



5MS & GS Program Consultative Forum #36

Thursday, 19 August 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 – 10:25	Introduction	Peter Carruthers
4	10:25 – 10:35	Initial Readiness Survey Results	Greg Minney
5	10:35 – 10:50	Market Trial Progress	Greg Minney
6	10:50 – 11:10	Initial Readiness Assessment for 5MS start notice	Greg Minney and Peter Carruthers
7	11:10 – 11:25	Participant Support	Anne-Marie McCague
8	11:25 – 11:35	Industry Risks and Issues	Anne-Marie McCague
9	11:35 - 11:40	Forward Meeting Plan	Anne-Marie McCague
10	11:40 - 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

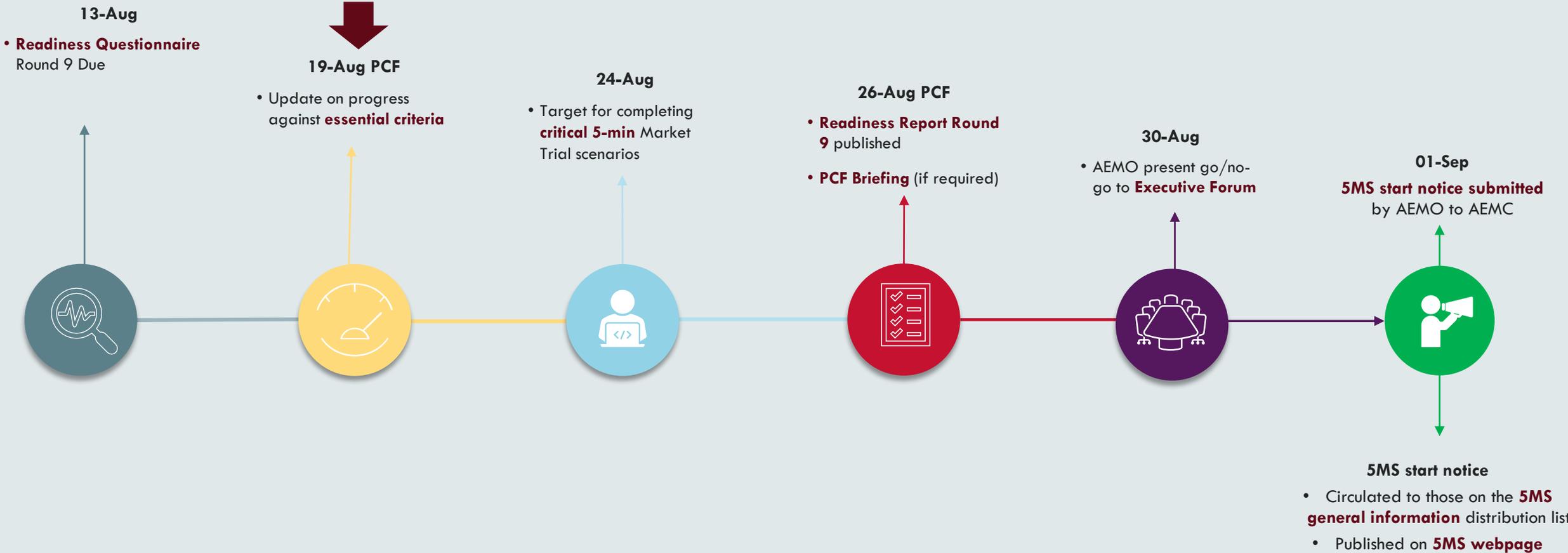
No.	Status	Action	Comment
35.4.1	Closed	AEMO to add Readiness Survey and Reporting to Program Timeline Level 1 & 2 (Milestones)	
35.5.1	Closed	AEMO to include the risk associated with deploying EMMS Data Model v5.1 into pre-production during September 2021.	Included in Market Trial section.
35.6.1	Open	AEMO to provide clarity on the assurance of the accuracy of the outcomes of the settlements process and how AEMO manages the process if some input data is not accurate.	<p>The assurance around commercial outcomes for participants comes from a variety of sources:</p> <ol style="list-style-type: none"> 1. AEMO UAT process – this is AEMO’s testing regime to prove that the systems are compliant with NER 2. Independent certification – required for the complex calculations of the settlement engine – complete 3. Production – the transitional period allows for the monitoring of metering data for input errors by participants 4. Market Trial – provides assurance of the end-to-end process, the opportunity for participants to conduct their own checking that the outputs reflect the inputs, and the opportunity to flush out defects/issues/misunderstandings at the AEMO or participant end. <p>The AEMO system is already receiving 5m data and register level reads from MDPs. The receipt, ingestion, and processing of 5m data works through the AEMO MDM today (and its aggregation to 30m). Where 5m metering data is properly sent, the commercial outcomes are accurate at the 30m level.</p>
35.8.1	Closed	AEMO to forward the outcomes of the Regulatory Implementation Roadmap Forum to the PCF.	



Introduction

Peter Carruthers

5MS start notice process



Reminder: Readiness assessment

ESSENTIAL CAPABILITY

AEMO Capability

Metering Platform: Is deployed and has stable business operation

Settlements Platform: Is deployed and has stable business operation

Bidding Platform: The 5-minute bidding and dispatch solution, including the web bidding interface is deployed and has stable business operation.

