FIVE MINUTE SETTLEMENT – METERING PROCEDURE CHANGES (PACKAGE 2)

PROCEDURE CONSULTATION

FIRST STAGE PARTICIPANT RESPONSE TEMPLATE

***Participant**: AGL*

***Submission Date**: 24 June 2019*

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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 – 6 Feb 2022

Met A Section	Description	Participant Comments
AGL General		
3.1.(d) AGL	Update to include International Standards covered in 3.1.(b) and 3.1.(c).	The Feb 22 version does not include the updates made to the May 20 version for IEC standards etc.
12.3	Provisions for non-contestable unmetered loads	Noting the AEMC comment that UMS could be contestable in the future, AGL suggests that the word non-contestable be removed. This clauses pre-supposes that non-contestable unmetered loads will not have individual NMIs (ie will use inventory tables) and only require On/Off tables. AGL would expect that these loads should have individual NMIs and that the 5ms profiles may be more complex than simple On/Off, and may require load variation and seasonal adjustments. As such, AGL believes that this amendment may not be suitable, and may drive solutions (eg bulk NMIs, inventory tables) which are not appropriate for the non-type 7 UMS devices..
12.4		AGL supports this change.

Met A Section	Description	Participant Comments
12.5(a) AGL		Verification amendments not shown
12.7		AGL notes the changes for this clause but suggests that clause (c) is insufficient and pre-supposes that unmetered loads do not have individual NMIs identifying an agreed load and load profile. AGL suggests that a further clause dealing with load and load profile should be added here. See also comments below. AGL suggests that the framework for non-contestable unmetered load requires further development and the proposed changes are not sufficient. See notes below.
12.4	Removal of 'First Tier' references	Noted – AGL supports the change.

Met A Section	Description	Participant Comments
AGL		Non-Contestable Unmetered Load - General Comments AGL believes that unmetered loads will require individual NMIs to manage the connection point data (ie location, load, contract etc.) and the obligations for issuing outage notices. AGL has suggested that given the potential for a substantial number of very small load connections or large numbers of identical devices, that consideration be given to creating an additive parent child relationship, so that the connection point data can be managed at an individual NMI level, but that profiles, network bills and customer billing can be managed at a virtual parent NMI level. In terms of the metrology for these unmetered loads, AGL does not support them being blocked into the Type 7 category (which presupposed very predictable loads) but rather suggests that there be two further categories – Type 8 and Type 9. For instance: • Type 8 would be small loads where the load profile is entirely calculated; • Type 9 would be where the load profile would be supported by sample meters, network devices etc. This differentiation would provide clarity to participants and customers on the issues associated with the load profile and billing.

3. Metrology Procedure: Part B – 6 Feb 2022

Met 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)	AGL notes the proposed change for Global settlements but considers that a substantial change to any site (T1 or T2) will impact all retailers through changes to the UFE calculations. AGL suggests that this process needs discussion and potentially reporting for parties to manage their position.

Met B Section	Description	Participant Comments
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	AGL notes the inclusion of provisions for non-contestable unmetered load in these sections, but the amendments pre-suppose that these connections will not have individual NMIs, but rather operate on inventory tables. AGL believes that UMS needs further discussion to cover the process from customer request through to customer billing. See previous comments. Overall, AGL believes that the UMS framework needs further discussion prior to procedural changes to ensure a flexible but accurate regime. Non-Type 7 UMS loads may have more variance in load characteristics than standard type 7, including seasonal load increase (eg cabinet fans) seasonal load decrease, seasonal usage (eg BBQs) and so forth. AGL does not believe that simple On-Off is adequate.
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	Noted

Met B Section	Description	Participant Comments
11.2.1	Removal of 'Local Retailer (LR)' references	Noted.
11.3.3, 11.4, 12.4, 13.2.5	Change in formulas	Noted.
11.4(d)		Noted.
11.4, 12.3	Provisions for 'bulk supply'	Noted – formula on p34, 4th line uses the term 'constable unmetered ..' not 'non-contestable …'
12.4	Provisions for UFE (unaccounted for energy)	Noted. AGL Supports the change.

