

# 5MS and GS Readiness Working Group – Meeting Notes

MEETING: Readiness Working Group

DATE: Monday, 14 September 2020

TIME: 10:00 AM – 1:00 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 |
| Carol Bosnjak      | AEMO             | Remote - WebEx |
| Graeme Windley     | AEMO             | Remote - WebEx |
| Ian Devaney        | AEMO             | Remote - WebEx |
| Jim Agelopoulos    | AEMO             | Remote - WebEx |
| Mark Hillaby       | AEMO             | Remote - WebEx |
| Monica Narayan     | AEMO             | Remote - WebEx |
| Paul Lyttle        | AEMO             | Remote - WebEx |
| Peta Hatzikides    | AEMO             | Remote - WebEx |
| Sangeeta Pai       | AEMO             | Remote - WebEx |
| Simon Tu           | AEMO             | Remote - WebEx |
| Tui Grant          | AEMO             | Remote - WebEx |
| Adrian Honey       | TasNetworks      | Remote - WebEx |
| Andrew Lenga       | ENGIE            | Remote - WebEx |
| Andrew Peart       | AGL Energy       | Remote - WebEx |
| Annett Reitmann    | AGL Energy       | Remote - WebEx |
| Arif Syarifuddin   | Powercor         | Remote - WebEx |
| Audrey Follett     | Snowy Hydro      | Remote - WebEx |
| Ben Johnson        | ERM Power        | Remote - WebEx |
| Cameron Bath       | Energy Australia | Remote - WebEx |
| Chris Leffler      | AGL Energy       | Remote - WebEx |
| Chrstophe Bechia   | Red Energy       | Remote - WebEx |
| Cindy Matthews     | Ergon Energy     | Remote - WebEx |
| Con Michailides    | AusNet Services  | Remote - WebEx |
| Craig Eadie        | Aurora Energy    | Remote - WebEx |
| Dan Hiller         | Meridian Energy  | Remote - WebEx |
| David Woods        | SAPN             | Remote - WebEx |
| Dean Knight        | Powerlink        | Remote - WebEx |
| Dickson Abeydeera  | Jemena           | Remote - WebEx |



| Dino Ou               | Endeavour Energy     | Remote - WebEx |
|-----------------------|----------------------|----------------|
| Elizabeth Keogh       | Stanwell             | Remote - WebEx |
| Ellie Leiper          | Actew AGL            | Remote - WebEx |
| Fergus Stuart         | Origin Energy        | Remote - WebEx |
| Gail Mitchell         | AGL Energy           | Remote - WebEx |
| Grant Ross            | Alinta Energy        | Remote - WebEx |
| Greg Fawcett          | ENGIE                | Remote - WebEx |
| Greg Szot             | CitiPower / Powercor | Remote - WebEx |
| Helen Rickards        | Essential Energy     | Remote - WebEx |
| Helen Vassos          | PLUS ES              | Remote - WebEx |
| Ingrid Farah          | Ergon Retail         | Remote - WebEx |
| Jacob Lee             | Energy Queensland    | Remote - WebEx |
| Jaya Mukherjee        | Alinta Energy        | Remote - WebEx |
| Jayendra              | Insight Power        | Remote - WebEx |
| Jeff Roberts          | Evoenergy            | Remote - WebEx |
| Jenny Mastello        | Energy Queensland    | Remote - WebEx |
| Jon Ham               | Energy Australia     | Remote - WebEx |
| Joseph Giddings       | Energy One           | Remote - WebEx |
| Justin Stute          | Mondo                | Remote - WebEx |
| Julie Lee             | Clean Co             | Remote - WebEx |
| Justin Wearne         | Energetiq            | Remote - WebEx |
| Karan Mengi           | EnergyAustralia      | Remote - WebEx |
| Karel Mallinson       | Powerlink            | Remote - WebEx |
| Kelly Mason           | Ausgrid              | Remote - WebEx |
| Kevin Boutchard       | Aurora Energy        | Remote - WebEx |
| Mariaan Wagner        | n/a                  | Remote - WebEx |
| Marina Bakh           | Jemena               | Remote - WebEx |
| Mark Reid             | Red / Lumo           | Remote - WebEx |
| Matt Porter           | Evoenergy            | Remote - WebEx |
| Matthew Mullen        | Jemena               | Remote - WebEx |
| Mahdi Maleki          | AusNet Services      | Remote - WebEx |
| Nick Gustafsson       | Red Energy           | Remote - WebEx |
| Nicole Bright         | Energy Queensland    | Remote - WebEx |
| Owen Self             | Stanwell             | Remote - WebEx |
| Paul Greenwood        | Vector AMS           | Remote - WebEx |
| Peter Borash          | Energy Australia     | Remote - WebEx |
| Peter Gilligan        | Ausgrid              | Remote - WebEx |
| Rajiv Balasubramanian | Jemena               | Remote - WebEx |
| Ramesh Khadka         | Electranet           | Remote - WebEx |
| Rob Wilson            | Jemena               | Remote - WebEx |
| Sandra Ho             | Snowy Hydro          | Remote - WebEx |
| Sharleen Flanagan     | ERM Power            | Remote - WebEx |