Essential metering

All essential meters* are able to produce and store 5-min data

All essential meters* are able to deliver 5-min metering data

Bidding

Generators and MNSPs are able to submit 5-min offers

CRITERIA

Metering Platform:

- Receive and process 5 minute metering data.
- Support 5 Minute Profiling / UFE

Settlements Platform:

- Support 5 Minute Settlement processes

Bidding Platform:

- Support 5 Minute Bidding Services
- Provide 5 Minute Bidding interface

MP's upgraded ensured that essential meters are capable of providing 5 minute metering data

MDPs are able to provide 5 minute metering data for essential meters for settlement

Generators are capable of providing 5 minute bids

SUPPORTING ASSESSMENT

Market Trial IP

Market Trial IP

Market Trial IP

Production Operation

Production Operation

Production Operation

Independent Certification

Market Trial N/A

Metering Data Delivery IP

Meter Rollout Plans & reports, MTP delivery IP

Participant Readiness Reporting

Market Trial IP

"Transition bidding" IP

Participant Readiness Reporting

OTHER PARTICIPANT CAPABILITY

Retailer

Capability to operate retail functions in place

DNSP

Metering and Standing Data capability in place to support GS and 5MS

TNSP

Metering and Standing Data capability in place to support GS and 5MS

MDP

Metering Data delivery compliance requirements met

MP

Meter upgrade compliance requirements

Generator

Generators and MNSPs are able to submit 5-min offers

CRITERIA

- Receive and process 5-minute metering data
- Receive and process 5-minute Settlement statements

- Receive and process 5-minute metering data

- Provide GS Metering and Standing Data updates (inc. NCONUML)

- Provide 5-minute Data T1-3 Distribution connected metering data
- Provide T1 Basic Metering Data
- Provide MDFF Interval Data / Inc

- Provide 5 Minute metering Data (4, 4A, VicAMI)
- T1-3 distribution connected meters capable of producing 5-minute Data

- Submit 5-minute bids
- Process 5-minute settlement and metering data

SUPPORTING ASSESSMENT

Participant Readiness - Reporting

Market Trial IP

Bi Lateral Testing IP

Participant Readiness - Reporting

Market Trial N/A

Rollout Plans & reports, MTP delivery IP

Bi Lateral Testing IP

Participant Readiness - Reporting

Market Trial N/A

Rollout Plans & reports, MTP delivery IP

Bi Lateral Testing IP

Participant Readiness - Reporting

Market Trial N/A

Rollout Plans & reports, MTP delivery IP

Bi Lateral Testing IP

Participant Readiness - Reporting

Market Trial N/A

Rollout Plans & reports, MTP delivery IP

Participant Readiness - Reporting

Market Trial IP

"Transition bidding" IP

Summary

- AEMO's overall readiness assessment for 1 October is currently "amber"
 - Primarily driven by Market Trial status
- Key risks for "green" 5MS Start Notice are:
 - Market Trial data issues impeding clean 5m Settlements run
 - Essential meter upgrade and metering data delivery risks
 - Unexpected show-stopper issue emerging from AEMO UAT finalisation
- Objectives for Today – readiness assessment preparations:
 - Update on Participant readiness – final readiness survey
 - Review of Market Trial progress and issues/risks
 - Preliminary readiness assessment for 5MS start notice
 - Actions required for Green assessment
 - Decision framework if readiness assessment is amber
- Update on Participant Support – feedback and response



Initial Readiness Survey Results

Greg Minney

Summary

- Highest response rate of any survey round: **49 organisations**
- **100% of organisations** either confident or very confident that they'll be able to continue to perform their core activities post 5MS Rule commencement
- On average, overall program delivery progress is **75-99% complete**, however, 9 organisations are reporting 'at-risk' and 1 reporting 'late'
 - Common reasons: Late installation/reconfiguration of tranche 1 meters and vendors/testing behind schedule
- Ongoing delays associated to:
 - Tranche 1 meters
 - The establishment of Cross boundary supplies and Non-contestable unmetered loads
- MP and MDP accreditation is being reported as either '**on-track**' or '**complete**'

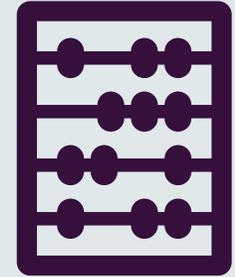
Overall:

- Whilst organisation's projects may be progressing well, **most projects are still in testing phases**
- Tranche 1 metering activities are running 'late' compared to the MTP transition end dates, however, all MSPs are confident they will meet their 1 Oct 2021 obligations
- Late delivery of cross boundary and non-contestable unmetered loads will impact UFE values in the short term

Readiness Questions

Respondent composition

- **49 responses received** representing **111 Participant types**:
 - 20 MCs
 - 18 MPs
 - 17 MDPs
 - 19 Generators
 - 20 Retailers
 - 10 Distributors
 - 7 TNSPs



October 1 specific questions:

- How confident are you that you'll be able to continue to perform your Organisations' core activities post the 5MS Rule commencement?
 - **100% of respondents report** that they are either confident (25) or very confident (24)
- Do you have contingencies in place to ensure you can perform your core activities post the 5MS Rule commencement?
 - Over **80% of respondents** report they have contingencies in place



Market Trial Progress

Greg Minney

Overall Status as at 17 August 2021

[Click here for PractiTest Dashboard](#)

Overall RAG Status



Schedule is on track however data quality issues are impacting outcomes

- 35% of total scenarios are either completed or in progress.
- 5-min profiled bids continue to be submitted.
- Preliminary invoice for 2021Wk32 (full 5-min) released on 13-Aug.
- Preliminary invoice for 2021Wk33 due for release on 20-Aug. It is expected that data estimations will continue to be required.

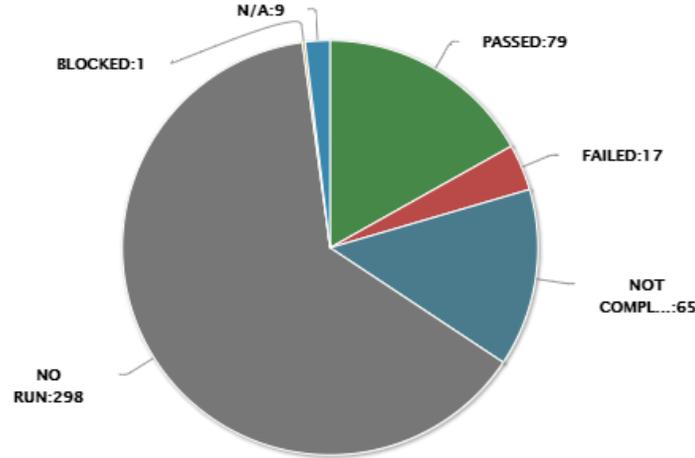
Risk/Issue RAG Status



Amber risk status.

