

¹MS Procedures Working Group (PWG) Meeting Notes

MEETING: 6
 DATE: Thursday 13 December 2018
 TIME: 10:00 AM - 1:00 PM
 LOCATION: AEMO Offices Melbourne, Sydney, Brisbane, Adelaide and Video/Teleconference

Attendees:

| Attendee | Organisation | |
|-------------------|------------------------------|-----------|
| Rebecca Malmur | AEMO | Melbourne |
| Piera Lorenz | Telstra | Melbourne |
| Jason Pereira | Landis & Gyr Pty Ltd | Sydney |
| Emily Brodie | AEMO | Sydney |
| Pierre Fromager | AEMO | Sydney |
| Austin Tan | AEMO | Sydney |
| Adam Gritton | Stanwell Corporation Limited | Brisbane |
| Ricky Brooks | Stanwell Corporation Limited | Brisbane |
| Leo Aliakbari | Stanwell Corporation Limited | Brisbane |
| Ingrid Farah | Ergon Energy | Brisbane |
| Damien Lynch | Ergon Energy | Brisbane |
| Blaine Miner | AEMO | Dial in |
| Jane Hutson | Energy Queensland | Dial in |
| Elizabeth Byrne | Stanwell | Dial in |
| Prabpreet Calais | AEMC | Dial in |
| Stephanie Lommi | Red / Lumo Energy | Dial in |
| Haiden Jones | Powershop Australia | Dial in |
| Panos Priftakis | Snowy Hydro | Dial in |
| Carolyn Hope | Energex | Dial in |
| David Woods | SA Power Networks | Dial in |
| Divya Kapoor | Flow Power | Dial in |
| Jeff Roberts | Evoenergy | Dial in |
| Chantal Wright | Momentum Energy | Dial in |
| Chris Streets | AGL Energy Services | Dial in |
| Dino Ou | Endevour Energy | Dial in |
| Georgina Snelling | Energy Australia | Dial in |
| Greg Szot | Powercor | Dial in |

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|-------------------|-----------------------------------|---------|
| Linda Brackenbury | Plus ES | Dial in |
| Neville Lewis | Mondo | Dial in |
| Paul Greenwood | Vector Advanced Metering Services | Dial in |
| Sharleen Flanagan | ERM Power | Dial in |
| Shaun Cole | Origin | Dial in |
| Sinisa Dodos | Energy Australia | Dial in |
| Tim Lloyd | Essential Energy | Dial in |
| Wayne Turner | Ausgrid | Dial in |

1.0 WELCOME, INTRODUCTION and APOLOGIES – Emily Brodie (AEMO) – Slide 1 to 2

Attendees were welcomed to the sixth Procedures Working Group meeting.

AEMO noted that it was a year since the 5MS rule was made, the industry is now approximately two and a half years away from 5MS go live, and that there is less than one year before AEMO's procedures will have to be updated for 5MS and Global Settlement.

MINUTES & ACTIONS FROM PREVIOUS MEETING – Emily Brodie (AEMO) – Slide 3 to 6

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

AEMO presented an indicative high level 5MS transition plan for the Dispatch, Metering and Settlements stream. Currently the Dispatch stream is the most progressed and has the most developed workplan. The Metering stream is progressing well with its transition plan, followed by the Settlements stream in the early stages of developing its transition plan. The high-level transition plan will be updated as the individual workstream transition plans are developed.

2.0 PROCEDURES WORKSTREAM UPDATE, INCLUDING FOCUS GROUP UPDATES

– Emily Brodie (AEMO) – Slide 7 to 11

The procedures stream is tracking well, the only notable change is that the Reallocations Package is proposed to be brought forward for publication on 21 December (see also section 6 below). AEMO is prioritising this package given that consultation of the CLP is dependent on finalisation of the Reallocations Package.

AEMO reiterated that consultation for Metering Package 1 will be closing in the next few weeks, with submissions due 28 December. The Settlement Estimates consultation is also available for submission until 21 January 2019.

Upcoming consultations include the Settlement Revisions Policy, scheduled for publication on 14 December. The Reallocations Package is also proposed for publication on 21 December.

All 5MS consultations can be accessed at

<https://www.aemo.com.au/StakeholderConsultation/Consultations>.

AEMO noted that a new consultation landing page is currently under development and is scheduled for launch over the new few weeks. This will give participants a dedicated 5MS web location to access 5MS specific consultations, and also High-Level Impact Assessments for each procedure.

