

5MS Procedures Working Group #13 Monday, 12 Aug 2019

AEMO Offices:

Level 9, 99 Gawler Place, Adelaide Level 10, 10 Eagle Street, Brisbane Level 22, 530 Collins Street, Melbourne Level 2, 20 Bond Street, Sydney

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



NO	TIME	AGENDA ITEM	RESPONSIBLE
Prelin	ninary matters		
1	10:00am – 10:10am	Welcome, introduction and apologies	Emily Brodie (AEMO)
2	10:10am – 10:15am	Minutes and actions from previous meeting	Emily Brodie (AEMO)
Matte	ers for noting		
3	10:15am – 10:35am	Procedures workstream update	Emily Brodie, Blaine Miner, Austin Tan (AEMO)
Matte	ers for discussion		
4	10:35am – 11:00am	Debrief on Dispatch Focus Group	Michael Sanders (AEMO)
5	11:00am – 11:30am	Debrief on Metering Focus Group	Blaine Miner (AEMO)
6	11:30am – 11:50am	Metering consultations update	Blaine Miner (AEMO)
Othe	r business		
7	11:50am – 12:00pm	Forward meeting plan and general questions	Emily Brodie (AEMO)



Minutes and actions from previous meeting

Emily Brodie



Responses to PWG actions

	Торіс	Action	Response
12.4.1	Power system operating procedures	PWG to provide feedback on the consultation approach of the SO_OP_3713 - Mandatory Restriction Offers procedure	Four responses received. No issues were raised with the consultation approach (timing and format).
12.4.2	Power system operating procedures	PWG to provide feedback on the consultation approach of the SO_OP_3717 – Procedure for Dispatch and Activation of Reserve Contracts	Four responses received. No issues were raised.



Procedures workstream update

Emily Brodie



Procedures workstream status

	Pre-con	sultation	C	onsultatior	ו		
5 MINUTE SETTLEMENT			TIMING			CONTENT]
PROCEDURES TRACKING	HLIA	PWG Engagement	Consultation paper	Draft documents	Final documents	Package content	TIMING Started and on track
METERING							Started late
1. Metering - Metering Data & Metrology	Jul-18	Jul-18	Sep-18	Jan-19	Mar-19		Overdue
2. Metering - MSATS and SLPs	Jul-18	Dec-18 & Mar-19	Apr-19	Aug-19	Sep-19		Complete
3. Metering - Miscellaneous*	Jul-18	Feb-19	n/a	Jun-19	Aug-19		
B2B Procedures - B2B file size	n/a	Feb-19	n/a	n/a	n/a	n/a	CONTENT
SETTLEMENTS							No issues
SRA	Jun-18	Jul-18	n/a	Jul-18	Aug-18		Issues
SRA round #2	Jun-18	Feb-19	Mar-19	Jun-19	Aug-19		Severe issues
TNSP	Feb-19	Feb-19	n/a	Apr-19	Jun-19		
Estimation	Aug-18	Aug-18	Nov-18	Feb-19	Apr-19		Complete
Reallocations	Dec-18	Dec-18	n/a	Dec-18	Feb-19		
Miscellaneous	Oct-18	Oct-18	Dec-18	Mar-19	May-19		
Prudentials	Aug-18	Sep-18	Apr-19	Jun-19	Aug-19		
DISPATCH							
2. Dispatch - Spot market - Rules consultation	Sep-18	Oct 18 ongoing	Jan-19	Jun-19	Aug-19		
2. Dispatch - Spot market - For comment*	Sep-18	Oct 18 ongoing	n/a	Jul-19	Oct-19		
3. Dispatch - Pricing - Rules consultation	Aug-18	Aug 18 ongoing	Aug-18	Sep-18	Nov-18		
3. Dispatch - Pricing - For comment*	Aug-18	Aug 18 ongoing	n/a	May-19	Jul-19		
4. Dispatch - Miscellaneous*, release 1	Jan-19	Feb-19	n/a	May-19	Jul-19		
 Dispatch - Miscellaneous*, release 2 	Jan-19	Feb-19	n/a	May-19	Oct-19		
POWER SYSTEM OPS							
1. Operations - Miscellaneous*	TBA	Apr 19 ongoing	Aug-19	Oct-19	Nov-19		

