



5MS & GS Executive Forum #9

THURSDAY 30 JULY 2020

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



We acknowledge the Traditional Owners of country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past, present and emerging.

AEMO Competition Law Meeting Protocol

AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO regarding proposed reforms or other initiatives, all participants agree to adhere to the CCA at all times and to comply with this Protocol. Participants must arrange for their representatives to be briefed on competition law risks and obligations.

Participants in AEMO discussions **must**:

Ensure that discussions are limited to the matters contemplated by the agenda for the discussion

Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO

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

Participants in AEMO meetings **must not** discuss or agree on the following topics:

Which customers they will supply or market to

The price or other terms at which Participants will supply

Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participant will participate in the bid

Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services)

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

No.	Agenda Item	Presenter
1	Welcome, Introductions and Apologies	Peter Geers
2	Minutes and Actions – Actions from previous meeting	Peter Geers
3	AEMC Decision on Deferral	AEMC
4	Impact of Deferral <ul style="list-style-type: none">• AEMO 5MS Program• Industry Readiness Activities• Industry Testing and Market Trial• Industry Readiness – Survey	Rowena Leung, Greg Minney
5	Interactions with other market changes	Peter Carruthers
6	Industry Risks and Issues	Peter Carruthers
7	Program Update	Rowena Leung
8	Update on Cost Recovery	Kevin Ly
9	Update on Critical Capability for Go-Live	Greg Minney
10	General Questions	Peter Geers
11	Meeting Close	Peter Geers

Welcome

Peter Geers

Action Items

No.	Agenda Item	Action required	Status
8.3.1	Volume of Industry Change	AEMO to lead a piece of work on mapping and reviewing the current and upcoming industry changes and to set up a related consultation group.	Regulatory implementation roadmap V1 complete. Update now required for 5MS 3-month deferral. Refer agenda.
8.3.2	Volume of Industry Change	Executive Forum members to nominate a contact for consultation via the 5MS@aemo.com.au inbox by Thursday 19 March 2020.	Complete
8.3.3	Volume of Industry Change	AEMO to confirm the purpose of the consultation group to the Executive Forum.	Complete
8.5.1	Readiness workstream	AEMO to develop the definition of 'Critical Mass' and how it was intended to be used.	Developed in consultation with the RWG. Presented to PCF 02-06. Presented in this EF.
8.5.2	Readiness workstream	AEMO to write (make contact) on behalf of the Executive Forum to those participants who haven't responded.	AEMO has carried out a campaign of contacting participants to increase participation in Readiness Reporting
8.6.2	Industry Risks & Issues	AEMO to adjust R06 and R09 (impact of other regulatory changes) to be listed as an issue rather than a risk and create actions against them.	Complete
8.6.2	Industry Risks & Issues	AEMO to align target resolution date for the new issue about the volume of industry change with the industry regulatory change mapping timeline.	Complete
8.6.3	Industry Risks & Issues	AEMO to add the impact of Coronavirus (Covid-19) on participants to be added to the next Readiness Report Survey.	Complete
8.8.1	Program Timeline	AEMO to look at consolidating the cutover and transition dates to the overall timeline.	Single timeline pack is updated on the website on a monthly basis. This is used as the basis for timelines in packs. Consolidation of RWG & SWG will allow for end to end discussion of timelines.

AEMC Decision on Proposed Deferral

AEMC

AEMC final determination on delayed implementation of 5MS and GS

Rule change proposal and AEMC conclusions

In the context of COVID-19 and the market bodies' work to prioritise regulatory reform processes, AEMO proposed to delay the start of 5MS and GS by 12 months.

The rule change was assessed on an expedited process.

AEMC conclusions:

- COVID-19 has had a short term impact on industry capabilities to implement 5MS and GS and meet business activities to supply energy and support customers.
- These COVID-19 impacts have put a strain on participant capabilities, slowing or delaying their 5MS and GS implementation programs.
- The impact of COVID-19 on industry capabilities was only in the order of two to three months and participants have so far had a number of years to implement each of the 5MS and GS reforms.

AEMC final determination on delayed implementation of 5MS and GS

Reasons to delay by 3 months

The AEMC considered that a 12 month delay was too long. It would:

- create cash flow benefits from deferring implementation expenditure, however 5MS and GS project costs would increase and overall industry cash flows are expected to be worse than not delaying 5MS and GS.
- not impact participants equally, with those participants that are more progressed with their implementation being more adversely impacted by a delay than those that were less progressed.
- delay the realisation of short-term efficiency benefits associated with 5MS and GS.
- not be an efficient or targeted way to address specific cash flow issues that a sub-set of participants may have. As such, it would not materially assist in avoiding potential financial contagion from COVID-19.

