

# 5MS Procedures Working Group (PWG) Meeting Notes

MEETING: 4

DATE: Thursday 11 October 2018

TIME: 10:00 AM - 1:00 PM

LOCATION: AEMO Offices Melbourne, Sydney, Brisbane, Adelaide and

Video/Teleconference

### Attendees:

Attendee	Organisation	Office
Andrew Godfrey	Energy Australia Pty Ltd	Melbourne
Chantal Wright	Momentum Energy Pty Limited	Melbourne
Chris Streets	AGL Energy Services	Melbourne
Paul Greenwood	Vector Advanced Metering Services (Australia) Pty Ltd	Melbourne
Rajiv Balasubramanian	Jemena Limited	Melbourne
Justin Stute	Select Data and Measurement Solutions	Melbourne
Mark Riley	AGL	Melbourne
Mark Pilkington	Powercor Australia Ltd	Melbourne
Canh Diep	AEMO	Melbourne
Christine Kang	AEMO	Melbourne
Leslie Chai	AEMO	Melbourne
David Ripper	AEMO	Melbourne
Anders Sangkuhl	Alinta Energy Retail Sales Pty Ltd	Sydney
Dean Lane	Origin Energy Limited	Sydney
Derek Perez	Infigen	Sydney
Jason Pereira	Landis & Gyr Pty Ltd	Sydney
Linda Brackenbury	Plus ES	Sydney
Tom Dwyer	Infigen	Sydney
Emily Brodie	AEMO	Sydney
Austin Tan	AEMO	Sydney
Gary Einser	AEMO	Sydney
Pierre Fromager	AEMO	Sydney
Adam Gritton	Stanwell Corporation Limited	Brisbane
Leo Aliakbari	Stanwell Corporation Limited	Brisbane
Ricky Brooks	Stanwell Corporation Limited	Brisbane
Sharleen Flanagan	ERM Power Limited	Brisbane
Blaine Miner	AEMO	Brisbane
Michael Sanders	AEMO	Brisbane
Divya Kapoor	Flow Power	Dial in
Ingrid Farah	Ergon Energy Corporation Limited	Dial in
Jane Hutson	Ergon Energy Queensland Pty Ltd	Dial in



Jeff Roberts	Evoenergy	Dial in
Martin Ralph	Hydro Tasmania (Hydro-Electric Corporation)	Dial in
Piera Lorenz	Telstra	Dial in
Prateek Beri	Hydro Tasmania (Hydro-Electric Corporation)	Dial in
Haiden Jones	Powershop	Dial in
Raman Qazi	Endeavour Energy	Dial in

**1.0 WELCOME, INTRODUCTION and APOLOGIES** – Emily Brodie (AEMO) – Slide 3 to 6

Attendees were welcomed to the fourth Procedures Working Group meeting.

MINUTES & ACTIONS FROM PREVIOUS MEETING - Emily Brodie (AEMO) - Slide 3 to 4

The Procedures Working Group confirmed the minutes of PWG meeting number three held on 13 September 2018.

The actions from meeting three have been reviewed and updated (see list below).

Participants had been invited to provide feedback to AEMO on the packaging and prioritisation of procedures. Stanwell highlighted that the timing of the reallocations package might be too late as parties are already entering into reallocation contracts for 2021. AEMO is still considering the timing of this package and plans to report back at the next PWG in November.

No feedback received to indicate a focus group was required for the Estimations package at the Settlement Managers Working Group. Mark Riley (AGL) asked a question to raise the possible need for a Settlements Working Group to discuss GS.

Submissions for feedback around a bidding data soft cutover is still open, due 31 October. This item will also be discussed at the next Joint Dispatch/Systems Focus Group meeting on 22 October.

Feedback was received from the PWG on the Credit Limit Procedure (CLP) in favour of a shortened consultation. AEMO will commence with a reduced consultation, with the option to revert to a full consultation if significant information comes to light.

Feedback was received from the PWG to support AEMO's recommended position to update the CLP to perform the calculation at a 5-minute level.