6

Procedures workstream meetings

- PWG #14 September format to be discussed
 - Summary of the metering package #2 second round submissions
 - Update on metering package #3
- Past focus groups meetings:
 - Dispatch focus group, Tuesday 16 July, AEMO offices
 - Metering focus group, Thursday 18 July, Sydney
 - Metering focus group, Cross Boundary Supplies, Wednesday 7 August, WebEx
- Upcoming focus group meetings:
 - Transition focus group (under the Readiness Working Group), transition approach and timeframes, Melbourne, Friday 30 August



Consultations - Metering

5MS Metering package 2

- Draft Determination published on Monday 5 Aug 2019
 - Submissions due Monday 2 Sept 2019 (4wks)
 - Final Determination Date of Monday 30 Sept 2019 (At-risk due to granting submission extension)

5MS Metering package 3

- Includes a number of guidelines and reference documents
 - AEMO will be publishing these documents for comments only at the end of August
 - AEMO will consider comments received, finalise the procedures and post them on the relevant AEMO website consultation page in October.



Consultations - Settlements

5MS Settlements package – Auction Participation Agreement [Completed]

- Final report and procedures scheduled published on 5 August 2019
- <u>http://aemo.com.au/Stakeholder-Consultation/Consultations/Five-Minute-Settlement---Auction-Participation-Agreement</u>

5MS Settlements package – Prudentials - Credit Limit Procedures

- Final report and procedures scheduled for publication on 16 August 2019
- Proposed changes include 5MS amendments that are administrative in nature, and amendments to season definitions moving the month of April under the winter season (effectively removing the shoulder 1 Maximum Credit Limit (MCL) review)
- <u>https://www.aemo.com.au/Stakeholder-Consultation/Consultations/Five-Minute-Settlement---</u> <u>Credit-Limit-Procedures</u>

5MS Settlements package – Settlements Guide to Ancillary Services Payment and Recovery

- Final report and procedures scheduled for publication 30 August 2019
- Does not requires Rules consultation under NER 8.9. Originally part of the Settlements Miscellaneous Package.
- <u>http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Settlements-Guide-to-Ancillary-Services-Payment-and-Recovery?Convenor=AEMO%20NEM</u>

Consultations – Power System Operations

Mandatory Restriction Offers Procedure (SO_OP_3713)

- Aiming to commence detailed consultation on SO_OP_3713 Mandatory Restriction Offers on 16 August.
- Proposed 5MS amendments were presented at the previous PWG. Feedback from four participants received with no issues raised on the consultation approach.
- The indicative consultation dates are tabled below.

Date	Consultation Stage
21/08/19	First stage consultation
26/09/19	First stage submissions due
24/10/19	Second stage consultation
8/11/19	Second stage notice submissions due
29/11/19	Publish final report, procedures and submissions

Update 16/08/2019 - The AEMC published a paper that recommended the removal of the mandatory restrictions framework from the NER on 15/08/2019. Hence, amendments to this procedure will not longer be required and AEMO will no longer consult

Consultations – Power System Operations

Dispatch and Activation of Reserve Contracts (SO_OP_3717)

- Initially, AEMO intended to consult on the *Procedure for the Dispatch and Activation of Reserve Contracts (SO_OP_3717)* for 5MS amendments together with Enhanced RERT amendments.
- The proposed 5MS amendments are minor terminology changes only. However the related NER clause (3.20.7) still requires AEMO to follow the full Rules consultation process
- AEMO is now proposing to consult on SO_OP_3713 together with SO_OP_3717 for 5MS changes.
 Any 5MS changes will be incorporated into the new RERT procedures amended for Enhanced RERT.
- A single Issues Paper and Notice of Consultation will be published for *both* procedures describing the proposed 5MS amendments. Clean and marked-up procedures will also be provided.
- The consultation timeline will follow the same consultation dates as SO_OP_3713, tabled in the previous slide.

Consultations – Power System Operations

- Update 16/08/19 Consultation on Mandatory Restriction Offers Procedure (MRO Procedure) will not be
 proceeding. Consultation on minor amendments to the Procedure for the Dispatch and Activation of Reserve
 Contracts will still proceed following the previously published timeframes.
 - The AEMC published the Investigation into Intervention Mechanisms in the NEM report on 15/08/19. This report recommended for AEMO to submit a rule change request to remove the mandatory restrictions framework from the NER. Hence, no further amendments to the MRO Procedure will be necessary.