The AEMC decided that a shorter delay of three months to the start of 5MS and GS would:

- recognise the short-term impact of COVID-19 on participant capabilities
- not significantly increase or decrease 5MS and GS implementation costs
- not materially reduce the broader market and consumer benefits from the rules.

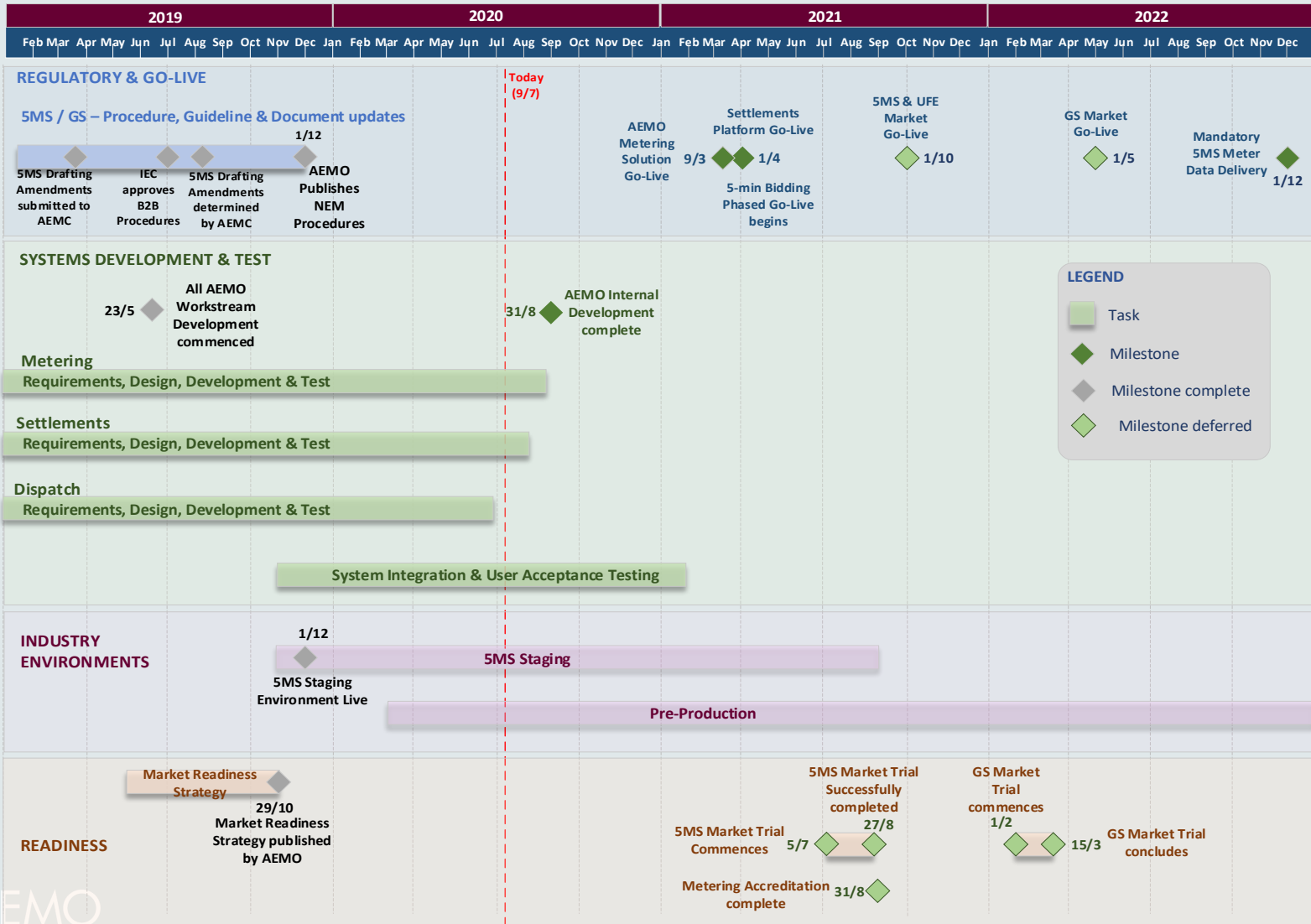
AEMC Deferral Decision

Activity	Original date	New date
Commencement of 5MS	1 July 2021	1 October 2021
Commencement of "soft start" GS	1 July 2021	1 October 2021
Commencement of financial settlement of GS	6 February 2022	1 May 2022
Compliance date for all new and replacement metering installations (other than excluded metering installations) to be configured to record and provide 5-minute data	1 December 2022	1 December 2022
AEMO required to publish UFE data report	1 July 2021	1 October 2021
AEMO required to publish UFE report on unaccounted for energy trends	1 March 2022	1 June 2022

