



METERING ICF PACKAGE

DRAFT REPORT AND DETERMINATION

Published: July 2019





NOTICE OF SECOND STAGE CONSULTATION – METERING ICF PACKAGE

National Electricity Rules – Rule 8.9

Date of Notice: 22 July 2019

This notice informs all Registered Participants, Metering Providers, Metering Data Providers, Embedded Network Managers, Ministers and the Australian Energy Regulator (AER) (Consulted Persons) that AEMO is commencing the second stage of its consultation on various National Electricity Market (NEM) metering procedures. The proposed changes to these procedures seek to implement process improvements put forward by proponents and AEMO and further to update the metering procedures to align with changed rule references.

This consultation is being conducted under clause 7.16.7 of the National Electricity Rules (NER), in accordance with the Rules consultation requirements detailed in rule 8.9 of the NER.

Invitation to make Submissions

AEMO invites written submissions on this Draft Report and Determination (Draft Report).

Please identify any parts of your submission that you wish to remain confidential, and explain why. AEMO may still publish that information if it does not consider it to be confidential, but will consult with you before doing so.

Consulted Persons should note that material identified as confidential may be given less weight in the decision-making process than material that is published.

Closing Date and Time

Submissions in response to this Notice of Second Stage of Rules Consultation should be sent by email to NEM.Retailprocedureconsultations@aemo.com.au, to reach AEMO by 5.00pm (Melbourne time) on 6 August 2019.

All submissions must be forwarded in electronic format (both pdf and Word). Please send any queries about this consultation to the same email address.

Submissions received after the closing date and time will not be valid, and AEMO is not obliged to consider them. Any late submissions should explain the reason for lateness and the detriment to you if AEMO does not consider your submission.

Publication

All submissions will be published on AEMO's website, other than confidential content.



EXECUTIVE SUMMARY

The publication of this Draft Report and Determination (Draft Report) commences the second stage of the Rules consultation process conducted by AEMO on various NEM metering procedures to implement recommended process improvements from proponents and AEMO and update the procedures to align with changed rule references under the National Electricity Rules (NER).

On 20 May 2019, AEMO published the Notice of First Stage Consultation and the Issues Paper for this package of amendments, called the Metering ICF Package.

The Issues Paper detailed proposed amendments to the:

- MSATS Procedures: CATS
- MSATS Procedures: WIGS
- Metrology Procedure: Part A
- Metrology Procedure: Part B
- Service Level Procedure: Meter Data Provider Services
- Service Level Procedure: Meter Provider Services
- Service Level Procedure: Embedded Network Manager Services
- Exemption Procedure: Meter Installation Malfunctions

AEMO received 15 submissions (including one late submission) from retailers, Local Network Service Providers (LNSPs), Meter Providers (MPs), Metering Data Providers (MDPs) and intending participants.

From these submissions and its own analysis, AEMO identified nine material issues. These are addressed in this Draft Report, on the topics of:

- Updating MSATS about remote de-energisation and remote re-energisation
- Defining timeframes for updating datastreams in MSATS
- Clarifying the LNSP's obligations in relation to creating Embedded Network Codes
- CT and VT Standards to include IEC61869
- Linear interpolation substitution type for accumulation metering installations
- Clarifying communication for identification of incorrect NMI and metering installation
- Delivery of metering data while the NMI status is not Active
- Verification of Metering Data for whole current Small Customer Metering Installations, Type 4A, 5, 6 and 7 Metering Installations
- Clarifying Embedded Network Manager's (ENM's) obligations with respect to distribution loss factors (DLFs) and Network Tariff Codes and that the Embedded Network (EN) for which the ENM has been appointed has an exemption by the AER

After considering the submissions and evaluating comments against the requirements of the NER and the Amending Rules, AEMO's draft determination proposes amending various clauses across the metering procedures to provide clarity on specific issues highlighted. Overall, broad support was provided by multiple respondents for the proposed amendments from the initial stage of consultation.

AEMO's draft determination is to amend the metering procedures in the form published with this Draft Report. AEMO proposes the changes will take effect from 20 May 2020.