| Shane Murray        | Arrow Energy      | Remote - WebEx |
|---------------------|-------------------|----------------|
| Soham Roy Chaudhuri | Alinta Energy     | Remote - WebEx |
| Sreeni Srirangam    | Metering Dynamics | Remote - WebEx |
| Steve Smith         | Energex           | Remote - WebEx |
| Subhra Sekhar Kar   | AGL Energy        | Remote - WebEx |
| Tessie Sato         | Alinta Energy     | Remote - WebEx |
| Tilin Yi            | EnergyAustralia   | Remote - WebEx |
| Trent Smith         | Brave Energy      | Remote - WebEx |
| Victor Sanchez      | Infigen           | Remote - WebEx |
| Warren Van Wyk      | IntelliHUB        | Remote - WebEx |
| Wilmund Foong       | United Energy     | Remote - WebEx |
| Stephen Wilson      | Aurora Energy     | Remote - WebEx |
| Zulfi Syed          | n/a               | Remote - WebEx |



## 1. Welcome, Introduction, Attendance and Apologies - G. Minney (slide 1-2)

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 - G. Minney (slide 7 - 9)

The actions from meeting RWG #14 have been reviewed and updated. Please refer to the meeting pack and list below for more details.

#### 3. 5MS Program Update - G. Minney, G. Windley (slide 10 – 15)

AEMO provided an update on the AEMO program timeline, and highlighted the following:

- Milestones from the previous period have been met
- Upcoming milestones include the development of the Retail platform go-live, and commencement of industry testing for the bidding process

AEMO proposed to move the settlements platform go-live date to 19 April 2021, this is to de-risk the cutover by allowing more time for the retail platform to stabilise prior to the settlements go-live. AEMO noted the benefits and consequences of this proposal, including minor impacts to the implementation of the data model for 5MS purposes. Changes to the data model will be discussed at the Market Systems User Group (MSUG) in early October and will also consider the implementation of other projects (e.g. MT-PASA).

AEMO requested the RWG's feedback on the proposal, including any impacts to participants' programs, testing requirements, and any suggested mitigations.

More details are available on slides 11-15 of the meeting pack.

**Action 15.3.1:** RWG to identify existing wholesale representative for the Market Systems User Group (MSUG) and contact 5MS mailbox if there is no existing representative.

**Action 15.3.2:** 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.

## 4. Procedures Update - S. Tu (slide 16 - 18)

AEMO presented an update on various procedure items, including the:

- · Status of each item
- Final determination dates
- Which items were raised by the 5MS program
- Likely impact to AEMO retail systems
- · Expected availability in staging
- Readiness considerations (added where known)

# AEMO noted that:

- The MSATS standing data review final determination has been published, including determinations on the application of the MeterReadType code (RWDA) to communicate metering reading granularity and TNI2 to support cross -boundary meter scenarios
  - AEMO confirmed that it will set up the TNI2 value for applicable NMIs via CATS transactions.



Any participants that do not upgrade to the R39 schema will not receive the TNI 2 value, but it can be
accessible from MSATS. The consultation relating to the removal of the obligation for the Register ID
to equal the Suffix commenced on 6 August 2020 and is scheduled to conclude in early December
2020.

More information can be found on slides 17 and 18 of the meeting pack.

#### 5. Industry Readiness Reporting - G. Minney (slides 19 – 26)

AEMO presented a summary of the results from the third round of readiness reporting, noting strong coverage across participant types and general progress across the industry.

#### AEMO noted that:

- It will include a prompt to remind participants to respond to the readiness surveys on behalf of all the Participant Types their organisation represents
- Reporting criteria for essential capabilities for 5MS and GS are on track, with the exception of three
  generators that are reporting their program's implementation of capability to submit 5-minute offers
  was 'late' or 'at risk'. AEMO noted that it will be following up with these participants to understand the
  status of their program and whether mitigations or escalation is required at this stage.
- For reporting on the status of Metering Transition Plan activities, for future reporting rounds, AEMO
  will disable irrelevant status options for specific MTP activities (e.g. 'On track not started' status
  would not be selectable where the transition end date of an activity within the sub-category has
  passed)
- Based on participant responses, there are a limited number of participants that are seeking to enter
  agreements for the early delivery of 5-minute metering data. AEMO's analysis of those parties
  indicates that the applicable MDPs are expected to have the capability to provide aggregation service
  to participants where required.
- There was a wide spread of responses when it comes to participant's progress on vendor
  agreements, with just under half yet to commence negotiations with vendors. Based on suggestions
  from RWG members, AEMO agreed that the question will be reworded to 'key vendor agreements for
  5MS and GS implementation'.
- There were no major changes in the industry's response to COVID compared to the previous round of reporting

#### 6. Wholesale Data Model Updates for Upcoming Initiatives – S. Pai (27 - 28)

AEMO informed the RWG of the Data Model Release v5.0, noting that it includes other application changes outside the 5MS program. A detailed discussion will be conducted in early October at the MSUG.

