deliver the full extent of the 5MS deliverables by 5MS and GS rule commencement including business processes and resource training, results in failure of Go Live for 5MS and GS Program	Medium	 Residual Likelihood – remains as unlikely Residual Consequence – remains as major Residual rating – remains as medium Trend: improving as AEMO progresses with Retail releases and preparation for Market Trial is underway
R19	Risk of a critical mass of participants not being ready at identified critical path milestones Critical capability of participants fail to meet expected industry Readiness critical path milestones, resulting in failure to be ready for go-live and impacting the proper functioning of the market.	Medium	 Residual Likelihood – remains as unlikely, key Residual Consequence – remains as major Residual rating – remains as medium Trend: worsened -reflecting the reduced time post Market Trial

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Volume of Regulatory Change

Risk ID	Description	Residual Rating	Comments
R37	New 5MS Retail Solution Go-Live Dates impact other regulatory change programs There is a risk that the changes to the 5MS retail timeline may have impacts on other AEMO change programs (e.g. Customer Switching or WDR) which may result in a need for those programs to replan having knock-on effects to the industry.	Medium	 Retail go-live has been confirmed and dates for 5MS Market Trial are firm. Risk to be closed with successful go-live
R06	Interaction with other industry changes that have already been adopted through rule changes Significant regulatory changes across the energy sector will stretch resources allocated to market change programs, resulting in potential impacts to participants resourcing and program delivery.	Significant	 No change to risk since last review. Residual Likelihood – remains as possible Residual Consequence – remains as major Residual rating – remains as significant Trend: neutral
R09	Impact to 5MS from other rule changes that are being considered Future rule changes could affect the implementation of 5MS, resulting in impacts to industry program implementation timelines	Medium	 Residual Likelihood – reduce from possible to unlikely as 4 months remaining until 1 October. Standard AEMC rule change process is 6 months. Expedited process would need to be used which is an exceptional process. Residual Consequence – remains as major Residual rating – reduces from significant to medium as a result of the change to likelihood Trend: improving as no further rule changes are being considered close to 1 October that would impact 5MS.
R30	Risk that new 5MS and GS Go-Live dates could impact other industry change programs The new commencement dates are closer to some other industry change programs. There is a risk that industry and AEMO resources and systems may be constrained during a period of multiple major go-lives which may lead to difficulties with timelines and system stability.	Significant	 Residual Likelihood – reduce from likely to unlikely. Retail Go-Live dates have been included in the Regulatory Implementation Roadmap and any necessary changes to other programs have been made. Residual Consequence – remains as major Residual rating – reduces from significant to medium as a result in change to likelihood Trend: neutral



NCONUML Delay

Greg Minney

NCONUML Issue

ID	Description	Rating
l13	Delay to NCONUML Functionality in Production The delay to the release on the NCONUML functionality in production has resulted in some participants reporting activity "Population and activation of NCONUML NMIs and Associated Metering Data Delivery from 1 Oct" as at risk/ late for a number of participants. This may cause a compliance risk for those participants.	High

Issue: Population and activation of NCONUML NMIs and Associated Metering Data Delivery from 1 Oct identified as at risk/ late for a number of participants in readiness reporting:

- Dependency on Capability to create NCONUML NMI in Retail Platform
- Scheduling and Resource conflicts for population and data delivery given other regulatory programs and Local Retailer impacts

NCONUML capability will not be included in the June 21 retail release

Capability to be available from 26 July

Impacts:

- For period of non-delivery post 1 October UFE values reported will not reflect the contribution of NCONUML in the profile area
- Potential impacts to LR processes for processing of NCONUML
- Potential compliance breach risk for participants that have not completed activities by 1 Oct

Mitigation / Remediation Process:

- The obligation on participants to complete this action is governed by the AEMO procedures
- AEMO is currently assessing the mechanisms for managing breaches as per NER and will provide a verbal update
- Consolidated reporting of timing and volume impacts to assist UFE understanding