CONTENTS

NOTICE OF SECOND STAGE CONSULTATION – METERING ICF PACKAGE	1
EXECUTIVE SUMMARY	2
1. STAKEHOLDER CONSULTATION PROCESS	4
2. BACKGROUND	4
2.1. NER requirements	4
2.2. Context for this consultation	4
2.3. First stage consultation	5
3. SUMMARY OF MATERIAL ISSUES	5
4. DISCUSSION OF MATERIAL ISSUES	6
4.1. Updating MSATS about remote de-energisation and remote re-energisation	6
4.2. Define timeframes for updating datastreams in MSATS	7
4.3. Clarifying the LNSP's obligations in relation to creating Embedded Network Codes	8
4.4. CT and VT Standards to include IEC61869	8
4.5. Linear interpolation substitution type for accumulation metering installations	9
4.6. Clarifying communication for identification of incorrect NMI and metering installation	10
4.7. Delivery of metering data while the NMI status is not Active	11
4.8. Verification of Metering Data for whole current Small Customer Metering Installations, Type 4A, 5, 6 and 7 Metering Installations	12
4.9. Clarifying ENM's obligations with respect to DLFs, Network Tariff Codes and EN exemption	13
5. OTHER MATTERS	14
6. DRAFT DETERMINATION	15
APPENDIX A. GLOSSARY	16
APPENDIX B. SUMMARY OF SUBMISSIONS AND AEMO RESPONSES	17



1. STAKEHOLDER CONSULTATION PROCESS

As required by clause 7.16.7 of the NER, AEMO is consulting on recommended process improvements from proponents and AEMO and updates to various metering procedures to align the procedures with changed rule references in accordance with the Rules consultation procedures in rule 8.9.

AEMO's indicative timeline for this consultation is outlined below. Future dates may be adjusted depending on the number and complexity of issues raised in submissions.

Deliverable	Indicative date
Notice of first stage consultation and Issues Paper published	20 May 2019
First stage submissions closed	24 June 2019
Draft Report & Notice of second stage consultation published	22 July 2019
Submissions due on Draft Report	6 August 2019
Final Report published	17 September 2019

The publication of this Draft Report marks the commencement of the second stage of consultation.

Note that there is a glossary of terms used in this Draft Report at Appendix A.

2. BACKGROUND

2.1. NER requirements

AEMO is responsible for the establishment and maintenance of metering procedures specified in Chapter 7 except for procedures established and maintained under rule 7.17.

The procedures authorised by AEMO under Chapter 7 must be established and amended by AEMO in accordance with the Rules consultation procedures.

2.2. Context for this consultation

A number of changes to the NER have occurred in recent years, including the *National Electricity Amendment (Metering Installation Timeframes) Rule 2018 No. 15*, requiring changes to the clause numbers referenced in AEMO's metering procedures. In addition, a number of metering issues have been raised through AEMO's consultation through the Electricity Retail Consultative Forum (ERCF).

The ERCF allows interested parties to raise issues and proposed changes to AEMO's Retail Electricity Market Procedures. Procedural changes are raised at the ERCF using issue change forms (ICFs). Over the course of 2019, a number of issues have been raised by both industry proponents and AEMO (Table 1). Proposed changes have been reviewed by the ERCF.

Details on forums and groups specific to NEM Electricity Retail are available on AEMO's website: <http://www.aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups>.

Table 1 Proposed changes

ID	Subject	Document changing
ICF_007	Updating MSATS about remote de-energisation and remote re-energisation	MSATS Procedures: CATS
ICF_008	Define timeframes for updating datastreams in MSATS	MSATS Procedures: CATS



ID	Subject	Document changing
ICF_011	Clarifying the LNSP's obligations in relation to creating Embedded Network Codes	MSATS Procedures: CATS
ICF_M002	CT and VT Standards to include IEC61869	Metrology Procedure: Part A
ICF_M003	Linear interpolation substitution type for accumulation metering installations	Metrology Procedure: Part B
ICF_M004	Clarifying communication for identification of incorrect NMI and metering installation	MSATS Procedures: CATS
ICF_M005	Delivery of metering data while the NMI status is not Active	Service Level Procedure Meter Data Provider Services
ICF_M007	Verification of metering data for whole current Small Customer Metering Installations, Type 4A, 5, 6 and 7 Metering Installations	Metrology Procedure: Part A
ICF_M008	Clarifying ENM's obligations with respect to DLFs and Network Tariff Codes and that the EN for which the ENM has been appointed has an exemption by the AER	Service Level Procedure Embedded Network Manager

2.3. First stage consultation

AEMO issued a Notice of First Stage Consultation on 20 May 2019, and published an Issues Paper and initial draft procedures for the Metering ICF Package. This information is available on [AEMO's website](#).

The Issues Paper included details on AEMO's stakeholder engagement in the course of developing the initial draft procedures, including various proposals that were discussed at consultative forums with industry representatives. The Issues Paper included a summary of the specific amendments proposed in the initial consultation pack.