In response to stakeholder requests, AEMO has been developing a 5MS program-wide actions log. This will be a spreadsheet tool that provides stakeholders a single view of all 5MS related actions. The actions log will be maintained by AEMO and made available on the

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5MS website from next week. Stakeholder feedback is welcome through the 5MS mailbox when the actions log is live on the website.

3.0 DEBRIEF ON DISPATCH FOCUS GROUP – Pierre Fromager (AEMO) – Slide 12 to 19

The third Dispatch Focus Group was held on 27 November. Topics discussed at the workshop include:

- Break-up rebid explanation field into two or four fields.
- Bidding interfaces
- Improvements to Web UI
 - Compressed view
 - Targeted updates: fields and ranges
 - Extract and upload to and from CSV
 - Show LF adjusted prices.
 - Running totals
 - Multiple-offer submissions
 - Multi-participant listings
- API Interface

More information on the discussion and outcomes are available in the Dispatch Focus Group meeting notes. This can be accessed at:

<http://www.aemo.com.au/Electricity/NationalElectricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/ProceduresWorking-Group>

4.0 DEBRIEF ON SETTLEMENTS FOCUS GROUP – Austin Tan (AEMO) Slide 20 to 27

The first Settlements Focus Group was held on 26 November. Topics discussed at the workshop include:

- Overview of settlement implications of 5MS
- Update on consultation approach:
 - Settlement Revisions
 - Settlement Estimations
 - Credit Limit Procedure
- Changes to the Reallocations procedure
- Transition to 5MS
- AEMO Settlement Interfaces
 - Data interchange
 - APIs
 - Publication of UFE

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More information on the discussion and outcomes are available in the Settlement Focus Group meeting notes. This can be accessed at: <http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-MinuteSettlement/Procedures-Workstream/Procedures-Working-Group>

5.0 GLOBAL SETTLEMENT FINAL RULE – Emily Brodie (AEMO) – Slide 28 to 31

AEMO provided an overview of the Global Settlement key milestones as per the final determination. A comparison of the draft and final rules was also presented.

AEMO notes that the final rule from the AEMC requires that AEMO update its procedures for Global Settlement before December 2019, in line with the 5MS requirement.

The final Global Settlement rule also requires AEMO to publish two new documents relating to UFE. A summary of both documents is provided in Table 1 below. Noting that while there is no requirement for AEMO to finalise these documents by December 2019, AEMO is currently investigating the best approach and timeline and will advise the PWG when possible.

Table 1: New AEMO documents to be developed for Global Settlement

| | UFE Adjustment Procedure | UFE Reporting Guidelines |
|---------------------|---|--|
| Description | <ul style="list-style-type: none"> A new procedure to be developed by AEMO outlining the approach to publish information that allows market customers to verify allocated UFE volumes. | <ul style="list-style-type: none"> A new guideline to be developed by AEMO on the approach to preparing the UFE trends report. |
| Rules requirement | <ul style="list-style-type: none"> NER 3.15.5 (d) -AEMO must publish information to enable each Market Customer in a local area to verify the unaccounted for energy amounts allocated to that Market Customer’s market connection points in that local area under paragraph (b) for each trading interval in accordance with a procedure developed and published by AEMO. | <ul style="list-style-type: none"> NER 3.15.5B (d) - AEMO must determine, maintain and publish UFE reporting guidelines that set out AEMO’s approach to preparing and publishing the report required under paragraph (a), including how the purpose of the report will be achieved. |
| Rules Consultation? | <ul style="list-style-type: none"> No | <ul style="list-style-type: none"> Yes – NER 3.15.5B (e) |

More information on the final rule and determination can be found at:

<https://www.aemc.gov.au/rule-changes/global-settlement-and-market-reconciliation>

ACTION 6.5.1: AEMO to advise PWG on its approach to create the UFE Adjustment Procedure and UFE Reporting Guideline.

6.0 REALLOCATIONS PROCEDURE PACKAGE – Rebecca Malmur (AEMO) – Slide 31 - 40

AEMO provided an overview of documents in the reallocations package, and presented on the proposed changes as a result of 5MS.

AEMO’s proposed approach on transitioning reallocations to 5MS is to move to 5-minute reallocations from 1 July 2021, with no 30-minute reallocations support after this date. A summary of the proposed approach is as below:

- Reallocations interface to be capable of processing 5-minute reallocations 6 months prior to July 2021.