In response to a query, AEMO clarified that updates to MTPASA\_DUIDAVAILABILITY is included in this release.

# 7. **Testing Update – T. Grant** (29 - 34)

AEMO provided an update on the defects identified in the 5MS Staging Environment. More information can be found on slide 32 of the meeting pack.

AEMO presented an overview of the functionality available in staging release 3, noting that standing data updates will update in MSATS, but will not flow through to Meter Data validations.

AEMO requested nominations from the RWG for participants that are able to assist AEMO with preparing the testing approach or executing formal invitation testing of the retail platform.



AEMO noted that a participant has raised an issue that functional releases into the 5MS Staging Environment currently does not allow for end-to-end integrated testing of 5MS and GS functionality (e.g. a full settlement run can be performed individually in MSATS and the Settlement Platform, but cannot be executed end-to-end across both platforms). AEMO requested the 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
- Cannot wait until the functionality has been deployed into the pre-production environment.

The RWG agreed that this issue would remain open and that the mitigation measures would be updated to state that participants should contact AEMO in the instant that it is not possible to carry out tests required by the participant's program within the limitations of the 5MS Staging Environment and / or AEMO pre-prod environment.

**Action 15.7.1:** 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.

**Action 15.7.2:** 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.

**Action 15.7.3**: AEMO to update the Industry Risks and Issues Register with the mitigation measures agreed at the RWG.

# 8. Readiness Risks and Issues - G. Minney (slide 35 – 38)

AEMO presented and reviewed the risks and issues in the Industry risks and issues register, including risks related to the metering transition, and risks related to participant readiness. Proposed amendments are detailed on slide 36 to 38 of the meeting pack. Proposed amendments to differentiate risk R02 and R19 were tabled and agreed.

# 9. Dispatch / Bidding Update – I. Devaney (slide 39 – 41)

AEMO presented the timelines and supported functionalities, associated to the Bidding/Dispatch platform, for Staging, Pre-production and Production environments. More details are available on slides 40 and 41 of the meeting pack.

## 10. Settlements Update - M. Hillaby (slide 42 - 45)

AEMO presented the timelines and supported functionalities, associated to the Settlements platform, for Staging, Pre-production and Production environments. More details are available on slides 43 and 44 of the meeting pack.

AEMO also noted that the following activities are now underway:

- first migration activity new tools carried out in SIT
- SIT testing
- Certification activities

#### 11. Retail / Metering readiness – J. Agelopoulos (slides 46 – 48)

AEMO noted that there were no issues to call out in relation to the retail workstream.



#### 12. RM20 PPS Report Simplification - S. Tu (slides 49 - 51)

AEMO presented a proposed simplification to the RM20 PPS Report, and invited the RWG to provide any feedback by Friday 18 September 2020. More information on the proposed change can be found on slides 50 and 51.

In response to a participant query, AEMO clarified that the RM20 change will included before the 5MS rule change date, and will be deployed in the staging environment when 5 minute functionality is deployed.

Action 15.12.1: RWG to provide feedback on proposed simplification to the RM20 PPS Report

# 13. Retail Platform Go-live Plan - G. Minney (slide 52 - 55)

AEMO reiterated the outline of the Retail go-live plan, including the document development timeline and any next steps. AEMO invited the RWG to nominate Cutover Focus Group members, noting that members are expected to understand the business and technical aspects of their organisation's system cutover.

Action 15.13.1: RWG to nominate Cutover Focus Group members

# 14. Forward Plan and Other Business - G. Minney (slide 56 - 60)

Attendees were thanked for their attendance and advised of future in-session RWG meetings.

Next Readiness Working Group:

Tuesday 13 October 2020

Next Program Consultative Forum:

• Thursday 1 October 2020

Next Executive Forum

Thursday 8 October 2020

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



| 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 |
|--------|---|---|------|-----------|
| 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        | Fri 2 Oct  |



|         | •                    | AUSTRALIAN ENERGY MARKET OPERATOR   |      |            |
|---------|----------------------|---|------|------------|
| 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  | Fri 23 Oct |
| 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  | Fri 2 Oct  |
| 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  | Ongoing    |
| 15.7.3  | Testing              | AEMO to update the Industry Risks and Issues Register with the mitigation measures agreed at the RWG  | AEMO | Tue 13 Oct |
| 15.12.1 | RM20 Report          | RWG to provide feedback on proposed simplification to the RM20 PPS Report   | RWG  | Fri 18 Sep |
| 15.13.1 | Cutover Focus Group  | RWG to nominate Cutover Focus Group members   | RWG  | Fri 2 Oct  |