Impact of Deferral

Rowena Leung, Greg Minney, Peter Carruthers

5MS & GS Program Timeline



L1 Milestone Changes

ID	Milestone	Planned Date	Deferral Date	Owner
Level 1 Milestones				
L1-17	5MS Market Trial Commences	6-Apr-21	5-Jul-21	AEMO
L1-9	5MS Market Trial Successfully completed	31-May-21	27-Aug-21	AEMO
L1-10	Metering Accreditation complete	31-May-21	31-Aug-21	AEMO / MSPs
L1-4	5MS & UFE Market Go-Live	1-Jul-21	1-Oct-21	AEMO / Participants
L1-18	GS Market Trial Commences	1-Oct-21	1-Feb-22	AEMO
L1-20	GS Market Trial Concludes	15-Nov-21	15-Mar-22	AEMO
L1-5	GS Market Go-Live	6-Feb-22	1-May-22	AEMO / Participants
L1-6	Mandatory 5MS Meter Data Delivery	1-Dec-22	1-Dec-22	AEMO

Summary of Impact on AEMO 5MS Program

- AEMO 5MS Program will continue to progress with system development and deployments to meet the current milestones
 - Platform release of MDM, Settlements and 5-min Bidding into 5MS Staging Environment, AEMO pre-production environment and production will remain as scheduled
 - The Functionality Release Matrix has been circulated to participants and discussed at RWG/ITWG on 23-Jul
- Reallocations update will be needed with new 5MS commencement date – plan will be communicated through RWG/SWG
- Working Groups will remain on a monthly basis until 5MS go-live with focus groups being used as needed
- Working Groups/ Focus Groups used as needed up until GS go-live
- 5MS mailbox will remain active until GS go-live

Summary of Impact on Approach to Transition



Phased implementation approach is maintained:

- Platform go-lives to deliver require capabilities
- 5MS and GS implementations aligned to Rule Commencement



Limited impact to Transition timeframes and windows:

- Shorter deferral has reduced the need for a “2 speed” transition
- Bidding transition period extends from 1 Apr to 1 Oct 2021
- Transition approach will continue to support commencement of transition activities as early as possible (subject to appropriate counter party agreements)



Metering Transition:

- Plan to be revised to take into consideration new Rule Commencement requirements
- Participants plans may need to be revised, with progress reported against new timings
- Participant accreditation timings to be reviewed

Summary of Impact on Market Trials and Readiness Reporting



Industry Testing and Market Trials:

- Market Trials realigned with revised Rule Commencement dates
 - Proposed 5MS Market Trial: 5/7/21 → 27/08/21
 - Proposed GS Market Trial: 1/2/22 → 15/03/22
- Staging environment to be utilized for participant testing of all releases
- Industry tests for platform deployments as per current strategy



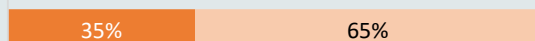
Readiness reporting:

- Cadence of planned Readiness Reporting to be maintained following a delay to Round #3 as requested by PCF and RWG
- Participants expected to report against their updated plans i.e. reflective of the revised Rule Commencements

Results of Industry Survey

5MS GS special survey results

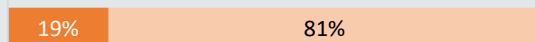
Has your organisation previously decided to defer its project resources or activities in anticipation of the rule change determination?



Considering your organisation's 5MS project current status, is your organisation on track to deliver against the new commencement dates?



If your organisation's delivery of 5MS and GS has been impacted by the AEMC decision, is there any additional support that AEMO can provide to help...



0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

■ Yes ■ No

	Gen.	Ret.	DNSP	TNSP	MP	MDP	MC	Total
Special survey responses	15	15	9	3	13	12	12	79
Deferred	4	6	4	1	5	5	5	30
Not deferred	11	9	5	2	8	7	7	49
Round 2 responses	12	15	10	7	18	17	17	96

- 37 Organisations respond c/f 41 to previous readiness survey
- Representative cross section of participant roles
- 3 Month deferral has resulted in "No change" to planned program (41%), "Limited change" (54%), "major change" (5%)
- Assume some non-respondents may not be as well positioned
- Program activities deferred across all participant roles, in approximately even proportion, exception being Generators
- Resources now being redeployed from other projects and re-engaged to recommence deferred activity
- Replanning of programs to confirm delivery certainty in progress
- Concerns remain on impact of COVID-19 on programs for a number of participants
- Requests for additional support from AEMO to be addressed where feasible



Discussion: Does summary of Industry position as presented align with your organisation's view?