- No critical capability issues for market start have been identified
- Uses of estimated meter read data and participant input test data may impact data quality which will be reflected in Market Trial outcomes (Issue 5)

Test Case Summary

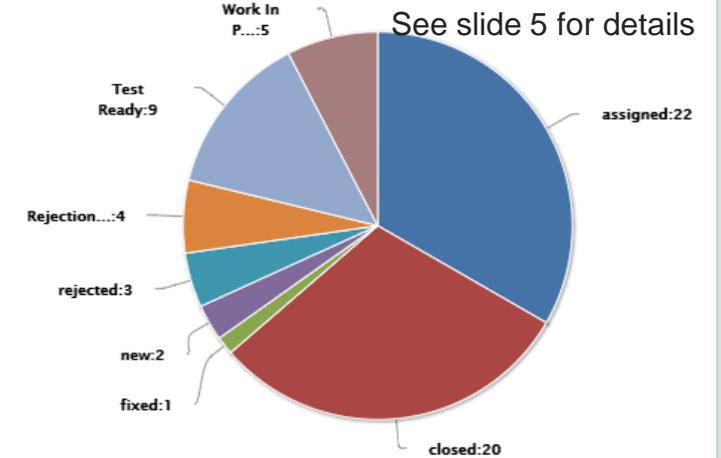


Key Risks – no change

Heightened risk of issues occurring early in the Market Trial as a result of:

- Testing of production defects in pre-prod
- Unexpected data/environment issues encountered following the refresh has required time to resolve
- Conflicting resource demands based on production support, Market Trial preparations and completion of testing including edge case

Defects Summary



Key Issues – see slide 4

- 5-minute pre-dispatch (5MPD) scenarios formulation error – due in pre-prod 25 Aug

* TS unique # reference
to Market Trial Workbook

Key Market Trial Business Functions

Stream	Action	Owner	TS #*	Status	Comment
Bidding	Verify successful submission of 5-min bids with varying underlying values	Generators	BD02, BD03		Participants have been submitting 5-min varied bids. No issues have been identified to date.
Retail	Verify 5-min settlement (RM reporting)	Generators and Retailers	S02, S03		5-min RM reports have been issued and are available for participant verification. Amber status reflects delay in issuing.
Retail	Verify RM reports for UFE	Generators and Retailers	S02, S03		Initial UFE reports can now be requested by participants. Amber status reflects delay in issuing.
Settlements	Verify transition invoice – prelim and final	AEMO to send and Gens and Retailers to receive	S08, S02, S03		The transition week preliminary invoice has been produced and available for participant verification. Final due 24 August.
Settlements	Verify prelim for full 5-min week	AEMO to send and Gens and Retailers to receive	S02		Issued on Friday 13 August with data quality exceptions
Overall status					Overall status is amber due to data quality issues. Currently trialling improved data profiling method to return to green. Key scenarios are expected to be executed in line with decision making process for 5MS start notice.

Open Issues that may impact Market Trial

No.	Title	Description	Status	Comment
3	5-minute pre-dispatch (5MPD) scenarios formulation error	The scenario offsets that were intended to be applied at the start of each 5MPD scenario have instead been applied cumulatively to each interval over the forecast horizon.	Open	AEMO is currently remediating this as a priority. Pre-prod release is scheduled for 25 August. Also raised as a Defect 50 (next slide).
5	Missing 5-min generator meter read data	Unavailability of daily generator meter reads requires intervention on behalf of AEMO to ensure complete data.	Open	AEMO will continue to create generator data to ensure complete data for each settlement run. AEMO is currently trialing an improved data profiling method that is expected to remediate this issue.

Performance Aspects of 5 MS solution in Market Trial

- Issue: Performance in Market Trial impacted by level of metering estimation required for each run increasing end-to-end run times:
 - **Impact** : extended runtimes for PAE in pre-prod environment lead to suspension of R1/R2 30 minute runs during 5 minute trial to enable focus on key trial scenarios for
- Summary results comparison Production to Preproduction:
 - For 30 min runs in Prod – PAE time 1-1.5 hours, estimations approx. 20mins, approx. 5% NMs estimated
 - Full 5 min week in Preprod – PAE 2 hours, estimations approx. 45 mins, Market Trial >95% NMs estimated
- Preprod performance stable and in line with requirements to support market trial and within timeframe for prod run times
- Level of estimations will continue to be monitored and processing adjustments made if required

Customer Switching

ID	Description	Residual Rating	Comments
New	<p><u>Customer Switching Readiness may impact 5MS Readiness</u></p> <p>The 5MS solution includes the code needed for Customer Switching.</p> <p>There is a risk that if a significant issue is encountered in the testing of Customer Switching it may impact the 5MS commencement.</p>	Medium	<ul style="list-style-type: none">• Customer Switching has established a defect management process using the 5MS Market Trial PractiTest tool• Customer Switching has confirmed that no significant issues have been identified through testing• Contingency options/workarounds were discussed at the Customer Switching Information Session on 16 Aug• Customer Switching will hold fortnightly Q&A sessions to support participant readiness and representatives will continue to attend the 5MS Market Trial calls twice a week.

