# FIVE MINUTE SETTLEMENT – METERING PROCEDURE CHANGES (PACKAGE 2)

# **PROCEDURE CONSULTATION**

# FIRST STAGE PARTICIPANT RESPONSE TEMPLATE

Participant: EnergyAustralia

Submission Date: 24 Jun 2019

# **Table of Contents**

1.	Context	3
2.	Metrology Procedure: Part A	3
3.	Metrology Procedure: Part B	4
4.	Meter Data File Format (MDFF) Specification NEM12 & NEM13	6
5.	MSATS Procedures: MDM Procedures	6
6.	MSATS Procedures: MDM File Format and Load Process	8
7.	MSATS Procedures: CATS Procedure Principles and Obligations	9
8. (WI	MSATS Procedures: Procedure for the Management of Wholesale, Interconnector, Generator and Sample GS) NMIs	
9.	National Metering Identifier	13
10.	NEM RoLR Processes – Part A	14
11.	Service Level Procedure: Metering Data Provider Services	15
12.	Exemption Procedure: Metering Installation Data Storage Requirements	17
13.	Retail Electricity Market Glossary and Framework	18
14.	Other Issues Related to Consultation Subject Matter	18

# 1. Context

This template is being provided to assist stakeholders in giving feedback about the changes detailed in the initial draft procedures associated with the 'Five-Minute Settlement Metering Procedure Changes – Package 2' consultation.

The changes being proposed focuses on supporting the implementation of:

- The Five-Minute Settlement (5MS) Rule
- The Global Settlement (GS) Rule
- Changes to the delivery, format and content contained in the meter data files sent to AEMO.

#### 2. Metrology Procedure: Part A

Section	Description	Participant Comments
12.3, 12.4, 12.7	Provisions for non-contestable unmetered loads	The transfer of non-contestable unmetered load data is dependent on AEMO's decision on the framework for calculating and storing this in MSATS. Should AEMO choose to treat non-contestable unmetered load with and without PE (photoelectric cells) differently a review of these clauses might be warranted.
12.4	Removal of 'First Tier' references	No comment

# 3. Metrology Procedure: Part B

Section	Description	Participant Comments
2.2, 2.5, 3.2, 3.3.6, 3.3.8, 4.2, 4.3.3, 4.3.5, 4.3.6, 5.2.1, 5.2.6, 5.3.4, 5.3.6, 6.1, 6.2.4, 14.2.2, 14.3	Provisions for embedded network local retailers (ENLR)	Administrateively it should be noted that this also effectively removes the LR references and we note AEMO has taken a similar approach to the other procedures.
6.1, 11.4, 12.3, 13.1.2, 13.1.3, 13.1.4, 13.2.1, 13.3.1	Provisions for non-contestable unmetered loads	See comments above relating to Provisions for non-contestable unmetered loads for Metrology Procedures Part A. 11.4 – this assumes that non-contestable unmetered load will be profiled on a 5minute basis and the distribution loss factors and marginal loss factors (DLF and MLF) computed on that basis as well – or is DLF and MLF to be calculated by aggregating the intervals? (please clarify). This also appears inconsistent with 12.4(c) – <i>"The metering data for individual NMIs is adjusted by MLF and DLF for NSLP calculations, but is not adjusted by MLF and DLF for UFE calculations"</i> Our suggestion is that losses should be applied to the calculation of UFE. @ 13.1.2, 13.1.4 – agreed and support

Section	Description	Participant Comments
		We also note there is an assumption that unmetered noncontestable load is calculated the same way as Type 7 (i.e. profiled using a formula) and, similar to our comments above, believe a review of this might be warranted if AEMO's position on UFE and unmetered non-contestable load changes.
11.1.2, 11.1.3, 11.2.2, 11.2.3, 11.3.1, 11.3.2, 11.3.3, 11.4, 11.5, 12.3, 12.4	Removal of 'First Tier' and 'Second Tier' references	It might be appropriate to clarify how sample meter NMIs are going to be classified under the new NMI classification codes.
11.2.1	Removal of 'Local Retailer (LR)' references	
11.3.3, 11.4, 12.4, 13.2.5	Change in formulas	See comments on 11.4 above
11.4, 12.3	Provisions for 'bulk supply'	
12.4	Provisions for UFE (unaccounted for energy)	See comments above on 11.4 – clarification requested on whether MLF/DLF is to be applied to UFE and/or its components (i.e. unmetered