Contingency Approach

Peter Carruthers

Risk Scenario and approach to contingency

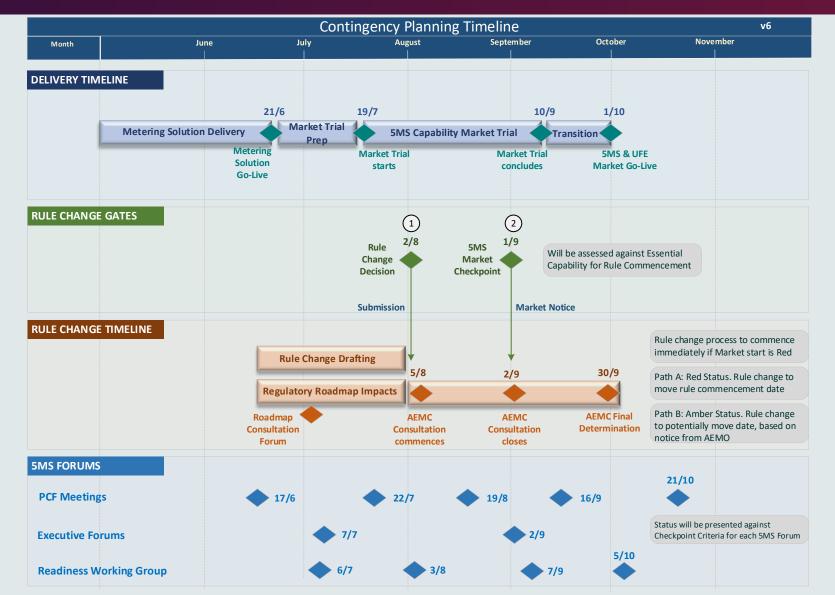
Risk ID	Description	Current Residual Rating	Comments
R33	Further delays to AEMO Retail Systems impact 5MS rule	Significant	Residual Likelihood –unlikely
	commencement critical path		Residual Consequence –extreme
			 Residual rating –significant
	There is a risk that cutover issues or post go-live issues cause		Trend: redefined, therefore neutral
	delays that impact on Market Trial start date thereby		
	impacting the critical path to further delays beyond those		 Risk description has been updated to reflect the 21 June go-
	identified put the critical path through market trial to		live of Retail Platform
	5MS rule commencement (01-Oct-21) at risk		

- Confirmation of 21 June Retail Go-Live has changed the nature of the "delay" risk, but prudent planning means a contingency plan is still required
- The potential scenarios that may lead to compression of the critical path and potential for a delay to 5MS market start on 1 Oct:
 - Cutover or significant post go-live issue with the Retail IT Platform
 - Unexpected significant issue during Market Trial
 - Essential capability issue for participant readiness (without a contingency response)
- Note: current actions in relation to deferring NCONUML are presently underway and treated separate to this contingency plan
- Purpose of this section:
 - Set out the contingency plan for a change to the market start date
 - Set out the timeline and triggers

Contingency Plan Move the Market Start Date

- Option 1 Full Rule Deferral will be the basis for any change to the market start date
 - Option 1 had the widest support
 - Option 2 had limited support and Option 3 gave rise to concerns for a number of participants
- A rule change process will be adopted
 - AER has advised that a Letter of No Action is not well suited to Option 1
- Key planning objectives
 - Do not want to move the market start date unless it is necessary
 - If the market start date needs to be moved, then earliest practical notification is to be provided
- Key challenge is managing uncertainty, with rule change lead times
 - An urgent rule change process requires 8 weeks from commencement of consultation to final determination
- The following approach is proposed
 - If the 5MS market start date moves to RED status at any time, then a rule change will be submitted immediately and a revised date determined asap
 - A checkpoint at 8 weeks prior to go-live is proposed. At this time:
 - Path A, 5MS market start date is RED: a rule change with a revised date will be submitted
 - Path B, 5MS market start date status is AMBER or GREEN with heightened risk: a provisional rule change, which will be subject to a Market Start Notice on 1 Sept from AEMO, will be submitted.
 - The Market Start Notice mechanism is intended to replicate the regime that is generally established for implementing a major reform i.e. market start is confirmed 1 month prior to go-live.
- The timeline overleaf sets out how this proposal integrates with the project timeline

Contingency Plan Timeline



Notes

- Participants should assume that the Path B provisional rule change process will NOT result in a change to the market start date. This is a contingency measure only and under this path it is expected 5MS will start on 1 Oct as scheduled.
- The Path B provisional rule change process raises risks in relation to "down tools" or distraction. Communication on readiness status will need to be strong and participant support for managing this risk is sought.
- Additional Executive Forums will be scheduled around the key dates. September EF will be moved forward.

