FIVE MINUTE SETTLEMENT – METERING PROCEDURE CHANGES (PACKAGE 1)

PROCEDURE CONSULTATION

FIRST STAGE PARTICIPANT RESPONSE TEMPLATE

***Participant**: AGL*

***Submission Date**: 21 Dec 2018*

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1. Context

This template is 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 1' consultation.

The changes being proposed are as a result of the Australian Energy Market Commission making a final rule to align operational dispatch and financial settlement at five minutes, starting 1 July 2021.

The Rule change requires the collection, storage and delivery of revenue metering data based on five-minute intervals for use in energy settlement, network and retail billing.

2. Metrology Procedure: Part A

Section	Description	Participant Comments
3.8(a)	Meter Clocks	AGL suggests that the issue of meter clock accuracy should be further reviewed as it has a much greater impact on load allocations within 5-minute intervals. A ± 20 seconds error in a 30-minute interval is a 1.1% error, while in a 5-minute interval is a 7.7% error. A drift of ± 300 seconds is a 5-minute interval, which is particularly critical in a type 4A and 5 (AMI) meter collecting interval data. Time Control Clocks and settings. AGL also queries what requirements there are for correctly setting and maintaining time control devices and the accuracy of these time control devices in a 5-minute market.
3.9	**The end of each TI must be on the hour (EST) and each continuous period of 5 minutes thereafter.**	First sentence can be refined to cover a meter interval which is now a part of a TI (e.g. 1 minute), a TI which is now 5-minutes and 15/30 minutes which are multiples of a TI: Suggest: Where a metering installation records *interval energy data* the interval periods are based on parts of a TI, a TI, 15-minute or 30-minute intervals: (a) A TI is set to 5-minutes and the end of which must be on the on the hour (*EST*) and each continuous period of 5 minutes thereafter…..

Section	Description	Participant Comments
4.1	Minimum Service Levels	AGL notes that this section details completion rates for services but recognises that some services – particularly remote reconnection services (which may depend on other parameters eg no load), can not necessarily be completed in the specified timeframe but rather should be responded to in a time frame. We believe that these timeframes would be are more correctly seen as a time frame to respond to a service request rather than complete such a request.
6	Embedded Networks – Vic/SA	AGL agrees with the goal of this section to ensure that parent and child meters are recording load at the same intervals but notes that it seems to incorrectly place obligations on MCs and impact other retailers. e.g. Vic / SA This section requires a metering coordinator to install an interval meter o the child connection point **and** change a parent meter to an interval meter if needed. AGL queries how the child Metering Coordinator can change a meter belonging to the retailer of the parent, where the parent ahs appointed a different MC. Even if the MC is the same, the parent retailer is responsible for initiating mete changes, not the child retailer. AGL seeks clarification on the scenario that once a 5 minute market has commenced, if a child meter is installed (5 minute recording) does the parent need to be upgraded to a 5 minute meter as well ? AGL would assume that this would be the case and both meters would need to be updated. If this is the case, then the procedures and processes will need to be updated to reflect this requirement.
6	Embedded Networks – NSW/ACT	AGL notes that the NSW Jurisdictional requirements for embedded networks still refers to type 6 meters, which can no longer be installed.

Section	Description	Participant Comments
6	Embedded Networks – ACT	It is not clear what the requirements for the ACT are. These could be written more clearly.
7	Removal of South Australia requirement (2) Removal of Tasmania requirement (2)	Noted
7	Reversion of metering installation types	There are still clauses allowing for type 5-meter reversion for NSW, although no party is now allowed to install a type 5 meter. For Qld, the NER does not allow a conversion of a type 4 to 4A for load reduction, so if QLD allows for such a reduction, the AEMO procedures need amending to allow for this outcome.
9.2	Type 4A	Typo – 'checked such that it has'
12.2 (f)	Change to clause reference	Noted
12.8.2 (b)	Change in section reference	Noted