Section	Description	Participant Comments
		non-contestable load)

# 4. Meter Data File Format (MDFF) Specification NEM12 & NEM13

Section	Description	Participant Comments
1.1	Include AEMO as a relevant party	As the MDFF file format is now going to be used for delivery from the MDP to AEMO and to market participants via B2B, we suggest that further work be undertaken by AEMO to make consistent, where possible, processes and terminology, and that this can be done through guidance or explanatory statements in other documents. An example can be a consistent understanding of timing for updating substituted reads, and responding to exception processes.

#### **5. MSATS Procedures: MDM Procedures**

Section	Description	Participant Comments
1.3	Inclusion of the MDM File Format and Load Process document	
3.2.11, 3.2.14, 3.2.15, 3.2.16, 9.3	Removal of 'First Tier' and 'Second Tier' references	
3.2.14, 3.2.16, 9.5, 9.6, 9.7	Inclusion of five-minute provisions	
3.2.15, 3.2.16	Provisions for 'bulk supply'	
3.2.15, 3.2.16, 9.2, 9.3, 9.4, 9.5, 9.6, 9.8, 9.9, 9.10	Provisions for embedded network local retailers (ENLR)	
3.2.16,	Removal of 'Local Retailer (LR)' references	
6.3, 6.4	Removal of aseXML csv payload tag reference	

9.5	Removal of MDM RM14 MDP Data Version Comparison report	Removal of 9.5/6 report – See above points on 4. Meter Data File Format (MDFF) Specification NEM12 & NEM13. This is an example of information which should have a consistent understanding regardless of whether the MDP is delivering MDFF to AEMO or a market participant.
9.6	Removal of MDM RM15 Multiple Versions report	Removal of 9.5/6 report – See above points on 4. Meter Data File Format (MDFF) Specification NEM12 & NEM13. This is an example of information which should have a consistent understanding regardless of whether the MDP is delivering MDFF to AEMO or a market participant.
9.9	Removal of MDM RM18 Electricity Interval Data report	
Appendix A	Provisions for FTP and API delivery method	

#### 6. MSATS Procedures: MDM File Format and Load Process

Section	Description	Participant Comments
1.1, 2.2, 3.1, 3.3, 3.4, 3.5, 3.7, 3.9, 3.10, 5.2, 5.2.5, 6	Provisions for MDFF (Meter Data File Format)	
1.3	Inclusion of additional 'Related Documents'	

3.6	Changes to table content	
3.7, 3.8, 3.9, 3.12, 4.4.1	Removal of sections, including references to netting and aggregating to 30-minute	
3.8, 5.1	Changes to MDMF content	
3.11	Inclusion of file size references	
4	Inclusion of Meter data messaging exchange content	
3.1, 3.3, 3.10, 3.12, 4.2	Provisions for FTP and API delivery method	

# 7. MSATS Procedures: CATS Procedure Principles and Obligations

Section	Description	Participant Comments
Quick Reference Guide, 3.4, 3.7, 3.7.2, 4.2	Removal of Change Reason Code 1050, 1051, 1090, 1091, 2003, 3003, 3053, 4003, 4053, 5053, 5090, 5091, 6400, 6401	Removal of Change Request (CR) 6401 – how will child NMIs be fixed if the ENLR is assigned incorrectly? What about for future requests, will any validation for LR or ENLR be provided in MSATS for CR? AEMO might need to consider if CR6421 will allow the change of ENLR prospectively and whether there is a use case for this (e.g. change of parent NMI meter FRMP, resulting in change in ENLR), and whether a