Alignment of the electricity trading day with either the gas trading day or the calendar day is considered unnecessary for 5MS to proceed and will not be pursued through the program. This process would require a Rule change request to AEMC and any participant may elect to submit this request.



## **ACTIONS FROM AUGUST 14<sup>TH</sup> DISPATCH FOCUS GROUP** – Emily Brodie (AEMO) – Slide 5 to 6

The actions from the August Dispatch Focus Group were discussed.

Vector Advanced Metering Services noted that transitional arrangements allowing 5 minute and 30-minute bids could have operational impacts on MDP's.

**ACTION 4.1.1**: AEMO to update PWG on interactions between dispatch and metering transitional arrangements.

The full minutes and actions for the August 14<sup>th</sup> Dispatch Focus Group can be accessed at: <a href="https://www.aemo.com.au/-/media/Files/Electricity/NEM/5MS/Procedures-Workstream/Focus-Groups/2018/5-MS---Bidding-Options---Dispatch-Focus-Group---14-Aug-2018---Including-Outcomes.pdf">https://www.aemo.com.au/-/media/Files/Electricity/NEM/5MS/Procedures-Workstream/Focus-Groups/2018/5-MS---Bidding-Options---Dispatch-Focus-Group---14-Aug-2018---Including-Outcomes.pdf</a>

## **2.0 PROCEDURES WORKSTREAM UPDATE, INCLUDING FOCUS GROUP UPDATES** – Emily Brodie (AEMO) – Slide 7 to 11

Procedures on track except for the metering package which has timing slip by one month due to additional pre-consultation through the Joint Metering and Systems Focus Group. The formal consultation process is scheduled to commence on 31 October.

The joint Metering/Systems Focus Group will reconvene on 12 November, and the joint Dispatch/Systems Focus Group will meet for the first time on 22 October.

AEMO proposes to move the next PWG scheduled for Friday 16th November to the following week. This is to allow enough time after the Metering/Systems and Dispatch/Systems focus group meetings to prepare a de-brief for the PWG.

Final stage of consultations is now closed for the Dispatch – Market suspension pricing methodology. The final report will be published on 16 November.

Submissions to the AEMC on the Global Settlement and Market Reconciliation draft determination are due on 25 October. AEMO encourages all participants to review the draft determination and contribute submissions.

**ACTION 4.2.1**: AEMO to confirm new date of PWG 5



## **3.0 UPDATES TO SETTLEMENTS PACKAGE, MISCELLANEOUS PROCEDURES –** Canh Diep (AEMO) – Slide 12 to 37

It was noted that the NEM Rule Consultation process only applies to the NEM Settlement Revisions Policy. Other documents in the Settlements Miscellaneous package will be published for comment.

# **3.1 Settlement Guide to Ancillary Services Payment and Recovery –** Canh Diep (AEMO) Slide 15 to 22

Proposed changes to The Ancillary Services Payment and Recovery Guide were discussed. It was noted that cost allocations for both market and non-market ancillary services will be based on 5-minute energy volumes from July 2021.

The draft guide will be released in March 2019 for comments, with the final guide available in June 2019.

A description of proposed changes can be found on slides 15 to 22 of the meeting pack, available at: <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/Procedures-Working-Group">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/Procedures-Working-Group</a>

**ACTION 4.3.1**: PWG to provide feedback on proposed changes to the Settlement Guide to Ancillary Services Payment and Recovery, and AEMO's proposed consultation approach.

### 3.2 Settlement Guides and Overview Documents - Leslie Chai - Slide 23 to 28

It was noted that GST related documents in this package will remain unchanged, with some others requiring updates in terminology. These documents are scheduled for release in November for comment, with the final versions expected in December.

The NEM Settlements Process document was identified as impacted by the Global Settlements draft rule. AEMO will consider further changes to this document after the final rule is released on 6 December. This document will be released in January 2019 for comment, with final versions released in February 2019.