3. Metrology Procedure: Part B

Section	Description	Participant Comments
2.6	Update to page references	Noted Suggest that rather than page reference, the table references the relevant section, as there is less likelihood of another change due to final editing.
11.2.1	Update to section reference to Metrology Procedure: Part A	Noted
11.2.2	Update to section reference to Metrology Procedure: Part A	Noted
11.2.3	Update to section reference to Metrology Procedure: Part A	Noted
11.3.1	Update to section reference to Metrology Procedure: Part A 'Half hourly' reference updated to 'Interval'	Noted
11.3.2	Update to section reference to Metrology Procedure: Part A Change end dates from '23:30' to '23:55'	Noted Type in 11.3.2(c)(i) formula – 'Accumulati on..'

Section	Description	Participant Comments
11.4	Update to section reference to Metrology Procedure: Part A 'Half hourly' reference in formulas updated to 'TI' 'Half hourly' reference updated to 'Five minute' Updates made to formulas	Noted AGL notes the amended formulas. The formulae assume that metering is set at intervals no smaller than 5-minute intervals, although other sections allow for metering to be set at part of a TI (ie less than 5 minutes). It is assumed that part TI metering would need to be aggregated to 5- minute metering prior to this calculation. AGL believes that there should be no barrier to installing meters collecting data at less than 5 minute intervals as was the case with meters collecting data at less than 30 minute intervals. AGL therefore suggest that the procedures recognise intervals of less than 5 minutes and accommodate the summation to 5 minute data. Given the significant levels of small customer generation (eg photo voltaic, battery feed-in etc.) which will be recorded at 30-minute intervals, AGL questions how this energy will be included as energy inflows when it is fed into a TNI prior to establishing the NSLP. Typo 11.4(b) 'Profile Area' is italicised once in formulas.

Section	Description	Participant Comments
11.5	Update to section reference to Metrology Procedure: Part A Change end dates from ’23:30’ to ‘23:55’	Noted
11.6	Change end dates from ’23:30’ to ‘23:55’	Noted
12	New section added to detail the conversion of interval metering data, previous section 12, and following section numbering, have been changed due to this insertion	AGL again seeks to understand how substantial levels of consumer generation recorded at 30-minute intervals will be included as energy inflows. There is also the question of how 30-minute generation (eg Solar) can be profiled to 5 minute levels and how this impacts the NSLP ? AGL has undertaken some initial analysis and is concerned at the likely error in this process.
13.1.4	Update to section references	Noted
13.2.2	Update to section reference to Metrology Procedure: Part A	Noted
13.2.4	Update to section references Update to formulas	Noted
13.2.5	Update to formulas	Noted

Section	Description	Participant Comments
13.2.6	Update to section references Update to formulas	Noted
13.3	Update to section references	Noted
13.3.2	Update to section reference to Metrology Procedure: Part A	Noted
13.4	Update to section reference	Noted AGL notes the On Delay/Off Delays are set at between 13 and 21 minutes, which is now equal to between 3 and 5 Trading Intervals and queries whether that is satisfactory within a 5-minute market and how that load is dispersed across these trading intervals.
13.5	Traffic Signal Dimming	AGL notes that the traffic signal dimming also incorporates the ON/OFF delays and seeks to understand the impact on a 5 minute market and how load would be dispersed across the 5 minute intervals.
13.5.2	Update to section reference to Metrology Procedure: Part A	Noted
13.5.4	Update to section reference Update to formulas	Noted
13.5.5	Update to formulas	Noted

Section	Description	Participant Comments
14.1	Update to section reference	Noted
14.3	Update to section reference	Noted

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

Section	Description	Participant Comments
3.3.3	Included references to five-minute interval metering data	AGL notes there is no definition of interval data for Sub-TI periods, but understands how they would be defined.
3.3.4	Index Reads	AGL notes that the procedure requires index reads for type 4A and 5 meters, although they are generally provided by MDPs for type 4 meters. However, there are small customer billing obligations which require index reads from any meter. AGL therefore suggests that this obligation should be extended to type 4 metering, not just 4A/5 metering.
4.3	NMI data details record (200) - Added '5' to the Interval Length field Definition	Noted, although doesn't explicitly allow for sub-TI metering. Per previous comments this should now accommodate sub-5 minute intervals.
Appendix H	Section added to include five-minute meter data file example	Noted

