

# 5MS and GS Readiness Working Group – Meeting Notes

MEETING: Readiness Working Group
DATE: Tuesday, 2 March 2021
TIME: 10:00 AM - 12:00 PM

LOCATION: WebEx

# **Attendees**

Attendee	Organisation	Location
Greg Minney	AEMO (Chair)	Remote - WebEx
Anne-Marie McCague	AEMO	Remote - WebEx
Austin Tan	AEMO	Remote - WebEx
Blaine Miner	AEMO	Remote - WebEx
Graeme Windley	AEMO	Remote - WebEx
lan Devaney	AEMO	Remote - WebEx
Jim Agelopoulos	AEMO	Remote - WebEx
Liz Bernhardt	AEMO	Remote - WebEx
Lady Mike	AEMO	Remote - WebEx
Mark Hillaby	AEMO	Remote - WebEx
Monica Narayan	AEMO	Remote - WebEx
Paul Lyttle	AEMO	Remote - WebEx
Pierre Fromager	AEMO	Remote - WebEx
Simon Tu	AEMO	Remote - WebEx
Tui Grant	AEMO	Remote - WebEx
Collette Reedy	Actew AGL	Remote - WebEx
Damien Banky	AGL	Remote - WebEx
Andrew Peart	AGL Energy	Remote - WebEx
Chris Leffler	AGL Energy	Remote - WebEx
Gail Mitchell	AGL Energy	Remote - WebEx
David Rundell	Alcoa	Remote - WebEx
Chris Pratt	Alinta Energy	Remote - WebEx
Keshava	Alinta Energy	Remote - WebEx
Natasha Rajdev	Alinta Energy	Remote - WebEx
Naomi Donohue	APA Group	Remote - WebEx
Shane Murray	Arrow Energy	Remote - WebEx
Craig Eadie	Aurora Energy	Remote - WebEx
Shane Howlett	Aurora Energy	Remote - WebEx
Peter Gilligan	Ausgrid	Remote - WebEx
Wayne Turner	Ausgrid	Remote - WebEx
Con Michailides	AusNet Services	Remote - WebEx
Greg Mather	Basslink	Remote - WebEx



	CitiPower and Powercor	Remote - WebEx
James Hutt	CS Energy	Remote - WebEx
Edmund Hon	Edify Energy	Remote - WebEx
Ramesh Khadka	Electranet	Remote - WebEx
Yi Zheng	Endeavour Energy	Remote - WebEx
Luke Emrose	Energy Australia	Remote - WebEx
Mai Huynh	Energy Australia	Remote - WebEx
Tilin Yi	EnergyAustralia	Remote - WebEx
Greg Fawcett	ENGIE	Remote - WebEx
Ingrid Farah	Ergon Retail	Remote - WebEx
Rob Oshlack	ERM Power	Remote - WebEx
Alison Davison	Essential Energy	Remote - WebEx
Steve Blair	Essential Energy	Remote - WebEx
Tim Lloyd	Essential Energy	Remote - WebEx
Jeff Roberts	Evoenergy	Remote - WebEx
Matthew Pillifeant	Evoenergy	Remote - WebEx
David McKenzie	Flower Power	Remote - WebEx
Natalie Junge	Infigen	Remote - WebEx
Jayendra	Insight Power	Remote - WebEx
Warren Van Wyk	Intellihub	Remote - WebEx
Chai No	Intergen	Remote - WebEx
Joseph Lyttleton	Jemena	Remote - WebEx
Leon Vilfand	Jemena	Remote - WebEx
Marina Bakh	Jemena	Remote - WebEx
Matthew Mullen	Jemena	Remote - WebEx
Rajiv Kumar Balasubramanian	Jemena	Remote - WebEx
Rob Wilson	Jemena	Remote - WebEx
Tejas Vadera	Jemena	Remote - WebEx
Dan Hiller	Meridian Energy	Remote - WebEx
Neville Lewis	Mondo	Remote - WebEx
Fergus Stuart	Origin Energy	Remote - WebEx
Linda Brackenbury	PlusES	Remote - WebEx
Arif Syarifuddin	Powercor	Remote - WebEx
Dean Knight	Powerlink	Remote - WebEx
Mark Reid	Red / Lumo	Remote - WebEx
Nick Gustafsson	Red and Lumo Energy	Remote - WebEx
Christophe Bechia	Red Energy	Remote - WebEx
Andrew Wilkins	SA Water	Remote - WebEx
Kamiran Pillay	SA Water	Remote - WebEx
David Woods	SAPN	Remote - WebEx
Kam Vessali	Secure Meters	Remote - WebEx
Kerrye Bradford	Secure Meters	Remote - WebEx