A full list of relevant documents and proposed changes can be found on slides 23 to 28 of the meeting pack, available at: <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/Procedures-Working-Group">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/Procedures-Working-Group</a>

**ACTION 4.3.2**: PWG to provide feedback on proposed changes to settlement guides and overview documents, and AEMO's proposed consultation approach.

### 3.3 NEM Settlements Revision Policy – Christine Kang – Slide 29 to 37

Changes to the NEM Settlements Revision Policy as a result of the 5MS Rule were discussed.



Among other administrative updates, new chapters are proposed to clearly outline that any routine and special revised statements for billing weeks until 1 July 2021 will be based on existing arrangements of:

- 30-minute settlement.
- Settlement by differencing.

AEMO emphasised that any 30-minute to five-minute price change will not entitle market participants a dispute or a special revised statement. Similarly, any settlement statement amount change arising from 'settlement by differencing' to the Global Settlements framework will not entitle market participants a dispute or a special revised statement.

It was acknowledged that reviews of unaccounted for energy (UFE) volumes may result in settlement revisions. As these would need to be handled in the same way as revisions resulting from other input changes, specific amendments such as special revisions to address UFE should not be necessary. AEMO will re-evaluate the guide after the final determination of Global Settlements.

Some participants raised potential issues arising from the 5MS and proposed Global Settlements rule change commencing during the middle of a billing week. It was noted that this could involve running old and new systems in the same billing run, with the introduction of UFE volumes after the cutover. AEMO will advise PWG on what groups can be leveraged for discussion. PWG to also provide feedback if a focus group to discuss transitional arrangements is required.

Participant discussion and feedback on the design of Global Settlement was noted. AEMO encourages all participants to review the draft determination and contribute submissions to AEMC by 25 October.

Consultation for the NEM Settlements Revisions Policy is scheduled to commence on 7 December 2018, with submissions due 15 February 2019. AEMO invites feedback from participants on this timeline.

A description of proposed changes can be found on slides 29 to 37 of the meeting pack, available at: <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/Procedures-Working-Group">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/Procedures-Working-Group</a>

**ACTION 4.3.3**: AEMO to advise PWG on existing forums that could be used for discussions relating to transitional arrangements for settlements.

**ACTION 4.3.4**: PWG to provide feedback if a separate focus group to discuss settlements transitional arrangements will be beneficial and what suitable timing would be.

**ACTION 4.3.5**: PWG to provide feedback on proposed changes to the NEM Settlements Revison Policy, and AEMO's proposed consultation approach.



### **4.0 UPDATES TO DISPATCH PACKAGE (SPOT MARKET PROCEDURES)** – Michael Sanders – Slide 38 to 39

The Dispatch – Spot Market package includes four documents. Only the Spot Market Operations Timetable requires formal Rules Consultation. Scheduled to commence in January 2019.

5MS amendments to all four documents include terminology changes, transitional arrangements, amendment to the cumulative price threshold calculation, and changes to 5-minute pre-dispatch. A Dispatch/Systems Focus Group is scheduled for 22 October to discuss transitional arrangements in particular.

AEMO is currently investigating if 5-minute pre-dispatch could be extended beyond one hour, and if it is possible to add sensitivities. This will also be discussed in the 22 October Dispatch/Systems Focus Group.

AEMO confirmed that only the Spot Market Operations Timetable requires a Rules consultation, and that the Rules require AEMO to include sensitivities in 30-minute predispatch, but not in 5-minute pre-dispatch. The existing set of sensitivities used in 30-minute pre-dispatch was developed in consultation with market participants.

AGL asked whether it was possible to trade off various attributes of an extended 5-minute pre-dispatch to achieve a computationally viable solution, e.g. forecast horizon, number of sensitivities, frequency of updates. AEMO confirmed that this was possible, and that compromises would probably be necessary.

A description of proposed changes can be found on slides 38 to 39 of the meeting pack, available at: <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/Procedures-Working-Group">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/Procedures-Working-Group</a>

**ACTION 4.4.1**: PWG to provide feedback on proposed changes to the dispatch package of spot market procedures, and AEMO's proposed consultation approach.