AEMO received 15 submissions in the first stage of consultation, one of which was a late submission. Copies of all written submissions (excluding any confidential information) have been published on AEMO's website at: <http://aemo.com.au/Stakeholder-Consultation/Consultations/Metering-ICF-Package-Consultation?Convenor=AEMO%20NEM>.

3. SUMMARY OF MATERIAL ISSUES

This section details the material issues AEMO identified during the review process. It also provides AEMO's assessment of the issues and how AEMO proposes to address them.

The key material issues arising from the proposal and raised by Consulted Persons are summarised in the following table:



No.	Issue	Raised by
1.	<u>Updating MSATS about remote de-energisation and remote re-energisation</u>	Multiple Respondents
2.	<u>Define timeframes for updating datastreams in MSATS</u>	Multiple Respondents
3.	<u>Clarifying the LNSP's obligations in relation to creating Embedded Network Codes</u>	Multiple Respondents
4.	<u>CT and VT Standards to include IEC61869</u>	Multiple Respondents
5.	<u>Linear interpolation substitution type for accumulation metering installations</u>	Multiple Respondents
6.	<u>Clarifying communication for identification of incorrect NMI and metering installation</u>	Multiple Respondents
7.	<u>Delivery of metering data while the NMI status is not Active</u>	Multiple Respondents
8.	<u>Verification of Metering Data for whole current Small Customer Metering Installations, Type 4A, 5, 6 and 7 Metering Installations</u>	Multiple Respondents
9.	<u>Clarifying ENM's obligations with respect to DLFs, Network Tariff Codes and EN exemption</u>	Multiple Respondents

A detailed summary of issues raised by Consulted Persons in submissions, together with AEMO's responses, is contained in Appendix B.

4. DISCUSSION OF MATERIAL ISSUES

4.1. Updating MSATS about remote de-energisation and remote re-energisation

4.1.1. Issue summary and submissions

The MSATS Procedure requires the MP to update MSATS when a meter is remotely de-energised and remotely re-energised (clause 2.5.h). However, it does not define what date to use when updating MSATS. There is a risk that MPs may apply different logic to determine the date to use when updating MSATS which will lead to confusion within the market. The proposed amendment defines the date to be applied to remote de-energisation as the 'day after' de-energisation, in line with clause 2.3.(h) for physical de-energisation of an interval meter by an LNSP, and the date for remote re-energisation as the 'day of' the re-energisation, in line with clause 2.3.(i) for physical re-energisation of an interval meter by an LNSP.

There was broad support for the proposed amendment for the timeframes for updating MSATS about remote de-energisation and remote re-energisation. TasNetworks noted that remote de-energisations and re-energisations occur at the meter level, not the connection point level. Origin asked for an example on how the timings work. EVO Energy agreed with the change proposed, however, suggested that the wording of the clauses be amended. AGL suggested broadening the clauses to cover both remote and physical de-energisations. AusNet did not support the timeframe nominated in the amendment proposed. Red/Lumo did not support the timeframe nominated in the amendment proposed and suggested that the wording of the clauses be amended.

4.1.2. AEMO's assessment

The majority of stakeholder feedback supported the proposed remote de-energisation on the day after the de-energisation and remote re-energisation on the day of the re-energisation. AEMO considers the proposed timeframes are appropriate as they are consistent with the NER and allow for all partial day meter readings to be delivered for settlement purposes. Changing the de-energisation update timeframe



to the day of de-energisation (as suggested by AusNet and Red/Lumo) would remove the ability to capture part day meter readings that need to be included in settlement.

AEMO has corrected the wording as per TasNetworks suggestion to identify that the meter is de-energised and re-energised remotely, not the connection point. AEMO does not propose to include examples of the applications of clauses in the procedures as they are consistent with generally followed current practice.

AEMO will update the wording based on Red/Lumo's suggestion but prefers to retain the current structure of the clauses for consistency with other sections (suggested by both Red/Lumo and EVO Energy).

AEMO does not propose to broaden the clauses to cover both remote and physical de-energisations as per AGL's request, as the Rules do not provide for the MP to manually open or close the contactor in the meter.

4.1.3. AEMO's conclusion

AEMO will retain the remote energisation/de-energisation update timeframes proposed in the initial draft, but will include updated wording to identify the meter rather than the connection point and clarify the clauses taking into account stakeholder feedback. The changes are marked up in the draft MSATS Procedure: CATS that is published with this Draft Report.