Consultations - Dispatch

5MS Dispatch package – Spot Market Operations Timetable

- Final report and procedures scheduled for publication on 16 August 2019
- <u>http://aemo.com.au/Stakeholder-Consultation/Consultations/Spot-Market-Operations-Timetable</u>

5MS Dispatch package – Spot Market and Misc. Procedures (Non-Rules Consultation)

- These documents do not require formal consultation under NER 8.9
- Aiming to publish on 30 August 2019 for a single round of comment
- Submissions due 20 September 2019
- Final procedures will be published October 2019



Consultations – Dispatch Spot Market and Misc. Procedures (Non-Rules Consultation)

Document	HLIA	Consultation approach	
SO_OP_3704 - Predispatch	 Terminology changes Addition of 5-minute pre-dispatch 		
SO_OP_3705 - Dispatch	 Terminology changes Changes to operation of the cumulative price threshold to reflect the five-minute settlement rule changes. 		
Efficient Dispatch and Localised Recovery of Regulation Services Business Specification	Terminology changes	 Single round consultation from Aug – Oct 2019 	
Treatment of Dispatchable Loads in NEM	Terminology changes		
Brief on Automation of Negative Residue Management	 Terminology changes Changes to calculation of the accumulation trigger to reflect the five-minute settlement rule changes 		



Pre-Dispatch Process Description – Consultation approach

- The Pre-Dispatch Process Description is a guide on pre-dispatch provided by AEMO to the industry, and is one of the documents AEMO was intending to publish for comment in August.
- The document has not been updated since 2010, and requires major amendments to reflect the current pre-dispatch process.
- 5MS amendments are terminology changes, and also the addition of 5 minute pre-dispatch.
- Considering that majority of amendments are not 5MS related, and there is no specific rules requirement to update this document for 5MS before 1 December 2019, AEMO proposes that this document will be updated and managed outside of the 5MS program.
- The updated document will be published on the usual AEMO policy and process documentation webpage.

https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Security-andreliability/Dispatch-information/Policy-and-process-documentation

Debrief on Dispatch Focus Group

Michael Sanders



Debrief on Dispatch Focus Group

- Held in AEMO offices on Tuesday 16 July 2019
- Agenda
 - Five-minute Pre-dispatch (5MPD)
 - Short-term Projected Assessment of System Adequacy (ST PASA)
 - Reliability and Emergency Reserve Trader (RERT)
 - Mandatory Restrictions (MR)



Debrief on Dispatch Focus Group

Agenda Item	Outcome
5MPD	 AEMO will not extend the forecast horizon (as part of 5-MS) AEMO will not add price sensitivities (as part of 5-MS) AEMO will add fast start profiles Further investigation: storage systems and energy-limited plant demand forecasts real-time dispatch of superfast-start plant
ST PASA	 AEMO confirmed it will use the 5-minute offer with the lowest availability in each 30-minute period some changes to pre-processing of 5-minute offers no changes to solver or reporting Terminology changes needed in SO_OP_3703 – Short-Term Reserve Management



Debrief on Dispatch Focus Group

Agenda Item	Outcome
RERT	 AEMO confirmed that RERT is already pre-activated, activated, and dispatched on a 5-minute basis Terminology changes needed in SO_OP_3717 – Procedure for the Dispatch and Activation of Reserve Contracts → Rules consultation
Mandatory Restrictions	 MR has never been used, but is needed for Rules compliance AEMO will require identical 5-minute MR offers in each 30-minute period or else will use the last 5-minute MR offer in each 30-minute period some changes to pre-processing of 5-minute MR offers



Blaine Miner



- Held in Sydney on Thursday 18 July 2019
- Agenda
 - Metering Consultation Update
 - June MFG Actions
 - Non-contestable Unmetered Loads
 - MSATS Standing Data Scenarios
 - Proposed Metering Data Quantity and Quality SLAs
 - Readiness Workstream