Eileen Hayes	Snowy Hydro	Remote - WebEx
Adam Neilson	Stanwell	Remote - WebEx
Elizabeth Byrne	Stanwell	Remote - WebEx
Michael Flynn	Stanwell	Remote - WebEx
Owen Self	Stanwell	Remote - WebEx
Rossi Mangano	Stanwell	Remote - WebEx
Adrian Honey	TasNetworks	Remote - WebEx
Nate Chang	Tesla	Remote - WebEx
Paul Greenwood	Vector Metering	Remote - WebEx
Cindy Matthews	Yurika	Remote - WebEx
Mark Leschke	Yurika	Remote - WebEx
David Pugal	-	Remote - WebEx
John Weston	-	Remote - WebEx
Raphael Ozvath	-	Remote - WebEx
Rey Cortes	-	Remote - WebEx
Roger Helbig	-	Remote - WebEx
Steve Ferry	-	Remote - WebEx



## 1. Welcome, Introduction, Attendance and Apologies – G. Minney (slide 1 - 4)

AEMO noted that the meeting was being recorded for the purposes of preparing meeting notes and requested for dial-in attendees to email 5ms@aemo.com.au for inclusion on the attendees list.

#### 2. Minutes and Actions from Previous Meeting - A. McCaque, P. Lyttle (slide 5 - 7)

The actions from meeting RWG #20 have been reviewed and updated. Please refer to the meeting pack and list below for more details.

AEMO presented the schema change schedule. In response to a participant query, AEMO confirmed that the r39\_p1 schema is currently available in the Staging Environment and will be migrated to the pre-production environment on 19 April 2021. AEMO also noted that the consultation of the r41 has been delayed with remediation in progress, and the estimated final draft is now expected in April 2021.

# 3. 5MS Program Update - G. Minney (slide 8 - 14)

AEMO presented the overall 5MS program timeline, noting the testing activities currently underway, and also noted the L1 and L2 milestones impacted by the retail solution go-live deferral.

AEMO presented the approach to providing retail status updates, including the checkpoint criteria and assessment approach to monitor if delivery is tracking on schedule. It was noted that the key industry forum for communication of those updates will be the PCF. An interim status against the criteria was also provided to the RWG.

#### 4. Readiness Report Round 6 - G. Minney, A. Tan (slide 15 - 25)

AEMO presented a summary of the survey results from the sixth round of readiness reporting. AEMO also presented status reports for 5MS rule commencement, including a summary of 5MS essential capabilities, and other industry capability.

AEMO presented potential risks that were identified by survey respondents, and invited the RWG to consider if these risks should be managed as industry risks.

In response to participant queries, AEMO noted that:

- essential criteria are measured in productions systems for readiness by 1 October 2021
- AEMO will be following up with participants that have responded that they are not 'on track' for 5MS
  and GS capability development, or for any MTP activities, to confirm the success of their remediation
  activities.
- AEMO will look to highlight in subsequent readiness reports whether participants who have reported at risk or late statuses are a continuation from previous reports or a separate participant
- it is working with its cloud service provider to resolve issues on the retail platform; however these issues are not expected to be major
- it will provide the RWG with an impact assessment of any participants not completing associated activities by GS soft start on 1 October where the impact of these activities can be established

**Action 21.4.1:** AEMO to provide RWG with an impact assessment of any participants not completing associated activities by GS soft start on 1 October

**Action 21.4.2:** Local Retailers to provide assessment of materiality of NCONUML for greater industry visibility of impact on UFE



#### 5. Testing Update - T. Grant (26 - 30)

AEMO provided an update on the ITWG held on 23 February 2021, noting that training has been organised for MSATS and Practitest. AEMO also provided an update on settlements industry testing, and also a summary of defects in the 5MS staging environment and 5MS bidding service pre-production.