Met B Section	Description	Participant Comments
13.1.2	NCUL	Noted. AGL does not believe that these proposed provisions are necessarily appropriate or sufficient. The proposed obligations require the LNSP to '*publish*' a list of loads, a load table and manage an inventory table – it is not clear why this is required to be a pubic list, given that these devices are presently non-contestable. There is an assumption that each group of devices within this category will fit into a load group, which AGL disagrees with. The obligations pre-suppose an inventory table not individual NMIs for each connection; These devices have become part of this group of devices as a result of being varied and less predictable. For example, each Council will have multiple devices which are garden sprinklers with varying loads. AGL has proposed a NMI parent-child additive framework to allow individual devices to be connected, registered and identified, but grouped by customer and profile to efficiently manage numerous similar loads and simplify network, market and customer billing.

Met B Section	Description	Participant Comments
13.1.4(b)		AGL does not agree with this requirement for non-contestable unmetered loads. At the very least the NMI would also have to have the same 5ms profile, but this would not resolve the issue of connection point management or management of outage notices to end users. AGL's parent-child NMI proposal meets these requirements and allows for individual connection management through on-market service orders, including connection, abolishment and de-energisation. While this framework may be suitable for public lighting where the network manages the inventory and asset, AGL does not believe that it is suitable for an environment where the customer can change individual assets.
13.2.1 AGL		AGL has previously noted that it believes that the NMI classification of NCONUML defines the type of connection, but that these connections should be broken into a metering Type 8 and Type 9 classification to differentiate between purely profiled, or profiles based on sample meters or network devices.

4. Meter Data File Format (MDFF) Specification NEM12 & NEM13 – Dec 2020

MDFF Spec Section	Description	Participant Comments
1.1	Include AEMO as a relevant party	Noted. AGL Supports the change.

5. MSATS Procedures: MDM Procedures – 1 Dec 2020

MDM Proc Section	Description	Participant Comments
1.3	Inclusion of the MDM File Format and Load Process document	Noted. AGL Supports the change.
3.2.11, 3.2.14, 3.2.15, 3.2.16, 9.3	Removal of 'First Tier' and 'Second Tier' references	Noted. AGL notes that the file size/volume for metering transactions has been specified, but that the B2B file sizes have not, and understands that this size/volume is yet to e tested and may be amended once tested. AGL is unsure how this information will be amended particularly if the change needs to be undertaken quickly as it is now hard wired into a procedure. AGL also suggests that this information needs to clearly state that it impacts meter data files only and that other transactions (especially B2B) are defined elsewhere.
3.2.14, 3.2.16, 9.5, 9.6, 9.7	Inclusion of five-minute provisions	Noted. AGL Supports the change.

MDM Proc Section	Description	Participant Comments
3.2.15, 3.2.16	Provisions for 'bulk supply'	Noted. AGL Supports the change.
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)	Noted. AGL Supports the change.
3.2.16,	Removal of 'Local Retailer (LR)' references	Noted. AGL Supports the change.
6.3, 6.4	Removal of aseXML csv payload tag reference	Noted. AGL Supports the change.
9.5	Removal of MDM RM14 MDP Data Version Comparison report	Noted. AGL Supports the change.
9.6	Removal of MDM RM15 Multiple Versions report	Noted. AGL Supports the change.
9.9	Removal of MDM RM18 Electricity Interval Data report	Noted. AGL Supports the change.
Appendix A	Provisions for FTP and API delivery method	Noted. AGL Supports the change.

6. MSATS Procedures: MDM File Format and Load Process – Dec 2020

MDM File 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)	Noted.
1.3	Inclusion of additional 'Related Documents'	Noted.
3.6	Changes to table content	Noted.
3.7, 3.8, 3.9, 3.12, 4.4.1	Removal of sections, including references to netting and aggregating to 30-minute	Noted.
3.8, 5.1	Changes to MDMF content	Noted.
3.11	Inclusion of file size references	Noted.
4	Inclusion of Meter data messaging exchange content	Noted.

MDM File Section	Description	Participant Comments
3.1, 3.3, 3.10, 3.12, 4.2	Provisions for FTP and API delivery method	Noted.