Agenda Item	Items of Interest
Metering Consultations Overview	 AEMO discussed the PWG support of decoupling the MP2 and ICF consultations, including high-level reasoning AEMO engaged the MFG on the expected length of time participants may require to submit a well considered submission to the MP2 Draft Determination AEMO stated that the MDM Format and Upload process document was being removed from the MP2 consultation, due to it being a non-rules based technical document AEMO requested that where a participant does not agree with an AEMO Draft position, for them to include sufficient context as to why they disagree and to propose an alternative option wherever possible AEMO described the interplay between Procedure effective dates and Readiness workstream plans
June MFG Actions	 Discussion regarding the identification and treatment of SGA connection points Members stated that they did not know which connection points were associated to an SGA at the time of creating a NMI in MSATS AEMO agreed that DNSPs could not identify SGAs efficiently but did suggest that they could identify non-registered embedded generators (NREG) Proposed SGA NMI Classification Code be removed and NREG added AEMO confirmed that all June actions are now considered closed

Agenda Item	Items of Interest
Non- contestable Unmetered Loads	 General discussion regarding various NMI creation models: One NMI to one connection point and one NMI to multiple connection points AGL described their proposed master to child NMI option Multiple child NCUL connection point NMIs linked to one master NMI Participants agreed that a one to one model is preferable but recognised that this arrangement will take time to transition to Participants believed that AEMO should provide for both models in the Draft so that industry can lead the transition Agreement that 'Type 7 approach' works well for predictable NCULs such as watchman lights Members suggested that other less predictable NCULs should be treated as flat 12 or 24hr profiles AEMO recognised issues with having DBs publish certain information to the market e.g. confidentiality concerns AEMO will remove the publishing requirement relating to NCULs in the MP2 Draft Procedures Discussed submission feedback regarding AEMO profiling NCUL instead of MDPs Mest members believed that the required updates to MDP systems should be manageable and that MDPs should perform this function AEMO mentioned that if it had to perform the profiling then Retailers would also need to build this functionality in order for them to be able to validate AEMO's market charges AEMO's draft position will be that the MDP needs to perform this profiling and supply 5min metering data to the market

Agenda Item	Items of Interest
MSATS Standing Data Scenarios	 AEMO not intending to proceed with NMI classification Code of SGA, to be replaced by NREG AEMO not intending to proceed with HYBRID NMI classification Codes, tied up with ESS rule change development and timing Question regarding the provisioning/treatment of Small or Large NCULs In instances where NCULs are being aggregated under one NM, should the NMI be classified as Small or Large? DNSPs prefer procedures to say NCULs are always Small, irrespective of aggregated load, but retailers may have a different view Member asked if the NMI Classification Code is an enumerated list AEMO confirmed that the participant submitted NMI Classification code is validated by MSATS at the time of CR submission using a codes table and it is not based on an Enumerated list. As a result there is no impact to the aseXML schema when introduction new NMI Classification codes Expected process for updating MSATS standing data NMI Classification Codes – as per the standard CATS CR process GLOPOOL updates – updates to be performed by AEMO, supported by applicable participants Implications of the introduction of GLOPOOL MSPs to discuss this issue with NSPs Members mentioned that all of the variations of cross-boundary supplies needs to be discussed and finalised Ausgrid stated that all of these scenarios must be finalised to ensure the correct NSP system validations are developed Members Suggested the need to have a Cross Boundary Guideline to flush out the permutations and the detail

Agenda Item	Items of Interest
Proposed Metering Data Quantity and Quality SLAs	 AEMO stated that some the proposed Quantity SLAs in the MFG slide pack does not reflect the previously distributed slide pack, due to feedback being received from an MDP prior to the meeting MDP feedback suggested that the Quantity SLA for R1/R2 should be 100% AEMO asked what scenarios caused the quantity of reads to not be a 100% by Revision 1 Member mentioned that system deficiencies and manual exception processes resulted in this outcome AEMO asked why MDP systems were not programmed to provide temporary substitutions while manual exceptions were being investigated Member mentioned that substitution methods are different for different meter types, some involve negotiation with other parties and this takes time and manual intervention Members were comfortable with quantity targets being between 99% and 99.9%