In response to participant queries, AEMO noted that:

- training has been organised for MSATS and Practitest. Practitest is a tool used by AEMO to record and manage issues. Participants will receive an invitation shortly with more details
- a list of published settlements runs can be made available to participants

**Action 21.5.1:** AEMO to provide RWG and ITWG a list of published settlement runs in the staging environment

### 6. Transition Focus Group / Metering Transition Plan Update - B. Miner (slide 31 - 38)

AEMO provided an overview of the TFG meeting held on 11 February 2021, including a summary of the rollout plans, and upcoming MTP activities.

AEMO also provided an update on the Meter Read Type Code (RTC) draft transition approach, noting that the overall RTC transition approach will be discussed in more depth at the MSDR data transition working group.

In response to participant queries, AEMO noted that:

- the RTC transition approach for meters not within the scope of 5MS will be discussed at the MSDR data transition working group (e.g. for type 5 meters)
- RTC updates for 5MS Tranche 1 meters (type 1-3, subset of type 4, cross boundary) are expected to be completed by 31 August 2021 as per the MTP transition end dates
- to create a RWDA code in MSATS, the applicable MP would raise a CR as per BAU processes
- any 'mass' updating of RTCs should occur in consultation with effected Participants (e.g. 'mass' updates to Tranche 2 meters (new and replacement type 4, 4A, VICAMI, etc.))
- AEMO's capability to receive 5-minute metering data via B2M is expected to be occur from 21 June 2021. This is reflected in the latest version of the MTP (v1.7).

More information is provided on slides 32 to 38 of the meeting pack.

#### 7. Procedures Update - S. Tu (slide 39 - 42)

AEMO presented an update on the procedure consultations related to 5MS/GS, noting that any changes have been highlighted in the meeting pack.

In response to a participant query, AEMO noted that the consolidation of retail procedures has been delayed to May 2021 to accommodate the final determination dates of the 5MS/GS & Customer Switching B2M Consultation.

More information is provided on slides 40 to 42 of the meeting pack.

### 8. Retail Update – J. Agelopoulos (slide 43 – 45)



AEMO presented the updated retail metering solution timelines that reflect the replanned pre-production and production dates. AEMO noted that preparatory activities are underway for the pre-production environment golive on 19 April 2021.

# 9. **Dispatch / Bidding Update – I. Devaney** (slide 46 – 54)

AEMO provided an update on the bidding and dispatch platform, noting that deployments are progressing on schedule.

AEMO noted that the FSIP component in the pre-dispatch P5 package will be released in pre-production on 1 April 2021, and will likely be available in production on 3 May 2021. This is in line with changes in the WDR program, and due to testing timeframes taking longer than expected.

AEMO reminded participants of the bidding transition arrangements, noting that only the 5MS bidding service will be available from 1 October 2021.

AEMO presented an update on the 5MS Bidding service go-live plan, providing an overview of received participant feedback, and also communication and support arrangements during the transition.

AEMO noted that the 5MS Bidding service go-live plan will be released on 8 March 2021.

In response to participant queries, AEMO noted that:

- the existing 30-minute bidding service and 5-minute bidding service will be running in parallel from 1 April 2021 to 30 September 2021, therefore if any participant experiences issues with the 5-mnute service they can revert to using the existing 30-minute service
- there will be no disruptions to the existing 30-minute bidding service when the 5-minute bidding service goes live on 1 April 2021
- it expects to provide participants with reports replicating submitted bids in the format of 30-minute tables and also 5-minute tables over the next few weeks
- it expects that there will be smaller latencies using the API compared to FTP
- similar to the existing 30-minute arrangement, participants must ensure that their offer is accepted in AEMO's system 60 seconds before the next dispatch interval
- participants will have to upgrade to EMMS data model v5.0 to commence 5 minute bidding
- the Market Systems User Group (MSUG) will be held on 24 March 2021 for any Q&A relating to the data model

AEMO noted that it will be providing correspondence during the 5-minute bidding service go-live through AEMO Support Hub bulletins, and also forwarding these to the 5MS mailing list. Participants are encouraged to get in contact with the person receiving AEMO Support Hub bulletins in their organisation if they wish to receive these bulletins directly from AEMO Support Hub.