Level 2 Contingency Triggers Table

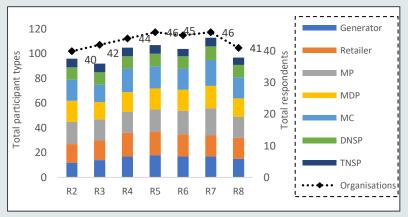
Trigger	Timing	Criteria	Action
1. Rule Change Decision	No later than 2 August	 Status of Retail Go-Live Status of Market Trial readiness and conduct Assessment against 1 October readiness - utilising Market Readiness Essential Capability Informed by industry engagement through the PCF and EF 	 If Market Start Readiness is Red, then submit a "Revised Date Rule Change" If Market Start is Amber or Green with heightened risk, then submit a "Provisional Rule Change based on Market Start Notice"
2. Market Start Notice	No later than 1 September	 Only applies if a "Provisional rule change based on Market Start Notice" has been submitted Assessment against 1 October readiness – utilising Market Readiness Essential Capability Informed by industry engagement through the PCF and EF 	 AEMO submits a Market Start Notice to the AEMC (and to industry) advising the proposed date for rule commencement AEMC takes the Market Start Notice into account when preparing its Final Determination (informs the Commission's decision, but without pre-empting the Commission's decision making powers)



Readiness Results

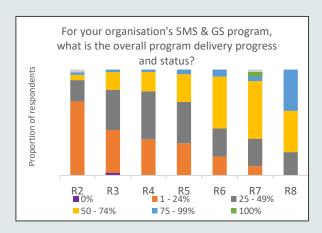
Greg Minney

Readiness Results - Snapshot 14/6



	coverage
Generator	82.4%
Retailer	76.6%
MP	99.8%
MDP	99.9%
MC	93.2%
DNSP	90.9%
TNSP	85.7%

- Coverage of both Generator (Vic and Qld) and Retail sectors impacted by late submission from key participants, some smaller participants submitting responses irregularly
- Generation Coverage does not meet critical capability coverage in Vic & Qld
- All reporting Generators "on Track", with submit 5 minute bids "at risk" for one generator and one key participant not submitting a survey
- One critical MSP reporting Program "at risk" to MTP activities, on track to compliance obligations
- 1-2 participants reporting "at risk" or "late" for each of x-boundary, NCONUML, type 7 migration activities
- 2 retailers "late" and 2 "at risk" in receiving 5 minute metering data



- 22% of respondents < 50% complete, all > 25%
- 4 programs "at risk", 1 program "late"
- 85% to participate in Market Trial, 25 currently registered
- 50% of Retailers expect to conduct bi-lateral testing, 80% of MDPs, 80% DNSPs
- Approx. 50% of wholesale participants to conduct bi-lateral testing, predominately 3rd quarter
- 1 Major and 5 minor Covid Impacts to participants, including vendor and project resource availability
- Reschedule of MDM to 21 June has impacted 1 participant critical path



Forward Meeting Plan

Anne-Marie McCague

This table provides a list of key topics. The normal updates will also be provided at each PCF. This table will evolve as the year progresses.

High-Level Plan for 2021

Month	Topics	Month	Topics
January	 ✓ AEMO go-live decision making process ✓ Risk Review ✓ Readiness and go-live dashboard 	17 June	 Market Trial prep status Confirming Retail Go/No-Go Retail Cutover Preparation Status Contingency Planning
18 February	✓ Retail Solution Status✓ Exec Forum Agenda	23 July	 Market Trial progress Readiness Reporting #8 Debrief on Retail Go-Live Update on Contingency Planning
18 March	 ✓ Dispatch Cutover Preparation Status ✓ Readiness Reporting #6 ✓ Retail Checkpoint Criteria – assessment and outcomes ✓ Retail Pre-prod – status and go/no-go date ✓ Retail Production go-live – checkpoint date and criteria ✓ Settlements Certification Process Conclusions 	19 August	 Market Trial progress Risk Review – focus on rule commencement Exec Forum Agenda
23 April	 ✓ Debrief on Dispatch go-live ✓ Settlements Cutover Preparation Status ✓ Risk Review ✓ Retail Checkpoint Criteria – assessment and outcomes ✓ Retail Production go-live – confirmation of go/no-go date 	16 September	 Results of Market Trial Preparing for 1 Oct – Ind Go-Live Plan review Readiness Reporting #9
19 May	 ✓ Readiness Reporting #7 ✓ Exec Forum Agenda ✓ Retail Production: Confirming go/no-go 	22 October	1. Debrief and reconfirmation of approach for Global Settlements

Proposed Additional Executive Forums

- Thursday 29 July in advance of Rule Change Decision on 2 August
- Monday 30 August in advance of 5MS Market Checkpoint on 1 September
- Remove meeting currently scheduled for 2 September
- Date for meeting week before 1 October TBD

Upcoming Meetings

AEMO | Program Calendar and Timelines

Current as at 15/06/2021





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

TOUGHLA

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

Focus Groups

Transition (TFG)

Market Trial (MTFG)

Other

Information sessions

Q&A session

Industry Testing

Training 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

Peter Carruthers



Meeting Close

Peter Carruthers