New Risk

ID	Description	Rating	Mitigations
New	<p><u>Deployments of EMMS Data Model V5.1 into the pre-production environment prior to 1 October 2021 may disrupt the environment</u></p> <p>There is a risk that the deployment of the EMMS Data Model V5.1 into the pre-production environment during Market Trial may disrupt the environment, which could result in an impact to participant 5MS testing and readiness.</p>	Medium	<ul style="list-style-type: none"> • Inherent Likelihood: Possible • Inherent Consequence: Moderate • Inherent Risk Rating: Significant • AEMO will be releasing a new participant data model for WDR version 5.1 on 27 September 2021 in our pre-production environment. • The date chosen does not conflict with 5MS key milestone dates such as the Market Trials nor the rule commencement date of 1 October 2021. • AEMO will make available a new participant data model for DM5.1 on 20 September 2021 to Market Participants, with the ability to enable and send actual reports starting on Sept 27, 2021. This is for the purposes of testing and migrating WDR changes. • Participants can only utilise, and will only be impacted by, the new DM5.1 if they also install at their end. • All versions of the participant data model are backward compatible and no issue should be found in relation to 5MS build. • AEMO recommend that those testing the version 5.0 remain on that version until your validation tests are completed. • Participant are only advised to install the version 5.1 of the data model if they want to test for new WDR components. • Residual Likelihood: Unlikely • Residual Consequence: Moderate • Residual Risk Rating: Medium



Initial Readiness Assessment for 5MS start notice

Greg Minney and Peter Carruthers

Current status for 5MS start notice

	On track	On track for commencement date
	Risk 1 – Risk to major milestones or deliveries	Remediation or contingency activation required to ensure on track delivery for Rule Commencement
	Risk 2 – Risk to rule commencement	Cannot be addressed with available contingencies to be on track for commencement date

Responsible Participant	Essential Criteria	Status	Comments
Generator	Generators and MNSPs are able to submit 5-min offers	On-track	<ul style="list-style-type: none"> 15/18 generators “on track”, 3 reporting “at risk”, all reporting confident or very confident of being able to operate core functions 16/18 are or plan to implement during transition bidding operation, 5 currently submitting 5 minute bids 16/18 have contingency plans in place to enable continuity of core function
MP, MC, MDP	All essential meters* are able to produce and store and deliver 5-min data	At-risk	<ul style="list-style-type: none"> All Providers of essential meters have indicated they are confident or very confident being able to operate core functions post 1 October MSP Plans as at 13 August have 1 essential meter scheduled for September, but 867 scheduled in August. Contingency plan to be agreed with impacted parties for meters scheduled for update in September MSP metering data delivery for essential meters – all essential meters are reporting to have metering data delivered prior 1 October, with 2 MSPS with programs at risk. Multiple MDPs will be commence delivering some or all 5 minute metering data in September beyond MTP end date of 31 August Contingency plan requested from those MSPs who have not commenced delivery of 5 minute metering data prior to 31 August
AEMO	The 5-minute bidding and dispatch solution, including the web bidding interface is deployed	On-track	<ul style="list-style-type: none"> Market trial execution of key scenarios has not raised major issues Web Bidding interface has been deployed since 1 April to provide participant contingency 5ms bidding platform has been operationally stable in production environment
	The Metering Data Management (MDM) solution is deployed	At-Risk	<ul style="list-style-type: none"> Market Trial challenges being experienced due to significant test data quality issues, requires resolution to facilitate clean Settlements runs No significant capability issues identified to date Production operation of platform stable in 30 Minute mode Performance validation based on observations of Production and Market Trial behaviour Risk of unexpected issues emerging from final AEMO UAT
	The 5-minute settlements solution is deployed	On-track	<ul style="list-style-type: none"> Key market trial scenarios for preliminary settlement invoices in progress, test data quality issues impacting Metering are noted. Settlements runs have enabled process validation by participants to continue Independent certification of settlement calculation performed, but AEMO UAT prior to market start notice is a potential risk area Platform operation in production stable
Initial Readiness Assessment status		At-Risk	<ul style="list-style-type: none"> Heightened risk on satisfactory completion of key market trial scenarios in time for Go/No-Go status assessment Risk of unexpected issues emerging from final AEMO UAT Contingency plans identified for essential meter installation may require activation for small number of meters and for metering delivery

Actions for “Green” 5MS start notice

	On track	On track for commencement date
	Risk 1 – Risk to major milestones or deliveries	Remediation or contingency activation required to ensure on track delivery for Rule Commencement
	Risk 2 – Risk to rule commencement	Cannot be addressed with available contingencies to be on track for commencement date

Responsible Participant	Essential Criteria	Status	Conclusions and Actions for “Green” 5MS Start Notice
Generator	Generators and MNSPs are able to submit 5-min offers	On-track	<ul style="list-style-type: none"> No further actions. Status is acceptable.
MP, MC, MDP	All essential meters* are able to produce and store and deliver 5-min data	At-risk	<ul style="list-style-type: none"> All MSPs reporting compliance by 1 October. Completion of August scheduled installation and metering plans No reason to delay Market Go-Live on that basis Agreed Contingency Plan required from MPs and MDPs with any essential meters/metering data in September
AEMO	The 5-minute bidding and dispatch solution, including the web bidding interface is deployed	On-track	<ul style="list-style-type: none"> No further actions. Status is acceptable.
	The Metering Data Management (MDM) solution is deployed	At-Risk	<ul style="list-style-type: none"> No fundamental capability issues identified to date Resolve metering data issues to enable clean 5m Settlements run in Market Trial to be completed AEMO advise on any residual UAT issues Criteria is no outstanding defects that have a material compliance or participant impact that cannot be remedied prior to 1 Oct
	The 5-minute settlements solution is deployed	On-track	<ul style="list-style-type: none"> No fundamental capability issues identified and independent certification completed Resolve metering data issues to enable clean 5m Settlements run in Market Trial to be completed AEMO advise on any residual UAT issues
Initial Readiness Assessment status		At-Risk	

Part B – Other Industry Capabilities

(as at 13 August)