#### 10. Settlements Update – M. Hillaby, Pierre Fromager (slide 56 - 60)

AEMO presented the updated settlements solution timelines that reflect the replanned pre-production and production dates.

AEMO presented an overview of the settlements solution cutover implementation, including the implementation principles, go/no-go approach, and settlements changes at go-live. AEMO noted that the cutover is expected to start on 14 May, and is expected to finish on 16 May.

In response to a participant query, AEMO noted that the existing settlements solution is able to interface with the new retail solution, and that the retail solutions cutover is not expected to be affected if the settlements cutover is delayed.

# 11. Forward Plan and Other Business – G. Minney (slide 61 - 63)



AEMO presented the proposed topics for the upcoming RWG and ITWG on 06 April 2021 and 23 March 2021. Attendees were thanked for their attendance and advised of future in-session RWG meetings.

Further information on the 5MS program, and a calendar of all meeting and forum dates can be found via the following link: <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement</a>.



Item	Topic	Action required	Responsible	Ву
11.3.1	Readiness Reporting	AEMO to consider providing additional guidance alongside readiness reporting survey questions	AEMO	Completed
11.3.2	Readiness Reporting	AEMO to include latest MTP with readiness reporting survey	AEMO	Completed
11.3.3	Readiness Reporting	AEMO and RWG to consider alternative ways of communicating readiness reporting survey results	AEMO / RWG	Completed
11.4.1	Proposed milestone changes	AEMO to update charts on proposed AEMO system deployment milestone changes	AEMO	Completed
11.4.2	Proposed milestone changes	AEMO to consider extending the 30 minute settlement trial so that it can be commenced before December 2020	AEMO	Completed
11.4.3	Proposed milestone changes	AEMO to investigate any impacts on Recipient created tax invoices (RCTI) and provide feedback to or seek further info from the RWG	AEMO	Completed
11.4.4	Proposed milestone changes	RWG to provide feedback on impact of settlements 'like-for-like' delivery, including impacts on RM 16 and RM 27	RWG	Completed
11.4.5	Proposed milestone changes	AEMO to confirm if there are any changes to the format of settlement reports that are used by participants for settlement reconciliation purposes (e.g. RM 16 and RM27)	AEMO	Completed
11.4.6	Proposed milestone changes	AEMO to update table in slide 27 to clarify that MDFF acceptance relates to metering data files (not settlement files)	AEMO	Completed
11.4.7	Proposed milestone changes	AEMO to provide explanation of how 5-min bilateral testing will be supported	AEMO	Completed
11.4.8	Proposed milestone changes	RWG to provide feedback in response template on impact of MDM milestone change and proposed deployment milestone changes for dispatch and settlements	RWG	Completed
11.6.1	Proposed 12-month deferral	AEMO to update Gantt to reflect NCONUML datastream activation	AEMO	Completed
11.6.2	Proposed 12-month deferral	RWG to provide information on how AEMO would support a multi-speed transition (some participants continuing to current timeline, some participants deferring to proposed timeline)	RWG	Completed
11.6.3	Proposed 12-month deferral	AEMO capture and manage the risk of a multi-speed transition (some participants continuing to current timeline, some participants deferring to proposed timeline) in the 5MS industry risks and issues register	AEMO	Completed