Agenda Item	Items of Interest
Readiness Workstream	 Member asked if the introduction of NCULs would result in the need for accreditation updates AEMO stated that this would be dependent on the exact scenario and that these considerations would be addressed as part of the Readiness Workstream Question asked if the Readiness group had developed a 'flow path' about what would happen if certain participants were ready and others were not AEMO stated that the RWG would be considering this issue in the coming months Member made a comment that Readiness appears to be only focusing on 1 July 2021 delivery as opposed to 1 July 2021, 6 February 2022 and 1 December 2022 delivery AEMO commented that Readiness will consider the activities required to successfully implement both Rules Member mentioned that some participants will be delivering their system changes throughout 2021 and 2022 Will be transitioning type 4 and 4A of meters throughout 2022 On average approximately 650 meters per day to deliver 5min data throughout 2022 to meet the 01 Dec 2022 deadline
General Business and Next Steps	 AEMO Stakeholder team will be contacting MFG members to confirm primary contact details Readiness is currently considering if a new call for nominations will be required to support the Readiness centric MFG discussions

Metering package #2 consultation update

Blaine Miner



Metering package #2 – Submissions Overview

Deliverable	Date
Issues Paper published	20 May 2019
Submissions due on Issues Paper	24 June 2019
Draft Report published	5 August 2019
Submissions due on Draft Report	2 September 2019
Final Report published	30 September 2019

- Draft Determination published on Monday 5th August
 - Submissions close Monday 2 Sept (4wks)
 - Final Determination indicative date 30 Sept (At-Risk due to Draft submission extension)
- Material Items
 - Treatment and profiling of non-contestable unmetered loads
 - Metering data quality and quantity requirements
 - Inclusion of MSATS Standing data scenario content into the relevant procedures e.g. NMI Procedure
 - Approach to the removal/replacement of the LR and the introduction of the ENLR

Metering package #2 – Draft Determination Overview

Material Item	AEMO Draft Determination
Treatment and profiling of non-contestable unmetered loads	 Creation of NCUL NMIs in MSATS AEMO's Metering Procedures e.g. Metrology Procedures: Part A & Part B will explicitly allow for both a one NMI to one device and a one NMI to multiple device arrangement. Classification of NCULs AEMO considers that the inclusion of one new NMI Classification Code of 'NCONUML' and one associated Meter Installation Type code of 'NCONUML' will adequately support the correct treatment of these supplies in the market. Profiling of NCULs Predictable loads Discretion should be provided to metering coordinators (MCs) as to when a 'Type 7' methodology could be applied in profiling NCULs. Unpredictable loads Procedures should align as much as possible to the existing methodologies used to support retail and network billing of these supplies. Profiling arrangements should be agreed between the Distributor, Retailer and the Customer.
Changes to the metering data quantity and quality requirements	- AEMO maintains that the delivery of timelier and more accurate metering data from MDPs will result in more accurate and efficient market settlement outcomes. AEMO does however acknowledge that implementing 100% targets could result in unintended consequences and does not provide for legitimate exception scenarios.

Metering package #2 – Draft Determination Overview

Material Item	AEMO Draft Determination
Exemption Procedure: Metering Provider Data Storage Requirements	 The draft exemption procedure will account for the modifications to clauses 7.1.2 and 7.8.2 of the NER for Victorian advanced metering infrastructure (AMI), as applicable in Victoria only. There is no change to the position that data storage exemptions will only be considered for applicable interval meters that just fall short of Rule 7.8.2(a)(9) of the NER i.e. 30-34 days of storage.
Treatment and maintenance of the LR and FRMP fields	 A new notional Market Participant ID of 'GLOPOOL' will be introduced to effectively remove the applicable LR obligations and notifications in MSATS.
Global Settlement Connection Point Scenarios	 Additional NMI Classification Codes will be introduced to appropriately identify and allocate various connection point loads from 1 July 2021 to support UFE publication requirements. BULK Connection point where a Transmission Network connects to Distribution Network - also termed 'Bulk Supply Point' DWHOLSAL Distribution network connection point where energy is directly purchased from the spot market by a Market Customer NCONUML NREG Connection point associated with a non-registered embedded generator, i.e. a generating unit that is not classified by a registered Market Generator with AEMO, but may be classified by a Small Generation Aggregator as a market generating unit. XBOUNDRY Distribution Network to Distribution Network connection point

Forward meeting plan

Emily Brodie



Upcoming meetings

- Procedures Working Group meeting:
 - TBC
- Readiness Working Group:
 - Tuesday 27 August 2019
- Next Systems Working Group
 - Monday 19 August 2019
- Next Executive Forum
 - Monday 11 November 2019
- Next Program Consultative Forum
 - Friday 6 September 2019
- 5MS Meetings and Forum Dates: <u>http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement</u>



General questions

Emily Brodie



