FIVE MINUTE SETTLEMENT – METERING PROCEDURE CHANGES (PACKAGE 2)

PROCEDURE CONSULTATION

FIRST STAGE PARTICIPANT RESPONSE TEMPLATE

Participant: Ausgrid

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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

| Section | Description | Participant Comments |
|------------------------|--|---|
| 12.3, 12.4, 12.7 | Provisions for non-contestable unmetered loads | Ausgrid believes there is merit in AEMO profiling non-contestable UM (NC-UM) loads. Each MC currently has a DAL (kwh) for each NC-UM load NMI, if this was linked with a UM profile shape (eg. flat or switched) then AEMO would be the only participant would would be required to develop profiling for NC-UM loads. 12.4 - If AEMO is to profile non-contestable UM loads then only accumulated metering data should be provided. |
| 12.4 | Removal of 'First Tier' references | |

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) | |
| 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 | Are the provisions in clause 11.2 classified as jurisdictional material and only able to be modified by the jurisdicition? 13.1.2 – Publish is a italicised term but there is no definition in the glossary. When does AEMO intend by stating load table must be published, if so what is their content and format? Also should the references be MC rather than LNSP. 13.1.4 (b) – suggsest that each NMI for NC-UM load also have a profile shape as a mandatory parameter, ie cannot have load with flat and switched loads contained in same NMI. For example a council that has NC-UM lighting which is switched will have a switched profile where as other loads (parking meters) will be a flat profile. 13.2& 13.3 – AEMO should develop this profile for NC-UM NMIs. |

| Section | Description | Participant Comments |
|--|--|---|
| 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 | |
| 11.2.1 | Removal of 'Local Retailer (LR)' references | |
| 11.3.3, 11.4, 12.4, 13.2.5 | Change in formulas | 13.2 – AEMO should develop this profile for NC-UM NMIs. |
| 11.4, 12.3 | Provisions for 'bulk supply' | AEMO should define these new NMI Classifications in the Glossary so participant know when and what they are used for. |
| 12.4 | Provisions for UFE (unaccounted for energy) | |

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

| Section | Description | Participant Comments |
|---------|----------------------------------|----------------------|
| 1.1 | Include AEMO as a relevant party | |

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, | Provisions for embedded network local retailers (ENLR) | |

| 9.4, 9.5, 9.6, 9.8, 9.9, 9.10 | | |
|-------------------------------------|---|--|
| 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 | |
| 9.6 | Removal of MDM RM15 Multiple Versions report | |
| 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, | Provisions for MDFF (Meter Data File Format) | |

| 5.2.5, 6 | | |
|----------------------------------|---|--|
| 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, | Removal of Change Reason Code 1050, 1051, 1090, 1091, 2003, 3003, 3053, 4003, 4053, 5053, 5090, 5091, 6400, 6401 | |

| 3.7.2, 4.2 | |
|--|---|
| 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) |
| 9, 3.2, 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, 13.6, 13.7, 25.9, 26.7, 29.7, 33 | Removal of Local Retailer (LR) references |

| 3.7.1, 3.7.2 | Changes in table references | |
|-----------------|---|--|
| 4.9 | Addition to and modification of NMI Classification Codes | WHOLESAL – suggestion to make it clear that this is to be used for a customer NMI connected to the transmission network. |
| 4.12 | Addition of 'Non-contestable Unmetered Load' Metering Installation Type Code | In table add Manually read flag for NCONUML to 'N'. 4.12.1 (b) Should allow for a NMI with a NMI status code of NCONUML to have a datastream type of 'C'. This allows the MC to deliver consumption data to AEMO to calculate and develop interval data for NCONUML NMIs. |
| 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, | Provisions for embedded network local | |

| 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 | 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' | In the proposed CATS procedure the population of LR is optional (ie. may Populate (clause 11.4 (c)), yet here it is mandatory. |
| 2.2 | Provisions for embedded network local retailers (ENLR) | |
| 2.4, 7 | Provisions for non-contestable unmetered | 2.4(a) - Should also be mandatory that the same profiling method (eg. flat |

| | loads | or switched) can only be used. |
|--------|---|--|
| | | 2.4 (b) – If this means one NMI for each NC-UM load, Ausgrid does not agree, One NMI should be able to have multiple different loads. |
| | | Suggested rewording. |
| | | 2.4 (f) - AEMO expects that each MC that has NMIs with a classification of NCONUML, has a procedure for the allocation of NMIs for non-contestable unmetered loads, which will be available for review by the Jurisdiction or AEMO on request. |
| 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 | In Part B is the number bulleting suppposed to start at 101? |
| 2, 3, 6.1, | Provisions for embedded network local | |

| 7.1, 11.2, 12, 13, 15.1, 18.2, Appendix 1 | retailers (ENLR) | |
|---|--|--|
| 6.1, 12 | Removal of Second Tier references | |
| Appendix 1 | Inclusion of Average Daily Loads (ADLs) in the ROLR_013 report | |