7. MSATS Procedures: CATS Procedure Principles and Obligations – 6 Feb 2022

MSATS: CATS Section	Description	Participant Comments
Various	Updated table and section references throughout the document	AGL notes that what will become a previous version to this document (v4.8) has had the Table numbering changed eg from 4-A to 4-1. This change is not reflected in this version.
General AGL		Noted. Although these have not been updated compared to v48.
General AGL		AGL notes that there are multiple instances (eg Cl 7.7 through to 42.3.4 iv) where table references have not been updated from A,B,C etc. to 1,2,3 etc. assuming v48 is authorised prior or v50.
General AGL	MSATS Field Names	AGL queries whether the LR field name will be updated to ENLR or left as LR, in the same way that RP has been left for MC, within this Procedure ?
General AGL	Change of Column from LR to ENLR	AGL nots that in a number of instances, there are various tabled where the column showing in one table is LR and in another it is ENLR – eg Tables 19-B vs 19-C. AGL suggests all these tables be reviewed.
General AGL	CR Validation for NCOMNUCL NMIs	AGL suggests that NCONUML NMI types have a validation against them to stop them being transferred via MSATS via MSATS Change Requests.

MSATS: CATS Section	Description	Participant Comments
AGL General	Process for managing cross border NMIs	The Metering Focus Group discussed the requirements for managing cross border LV NMIs by up[dating TNI and DLF. The process seemed a simple and effective method, however, that process or an outcome, now needs to be captured and published to provide guidance to LNSPs to manage these NMIs. It is also unclear if this change can be implemented ahead of the 5ms/global go live dates or whether settlements would be affected. If it can be implemented early, then AGL should suggest that the framework be implemented as soon as possible to allow networks to start migrating cross border NMIs at their earliest opportunity.
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	Noted. AGL Supports the change.

MSATS: CATS Section	Description	Participant Comments
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)	Noted. AGL Supports the change.
2.1 (h) AGL		AGL notes that only some, but not all, of the proposed changes to v6.8 (inclusion of words 'for which') have been made to this Draft v7. AGL assumes this is the effectively a typo
2.3 (e) AGL		AGL suggests that the obligation to update the Customer Threshold Code be extended from NMI status 'A','D' to include NMI Register Codes as well, as it is expected over time that customer energisation will more frequently be done by Register Status rather than NMI.

MSATS: CATS Section	Description	Participant Comments
2.3 (h)/(i) AGL		AGL suggest that five business days to update a NMI status Code is too long, and suggest that this be **one** business day.
2.10 (m)/(n) AGL		AGL suggest that five business days to update a NMI status Code is too long, and suggest that this be **one** business day. AGL also queries if there are or can be any accumulation meters (either parent or child) within an embedded network, or if they are, then they should be replaced over a defined period with interval meters.
2.9, 3.2, 4.11.2	Removal of 'First Tier' and 'Second Tier' references	Noted. AGL Supports the change.
2.9 (b) AGL		AGL suggest that this be extended from 'LNSP' to 'LNSP and ENM' for management of DLF codes.
3.2, 3.4, , 7.5, , 11.7, 11.8, 13.4, 13.6, 13.7, 25.9, 26.7, 29.7, 33	Removal of Local Retailer (LR) references	Noted. AGL Supports the change.
4.15		
3.7.1, 3.7.2	Changes in table references	Noted. AGL Supports the change.

MSATS: CATS Section	Description	Participant Comments
4.9	Addition to and modification of NMI Classification Codes	Noted. AGL Supports the change, however, suggests that definitions which require changes to Classification types (eg DHYBRID) need to be specific where the load boundary point is. The use of 'significant' is rather ambiguous, and likely to lead to the classification not being used correctly. Also, noting that industry has other obligations to define customers as small/Large, if these new characteristics can be applied to small and large sites, then there will need to be a further sub-designation, or the classification description should define that they only apply to Large.
4.10.2	Consumption	Should there be consideration of a UMS consumption Identifier. Noting that Unmetered connections cannot be requested by a residential party, but only by an Authority (eg Telco, Water etc.), Local Government (or business if Watchman lights are included), then there should be a note to specify that an unmetered connection should by definition be a 'Business' classification.
4.11.1	NMI Status Codes	Noting the proposed designation of UMS, this table be updated to reflect that non-contestable UMS will now be a market load and are non-contestable.