4.2. Define timeframes for updating datastreams in MSATS

4.2.1. Issue summary and submissions

Clause 2.4.1(a)(iv) of the MDP SLP states "Each MDP - Category D must manage the registration of connection point datastreams in accordance with the timeframes specified in the MSATS Procedures".

However, clause 2.4(g) of the MSATS Procedures: CATS states "The New MDP must configure the datastream as 'A' (Active) or 'I' (Inactive) in accordance with the Service Level Procedure (MDP)".

Each document references the other for the timeframe but neither specifies the timeframe.

The proposed change defines the timeframe for updating datastreams in the MSATS Procedure CATS as two business days.

Stakeholder feedback supported the intent of the proposed timeframes for updating datastreams in MSATS. TasNetworks, intelliHUB, Vector AMS, EVO Energy, Plus ES, Ausgrid, AusNet, and AGL all sought clarification on the timeframe proposed in the amendment. Plus ES suggested clarifying that there is no requirement to de-activate datastreams when a NMI is Inactive. Red/Lumo and EVO Energy suggested wording changes for clarity. AGL proposed an extension to 30 days for enabling communications.

4.2.2. AEMO's assessment

AEMO has updated the clauses to specify when the timeframe should commence and improve clarity where the change does not create clause structure inconsistency with other sections.

Plus ES's suggested clarification on not interpreting the clauses as a requirement to de-activate datastreams when a NMI is Inactive is outside the scope of the current consultation. Plus ES may wish to submit an ICF to facilitate further consideration of this change.

AEMO notes that the change proposed in the Metering Exemption (Small Customer Metering Installation) Guideline is to the length of the period to apply for an exemption, not a proposed extension for enabling communications.



4.2.3. AEMO's conclusion

AEMO has updated the clauses for this issue to reflect when the timeframe should commence and updated the clauses wording to provide clarity. The changes are marked up in the draft MSATS Procedure: CATS that is published with this Draft Report.

4.3. Clarifying the LNSP's obligations in relation to creating Embedded Network Codes

4.3.1. Issue summary and submissions

The MSATS Procedures: CATS current wording of clauses 4.18 (b), (c) & (d) has the potential to be incorrectly interpreted and lacks obligation timeframes.

The proposed amendment clarifies the sections on Embedded Network Codes and Rules in the MSATS Procedures: CATS and defines the timeframes for provision of various Embedded Network details.

Stakeholder feedback supported the proposed clarifications of timeframes for the LNSP's obligations in relation to creating Embedded Network Codes. Origin requested an obligation be assigned for AEMO to publish the embedded network code. EVO Energy sought clarification on how this amended timeframe will be monitored. AGL queried the requirement to generate and provide an Embedded Network Code triggered by the ENM appointment and suggested it seems inefficient to require EN Codes when they are not needed.

4.3.2. AEMO's assessment

AEMO notes the obligation in clause 2.9(e) for AEMO to populate MSATS with the Embedded Network Code provided to AEMO by the LNSP within two business days of receipt.

AEMO proposes to explore what options exist for the monitoring of the proposed obligation, to provide the Embedded Network Code to AEMO within 5 *business days* from the time it receives the request from the *embedded network owner*, or the ENM acting on behalf of the *embedded network owner*.

AEMO notes that having a valid ENC and information about the appointed ENM are conditions required to ensure child NMIs are established quickly when an EN customer wishes to join the market.

4.3.3. AEMO's conclusion

AEMO notes the feedback provided, but considers that no further changes should be made to the proposed MSATS Procedures: CATS amendments for this issue.

4.4. CT and VT Standards to include IEC61869

4.4.1. Issue summary and submissions

The Metrology Procedures require CTs and VTs to meet the relevant requirements of AS60044 (clause 3.1(b) and (c)) and that they must comply with current Australian Standards (clause 3.1(d)).

All metering CTs and VTs are now manufactured overseas, and as such are usually specified and tested to IEC61869. This replaced IEC60044 many years ago and is considered the international industry standard.

AS60044 and IEC61869 have been compared and an engineering report produced showing no material differences between these standards.

The proposed change updates the sections in the Metrology Procedure Part A to include the relevant parts of the IEC61869 that relate to CTs and VTs.



Stakeholder feedback supported the proposed inclusion of IEC61869. Momentum and AGL suggested minor changes to provide clarity to the clauses. Red/Lumo queried whether AEMO has assessed the impacts of the National Measurement Institute (NMI) current review of "the standards" and whether it will likely impact the procedures. AGL queried if clause 3.6(a) should continue to contain differentiation between 1st and 2nd tier obligations, such as component approvals, or should these now have an end date.