Interaction with Other Market changes

Peter Carruthers

Interaction with other market changes

- Regulatory Implementation Roadmap
 - Holistic view of the industry-wide program for implementation of regulatory change initiatives
 - Initiated following Executive Forum discussion and Market Bodies regulatory prioritisation review
- Version 1 of roadmap
 - Developed and consulted on by AEMO in April/May
 - Go-live date assumptions for key initiatives 5MS and WDR
- Go-Live dates for WDR and 5MS have now been finalised
- Key issue will be co-ordination of regulatory implementation in 2H 2021
 - 5MS – 1 October 2021
 - WDR – 24 October 2021
 - Customer switching – 3Q 2021
 - Other initiatives originally flagged including NMI Standing Data Review, Metering Co-ordinator Planned Interruptions and Stand-Alone Power Systems.

Interaction with other market changes

- Regulatory Implementation Roadmap Update
 - Currently being updated by AEMO
 - Will be released to industry and consulted on
 - Includes any newly confirmed initiatives/dates and identifies where flexibility exists
- Timeline for release and consultation
 - 4 Aug - Updated roadmap released
 - 10 Aug – Stakeholder briefing session
 - 17 Aug – Stakeholder feedback closes
 - 31 Aug – Version 2 Roadmap released
- Likely consultation questions
 - Customer Switching – mid-July 2021 or October 2021?
 - Timing of MSATS Standing Data Review and MC Planned Interruptions
 - Timing of Proposed B2B changes
- Recognise need for integrated implementation timeline, once dates confirmed

Industry Risks and Issues

Peter Carruthers

Approach to Industry Risks and Issues Review

- Through discussion with the PCF, three areas of risks have been identified as the key risks to the implementation programs for industry and AEMO:
 - The proposed deferral of the 5MS and GS go-live dates
 - The impacts of moving the Metering Solution release to 09-Mar-21
 - The impacts of Covid-19.
- This section will discuss the risks associated with these key areas with the aim of agreeing an approach to risk management.

Proposed deferral of 5MS and GS commencement dates

Related Risk/Issue ID	Description	Rating	Actions
I08, R09, R06, R30	Volume of regulatory change during 2021	Critical	<ul style="list-style-type: none"> • Regulatory prioritisation implementation roadmap and consultation • Reprioritise initiatives where date flexibility exists – subject to consultation • Coordinate plan across implementation initiatives • Active management of inter-dependencies
R29, R02, R19	Participant readiness	Significant	<ul style="list-style-type: none"> • Special survey to clarify risks associated with 3-month deferral e.g. re-mobilisation • Monitor through ongoing industry readiness reporting
I11	Increased cost for participants	Medium	<ul style="list-style-type: none"> • Monitor and take coordinated action on any industry wide issues • Follow-up suggestions from Special readiness survey

Impacts of moving the Metering Solution release to 09-Mar-21

Related Risk ID	Description	Rating	Actions
R11, R20	Reduced contingency for AEMO	Medium	<ul style="list-style-type: none"> • Management attention for on-time delivery against revised plan • Review and confirm resource allocations and increase resourcing where necessary • Prioritise activities to ensure critical path not impacted
R28, R20	Consecutive go-lives for AEMO IT deployment in March/April 2021	Significant	<ul style="list-style-type: none"> • Identify and manage resource contention • Bring activities forward where possible • Consider holistic 2021 go-live schedule

Impact of Covid-19

Related Risk ID	Description	Rating	Actions
R26	Reduced project productivity	Medium	<ul style="list-style-type: none">• Managed individually by participants and AEMO• Monitor through readiness reporting
R26	Reallocation of resources or capital to other business areas	Medium	<ul style="list-style-type: none">• Reported by some participants but not all• Managed individually by participants• Monitor through readiness reporting

Program Update

Rowena Leung

Program update and current activities



AEMO program

- Overall Program Green
- L1-13 milestone: Core functionality on target to be completed end of Aug. Defect fixing and solution tuning will continue. These items will not impact Staging and pre-Prod deployments.
- Delivery alignment with Wholesale Demand Response and Customer Switching programs required. Impacts to be discussed with the RWG.
- Realigned industry forum (the combined RWG / SWG) to begin from July.