MSATS: CATS Section	Description	Participant Comments
4.12	Addition of 'Non-contestable Unmetered Load' Metering Installation Type Code	Noted. AGL reiterates its position, that while UMS may be non-contestable at present, that is likely to be transitory, and therefore should be more appropriately labelled. Further, AGL suggests there be a split between UMS supported by a network device / sample meters for profile measurement and ones which have no network device, and that these be designated as UMS Types 8 and 9. AGL notes that Cl 4.12.1(a) contemplates the use of profile meters for NCONUML.
4.11.2, 4.17	Provisions for UFE (unaccounted for energy)	Noted. AGL Supports the change.
11.4 / 13 / 14	Create NMI	AGL suggests that further work is required to accommodate the creation of unmetered NMIS. Much of the required information may be irrelevant, while aspects such as customer, customer asset ID, load and load profile are crucial. AGL also notes that should its proposal on parent child NMIs be accepted, Cl 14 may require updating to incorporate child UMS NMIs.
12.7 AGL		As the LR field is now being used for the ENLR, should the ENLR have the ability to object to a child NMI being allocated to it as ENLR – under code NOTRESP. Should table 12-A, 12-B be updated from LR to ENLR, as this is a child NMI creation.

MSATS: CATS Section	Description	Participant Comments
11.7 /11.8 AGL	Objection Rules	AGL notes that the LR objections have been deleted, but queries where the requirements for the ENLR have been placed and would expect them to largely follow the various codes for the FRMP.
12.7 AGL		AGL notes that there is no inclusion of an ENLR column in these tables or many of the other tables. The market requirements for an ENLR are different from those of an LR, so these tables require further review.
39 AGL	Standing Data Updates	AGL suggests that the conditions precedent for standing data updates be extended to cover the new NMI classifications being proposed – eg DHYBRID, THYBRID etc. AGL suggests that all the conditions precedent be reviewed for application of the various NMI Classification Codes.

8. MSATS Procedures: Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs – 6 Feb 2022

MSATS:WIGS Section	Description	Participant Comments
Various AGL		Table re-numbering Note that the Table Numbers have been changed in v48 from 4-A to 4-1, but have reverted back in this version 5 to 4-A etc.
Various AGL		Throughout this document, there are instances where LR has been updated to ENLR, and multiple places where LR remains. The changes seem inconsistent and more consideration of the role and obligations of an ENLR are different from those of an LR.
General AGL		This document doesn't consider the NMI types THYBRID, DHYBRID, XBOUNDRY etc. AGL would expect this Procedure to require these NMI classifications to be used and be conditions precedent for some processes.
AGL General	Process for managing cross border NMIs	The application and requirements for using the newly created NMI types needs to be completed and AGL would expect this procedure to require those updates.
3.8		Changes to CR 1080 noted.

MSATS:WIGS Section	Description	Participant Comments
Quick Reference Guide, 23	Removal of Change Reason Code 1050, 1051, 6400 and 6401	Noted. AGL supports the change. In further reviewing the change from LR to ENLR, a review of the objection codes is needed, as this role change is more of a FRMP role change than an LR role change, and the other – eg Table 3-C/3-3 p21
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)	Should Cl 27 include ENLR as a role which can be changed – eg 27(a) and 27.3(h) ?
5.7, 5.8, 7.6, 7.7, 16.9, 16.10, 17.7, 19.7, 24.7	Removal of Local Retailer (LR) references	It is unclear if there are some remaining role categories for LR (see Table 5-B/5-2) of if all LR roles are now ENLR. AGL notes that for various codes – eg CR2020, the ENLR is identified in the notification table (but the LR isn't identified) whereas in the objection table the LR is identified but not the ENLR. Again, AGL suggest that by changing the role of the party from LR to ENLR, further consideration is needed of notifications and objections and a review of the changes made to ensure they are applied consistently.

MSATS:WIGS Section	Description	Participant Comments
7 / 9.5 AGL		AGL notes that the CR 3000/3001 – Create Metering Installation includes the ENLR but not the LR, whereas the CR 2500/2501 Create NMI, Metering Installation Details and NMI Datastream includes the LR but not the ENLR. Is this correct ?
Various	Updated table and section references throughout the document	Noted. AGL supports the change.

9. National Metering Identifier – 6 Feb 2022

NMI Section	Description	Participant Comments
General AGL		This procedure needs to include the concepts identified in CATS v7.1 for the new NMI types, in particular the boundary crossing NMIs and associated procedures.
2.2	Updates to LR population e.g. 'GLOPOOL'	Noted. AGL supports the change.
2.2	Provisions for embedded network local retailers (ENLR)	Noted. AGL supports the change.