4.4.2. AEMO's assessment

AEMO will update the clauses to incorporate the suggestions for clarity.

AEMO has reviewed the National Measurement Institute (NMI) Measurement Law Review and has not identified any required changes to the Metrology Procedures.

AEMO believes clause 3.6(a) should continue to differentiate for tier one and tier two obligations and that the end date occurs when the meter is exchanged.

4.4.3. AEMO's conclusion

AEMO has updated the clauses wording to provide clarity. The changes are marked up in the draft Metrology Procedures: Part A that is published with this Draft Report.

4.5. Linear interpolation substitution type for accumulation metering installations

4.5.1. Issue summary and submissions

The Metrology Procedure Part B requires when a validated actual read for an accumulation meter is lower than the previous substituted read, then the substituted read can either be deleted or re-substituted.

If re-substituted, using method type 61 or 62 would not be suitable because that causes the same issue. Sometimes using another method type like 63 or 65 will work, but on other occasions still provides a read that is higher than the latest validated actual read, therefore these methods are also not suitable.

Another method that would always be suitable for the above scenario is the linear interpolation method whereby the reading is calculated using the ADL between two validated meter readings and applying this ADL pro-rated to the number of days for the substituted read.

This method is currently not available as a standard substitution method; therefore it can only be used if reasonable endeavours to form an agreement are made with impacted participants.

The proposed change therefore updates the Metrology Procedure Part B to include a new substitution type 69 using the linear interpolation methodology.

Stakeholder feedback supported the proposed inclusion of the Type 69 substitution method. Origin queried what is a validated meter reading. Momentum, Vector AMS and Energy Queensland queried the use of the ADL. TasNetworks requested that 'When to Use' this new substitution type be included in the procedure.

4.5.2. AEMO's assessment

AEMO reviewed the proposed methodology for Type 69 and updated the calculation to use Actual Meter Readings rather than ADL.

AEMO has proposed amendments to indicate when to use Type 69.



4.5.3. AEMO's conclusion

AEMO has updated the clauses to reflect the use of Actual Meter Readings for the calculation and when Type 69 can be used. The changes are marked up in the draft Metrology Procedures: Part B that is published with this Draft Report.

4.6. Clarifying communication for identification of incorrect NMI and metering installation

4.6.1. Issue summary and submissions

It is not uncommon for metering installations to be linked to the incorrect NMI. This could be the result of human error when commissioning the meter or where a landlord renames premises without notifying a market participant. This type of issue is usually identified through customer complaints of high bills or no supply, or by a field technician.

The correction required can be complex and the error could go back several years, and therefore requires good communication and coordination between impacted market participants and impacted end use customers.

There have been instances where this type of issue was identified and corrected by the MC/MP/MDP with little or no communication and coordination. This resulted in poor outcomes for the end use customer due to the confusion it caused and extra work on impacted market participants.

The proposed change updates a section in the MSATS Procedures: CATS to include upfront communication when an instance is identified of a metering installation that is not measuring the energy for the connection point it should be measuring.

AEMO proposed amendments to the MSATS Procedures: CATS take into consideration the requested ICF amendment about transposed metering and CATS Standing Data, but represent a broader change to reflect the requirements for participants to maintain correct standing data within MSATS and capture all scenarios, rather than just this one.

Most stakeholder feedback broadly supported the proposed changes. Red/Lumo, TasNetworks and EVO Energy suggested changes to the wording of the clauses. In addition:

- EVO Energy sought clarification on the reason for the change from 20 to 10 business days to correct the CATS Standing Data.
- Momentum, Origin, EVO Energy, AusNet and Energy Queensland questioned the timeframe definition of 'promptly'.
- Vector AMS does not support the current wording for the amendments as it feels the issue of correcting CATS Standing Data is captured in the Rules and other procedures and questioned the reasoning behind expanding the clauses to capture all scenarios rather than just the ICF's transposed metering scenario.

4.6.2. AEMO's assessment

AEMO will update the wording of these amendments to increase clarity. In relation to the timeframe for CATS standing data, the change to 10 business days aligns the obligations with other standing data updates in time for final settlements.

AEMO has updated the word 'promptly' to five business days for clarity.

AEMO considers that it is appropriate for the proposed change to apply equally to all requirements to update standing data. Restricting it to one particular scenario is likely to give rise to inconsistency and uncertainty.



4.6.3. AEMO's conclusion

AEMO has updated the clauses in relation to correcting CATS Standing Data to reflect all scenarios including the ICF requested change, and defining timeframes for when corrections should occur and when actions should be undertaken after a discrepancy has been identified. The changes are marked up in the draft MSATS Procedure: CATS that is published with this Draft Report.