		analogous CR for the ENLR to CR6400 Change LR is needed for a prospective change (i.e. how CR6401 is being replaced by CR6421 for the ENLR function).
Quick Reference Guide, 2.2, 2.6, 3.6, 4.2, 4.3, 4.15, 9.5, 12.8, 15.7, 16.7, 17.7, 18.8, 19.8, 20.7, 21.7, 22.7, 23.7, 25.9, 25.10, 27.7, 28.7, 30.7, 31.8, 32.7, 33, 34.7, 35.8, 36.9, 37.1, 37.5, 39.7	Provisions for embedded network local retailers (ENLR)	In the scenario where an on-market NMI goes off-market, currently the FRMP for the off market customer is listed as Parent FRMP. Roles and responsibilities for child NMIs should be clarified, for example the responsibility for raising a CR1XXX when a child connection point moves from on-market (with a NEM registered retailer) to off-market. We understand AEMO has incorporated expected rule changes in embedded networks and support this approach, and request AEMO consider if the above scenarios have been adequately considered for assigning the ENLR.
2.9, 3.2, 4.11.2	Removal of 'First Tier' and 'Second Tier' references	
3.2, 3.4, 4.15, 7.5, 11.4, 11.7, 11.8, 13.4,	Removal of Local Retailer (LR) references	Removal of 3.2(i), <i>MSATS will not notify the LR at the time a change of FRMP occurs</i> – does this clause need to cater for the ENLR?

13.6, 13.7, 25.9, 26.7, 29.7, 33		We suggest there might be value in AEMO making validations and responsibilities for populating the LR field as "GLOPOOL" consistent across TNSP and DNSP level should there be a future need to reconcile UFE at those levels – we consider this as an "easy win" for future proofing should UFE levels be high in future. We request clarity be provided in the MSATS Procedures (perhaps through an explanatory statement) that while the references to Local Retailer (LR) are removed, this does not mean the LR field is going to be removed but rather, the field is going to be populated with GLOPOOL. We request clarity on whether the FRMP field will be changed for cross boundary sites currently assigned to the LR and what an appropriate treatment for this is. 33 – see above comments on CR 6421
3.7.1, 3.7.2	Changes in table references	
4.9	Addition to and modification of NMI Classification Codes	
4.12	Addition of 'Non-contestable Unmetered Load' Metering Installation Type Code	We suggest that validations be provided in MSATS so that an erroneous transfer of a NCONUML site is not valid. Correcting for an erroneous transfer in these instances can often be a tedious process and result in network billing issues and complexities.

		See also our comments on 2.4(e) of the National Metering Identifier document. We recommend that validations take both into consideration.
4.11.2, 4.17	Provisions for UFE (unaccounted for energy)	
Various	Updated table and section references throughout the document	

# 8. MSATS Procedures: Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs

Section	Description	Participant Comments
Quick Reference Guide, 23	Removal of Chane Reason Code 1050, 1051, 6400 and 6401	
9.7, 10.7, 11.7, 12.7, 13.7, 14.7, 15.7, 18.7, 20.7, 21.9, 22.7, 23, 25.8, 26.7, 27.1, 28.1, 28.5	Provisions for embedded network local retailers (ENLR)	

5.7, 5.8, 7.6, 7.7, 16.9, 16.10, 17.7, 19.7, 24.7	Removal of Local Retailer (LR) references	
Various	Updated table and section references throughout the document	

# 9. National Metering Identifier

Section	Description	Participant Comments
2.2	Updates to LR population e.g. 'GLOPOOL'	See comments on 7. MSATS Procedures: CATS Procedure Principles and Obligations relating to removal of LR references
2.2	Provisions for embedded network local retailers (ENLR)	
2.4, 7	Provisions for non-contestable unmetered loads	2.4(e) A change of one attribute (FRMP, TNI, DLF, LNSP), or a change of End User, will not of its own require an abolition of the NMI.
		AEMO will need to determine if a new CR (or a CR with appropriate validations) is needed, that minimises the likelihood of participants erroneously transferring non-contestable unmetered load if a change in an attribute is needed for the NMI E.g. in 2.4(g). Suggested alternatives are either a new CR, or appropriate validations.