Systems

- Staging environment has been successfully updated with the 2nd Retail drop on 15 June. Minimal market interaction with the deployment so far (Q&A sessions resulting in one or two questions).
- Planning for 3rd Staging drop for Retail planned for required with the RWG
- Dispatch and Settlements is on track for completing ST in July and beginning SIT activities on time from 3 August.
- Retail Metering stream is in an intense period of development and acceptance testing



Readiness

- Assessment of readiness report results with focus on assessment of progress against rule commencement requirements
- ITWG and RWG focus on Industry test scope, approach and preparation for Retail, Settlements and Dispatch releases
- Bidding transition plan approach reviewed with DFG on 29th July, Draft plan released 14th July

Update on Cost Recovery

Kevin Ly

5MS Cost Recovery

- Co-ordinated approach with AEMO fee consultation process
 - Although 5MS meets the criteria for a declared NEM project, it is more efficient and appropriate to consider the cost recovery as part to the broader upcoming NEM participant fee consultation
- Key dates
 - Initial consultation paper planned to be published 17 August 2020. Responses due late Sept 2020. Please note all key dates will be confirmed in a Notice of Consultation.
 - Draft report published late November 2020.
 - AEMO obliged to provide 3 months notice period before fees commence.
 - Final report published by 31 March 2021
 - Fee structure takes effect 1 July 2021

Cost Recovery – Issues to be canvassed

- AEMO's metering and settlement solutions were deployed 15-20 years ago
- Multiple system architectures exist across the gas and electricity markets
- Due to complexity and legacy technology, the systems are rigid and costly to maintain
- 5MS/GS costs are a function of legacy metering & settlement systems replacement/uplift and specific changes to meet the 5MS rule obligation
- The upcoming fees consultation will discuss options for the recovery of both legacy systems replacement (as part of meeting AEMO's obligation to operate and administer the wholesale energy exchanges) and the recovery of costs to meet 5MS rule obligation.

Update on Critical Capability for Go-Live

Greg Minney

Critical Capability for Go-Live

- Assessment undertaken as component of 5MS/GS Industry readiness contingency planning
- Detailed discussions held with Readiness Working Group in relation to critical capability for 5MS go-live
- **AEMO** platforms complete and capable of:
 - 5-min settlement (including 5-min metering and profiling): Able to produce 5-min settlement invoices
 - 5-min bidding: Enables submission of 5-min bids via API, FTP or the web bidding interface
- **Participants** have essential capability:
 - Submit 5-min bids, including via web bidding interface (basic functionality)
 - Deliver 5-min data from essential meters for settlement purposes (supporting contingency arrangements have been developed)
- Contingency arrangements defined for identified contingency events

Industry Engagement

Anne-Marie McCague

Executive Forum Schedule

- At the request of the PCF and RWG we have postponed Industry Readiness Survey Round #3
- The request was made due to the proximity of the survey to the Special survey and to provide participants with time to review the impact of the three-month deferral
- Moving Round #3 has implications for the following rounds
- In addition, the Executive Forum was scheduled to match the timing of the surveys
- AEMO is proposing the following Executive Forum dates to align with Readiness Reporting:

Readiness reporting	Survey released	Discuss at EF
#3	20-Jul-20 - >11-Aug-20	07-Sep-20 ->07-Oct-20
#4	15-Sep-20 -> 06-Oct-20	19-Nov-20 -> 07-Dec-20

Upcoming meetings

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

Current as at 22/07/2020



AUGUST

Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	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	31	1	2	3	4	5

SEPTEMBER

Su	Mo	Tu	We	Th	Fr	Sa
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	3
4	5	6	7	8	9	10

OCTOBER

Su	Mo	Tu	We	Th	Fr	Sa
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	7

Forums/Working Groups

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

Focus Groups

Dispatch
Metering
Settlements
Transition
Reconciliation
Contingency
Industry Testing

Other

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

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

General Questions

Peter Geers

Appendix

Summary of special survey support requests

- A number of participants responded to requests regarding further support for re-engagement and re-mobilisation
- These requests are being validated by AEMO and actioned where possible

Area for Participant Support	Approach
Finalising Metering Transition Plan in line with new Dates	Identified as priority, underway
Streamlining of industry meetings	Proposals to combine RWG and SWG
Guidance on flexibility in metering Transition Activity completion	Follow up with Participant
Management of overlapping programs - WDR, etc	Component of regulatory roadmap
Additional test environments (2nd pre-prod)	Expansion of Staging environment being worked on
Validation of Participant architecture and regulatory obligations	Follow up with participant
Confirm Re-accreditation roadmap timings for impacted participant	Follow up with participant
Data migration assistance for metering transition activities	Will investigate support required
Flexibility on regulatory requirements	Follow up with Participant