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- 5-minute reallocations interface to be available in pre-production by mid-2020 for market participant testing.
- Market participants to be restricted from inputting 30-minutes reallocations for any time periods beyond 1 July 2021

AEMO notes that it is also considering additional systems functionality such as regional calendars, reporting function, notifications, copy/paste/fill functionality and API data transfer. These changes are not strictly related to the 5MS project and will be assessed and implemented based on merit. Participants are invited to provide feedback on what features they would like to see implemented, and which ones they view as most important.

AEMO proposed bringing forward the consultation publication date of the reallocations package to 21 December. AEMO is prioritising this package to allow for accelerated development of the reallocations systems, and to allow sufficient time for the CLP procedure to be updated after the reallocations procedure.

The PWG is invited to provide feedback on the approach to transition 30-minute reallocations to 5-minute reallocations, and also the feedback on the reallocations consultation approach.

ACTION 6.6.1: PWG to provide feedback on AEMO's approach to only support 5-minute reallocations after 1 July 2021

ACTION 6.6.2: PWG to provide feedback on non-mandatory 5MS changes to reallocations

ACTION 6.6.3: PWG to provide feedback on reallocations consultation approach (i.e. whether a shortened consultation is appropriate for the changes proposed)

7.0 METERING PACKAGE 2 - INTRODUCTION – Blaine Miner (AEMO) – Slide 41 to 51

AEMO presented the High-Level Impact Assessments for the documents covered in Package 2. This package will consider any requirements coming out of the Global Settlements Final Rule and the 5MS Final Rule.

The following documents are included in the package, with the HLIAs available in the meeting pack.

- MSATS Procedures:
 - Metering Data Management (MDM) Procedures
 - MDM File Format and Load Process
 - National Metering Identifier ○ CATS
 - Procedures Principles and Obligations
 - Procedures for the Management of WIGS NMIS
- Metrology Procedure Part A
- Metrology Procedure Part B

- MDFF Specification NEM12 and NEM13
- Exemption Procedure - Metering Provider Data Storage Requirements
- Service Level Procedure: Metering Data Provider Services

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- Service Level Procedure: Metering Provider Services
- Retail Electricity Market Glossary and Framework

AEMO also gave an update on responses to the actions from the Metering Focus Group held on 12 November. Details of these actions are available in the meeting pack.

Metering Package 2 is expected to be released for first stage consultation in April 2019, with the procedures expected to be finalised in August 2019.

AEMO reminded participants that responses to the First Stage Package 1 consultation is due to close 28 Dec 2018.

Responses to queries raised:

- Unmetered Load Guidelines will be updated as part of Package 3
- AEMO is currently investigating an alternative option of using MDFF content to determine net meter reads.
 - If implemented, this option is expected to allow AEMO to process and load register level meter data while reducing disruption to MDPs and the industry.
- NEM13 MDFF format will be supported by AEMO ○ MDMF for basic meter reads will also be supported for the foreseeable future.

8.0 GENERAL QUESTIONS – Emily Brodie (AEMO) – Slide 54

AEMO acknowledges that this is the first time the PWG was supported through the Webinar format. AEMO is also considering participant preferences for attending the PWG, and if participants find value in attending the PWG on AEMO premises. The PWG is invited to provide feedback on the new Webinar software, and also the format of the PWG.

AEMO notes that there are some 5MS affected metering procedures that are also impacted by other AEMO initiatives such as the DER program. AEMO invites participant feedback on the best way to consult on these procedures.

Some participants expressed that they would value a consolidated view of 5MS timelines. AEMO notes that a high-level schedule was presented at the PCF, and an indicative transition plan was also made available. AEMO will consult with relevant participants and advise the PWG if an additional consolidated timeline will be developed.

ACTION 6.8.1: PWG to provide feedback on the new webinar format

ACTION 6.8.2: PWG to provide feedback on the preferred format of the PWG, and if participants value coming in to AEMO premises for the PWG

ACTION 6.8.3: AEMO to contact Stanwell and Energex in relation to their need for more detailed 5MS program timelines.

ACTION 6.8.4: PWG provide feedback on the approach to consult on metering procedures affected by other initiatives outside of 5MS (such as the DER and NMI standing data programs)

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FORWARD MEETING PLAN – Emily Brodie (AEMO) – Slide 52 to 53

Attendees were thanked for their attendance and advised of future PWG meetings for 2018:

- Thursday, 14 February 2019
- Tuesday, 12 March 2019

Procedures focus groups:

- Settlements focus group – early 2019, TBC
- Dispatch focus group – 15th February, face-to-face in Sydney

Next Program Consultative Forum

- Friday 8 February 2019

Next Executive Forum

- Tuesday 12 February 2019

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-MarketNEM/Five-Minute-Settlement>.