		Also refer to our comments on 4.12 of the MSATS Procedures: CATS Procedure Principles and Obligations. Overall we consider that the provisions appear to be sensible at this stage.
7, 9.3	Removal of net data and net datastream references	
3, 7.2	Provisions for 'bulk supply'	
7, 9.3	Removal of meter data to AEMO requirements	

#### 10. NEM RoLR Processes – Part A

Section	Description	Participant Comments
2, 4.3.2, 6.1, 11.3, 12.3	Removal of Local Retailer (LR) references	
2, 3, 6.1, 7.1, 11.2, 12, 13, 15.1, 18.2, Appendix 1	Provisions for embedded network local retailers (ENLR)	
6.1, 12	Removal of Second Tier references	

Appendix 1	Inclusion of Average Daily Loads (ADLs) in the ROLR_013 report	What time period does the ADL relate to? While ADL should be sufficient for understanding the load profile of mass market customers, ADL is insufficient for a ROLR to understand the profile of a large customer (e.g. industrial) that has been transferred as a result of the ROLR event.
		In normal circumstances, a retailer would need at least 12 months of interval data to be able to fully understand a large customer's profile shape. Rather than Average Daily Load, a retailer needs the daily profile and maximum demand to prudently manage price risk for a large customer load as a retailer needs to know the magnitude of it's exposure to high prices. Further, understanding a customer's seasonal profile and maximum demand is critical for accurately pricing a customer during the transfer process.
		We request that additional historical data relating to the profile shape of the transferred customers be provided to the ROLR, at least for large customers. We propose that at least a month of energy data at 30 or 5 minute granularity (as appropriate) and a maximum demand (MW) be included. This can be either included in the ROLR_013 (for maximum demand) report, or provided by AEMO, which is now receiving MDFF files directly from the MDP.
		An appropriate threshold would be by customer classification, or an appropriate consumption threshold considered by AEMO.

# 11. Service Level Procedure: Metering Data Provider Services

Section	Description	Participant Comments
1.3	Inclusion of additional related document	
2.4.1	Inclusion of 5 February 2022 reference	
3.7.1	References to MDM format and MDMT transaction groups	
3.10, 3.11, 3.12.2	Provisions for non-contestable unmetered loads	
3.12.4	Provisions for MDPs to deliver AEMO all Datastreams related to settlements ready data and any other metering data configured in the metering installation to support UFE calculations	
3.12.4	Changes to metering data quantity and quality requirements	<ul> <li>We suggest that AEMO should clarify that service levels should align with the additional intervals (for remotely read metering data); i.e. a 2% estimation and "A" or "F" quality flag threshold should be applied to the total number of intervals, e.g.:</li> <li>For 15 min intervals -&gt; 96 intervals a day X 90 days (Quarterly Billing frequency) = 8640 Intervals -&gt; @2% Estimation threshold, we expect 8468 Intervals to be with Actual reads.</li> <li>For 30 min intervals -&gt; 48 intervals a day X 90 days (Quarterly Billing frequency) = 4320 Intervals -&gt; @2% Estimation threshold, we expect 4234 Intervals to be with Actual reads.</li> </ul>

		<ul> <li>For 05 min Intervals -&gt; 288 Intervals a day X 90 days (Quarterly Billing frequency) = 6912 Intervals -&gt; @2% Estimation threshold, we expect 6774 Intervals to be with Actual reads.</li> </ul>
3.12.5, 3.14.1, 3.14.2	Changes to method of delivery of data	
5.1	Changes to meter churn scenio content, including the provision for having to send associated MDFFs to AEMO as well as to participants	<ul> <li>We request that a consistent understanding of fields, including the <i>UpdateDateTime</i> (in the 300 record in the MDFF file), be adopted so as to harmonise the delivery of MDFF files to participants and AEMO.</li> <li>Timeframes for AEMO to request that an MDP amend or correct data should also ideally be harmonised with the B2B framework for providing PMD/VMD transactions.</li> <li>It would also be useful to clarify how a meter churn scenario is reflected in the MDFF files technically (i.e. whether 2 separate MDFF files are used or 1) in delivery to AEMO.</li> </ul>

# **12.** Exemption Procedure: Metering Installation Data Storage Requirements

Section	Description	Participant Comments
New Procedure		

# **13.** Retail Electricity Market Glossary and Framework

Section	Description	Participant Comments
1.3	Inclusion of an addition related document	
2.2, 2.7.7	References to the Exemption Procedure: Metering Installation Data Storage Requirements	
2.6.2	Inclusion of bulk supply and/or cross boundary references	
5	Changes to terms including the addition of ENLR and UFE and modifications to first tier, second tier and FRMP related terms	a definitionshould be included for Non contestable unmetered load