NMI Section	Description	Participant Comments
2.4, 7	Provisions for non-contestable unmetered loads	As these devices are now on-market, AGL would expect normal market processes (including B2B Service Orders) to now operate in the same way that that they would for any other on market NMI. As such, AGL believes that each NMI should support a single connection and no more. AGL has proposed a structure which allows individual connections to be added together to form a larger virtual NMI for devices with the same profile (Parent-Child additive NMI framework) to make profile application, network and customer billing simpler. AGL is concerned that placing multiple devices, with varying profiles will make the generation of appropriate profiles difficult, make auditing of connections and profiles for connections close to impossible to audit, will make management of customer connections (Connect Service Order, Disconnect Service Order) difficult – and in some cases impossible (eg disconnect a single device in a bulk NMI), issuing of outage notification to the relevant customer impossible and customer billing very difficult. AGL accepts that for Public Lighting, where the network manages the inventory, the connection and maintenance/replacement of type 7 loads, that a bulk NMI is acceptable. However, AGL does not support multiple customer devices being managed via a bulk NMI. 2.4(f) AGL does not understand why the allocation of NMIs for non-contestable unmetered loads would now be different to a contestable metered load, and why LSNPs would require a separate process, unless this pre-supposes that only bulk NMIs exist..
7, 9.3	Removal of net data and net datastream references	Noted. AGL supports the change.

NMI Section	Description	Participant Comments
3, 7.2	Provisions for 'bulk supply'	Noted. Here should be provisions to explain other cross border requirements. See earlier comments.
7, 9.3	Removal of meter data to AEMO requirements	Noted. AGL supports the change. 9.3 - AGL notes that it has proposed that new metering types be included for non-contestable unmetered supplies (types 8 & 9) representing purely profiled loads and profiled loads supported by a sample meter and/or a network device and these would need to be included.
App A AGL		AGL suggests that diagrams to explain how HV and LV cross border, hybrid and unmetered NMIs etc. work would be a useful addition to this document.

10. NEM RoLR Processes – Part A – 6 Feb 2022

NEM RoLR A Section	Description	Participant Comments
General AGL		AGL notes that the Table numbering in MSATS: CATS was changed from a format style of 1-A to 1-1. Will this format style be applied to other documents such as the RoLR Procedures ?
2, 4.3.2, 6.1, 11.3, 12.3	Removal of Local Retailer (LR) references	Noted. 4.3.2 AGL supports the change, but notes the updating of LR (as ENLR for child NMIs) may be required.
3 AGL		AGL believes that this diagram needs updating to reflect that Tier 1 no longer exists, that LR is for child NMIs and all NMIs are Tier 2. eg • Fig 2 / Step 10.3 & 11.3 specifies changes to the LR • Fig 2/Step 9.3 and 11.3 is repeated • Fig 3 identifies LR and considers Tier1 and Tier 2
2, 3, 6.1, 7.1, 11.2, 12, 13, 15.1, 18.2, Appendix 1	Provisions for embedded network local retailers (ENLR)	Noted.
6.1,	Removal of Second Tier references	Noted. AGL supports the change.

NEM RoLR A Section	Description	Participant Comments
12		AGL notes that LR has been changed to ENLR through the procedure, but Tables 12-A,12-B only show the LR. Should the Participant Role in this table be updated from LR to ENLR ?
Appendix 1	Inclusion of Average Daily Loads (ADLs) in the ROLR_013 report	Noted. AGL supports the change.

11. Service Level Procedure: Metering Data Provider Services – 1 Dec 20

SLP MDP Section	Description	Participant Comments
1.3	Inclusion of additional related document	Noted. AGL supports the change.
2.4.1	Inclusion of 5 February 2022 reference	AGL notes that this change is to accommodate global settlements and hence UFE calculations. As AEMO has an obligation to report UFE from 1 July 2021, AGL seeks to understand the quality of information available from 1 July 2021 to 5 Feb 2022. AGL would expect that for the UFE reporting from 1 July 2021 to have any value, that changes such as this would apply prior to 1 July 2021. AGL notes that there has been some discussion about AEMO being able to support UFE calculations in the net market and would appreciate a paper detailing how this will happen to more clearly understand AEMOs proposed processes. 2.4.1(xii)B – AGL would like clarity on what the change to this clause means. We think it means that first-tier accumulation NMIS can have their datastream de-activated up until 5 Feb 2022, after which the data streams cannot be deactivated as they are not first tier. But notes the issue of UFE calculations, AGL seeks greater understanding as to how this impacts UFE reporting between 1 July 21 and 5 Feb 22.