		AUSTRALIAN ENERGY MARKET OPERATOR		
11.6.4	Proposed 12-month deferral	AEMO to consolidate multi-speed transition feedback and provide to RWG	AEMO	Completed
11.6.5	Proposed 12-month deferral	AEMO to provide clarification on the impact to the MMS data model version 5 under the proposed 12-month deferral scenario	AEMO	Wed 3 Jun
11.6.6	Proposed 12-month deferral	RWG to provide feedback in response template on proposed transition and testing approach under the proposed 12-month deferral scenario	RWG	Completed
11.7.1	"Minimum criteria" and 5MS go/no-go decisions	RWG to provide feedback on proposed 'minimum criteria' for commencement	RWG	Completed
11.7.2	"Minimum criteria" and 5MS go/no-go decisions	AEMO to publish final contingency plan, considering RWG feedback on 'minimum criteria'	AEMO	Completed
11.8.1	Bidding transition plan	RWG to provide feedback on bidding transition approach	RWG	Completed
11.8.2	Bidding transition plan	AEMO to confirm whether FCAS bidding is out of scope	AEMO	Completed
11.8.3	Bidding transition plan	AEMO to discuss bidding transition approach with the Dispatch Focus Group	AEMO	Completed
12.6.1	Working groups	RWG to provide feedback on proposal for RWG to be expanded to include SWG members, and for the working group to take an end-to-end systems and readiness view.	RWG	Completed
12.7.1	Industry testing	AEMO to update industry testing slides with clarifications	AEMO	Completed
12.7.2	Industry testing	AEMO to provide more details on the testing scope (e.g. test objective, key participants, key scenarios)	AEMO	Completed
12.7.3	Industry testing	RWG to provide feedback on their testing requirements for Dispatch, Settlement and Retail systems in pre-production	RWG	Completed
12.8.1	Readiness reporting	RWG to provide feedback on the readiness reporting approach if there is a delay to the 5MS and GS commencement dates	RWG	Completed
12.8.2	Readiness reporting	RWG to provide feedback on the proposed bar chart format for readiness reporting results	RWG	Completed
12.8.3	Readiness reporting	RWG to provide suggestions on any changes to the readiness reporting plan	RWG	Completed



12.8.4	Readiness reporting	AEMO and the RWG to consider how readiness reporting results can be used to consider if the industry is tracking to plan for 5MS and GS	RWG / AEMO	Completed
14.5.1	Regulatory Roadmap	AEMO to circulate regulatory roadmap workshop slide pack to RWG	AEMO	Completed
14.6.1	Retail Procedures	AEMO to add details of any aseXML schema impacts to the AEMO Retail Systems Impact for a Procedure issue.	AEMO	Completed
14.7.1	Transition Risks	RWG to consider their organisation's exposure to the risk of a 'big bang' delivery of 5min metering data in Production i.e. waiting until 5MS commencement to deliver/receive 5min metering data for the first time in Production.	RWG	Completed
14.7.2	Readiness Reporting	RWG to provide feedback on proposed approach to track if industry is on track for 5MS and GS commencements	RWG	Completed
14.11.1	Transition Approach	AEMO to include transition diagrams in the functionality matrix document	AEMO	Completed
14.12.1	Metering Transition Plan	RWG to provide feedback on the proposed changes to the MTP, and inform AEMO if a more restrictive or flexible transition period is preferred for MSATs Standing Data Creation and Maintenance activities	RWG	Completed
14.13.1	RM Reports	AEMO to confirm if Participants will receive push reports if there is no data missing	AEMO	Completed
14.13.2	GLOPOOL Updates	AEMO to confirm the timeframes and the approach for the transition of GLOPOOL	AEMO	Mon 14 Sep
14.14.1	Retail Platform Go-live Plan	RWG to provide feedback on the proposed high level structure of the Retail platform go-live plan	RWG	Completed
15.3.1	AEMO Data Model	RWG to identify existing wholesale representative for the Market Systems User Group (MSUG) and contact 5MS mailbox if there is no existing representative	RWG	Completed
15.3.2	Settlements Platform	RWG to provide feedback on the proposed settlements platform go-live date of 19 April 2021, including any impacts to participants' programs, testing requirements, and any suggested mitigations	RWG	Completed
15.7.1	Testing	RWG to inform AEMO if their organisation is able to assist AEMO with preparing the testing approach, or executing formal invitation testing of the retail platform	RWG	Completed