On track	On track for commencement date
Risk 1 – Risk to major milestones or deliveries	Remediation or contingency activation required to ensure on track delivery for Rule Commencement
Risk 2 – Risk to rule commencement	Cannot be addressed with available contingencies to be on track for commencement date

Responsible Participant	Criteria	Status	Comments
Retailer	Receive and process 5-minute metering data. Receive and process 5-minute settlement data.	On-track	<ul style="list-style-type: none"> All 20 reporting Retailers confident or very confident of being able to operate core capabilities post 1 October 18 “on track”, 2 “at risk” to be able to receive and process 5-min metering data 16 “on track” and 4 “at risk” to be able to receive and reconcile 5-min settlement data
DNSP	Receive and process 5-minute metering data. Provide GS metering and standing data updates (incl. NCONUML).	At-risk	<ul style="list-style-type: none"> All DNSPs report "on track" for receive and process 5-min metering data Multiple DNSPs are reporting at risk or late for numerous GS related items, including: <ul style="list-style-type: none"> Cross boundary supplies, 4 reporting at-risk or late NCONUML, 2 reporting at-risk or late There will be an impact on the UFE values initially published for those profile areas, overall impacts to be established and remediation/management options developed NMI reclassification required for GS has commenced, 1 DNSP reporting "late" for this activity
TNSP	Receive and process 5-minute metering data Provide GS metering and standing data updates	On-track	<ul style="list-style-type: none"> 5/7 TNSPs reporting their overall programs as on track, 2 "At risk" in regards ability to receive and process 5-min metering data 2 out of 7 have the intention to receive 5-min metering data prior to the Rule commencement date 1 TNSP reporting "at risk" for establishment of new NMI classification codes
MDP	Provide 5-minute metering data T1-3 distribution connected meters, type 7 meters. Provide type 4, 4A, Vic Ami metering data at 5-minute granularity by 1 December 2022 Provide basic metering data for tier 1 NMIs to AEMO.	On-track	<ul style="list-style-type: none"> 98,000 Tier 1 basic meters do not have active datastreams (as at 8/8) indicating that basic reads may not be available for inclusion in UFE calculations, 93,000 relate to a single distribution area. Majority of impact will be confined to that area, all relevant MDPs reporting activity "on track" Delivery of 5-minute metering data for T1-3 distribution connected meters dependent on MP upgrades in addition to MDP delivery capability 2 MDPs reporting "late" for delivery of type 7 data, with rectification plan for October All MDPs report "on track" for delivery of interval metering data via MDFF
MP, MC	All T1-3,4* meters are able to produce and store 5-minute data.	At-risk	<ul style="list-style-type: none"> 25% of T1 non-essential meters yet to be 5 minute capable (based on RTC update), with all scheduled to be compliant by 1 Oct Potential impact to accuracy of 5 minute readings when profiled with FRMP exposure for non-compliant meters, if late
Summary – Other Industry Capabilities		On-track	<ul style="list-style-type: none"> Based on participant reports – no issues that would prevent rule commencement Impacts of late and at-risk activity relate to GS Soft start

Decision Framework if “Amber” readiness assessment

- Objective is to complete actions required for “green” 5MS Start Notice
 - Supports clear advice for 1 October commencement
- If this is not achieved, then a risk-weighted status assessment will be required
- Assessment will need to be weighed against the options:
 1. Risk-weighted assessment of 1 October go-live
 2. Short deferral of go-live – to 1 December
 3. Extended deferral of go-live – to 2022
- Assessment of pros and cons will be prepared and presented to PCF on 26 August (suggested) and subsequently to EF on 30 August



Participant Support

Anne-Marie McCague

Summary of Feedback Received

- AEMO requested feedback through the RWG PIR and the Retail Q&A sessions.
- Responses were received from Red Energy, PlusES, AGL, Origin and Intellihub.
- AEMO has reviewed feedback and identified three ways in which feedback can be taken into account: immediately through the Retail Support Process, putting in place processes for Rule Commencement and post commencement support, sharing the feedback with other AEMO programs through the Lesson Learned Log

Retail Support Process

- Twice weekly Retail Q&A sessions and daily issues log are helpful
- Not including incident numbers against Issues makes it difficult for participants to track their own issues
 - AEMO has advised that incident numbers can be included with consent from participants
- Greater transparency for defect fixes / participant role in testing defect fixes
 - Further information on defect fix dates is included in the Retail Issues Log
 - Overview of defect fix is provided through the twice weekly Retail Q&A sessions
- Lack of visibility into the prioritisation of feedback and whether an issue impacts multiple participants
 - Prioritisation and impact have now been included in Log
- Defect release predictability
 - AEMO has committed to regular defect releases

5MS Industry Go-Live Plan

- Frequent comms worked well and were clear and well structured
 - Comms scheduled will be included in the Go-Live Plan
- Preparation briefing sessions worked well – AEMO will schedule same in advance of 1 Oct
- Delay in scheduled comms can cause confusion
 - AEMO will avoid delays by issuing a status at scheduled time
- Greater transparency on go/no-go decision making
 - AEMO has provided PCF the approach to the go/no-go assessment including the criteria
- Two-way comms and transparency over industry facing incidents
 - AEMO will establish a Support Room for 1 Oct and will continue Q&A sessions during October
- Online Issues Log could provide greater flexibility and reduces risk of working from old version

AEMO Lessons Learned Log

- AEMO should consider maintaining an environment for the purposes of participant testing of defect fixes
- System changes communicated through slide packs have resulted in discrepancy from consulted procedures.
- Failure to deliver projects to a schedule, impacting our resourcing and costs.
- Not enough time between first clean run of settlements left limited time for participant testing prior to Retail Go-Live
- Lack of performance testing prior to Go-Live
 - AEMO's approach to performance testing targeted the solution areas identified most at risk for performance challenges, that is metering data ingestion and profiling allocation/preparation.