SLP MDP Section	Description	Participant Comments
3.7.1	References to MDM format and MDMT transaction groups	Noted. AGL supports the change. ** MR – check MDM details and how net / global data will be delivered and settled
3.10, 3.11, 3.12.2	Provisions for non-contestable unmetered loads	AGL does not believe that the obligations in Cl 3.10 are sufficient. The non-Type 7 loads are more variable than Type 7 UMS loads will require a profile which may be seasonal or have variations which go beyond ON/OFF, and which may include load changes – eg operation of cabinet fans in warmer weather. The inventory table will need to include information regarding the device profile which can be used to drive the estimation and act as a reference point for network, retail and market allocations. IN saying this AGL notes that it does not support multiple devices on a single NMI. Further, AGL is proposing that some may be supported by Network devices to support profile derivation. AGL has proposed the creation of types 8 and 9, to support loads which are purely profile loads and loads where the profile is supported by sample meters or network devices. As such, the framework needs to be agreed before these procedural changes can be finalised.

SLP MDP Section	Description	Participant Comments
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	Noted. AGL notes the discussion held at the metering workshop and would be concerned that setting the readiness and quality targets would lead to MDPS submitting final substitutions even when actual data may be available somewhat later. In terms of quality reporting, the increase in intervals from 48 to 288 / day means that there is likely to be errors at some level in meter data. AGL would expect that the quality of meter data would be related to a proportion of intervals and potentially sequential or close intervals. Substitution of 1 x 5 min interval in a day may not be as relevant as substitution of 100 x 5 min intervals. AGL believes that the targets can be established that provide appropriate quality without engendering poor practices. AGL has noted, that as a result of undertaking UFE calculations and the likely processes to rectify issues identified through UFE reporting, that the amendments are likely to span beyond current settlement periods, and consideration should be given to extending the settlements periods or undertaking an annual revision each year until industry believes that the majority of errors have been corrected.
3.12.4	Changes to metering data quantity and quality requirements	Noted. AGL supports the change.
3.12.5, 3.14.1, 3.14.2	Changes to method of delivery of data	Noted. AGL supports the change.

SLP MDP Section	Description	Participant Comments
5.1	Changes to meter churn scenio content, including the provision for having to send associated MDFFs to AEMO as well as to participants	AGL notes the proposed amendments to the churn scenarios. AGL notes the issues of Jurisdictional metrology procedures, but these apply to Type 6 meters. As such, since only 5 minute meters can be installed from 1 July 2021, and these procedure apply from Feb 2022, is there any reason to retain the scenarios for 15/30 min meter churns except that the jurisdictions have not provided further comment ?

12. Exemption Procedure: Metering Installation Data Storage Requirements - 2019

Exempt Section	Description	Participant Comments
General AGL		AGL notes that the Rule (Amendment 5 ms 2017 No 15 schedule 4) granting AEMO the exemption powers only comes into effect on 1 July 2021, which means that AEMO actions resulting from this this procedure cannot formally commence until 1 July 2021, although it is understood that the procedure will commence in 2019. AGL suggest that this may be problematic in terms of the 1 July 2021 obligations.
General AGL		AGL notes that the meters under consideration in this procedure are Types 1-3 and 4 at a: (i) transmission network connection point; or (ii) distribution network connection point where the FRMP is a Market Generator or Market Small Generation Aggregator. Given the types of meters and the number of meters impacted may not be insignificant, the ability to source replacement meters may be limited, and the resources to replace those meters are also limited. It is unclear to AGL what happens if an MP is not granted an extension, but only has an obligation to effect a meter change for 1 July 2021.

Exempt Section	Description	Participant Comments
General AGL		AGL notes that this exemption does not apply to Distribution cross border meters. Again, these are large type 4 installations which are unlikely to be replaced in 10 b/days time. The reasoning behind this exemption procedure seems to be to minimise those meters which need to be replaced only due to a limitation in on board memory capability. AGL suggests that distribution cross boundary metering be included and recognises that this will require a rule change to 7.8.2 (a)(1).
General AGL		AGL notes that this exemption cannot be applied to other small customer meters, which may not meet the 35 day memory requirements once configured to 5 ms (eg converting a 4 quadrant meter – eg small customer with Solar). This issue has varied impacts not just on the 5ms and global rule, but can impact Distributed Energy Program development, Virtual Power Plant growth and slow down other programs while these sites are re-metered. While AGL understands that this requires a Rule change, AGL would suggest that AEMO work with industry to identify the various classes of meters and suitable criteria for an exemption as part of the development of an extension to the existing rule in order to meet the objectives of the NEO. Noting this, AGL would see value in allowing smaller loads (eg small consumer solar sites with ongoing communications capability) to have a reduced limit on the basis that the MP would attend and rectify / download the data before the storage period is exceeded.