# 14. Other Issues Related to Consultation Subject Matter

Heading	Participant Comments
Implementing and transitioning to the changes in delivery of metering data to AEMO	
<ul> <li>Do the proposed changes in the applicable initial draft change-marked procedures</li> </ul>	Where AEMO is required to make clauses effective prior to "go-live" of 1 July 2021, for example, the collection of UFE data 6 months prior, this should be made more explicit for ease of

Heading	Participant Comments
implement the required changes in section 2.2.5 in an effective manner?	participant implementation. We expect that coordination and responsibility for NMI classification changes (from participants) and FRMP to LR bulk changes (performed by AEMO) will be addressed in the Readiness Working Groups, and request that this information be published or widely circulated prior where available.
• Will the proposed transitional arrangements assist MDPs and other market participants in transitioning to the new procedural requirements?	
<ul> <li>Is including transitional arrangements in the relevant procedures the most effective way of implementing transitional arrangements? If not, what would be the preferred alternative approach?</li> </ul>	
Non-contestable Unmetered Loads	
<ul> <li>How should non- market/contestable unmetered loads be processed and maintained in MSATS?</li> </ul>	We consider that while non-contestable unmetered loads remain non-contestable, AEMO's current proposed framework for setting up a NMI (contained within the consultation documents) suffices for present needs. While differences in profiling methodology for NCONUML with and without PE cells might be

Heading	Participant Comments
<ul> <li>Should non-contestable unmetered loads with photoelectric (PE) cells be treated in a similar manner to Type 7 unmetered loads and why?</li> <li>Should non-contestable unmetered loads which do not have photoelectric (PE) cells be treated differently to those that do? If yes, how should these loads be treated?</li> </ul>	<ul> <li>warranted should there be sufficient quality data, we consider that currently, there isn't a strong case for the added complexity and cost of allocating this specific subset to different NMIs, and would need to be further considered by AEMO as to whether the cost and justification was warranted, together with other solutions (e.g. metering a subset of similar loads, and using statistical extrapolation to similar loads).</li> <li>We consider that DNSP provided data is often sufficient for off-market billing and in the absence of an agreed upon methodology for load profiling, this appears to be the most pragmatic solution that is sufficient for present needs.</li> <li>We recommend that AEMO formally reviews whether further work is needed in this area after sufficient UFE trend reports are produced to determine whether UFE has risen materially, and whether more granular visibility of unmetered load in MSATS is warranted.</li> <li>A further solution that is appropriate with additional complexity and cost, can be considered by AEMO and DNSPs should there be further developments in this area.</li> </ul>
What should be considered in creating and assigning non-contestable unmetered NMIs in MSATS e.g. introducing a new Metering Installation Type Code (NCONUML) and why?	As with our comments above, we suggest that validations be provided in MSATS so that an erroneous transfer of a NCONUML site is not valid. Correcting for an erroneous transfer in these instances can often be a tedious process and result in network billing issues and complexities. These should be considered together with the process for changing the attributes of a NCONUML NMI if required.
What would be the most accurate methodology for	We don't have any specific methodology to suggest, however in practice it may not be easy to

Heading	Participant Comments
calculating and applying a load profile to non- contestable unmetered loads	get the DNSP, retailer and customer (which is often a large customer with significant bargaining power, e.g. a telco or a council) to agree on a load profile.
and why?	We therefore suggest there might be merits in publishing guidelines on principles for estimating the loads in consultation with the parties involved, and further work to be done in this area for
	consistent methodology in estimation of UFE. A potential framework might prescribe a default methodology, with any departure from the methodology subject to agreement of all parties.
Service Levels for Meter Data Provider Services	
Will AEMO's proposed arrangements likely result in more accurate market settlements and why?	We suggest data quality flags be aligned to the intervals the data is collected in (i.e. 5/15/30). See detailed comments provided on the Service Level Procedure: Metering Data Provider Services.
Exemption Procedure: Metering Provider Data Storage Requirements	
<ul> <li>Do you believe that AEMO's proposed exemption procedure clearly articulates the conditions and process for applying for a data storage exemption and why?</li> </ul>	