## **5.0 DEBRIEF ON JOINT METERING / SYSTEMS FOCUS GROUP** – DAVID RIPPER (AEMO) – Slide 40 to 51

The first Joint Metering/Systems Focus Group was productive and notes and actions have been distributed. The group will reconvene on 12 November in Sydney after Metering Procedures Pack 1 is released for consultation.

A summary of the outcomes of discussion at the workshop are as below:

- AEMO and participants are still considering alternative methodologies to convert 15 and 30-minute meter reads to 5-minute intervals.
- No mixed metering installations under a single NMI have been identified. AEMO was asked to ensure that the relevant procedures explicitly didn't allow mixed metering types under 1 NMI.
- AEMO systems to accept kwh meter read precision to 4 decimal places, consistent with the gas procedures.
- AEMO proposes to transition to MDFF filetype. Feedback from participants due on 12 October.



- AEMO to periodically run a RM11 report to inform MDP's of missing meter reads.
- The NEM12 format interval length value will remain in the 200 record.
- Intraday interval length changes will not be permitted. AEMO was asked to explicitly
  include existing interval meter scenarios into the intraday meter churn requirements
  of the procedures. e.g. reconfiguration of meter from 30 to 5 minute.
- AEMO will develop the ability to accept non-energy meter reads.
- Only settlement data streams are to be registered in the CNDS table.
- MDM meter read signage will be derived based on the first character of the data stream suffix.
- UOM validations in the MDFF 200 record will be validated against known UOM types.
- Meter data storage approach where required standing data does not exist will be discussed at the next Joint Metering/Systems Focus Group.
- File size and communications bandwidth is proposed to increase from 1MB to 10MB, with file analysis to be completed by AEMO by 21 November.
- Transition planning will be discussed at the next Joint Metering/Systems Focus Group.

Participant discussion about off-market unmetered load information was noted. AEMO encourages participant feedback during the consultation stage by 28 December.

A comment was made that Distributors will still need Metering Data Providers (MDPs) to aggregate 5-minute interval meter reads to 15 and 30-minute intervals until 1 July 2021. This is to support network billing.

It was noted Local Retailers and Distributors will encounter several challenges in accurately identifying all off market unmetered supplies. This is in part due to councils and other corporations making changes to them without informing the associated Local Retailer or Distributor. AEMO requested Local Retailers and Distributors to provide information about off-market unmetered loads, in a similar format to the table below:

Device Types	<b>Load Cycle</b>	<b>Supply Capacity</b>	Load Values (W)	Consumption (Wh/kWh)
CCTV	Constant	2A		480Wh
BBQ	Constant			xxWh/kWh
Watchman Light 250W MV	PE		270W	
Watchman Light 250W HPS	PE		273W	

The Issues Paper for the first stage of Metering Procedure Changes Package 1 is scheduled to be published on 31 October, with submissions due on 28 December. The final report will be released on 22 March 2019.

A detailed summary of outcomes can be found on slides 40 to 52 of the meeting pack, available at: <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/Procedures-Working-Group">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement/Procedures-Workstream/Procedures-Working-Group</a>

**ACTION 4.5.1**: Local Retailers and Distributors to provide information about off-market unmetered loads by 30 November.



### **6.0 GENERAL QUESTIONS –** Emily Brodie (AEMO)

A question was raised on how the amended calculation of UFEs from Global Settlements would impact the prudential position of retailers. AEMO invites feedback from participants if a Settlements Focus Group will be required to discuss potential 5MS and Global Settlement issues.

**ACTION 4.6.1**: PWG to provide feedback from participants if a Settlements Focus Group will be required to discuss potential 5MS and Global Settlement issues.

It was noted that the Metering Package 1 Consultation first-round submission date coincides with the festive season in December. AEMO runs a risk of receiving late submissions due to participants' reduced resourcing around that period. AEMO advised that proposed Stage 1 response date is approximately two weeks longer than the minimum response period. It has been set to allow AEMO sufficient time to respond within NER timeframes. Submissions are welcome during this 2 month period of 31 October to 28 December 2018, noting that there will also be a second round of formal consultation.