4.7. Delivery of metering data while the NMI status is not Active

4.7.1. Issue summary and submissions

Clause 3.12.2 of the SLP MDP places an obligation on the MDP to deliver metering data within two business days of the Actual Meter Readings being received into the metering data services database or when the metering data is substituted or estimated. Note that the SLA for delivery of metering data to market participants is not dependent on NMI status or datastream status. However, some MDPs have configured their system to only deliver metering data when the NMI status is active, which causes delays in the delivery of metering data and communicating the existence of illegal reconnections.

This issue was raised in October 2013 at the MDP Working Group. AEMO noted at the time that clause 6.11 of the SLP (as at October 2013) required MDPs to deliver data within two business days, without stipulating whether the NMI was active or inactive. If metering data has passed validation, then it must be delivered to AEMO and participants. AEMO therefore considered that if the MDP receives data from the meter and that data passes validation then the MDP must activate the datastreams and provide data to AEMO and participants.

At the time AEMO decided not to update the MDP SLP as it considered the wording of the SLP along with the above clarification was enough. It has recently been identified that differing interpretations remain about when data should be delivered have been in use and therefore an amendment is desirable.

The proposed change adds clarification to the MDP SLP on when data should be delivered.

Stakeholder feedback supported the intent of the proposed delivery of metering data while the NMI status is not active. Specific comments on this issue can be summarised as follows:

- Momentum and EVO Energy requested a timeframe be included in the proposed amended clauses
- intelliHUB suggested a contradiction exists between the proposed amendments and clause 2.4(c) in MSATS Procedures: CATS
- Origin sought clarification on how the MDP determine/identify that energy is being recorded on the NMI
- Vector AMS and Ausgrid noted the proposed amendments also cover the broader issue of usage on a site that is believed to be de-energised. Endeavour noted the current wording of the proposed amendments suggests that metering data must be delivered even when it is not required for settlements, for example tier 1 accumulation metering data Plus ES suggests a clarification so it cannot be interpreted as a requirement to de-activate datastreams when a NMI is Inactive.
- AusNet did not support the proposed change to create a two business day obligation to update the NMI status of energy is being recorded. AusNet felt this would be costly to automate.
- Red/Lumo suggested minor changes to provide clarity to the clause.
- Origin suggested that clause 2.4.1.(x) include the wording 'regardless of the NMI Status'.
- AGL noted that the clauses do not discriminate between the methods of de-energisation.



4.7.2. AEMO's assessment

AEMO agrees with adding a timeframe for delivery of metering data when NMI status is inactive, and proposes 2 business days to align with the MSATS Procedures: CATS. AEMO will also make a number of suggested changes to the clause to improve clarity. AEMO does not propose to make changes to address the remaining feedback, for the following reasons:

- AEMO does not consider that there is a contradiction with clause 2.4(c). The proposed amendments will be the first step to correct the situation, with the CATS steps triggered from the first step.
- MDPs will become aware of recorded energy flows through the MDPs normal meter reading collection processes.
- AEMO notes that an additional ICF is currently being explored (outside of this consultation) on the broader issue of usage on a site that is believed to be de-energised.
- The proposed amendments are aligning with global settlements readiness activities in relation to the delivery of metering data.
- As the clause relating to deactivation has not been revised, there does not appear to be room for misinterpretation.
- AEMO notes that organisations have flexibility to build their processes as appropriate to comply with the procedures.
- AEMO does not agree with the inclusion of 'regardless of the NMI Status' in clause 2.4.1(x). This is because clause 2.4.1(ix) contains the words 'regardless of the NMI Status' and the two clauses are contingent upon one another.
- AEMO notes that only LNSPs perform physical on-site disconnections and have the obligation to update the NMI status accordingly. Contestable MPs/MDPs are not involved in updating the NMI status.

4.7.3. AEMO's conclusion

AEMO has updated the clauses for this issue to reflect the timeframe involved and updated the clauses wording to provide clarity. The changes are marked up in the draft Service Level Procedure Meter Data Provider Services that is published with this Draft Report.

4.8. Verification of Metering Data for whole current Small Customer Metering Installations, Type 4A, 5, 6 and 7 Metering Installations

4.8.1. Issue summary and submissions

The Metrology Procedures Part A requires updating to provide clarity to MCs on what they need to do for metering data verification. The current clause was open to interpretation.