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 | 3.10.1 (b) (ii)- AEMO is assuming there will only be 2 profile shapes for NC-UM load, controlled and non controlled as per metrology procedure part B? 3.10.1 (b) (iii)- NC-UM load tables are not published by AEMO. |
| 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 | 3.12.4 (b) – The increase in quantity of settlement ready data to 99% for Manually read metering data should reamin as is, as this will increase costs for little benefit. AEMO's procedures also apply a significant restriction of MDPs producing final substitutions on MRIM data and then receiving Actuals, which would make this metric unachievable. |
| 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 | |

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 | |

14. Other Issues Related to Consultation Subject Matter

| 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 | |

| Heading | Participant Comments |
|---|--|
| implement the required changes in section 2.2.5 in an effective manner? | |
| Will the proposed transitional arrangements assist MDPs and other market participants in transitioning to the new procedural requirements? | |
| 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? | |
| Non-contestable Unmetered Loads | Ausgrid believes there is merit in AEMO profiling non-contestable UM (NC-UM) loads. Each MC currently has a DAL (kwh) for each NC-UM load NMI, if this was linked with a UM profile shape (eg. flat or switched) then AEMO would be the only participant would would be required to develop profiling for NC-UM loads. |
| How should non- market/contestable unmetered loads be processed and maintained in MSATS? | How will these loads be processed through MSATS? Non-contestable unmetered loads with photoelectric (PE) cells be treated in a similar manner to Type 7 unmetered loads? |

| Heading | Participant Comments |
|--|--|
| 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? | Potentailly but these could also have 2 consumption values (similar to RMS traffic light dimming), eg Bus shelter displays are dimmed. Currently Ausgrid calculates base load, undimmed load and dimmed load, use metrology procedure to calculate switching times like they do for Type 7 and create a DAL in kWh. How should industry calculate switching time when it's a timer and not a PE cell. AEMO should have a rule that only specific switching time are allowed when using a timer (ie. same times as metrology procedure for PE cells)? This then limits the customers options for NC-UM loads. Allowing different time would open the door for a large number of different profile shapes. If a customer has switching times outside the NC-UM load shape, they need to install a meter or change timer to suit metrology procedure. • Non-contestable unmetered loads which do not have photoelectric (PE). How should these loads be treated? The the moment Ausgrid calculates max kW of the proposed load and in turn calculates a DAL in kWh. Ausgrid calculates the Max kWh if the load is variable. • How will the treatment of these unmetered loads improve over time? Ausgrid policy ES1 – Premise Connection Requirements, currently require full electrical specifications for devices and have done so for quite a number of years. Ausgrid would be comfortable that the DAL is very close to correct for connection over the past decade (legacy load prior to this policy may not be as accurate). Ausgrid Inspectors confirm that the connected load meets the connection approved load. |

| Heading | Participant Comments |
|---------|---|
| | Ausgrid also allow a capacity UM load, where the load is limited by a circuit breaker. eg. a 2A load which may not be consuming 2A but the DAL is calculated at 2A at 24Hrs. |
| | • How will the load profile and size of these loads be agreed between the customer, DNSP, retailer and AEMO. |
| | Is AEMO proposing to have a national load table for this UM suppiles, if not why does AEMO need to be involved in the calculation and development of the load tables for NC-UM supplies? The DNSP/MC and applicant should agree the load using an UM procedure published by AEMO giving high level rules around load calculation and associated profiles. |
| | Involving the FRMP would just add another step in the process (and another step if AEMO was involved) and would the FRMP want to be involved? If AEMO and FRMPs were involved in the load table calculation, there would need to be timing obligations on the FRMP and AEMO so DSNPs can meet NECF requirements. |
| | • What would be the most accurate methodology for calculating and applying a load profile to noncontestable unmetered loads? |
| | A flat profile and a switched profile using the metrology procedure Part B would be the minimum requirement as a starting point. We would need to ensure that the number of profiles does not get out of hand. |
| | What are the main challenges DNSPs are encountering? |
| | Dimmed signs under a profile situation wil be challanging and this would require system changes. When DNSP receive an application for an existing approved bus shelter with dimmed displays do |

| Heading | Participant Comments |
|---|---|
| | we have to retrospectively alter all prior connections or only ones going forward? There would need to be a NMI for each profile (eg, a council with PE controlled sites and non PE Controlled). How will DNSPs administer these loads going forward? Connection applicant provides Ausgrid with all of the electrical technical specifications and the DAL calculated. If AEMO is responsible for calculating the profile DNSP changes would be minimal as DNSPs just need to provide accumulated data for the period and the associated profile shape. |
| 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? | The creation and assignment of NMIs in MSATS An unmetered load NMI may contain different market loads or different Unmetered Device types, but they must have the same FRMP, End User, LNSP, TNI and distribution loss factor. Ausgrid have multiple connection points under one NMI per TNI area, and Ausgrid's preference would be to keep this current practice for NMI with NC-UM loads. However the profile shape should also be included as a mandatory requirement for each NC-UM load NMI (eg, one NMI for switched profile and one for flat profile). |
| What would be the most accurate methodology for calculating and applying a load profile to non- contestable unmetered loads and why? | |

| Heading | Participant Comments |
|---|----------------------|
| Service Levels for Meter Data Provider Services | |
| Will AEMO's proposed arrangements likely result in more accurate market settlements and why? | |
| What other data quality mechanisms should AEMO consider to supporting improved accuracy in market settlements? | |
| 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? | |