Overview of Support Arrangements for 5MS Commencement

Pre- 1 October

- Go-Live Plan walkthrough with RWG 7 September
- Q&A sessions – dates TBD – approx. 17- Sep, 24-Sep, 29-Sep

1 October

- Q&A session on 1 October at 10:00
- Increased Support staff and SME availability

5MS Cutover Support

- It is expected that the Retail cutover will take approximately 3 hours and will commence at 17:00 on Thursday 30 September – final times TBD
- AEMO will send a commencement email, a mid-point update email (time to be included in go-live plan) and a completion email
- A ‘support-room’ will be available from outage finish until 03:00 on 1 October.
 - This will be in place to cover post cutover issues and queries/issues with 5-min bidding from 00:01
 - Can be used to check if an issue has already been identified
 - All issues should still be logged with Support Hub
 - Once the issue has been logged, the ‘support-room’ can be used to receive updates on progress
 - Note: Issues will be prioritised during this time.
 - Updates on key issues (high impact) will be displayed on a slide in the ‘support-room’
 - Participants may use the chat function or speak

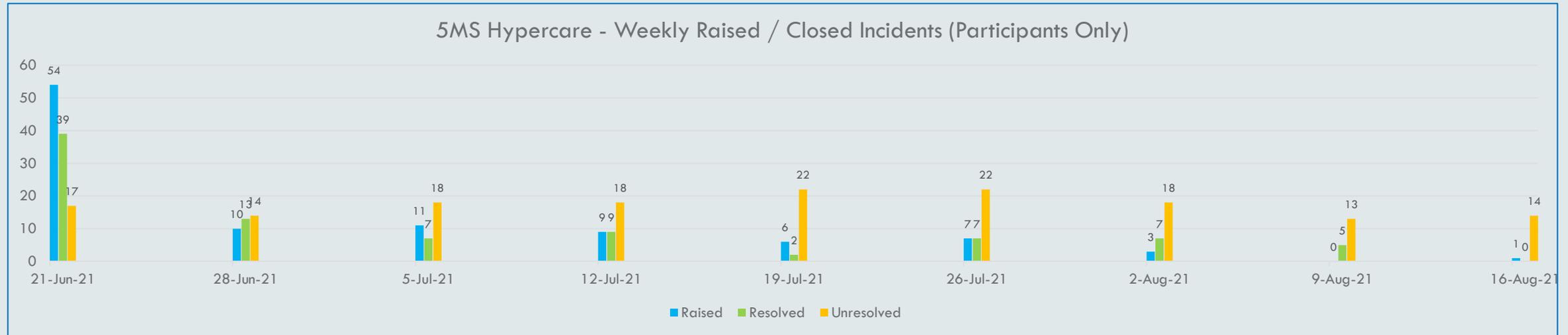
5MS Commencement Weekend

- Increased Support Hub staffing over weekend
- SMEs will be available over the weekend

Support post 1 October

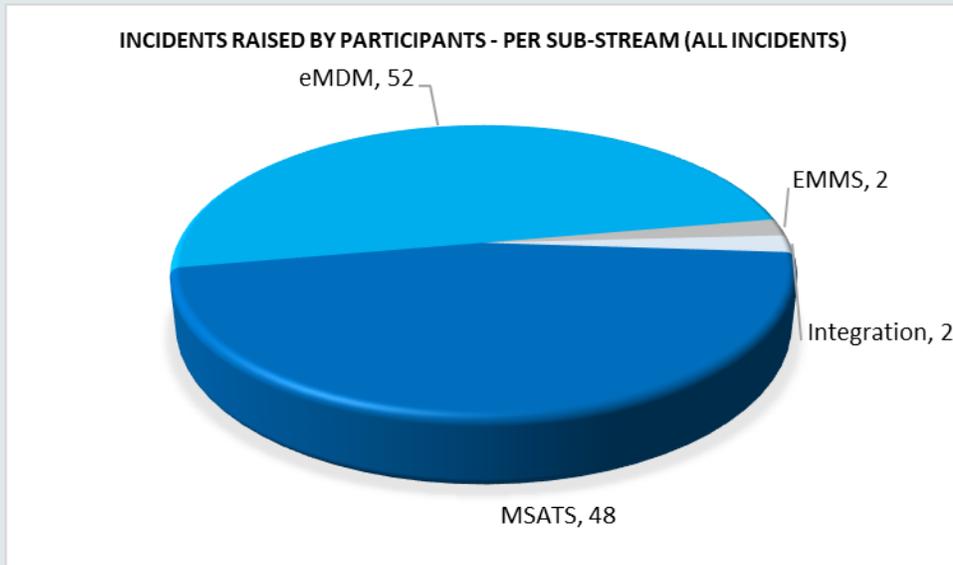
- Daily Q&A Sessions
- Daily publication of Issues Log (medium under investigation)
- Extended Q&A session for preliminary and final settlements invoice days
- AEMO will assume that the consent provided to include incident numbers is still in place – please contact 5MS mailbox if you no longer wish to have your organisation’s incident numbers included
- If you have not already provided consent to include incident numbers, please contact the 5MS mailbox