Stakeholder feedback supported the intent of the proposed amendments to provide clarity to MCs on what they need to do for metering data verification. Specific comments on this issue can be summarised as follows:

- Red/Lumo and Momentum suggested changes for clarity to various parts of clause 12.5
- Momentum suggested that the clauses that include 'each MC' be replaced with 'the MC'
- AGL queried if with the removal of AS 2490 current testing programs need to be grandfathered
- Red/Lumo queried whether AEMO has assessed the impacts of the National Measurement Institute (NMI) current review of "the standards" and whether it will likely impact the procedures Ausgrid



requested AEMO outline their expectation of how verification of Type 6 metering installations is to be conducted

- Whilst the MC needs to ensure that the metering installations are verified, Origin requested an additional paragraph under sub-clause 12.5(d)(ii) to avoid the ambiguity around who will verify and resolve the metering non-conformities with the rule

4.8.2. AEMO's assessment

AEMO considers that some of the suggested minor drafting changes to the clause would improve clarity, and has included these in the draft Metrology Procedures Part A. AEMO does not propose to make changes to address the remaining feedback, for the following reasons:

- AEMO does not agree with Momentum's suggested change to 'each' MC is appropriate, as MCs require a plan regardless of the NMIs they do or do not have a relationship with
- The expectation would be to switch to the new clarified test requirements at the next required test sample cycle, and AEMO does not consider grandfathering is necessary
- AEMO has reviewed the National Measurement Institute (NMI) Measurement Law Review and has not identified any changes to the Metrology Procedures
- Type 6 metering installation verification should be conducted as per current practice. AEMO has not changed this requirement the intention is to clarify what the AQL should be set and how to select samples for normal and tightened inspection based on the result outcome of the sampling

AEMO does not agree that an additional clause be added in under sub-clause (d)(iii), the requested addition is part of the Meter Asset Management System (MAMS) and the MC-MP contractual arrangements.

4.8.3. AEMO's conclusion

AEMO has updated the wording of clause 12.5 to improve clarity. The changes are marked up in the draft Metrology Procedures: Part A that is published with this Draft Report.

4.9. Clarifying ENM's obligations with respect to DLFs, Network Tariff Codes and EN exemption

4.9.1. Issue summary and submissions

There is currently no process to confirm that when an embedded network is created in MSATS, it is an embedded network that has the benefit of an AER exemption from the requirement to register under Chapter 2 of the NER.

The current wording in the ENM SLP does not accurately reflect the process required to create a site specific DLF code in MSATS. The obligation to develop a site-specific code is incorrectly placed on the EENSP who has no direct contact with AEMO under the Rules.

It is not currently clear in the procedure how the ENM can ensure that the network tariff code allocated for a child connection point is correct.

The proposed change seeks to clarify the sections in the ENM SLP with respect to DLFs and Network Tariff Codes and confirm that the EN for which the ENM has been appointed has the benefit of an AER exemption.

Stakeholder feedback generally supported the intent of proposed amendments to provide clarity for ENM obligations with respect to DLFs, Network Tariff Codes and EN exemption. In addition to minor drafting changes suggested by stakeholders for clarity, feedback included:



- AGL identified that the proposed amended clauses had not covered what occurs when the ENO loses its exemption or the ENM loses its accreditation
- Momentum requested a definition be provided for ENO
- AGL requested an obligation for AEMO to update, or add, the site specific DLFs into MSATS within 5 business days of receiving it and update any associated publications. AGL suggested an additional requirement for the ENM to ensure that all standing data has been updated prior to the NMI status code changed to 'A'
- Momentum suggested a wording change to clause 4.3.3(a) from 'populated' to 'assigned'
- Origin suggested adding the word 'controller' to clause 4.3.3(a)
- Red/Lumo does not believe the obligation proposed in 4.3.3(a) is required

4.9.2. AEMO's assessment

AEMO considers that some of the suggested minor drafting changes to the clause would improve clarity, and has included these in the draft ENM SLP. AEMO's assessment of the remaining suggestions from stakeholders is as follows:

- AEMO agrees that the clause should cover the scenario where an ENO's exemption is no longer valid
- AEMO considers that the loss of an ENM's accreditation is already covered in the Default and Dereistration Procedure

The Embedded Network Owner (ENO) may be a different party to the EENSP and AEMO will update the footnote to confirm this.