Exempt Section	Description	Participant Comments
1.1 2.1		AGL notes that in clauses 1.1 and 2.1, the storage requirements for holding meter data (35 days) are not specified. AGL suggest that as the majority of the rule is specified in the procedure, the procedure would be more readable if this lower limit (35 days) were specified prior to noting the exemption period of 30 days. For instance: Rule 7.8.2(a)(9) sets a minimum of 35 days storage when reconfigured for 5 ms. AEMO will only consider meters for an exemption which have a storage capability of between 30 and <35 days. If a meter has a storage capability of <30 days, then an exemption will not be granted. **Application** (a) The Rules require a meter to have a storage capability of 35 or more days for the 5 ms market; (b) this procedure only applies to a reconfigured meter with a storage capability of between 30 and <35 days in the 5 ms market; (c) If a meter has less than 30 days storage it will not be granted an exemption

Exempt Section	Description	Participant Comments
1.12.4		A second issue for further explanation is why was 30 days selected. These meters are all ongoing comm meters, so the issue is about losing comms vs storing data, and AGL would consider that non functioning comms for these size meters is rather important, and would expect the MC to attend a failed comm site fairly quickly and restore comms, and upload the missing data. The more important issue is dealing with a failed / by passed meter. Given the cost of these installations, and in the interests of the NEO and not wasting resources unnecessarily, AGL would suggest that there is value in discussing the 30 day limitation further.

13. Retail Electricity Market Glossary and Framework – 6 Feb 22

Glossary Section	Description	Participant Comments
1.3	Inclusion of an additional related document	Noted. AGL supports the change.
2.2, 2.7.7	References to the Exemption Procedure: Metering Installation Data Storage Requirements	Noted. AGL supports the change. Please note previous comments in relation to this matter.
2.6.2	Inclusion of bulk supply and/or cross boundary references	Noted. AGL supports the change.
5	Changes to terms including the addition of ENLR and UFE and modifications to first tier, second tier and FRMP related terms	Noted.

14. Other Issues Related to Consultation Subject Matter

Other Heading	Participant Comments
Implementing and transitioning to the changes in delivery of metering data to AEMO	
• Do the proposed changes in the applicable initial draft change-marked procedures implement the required changes in section 2.2.5 in an effective manner?	AGL notes the proposed changes but suggests that there is a great deal of complexity to these changes, due to timing and transition. AGL suggests that a high-level description be provided of the data delivery processes covering the current arrangements through to the post 6 Feb environment. AGL also suggest that this description needs to cover how market revisions will be undertaken. It is assumed that processes which are applicable to certain periods still need to be maintained for a revision cycle. Which in turn means that participants need to maintain various systems operationally as we transition through 30ms to 5ms through to 5ms global.
• Will the proposed transitional arrangements assist MDPs and other market participants in transitioning to the new procedural requirements?	AGL notes that the while industry has been reviewing procedural changes to accommodate the transition from a 30ms to 5 ms to global market settlement regime, which is based on AEMO's understanding of the transition from 30ms to global. AGL suggest that there is not the same clarity across all of industry and that what is missing is the high level description of what processes continue, what processes need to be adjusted (and by when). The high level assessments are very useful in this process.

Other Heading	Participant Comments
• 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?	AGL believes that it is necessary to mange not just the transitional needs, but also manage the requirements during the various settlement revision phases, which will cover multiple markets.
Non-contestable Unmetered Loads	AGL has made substantial comment on UMS through the various procedures. AGL notes the substantial discussion that took place at the recent metering focus group and notes that there are still widely varied views over managing UMS. AGL suggests that now that industry has had an opportunity to consider the various proposed changes, that AEMO host a specific industry meeting focussed on dealing with UMS which must cover the process from customer request through to customer bill and outage management. AGL believes that any of the proposed changes in these procedures have been predicated on the existing fleet of devices, have not contemplated new connections nor the r5equirements for managing end customers efficiently. The current proposals largely focus on inventory tables for UMS devices. AGL would note that this is the framework that has been in place for some years, and industry is well aware that this framework has substantial process and data gaps. \Given the requirements of global settlements and an expectation of further rollouts in this environment, AGL is seeking to ensure that the future UMS framework is more efficient for all parties, and less error prone.