### 7.0 FORWARD MEETING PLAN – Emily Brodie (AEMO)

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

- Friday 16 November, propose moving to following week
- Thursday 13 December

### Procedures focus groups:

- Joint Dispatch/Systems Monday 22nd October, Brisbane
- Joint Metering/Systems Monday 12th November, Sydney

### Next Program Consultative Forum

Monday 5 November

#### **Next Executive Forum**

Tuesday 13 November

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
PWG 2				
1.6.2	Packaging and Prioritising Procedures	Participants to provide AEMO with feedback on the prioritisation of procedures. Email feedback to <a href="mailto:5ms@aemo.com.au">5ms@aemo.com.au</a>	PWG members	14/8/2018
		No feedback received, assume packaging is suitable. At this stage not planning to alter proposed timing.		
		Ricky Brooks, Stanwell – reallocations package occurring late Q1 Q2 and parties may be entering into reallocation contracts.		
		<b>ACTION:</b> PWG members to provide information to AEMO about the suitability of reallocation procedure package timing.	PWG members	COMPLETE
		<b>ACTION:</b> AEMO to discuss with PWG whether there is a need to adjust the timing of the reallocation procedure package	AEMO	ONGOING
		<b>ACTION</b> : Prudentials date on Draft Document to be amended for correct year	AEMO	COMPLETE
1.8.1	Metering Procedures	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.	David Ripper (AEMO) ONGOING	24/08/2018
		PCF and PWG to be informed of progress.		Ongoing
		Under discussion and will inform PCF and PWG of developments.		



Item	Topic	Action required	Responsible	Ву
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 oNGOING		31/10/2018
3.4.1	Prudentials Procedures	PWG to provide feedback on whether a reduced consultation for the CLP procedure would be appropriate	PWG members	COMPLETE
3.4.2	Prudentials Procedures	PWG to provide feedback on proposed options to update the CLP procedures	PWG members	COMPLETE
3.5.1	General Questions	Investigate the risks and benefits associated with the alignment of the electricity trading day with either the gas trading day or the calendar day. Report back to the Dispatch Focus Group and PWG.	Gary Eisner (AEMO)	COMPLETE
Item	Topic	Action required	Responsible	Ву
PWG 4				
4.1.1	Transitional Arrangements	AEMO to update PWG on interactions between dispatch and metering transitional arrangements	AEMO	November PWG meeting
4.2.1	PWG scheduling	AEMO to confirm new date of PWG 5	AEMO	24/10/18
4.3.1	Settlements Procedures - Miscellaneous	PWG to provide feedback on proposed changes to the Settlement Guide to Ancillary Services Payment and Recovery, and AEMO's proposed consultation approach.	PWG	24/10/18



4.3.2	Settlements Procedures - Miscellaneous	PWG to provide feedback on proposed changes to settlement guides and overview documents, and AEMO's proposed consultation approach.	PWG	24/10/2018
4.3.3	Transitional Arrangements	AEMO to advise PWG on existing forums that could be used for discussions relating to transitional arrangements for settlements.	AEMO	November PWG meeting
4.3.4	Transitional Arrangements	PWG to provide feedback if a separate focus group to discuss settlements transitional arrangements will be beneficial and what suitable timing would be.	PWG	24/10/2018
4.3.5	Settlements Procedures - Miscellaneous	PWG to provide feedback on proposed changes to the NEM Settlements Revision Policy, and AEMO's proposed consultation approach.	PWG	24/10/2018
4.4.1	Dispatch Procedures – Spot Market procedures	PWG to provide feedback on proposed changes to the dispatch package of spot market procedures, and AEMO's proposed consultation approach.	PWG	24/10/2018
4.6.1	Settlements Procedures - Miscellaneous	PWG to provide feedback from participants if a Settlements Working Group will be required to discuss potential 5MS and Global Settlement issues.	PWG	24/10/2018
4.5.1	Metering Procedures	Local Retailers and Distributors to provide information about off-market unmetered loads.	PWG	30/11/2018