Summary of Incidents raised by participants against the Retail IT Platform



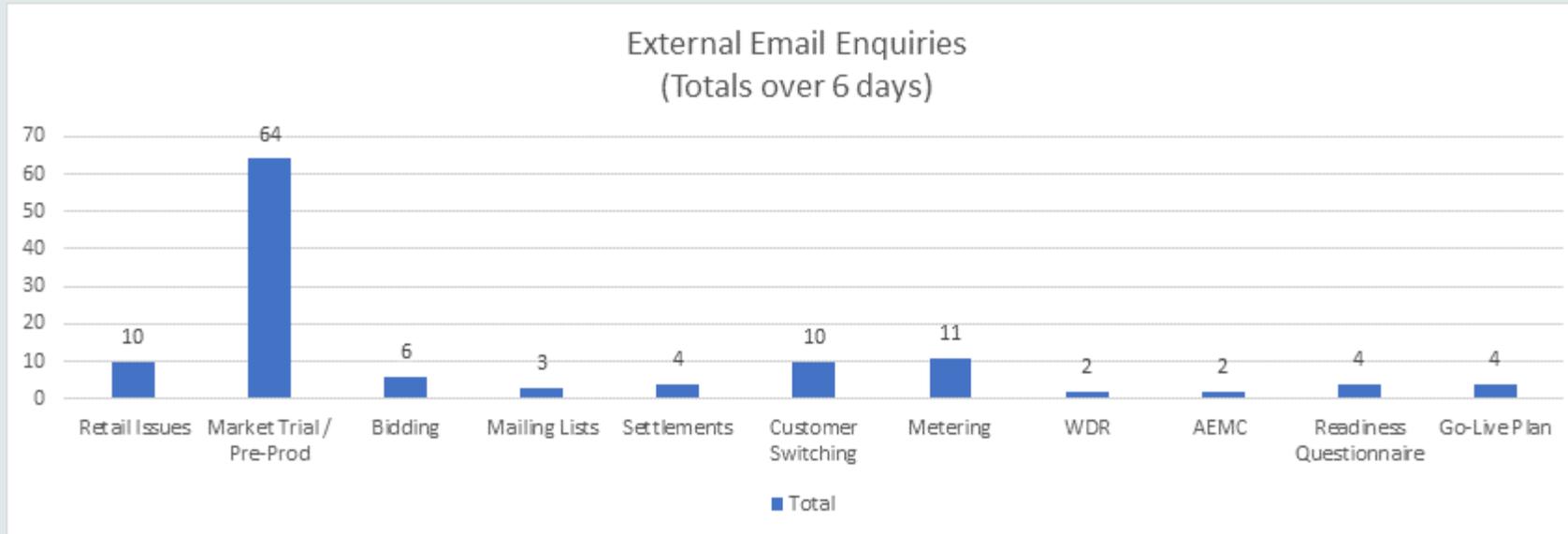
- Number of incidents being raised has declined
- AEMO is progressing the resolution of incidents on a weekly basis
- Outages for fix deployments are taking place every second Wednesday unless an emergency fix is required
- Participants are notified of outages by AEMO's BAU process through Support Hub Bulletins and through the daily Retail Issues Log emails from 5MS@aemo.com.au

Analysis of Incidents



Sub-stream >> Product Category	Awaiting 3rd Party	Awaiting Problem/Change	In Progress	Total
eMDM				
MDM - RM Reports	6			6
MDM - MACK, TACK, MDR	2			2
MDM - Meter Data Ingestion	2			2
MSATS				
MSATS - Data Exchange	3			3
MSATS - CATS B2M/Change Requests	1			1
Grand Total	14	0	0	14

5MS Mailbox



- Provides an example of the topics through the 5MS mailbox from Friday 6 August to Friday 13 August
- Topic trends vary week from week and are impacted by working groups taking place, consultations and issues that arise
- The following support arrangements have been put in place to reduce the reliance on the mailbox and provide quicker responses:
 - Daily Market Trial calls
 - SME attendance at Market Trial calls including Customer Switching
 - Small group sessions for Market Trial three times a week
 - Twice weekly Retail Q&A calls
 - Daily Retail Issue Log including incident numbers where consent is provided



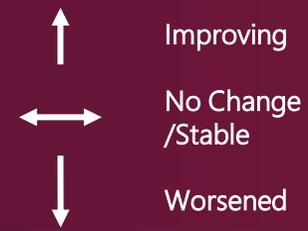
Industry Risks and Issues

Anne-Marie McCague

Industry Risks and Issues - Trend

- **The purpose of this section is to discuss the risks and issues that may have an impact on the 5MS start notice**
- **The risk review will take into account the three key areas of risk:**
 - Market Trial
 - Retail system readiness
 - AEMO and industry readiness
- Volume of regulatory change is not included, while this area of risk continues to be a source of resource pressure for participants, it is not considered a risk to the 5MS start notice

5MS start risks and issues



ID	Description	Rating	Mitigations
New issue	<p><u>Data quality issues in Market Trial cause delays to the schedule</u></p> <p>The time needed by AEMO to manage data quality issues is causing delays to the overall schedule which is impacting AEMO's ability to demonstrate the key essential criteria tests within the 5MS start notice decision making timeframe</p>	High	<ul style="list-style-type: none"> AEMO is currently trialing an improved data profiling method that is expected to remediate this issue. Updates will be provided to the ITWG through the daily Market Trial calls.
R33	<p><u>Further delays to AEMO Retail Systems impact 5MS rule commencement critical path</u></p> <p>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 5MS rule commencement (01-Oct-21)</p>	Significant ↔	<ul style="list-style-type: none"> Residual Likelihood – unlikely Residual Consequence – extreme Residual rating – significant Trend: neutral <p>The Market Trial has commenced on schedule with known issues in pre-production.</p>
R34	<p><u>Delay to AEMO 5MS Retail impacts participants readiness</u></p> <p>There is a risk that the delayed availability of the 5MS Retail solution impacts participants readiness programs resulting in delays in some participants programs.</p>	Significant ↔	<ul style="list-style-type: none"> Residual Likelihood – remains as possible. Residual Consequence – remains major Residual rating – remains significant Trend: remains as neutral Daily updates are provided on post go-live issues and defect fix schedule.
R11	<p><u>The AEMO business and operations are not ready for 5MS Rule Commencement on 1 Oct 21</u></p> <p>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</p>	Medium ↓	<ul style="list-style-type: none"> Residual Likelihood – remains as unlikely Residual Consequence – remains as major Residual rating – remains as medium Trend: remains as worsening – noting the issues associated with Market Trial
R19	<p><u>Risk of a critical mass of participants not being ready at identified critical path milestones</u></p> <p>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.</p>	Significant ↓	<ul style="list-style-type: none"> Residual Likelihood – remains as possible Residual Consequence – remains as major Residual rating – changes from medium to significant as a result of increased likelihood Trend: changes from worsened to neutral as no change in status since last review Current schedules have reduced or eliminated the schedule contingency for the upgrade of a number of essential meters. AEMO is working with at risk MDPs/MPs to establish contingencies for those essential meters that will not be upgraded by 1 September.