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| Item | Topic | Action required | Responsible | By |
|--------------|---------------------------------------|---|--|---|
| PWG 2 | | | | |
| 1.6.2 | Packaging and Prioritising Procedures | <p>Participants to provide AEMO with feedback on the prioritisation of procedures. Email feedback to 1ms@aemo.com.au</p> <p>No feedback received, assume packaging is suitable. At this stage not planning to alter proposed timing.</p> <p>Ricky Brooks, Stanwell – reallocations package occurring late Q1 Q2 and parties may be entering into reallocation contracts.</p> <p>ACTION: PWG members to provide information to AEMO about the suitability of reallocation procedure package timing.</p> <p>ACTION: AEMO is still considering timing, to be finalised in December after the Settlements Focus Group.</p> <p>ACTION: Prudentials date on Draft Document to be amended for correct year</p> | <p>PWG members</p> <p>PWG members AEMO</p> <p>AEMO</p> | <p>COMPLETE</p> <p>COMPLETE</p> <p>COMPLETE</p> |
| 1.8.1 | Metering Procedures | <p>The metering focus group and the SWG are to investigate whether there are data volume delivery constraints because of 5MS or global settlements with the current delivery timeframes.</p> <p>PCF and PWG to be informed of progress.</p> <p>Under discussion and will inform PCF and PWG of developments.</p> | <p>David Ripper (AEMO)</p> <p>ONGOING</p> | <p>24/08/2018</p> <p>Ongoing</p> |



| Item | Topic | Action required | Responsible | By |
|--------------|------------------------------|---|------------------------|------------|
| PWG 3 | | | | |
| 3.3.1 | 5MS Drafting Amendments | The PCF is seeking input from the PWG on the potential 5MS drafting amendments around a bidding data soft cutover, and other areas of the 5MS rule. | PWG members ONGOING | 31/12/2018 |
| Item | Topic | Action required | Responsible | By |
| PWG 4 | | | | |
| 4.1.1 | Transitional Arrangements | AEMO will communicate its high-level transition plan across metering, settlements and dispatch at the December PCF, PWG and SWG meetings | AEMO | COMPLETE |
| 4.5.1 | Metering Procedures | Local Retailers and Distributors to provide information about off-market unmetered loads. | PWG | COMPLETE |
| PWG 5 | | | | |
| 5.3.1 | Metering Procedures | AEMO to check whether there are any dependencies between the RM reports that have been identified for retirement the NMI Standing Data project. | AEMO | COMPLETE |
| 5.6.1 | DER Program | AEMO to update PWG on any possible impacts of the DER program to the 5MS program | AEMO | Ongoing |
| PWG 6 | | | | |
| 6.5.1 | Global Settlement procedures | AEMO to advise PWG on its approach to create the UFE Adjustment Procedure and UFE Reporting Guideline. | AEMO | 14/2/18 |

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|-------|-------------------------|---|-----|---------|
| 6.6.1 | Reallocation procedures | PWG to provide feedback on AEMO's approach to only support 5-minute reallocations after 1 July 2021 | PWG | 16/1/18 |
|-------|-------------------------|---|-----|---------|



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|-------|----------------------------------|---|------|----------|
| 6.6.2 | Non 5MS changes to reallocations | PWG to provide feedback on non-mandatory 5MS changes to reallocations | PWG | 16/1/18 |
| 6.6.3 | Reallocation procedures | PWG to provide feedback on reallocations consultation approach, if a shortened consultation is preferred | PWG | 19/12/18 |
| 6.8.1 | PWG format | PWG to provide feedback on the new webinar format | PWG | 19/12/18 |
| 6.8.2 | PWG format | PWG to provide feedback on the preferred format of the PWG, and if participants value coming in to AEMO premises for the PWG | PWG | 19/12/18 |
| 6.8.3 | 5MS timelines | AEMO to contact Stanwell and Energex in relation to their need for more detailed 5MS program timelines. | AEMO | 21/12/18 |
| 6.8.4 | Procedure updates | PWG provide feedback on the approach to consult on metering procedures affected by other initiatives outside of 5MS such as the DER program | PWG | 16/1/18 |