5. Retail Electricity Market Glossary and Framework

Section	Description	Participant Comments
2.11	Temporal References to Roles	This section provides a definition for a 'new' role but does not specify a common usage term for an 'incoming' or 'prospective' role which would be a useful addition.
4.4.4	Removal of NEM12 & NEM13 File Clarifications	Noted
5	Addition of various glossary items, including those from the 'Meter Data Provision Procedure'	Definition UOM This definition was transferred from the MDPP. However, a definition of UOM also exists within the MDFF procedures. The reference in the glossary to 4.1 is to clause 4.1 of the MDPP but AGL suggest that it would be better to refer to the MDFF – Appendix B.

6. Meter Data Provision Procedure

Section	Description	Participant Comments
1.1	Changes to NER clause references and minor administrative updates	Noted
1.2.1	Glossary removed and now included in the Retail Electricity Market Procedures – Glossary and Framework document	Noted – see comments in Retail Glossary
1.2.2	Interpretation section removed from the document	Noted
1.3	Retail Electricity Market Procedures – Glossary and Framework added as a related document	Noted – see comments in Retail Glossary
4.1	Field Details	AGL suggest that the MDPP should refer to Appendix B – MDFF.
4.3	Interval Metering Data Summary	AGL suggests that clause 4.3 (d)(iv) may need updating to include kVAr to accommodate changes in tariffs being discussed.

7. Other Issues Related to Consultation Subject Matter

Heading	Participant Comments
Profiling 15 and 30-minute meter reads to 5-minute trading intervals	
• What is your view on the proposed profiling approach for 15 and 30-minute non-controlled load meter reads and why?	AGL notes the complexity involved in profiling processes, but it has undertaken some initial analysis of 5 minute solar data and 30 minute data and has determined that there can be at ;least a 10% error level, which is greater during the dusk and dawn periods, which would coincide with increased consumer usage. AGL is planning to undertake another level of data assessment early in 2019 and would be more than happy to work with AEMO on the impact of this data. Nevertheless, this initial analysis indicates a sufficient error level that AGL believes that further analysis and consideration is needed of the profiling approach proposed by AEMO.
• What is your view on the proposed profiling approach for 30-minute controlled load meter reads and why?	AGL considers that the profiling of the controlled loads should be more efficient as controlled loads are generally far less variable and the profiling should provide a more accurate outcome.

Heading	Participant Comments
• Are there better profiling options to accommodate 5MS, that better achieve the required objectives? What are the pros and cons of these options? How would they be implemented?	AT this stage AGL does not have a better profiling proposal, but considers that this should not hamper further investigation and analysis of this issue by AEMO and industry. AGL considers that AEMO is better placed to undertake this analysis as it has access to all data, not sub-sets which retailers and networks have.
Meter Data Delivery to AEMO	
• What are your views on AEMO transitioning to MDFF and why?	The only issue is where AEMO uses or rejects an MDFF file that a retailer does not and the validation / holing processes AEMO implement on managing these files.
• What are your views on AEMO supporting the reception of register level meter data and why?	Part of the provision of the same data sets across the industry will require AEMO to accept register level meter data.
• What are your views on MDPs sending the same files to both market participants and AEMO, energy and non-energy, and why?	As more consistent data is provided and used by all parties the less error and variance should exist between each step in the settlement and recon ciliation processes.

Heading	Participant Comments
• What are the main challenges in adopting these proposed changes? How should these challenges be addressed?	The majority of the challenges are for AEMO in accepting these files and the management / interaction with MDPS in this respect. From a retail perspective, disconnects between the data sets provided and used can lead to reconciliation issues between AEMO and retailers.