Other Heading	Participant Comments

• How should non-~~market~~/contestable unmetered loads be processed and maintained in MSATS?
  ○ Should non-contestable unmetered loads with photoelectric (PE) cells be treated in a similar manner to Type 7 unmetered loads and why?
  ○ 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?
	The new framework for UMS loads will require further development and AGL is concerned that attempting to bolt these loads onto the existing type 7 arrangements is not the best outcome.
	
	For those loads such as watchman lights with simple switching (eg photocell) there is no reason not to manage them through a similar process to type 7 loads (noting that in general the equipment is often identical to other street lighting equipment).
	
	These loads exist because they do not meet the type 7 requirements of predictability. AGL has proposed that types 8 & 9 be implemented to identify UMS loads which are purely profiled and UMS loads which have sample meters/network devices to support profiles.
	
	Further, unlike public lighting, where the network manages the inventory and changes to the devices, these UMS devices are managed by customers who can alter the connected device without advice to the retailer or network.
	
	AGL believes that in this environment each UMS device should have an individual NMI which can have an appropriate profile assigned to it.
	
	Further, as these devices are individually customer managed, it will be important for retailers to individually identify these connections and for networks to individually manage these connections, including facilities access and outage notifications.
	
	AGL re-iterates that a focussed workshop on UMS prior to round 2 would be highly beneficial.

Other **Heading**	**Participant Comments**
• 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?	AGL believes that each UMS should have an individual NMI associated with it to ensure that the device, the customer, the connection management and billing (market, network, customer) can all be managed in existing market processes.
• What would be the most accurate methodology for calculating and applying a load profile to non-contestable unmetered loads and why?	AGL has proposed that a parent-child relationship be created for UMS NMIs so that each connection is managed through normal market processes, but can be aggregated for application of profiles for network bills, market load and customer bills. In the 5ms / global environment it will be important for UMS devices to be able to have profiles which are more complex and flexible that simple ON/OFF profiles. They will need to be able to manage more complex profile rules, such as load changes and different seasonal operation. For instance, devices with fans – may have a higher general load profile North of Sydney (due to increased ambient temperature) and in summer South of Sydney.
Service Levels for Meter Data Provider Services	
• Will AEMO's proposed arrangements likely result in more accurate market settlements and why?	See comments below regarding meter exemptions and the initial calculation of UFE at 30 min intervals in Victoria.

Other **Heading**	**Participant Comments**
• What other data quality mechanisms should AEMO consider to supporting improved accuracy in market settlements?	In a 5ms environment, consideration should be given to a data quality KPI that considers not just a data element replacement, but the number of elements replaced sequentially in the daily total. Eg 6 individual 5ms segment replaced across a day is not as critical as say 6 x 5 ms sequential segments replaced (eg a 30 min block) in a 5ms environment. This applies to a 15 or 30 min block. Single segments are less critical than multiple sequential segments.
Exemption Procedure: Metering Provider Data Storage Requirements	
• Do you believe that AEMO's proposed exemption procedure clearly articulates the conditions and process for applying for a data storage exemption and why?	The exemption procedures as they stand have some value, but in future market developments (VPP, DER etc.) consideration should begiven to maximising the value the relatively new fleet of AMI meters can bring, especially to Victoria which has an almost complete penetration of smart meters. AEMO has sought comment on the accuracy of settlements, and AGL believes that in both the 5ms and global market the required level of accuracy is more achievable in Victoria than anywhere else due to the high penetration of AMI meters. As such, any reasonable actions which can be taken to ensure data delivery from these meters (without having to replace them) allows all parties to concentrate their efforts on assessing market information and future market developments.

Other Heading	Participant Comments
AGL – UFE calculation - Victoria	AGL suggests that as Victoria has extremely high penetration of interval meters, that there would be benefits in undertaking the UFE calculations at 30-minute intervals before being calculated at 5-minute intervals (following 30 min to 5 min profiling) to test against the 5 min profile impact. This may help identify calculation and process issues associated with UFE at differing interval levels.