Are there any new risks or issues to be raised?



Forward Meeting Plan

Anne-Marie McCague

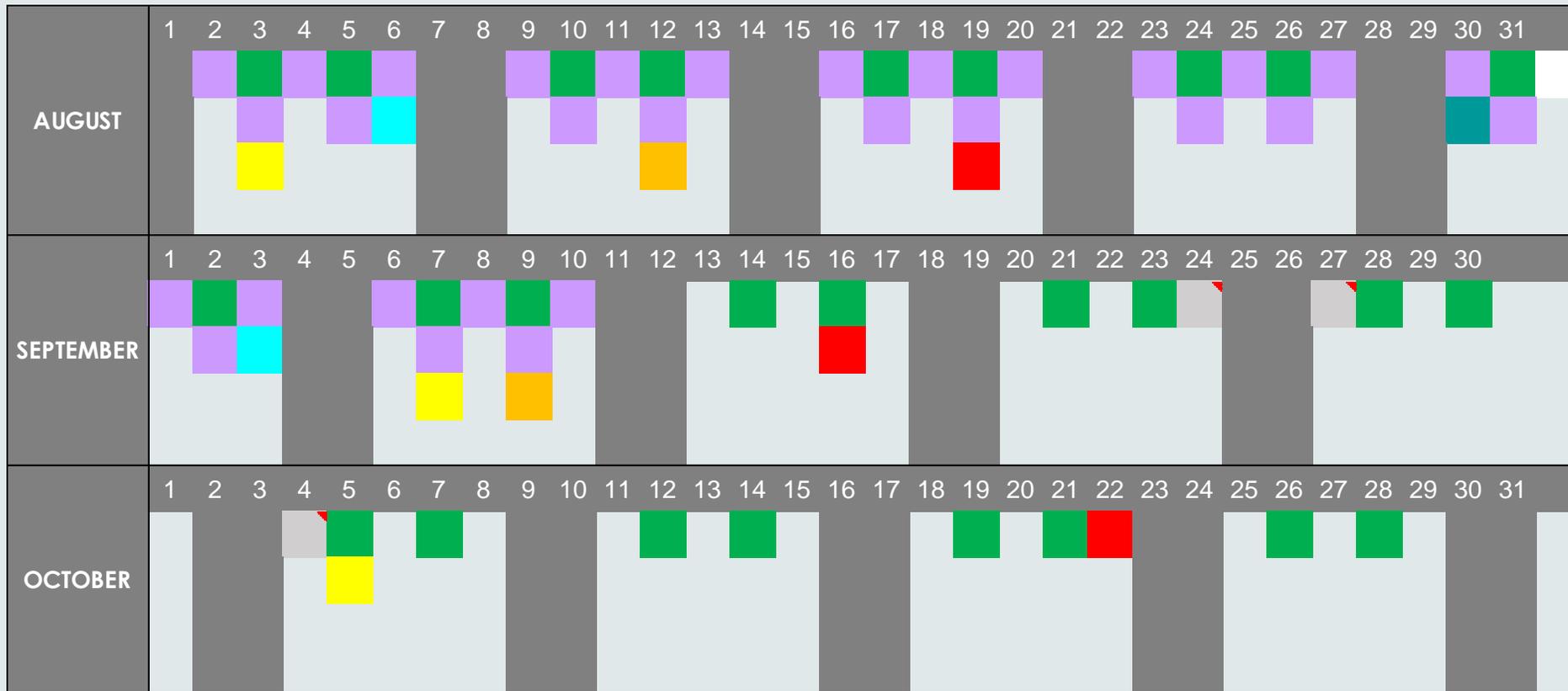
This table provides a list of key topics. The normal updates will also be provided at each PCF. This table will evolve as the year progresses.

High-Level Plan for 2021

Month	Topics	Month	Topics
January	<ul style="list-style-type: none"> ✓ AEMO go-live decision making process ✓ Risk Review ✓ Readiness and go-live dashboard 	17 June	<ul style="list-style-type: none"> ✓ Market Trial prep status ✓ Retail Cutover Preparation Status ✓ Contingency Planning
18 February	<ul style="list-style-type: none"> ✓ Retail Solution Status ✓ Exec Forum Agenda 	23 July	<ul style="list-style-type: none"> ✓ Market Trial progress ✓ Readiness Reporting #8 ✓ Debrief on Retail Go-Live ✓ Contingency Planning
18 March	<ul style="list-style-type: none"> ✓ 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	<ul style="list-style-type: none"> ✓ Market Trial progress ✓ Risk Review – focus on rule commencement ✓ Exec Forum Agenda ✓ 5MS start assessment
23 April	<ul style="list-style-type: none"> ✓ 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	<ol style="list-style-type: none"> 1. Results of Market Trial 2. Preparing for 1 Oct – Industry Go-Live Plan review 3. Readiness Reporting #9
19 May	<ul style="list-style-type: none"> ✓ Readiness Reporting #7 ✓ Exec Forum Agenda ✓ Retail Production: Confirming go/no-go ✓ Contingency Planning 	22 October	<ol style="list-style-type: none"> 1. Debrief and confirmation of approach for Global Settlements

Upcoming Meetings

Current as at 11/08/2021



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
Retail Q&A
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