15.7.2	Testing	RWG to provide a list and description of any required testing that cannot be carried out in 5MS Staging, is unacceptably complicated by the requirement to repoint from one environment to another, and cannot wait until the functionality has been deployed into the pre-production environment	RWG	Completed
15.7.3	Testing	AEMO to update the Industry Risks and Issues Register with the mitigation measures agreed at the RWG	AEMO	Completed
15.12.1	RM20 Report	RWG to provide feedback on proposed simplification to the RM20 PPS Report	RWG	Completed
15.13.1	Cutover Focus Group	RWG to nominate Cutover Focus Group members	RWG	Completed
16.9.1	Global Settlement	AEMO to provide RWG with implementation approach, timeframes and testing approach of Global Settlement changes (e.g. LR to GLOOPOOL transition).	AEMO	Completed
16.9.2	Global Settlement	AEMO will confirm considerations for the provision of Tier 2 accumulation meter data to LRs post GS go live	AEMO	Completed
16.11.1	Transition Focus Group	AEMO to organise a separate focus group session to discuss the potential system impacts associated to the anticipated volume of MTP related CATS CR transactions and notifications.	AEMO	Completed
16.12.1	Retail platform industry go-live plan	RWG to provide feedback on the Retail platform industry go-live plan	RWG	Completed
16.13.1	Readiness reporting	AEMO to make a recommendation to the PCF regarding if 5MS readiness reporting should incorporate considerations involving customer switching and WDR.	AEMO	Completed
17.4.1	Procedural updates	AEMO to confirm with RWG timing and 5MS impact of NCONUML NMI class codes related changes in the schema	AEMO	Completed
17.6.1	Cross boundary meters	AEMO to establish with DNSPs the extent that cross boundary meters will be compliant by 1 October 2021, and any potential industry impacts of noncompliance.	AEMO	Completed
17.7.1	Readiness reporting	AEMO to remove questions related to 5MS and GS program establishment from readiness surveys	AEMO	Completed



17.7.2	Readiness reporting	AEMO to consider how to incorporate monitoring of the impacts to 5MS from other regulatory change happening in October 2021 (i.e. Customer Switching, WDR).	AEMO	Completed
17.9.1	Settlements platform timelines	AEMO to update settlements staging, pre-production and production timelines diagram legend	AEMO	Completed
18.5.1	Industry testing	AEMO to circulate copy of test scenarios for industry testing to the RWG	AEMO	Completed
18.5.2	Industry testing	AEMO to send sample aseXML reports to relevant participants	AEMO	Completed
18.5.3	Retail platform cutover	MDPs to advise if they are able to continue delivering metering data in MDMT in the event of a rollback during the retail cutover	RWG	Completed
19.2.1	B2B schema changes	AEMO to confirm that NCONUML NMI class codes related changes in the B2B schema relates to the NCONUML CustomerType field and not the ability for all NCONUML to use B2B (even if the field does not apply to them)	AEMO	Completed
19.7.1	Metering rollout plans	MCs and MDPs who did not provide a rollout plan update to AEMO in Dec 2020 to forward one to the 5MS inbox as soon as possible	RWG	Completed
19.9.1	Industry testing	AEMO to provide a list of the UAT Bidding Service defect fixes that will be put into pre-production in February 2021 before they are applied	AEMO	Completed
19.13.1	Retail platform cutover	MDPs to advise if they are able to continue delivering metering data in MDMT in the event of a rollback during the retail cutover	RWG	Completed
20.3.1	Regulatory roadmap	AEMO to provide update to RWG on update on Regulatory roadmap	AEMO	Completed
21.4.1	GS soft start	AEMO to provide RWG with an impact assessment of any participants not completing associated activities by GS soft start on 1 October	AEMO	Tue 6 Apr
21.4.2	GS soft start	Local Retailers to provide assessment of materiality of NCONUML for greater industry visibility of impact on UFE	RWG	Fri 19 Mar
21.5.1	Industry testing	AEMO to provide RWG and ITWG a list of published settlement runs in the staging environment	AEMO	Tue 6 Apr