- AEMO notes that the MSATS: CATS Procedure clause 2.9(b) has an AEMO obligation to update the DLF in MSATS within two business days of receiving it, AEMO has modified the obligation to include getting the DLF from LNSP or ENM
- AEMO notes adding an obligation to require the ENM to ensure that all standing data has been updated prior to the NMI status code changed to 'A' is outside the scope of the current consultation and suggests should AGL wish to explore this change they submit an ICF
- AEMO will retain the word 'populated' in clause 4.3.3(a) as it considers it more accurate than 'assigned' in this context as the codes are already generated and the MPB only populates the field in the MSATS database
- AEMO does not agree with the addition of the word 'controller' to clause 4.3.3(a), but will replace embedded network owner with EENSP, as the EENSP is the party that an ENM needs to liaise with to ensure the Network Tariff Code is correct
- AEMO does not agree that the obligation proposed in 4.3.3(a) is not required. AEMO has received queries from participants on how to obtain the Network Tariff Code

4.9.3. AEMO's conclusion

AEMO has updated the clauses wording to provide clarity and added an additional sub-clause to cover when an ENO exemption is no longer valid. The changes are marked up in the draft Service Level Procedure: Embedded Network Manager that is published with this Draft Report.

5. OTHER MATTERS

As a result of the consultation, various respondents highlighted additional minor amendments to the various procedures within the Metering ICF Package. Where the highlighted amendments did not change the meaning of the obligation, and AEMO considered they were beneficial for clarity or consistency, AEMO



has made updates, as shown in the track changed versions published with this draft determination. Where a suggested change was outside of the scope of this consultation, AEMO has not changed the procedures and suggested an ICF be submitted to the appropriate forum for initial stakeholder assessment.

AEMO notes that all stakeholder feedback supported the Rule reference changes made to the Exemption Procedure Meter Installation Malfunctions and the change to the version numbering of WIGs to align with the updated CATS version.

Plus ES and Ausgrid questioned the objectives of the validation in Clause 12.5 of the Metrology Procedure Part A. AEMO notes that Clause 12.5 is related to verification of energy data stored within the metering installation and corresponds with metering data stored within the metering data services database when metering installation are tested. Validation of manually read metering data is covered in MDP Service Level Procedure.

AEMO has proposed that the amended metering procedures will come into effect on 20 May 2020.

6. DRAFT DETERMINATION

Having considered the matters raised in submissions, AEMO's draft determination is to amend various metering procedures in the form published with this Draft Report, in accordance with Chapter 7 of the NER. There are 16 published draft metering procedure documents:

- MSATS Procedures: CATS v4.8 Draft Determination Change Marked
- MSATS Procedures: CATS v4.8 Draft Determination Clean
- MSATS Procedures: WIGS v4.8 Draft Determination Change Marked
- MSATS Procedures: WIGS v4.8 Draft Determination Clean
- Metrology Procedure: Part A v6.05 Draft Determination Change Marked
- Metrology Procedure: Part A v6.05 Draft Determination Clean
- Metrology Procedure: Part B v6.1 Draft Determination Change Marked
- Metrology Procedure: Part B v6.1 Draft Determination Clean
- Service Level Procedure Meter Data Provider Services v1.8 Draft Determination Change Marked
- Service Level Procedure Meter Data Provider Services v1.8 Draft Determination Clean
- Service Level Procedure Meter Provider Services v1.4 Draft Determination Change Marked
- Service Level Procedure Meter Provider Services v1.4 Draft Determination Clean
- Service Level Procedure Embedded Network Manager v1.1 Draft Determination Change Marked
- Service Level Procedure Embedded Network Manager v1.1 Draft Determination Clean
- Exemption Procedure Meter Installation Malfunctions v1.1 Draft Determination Change Marked
- Exemption Procedure Meter Installation Malfunctions v1.1 Draft Determination Clean



APPENDIX A. GLOSSARY

Term or acronym	Meaning
AER	Australian Energy Regulator
AQL	Acceptance Quality Limit
CATS	Consumer Administration and Transfer Solution, a part of MSATS.
CT	Current Transformer
DLF	Distribution Loss Factor
EENSP	Exempt Embedded Network Service Provider
EN	Embedded Network
ENM	Embedded Network Manager
ENO	Embedded Network Owner
ERCF	Energy Retail Consultative Forum
ICF	Issue Change Form
LNSP	Local Network Service Provider
MC	Metering Coordinator
MDP	Metering Data Provider
MP	Meter Provider
MSATS	Market Settlements and Transfer Solution
NMI	National Metering Identifier
NER	National Electricity Rules
SLP	Service Level Procedure
VT	Voltage Transformer
WIGS	Wholesale, Interconnector, Generator and Sample



APPENDIX B. SUMMARY OF SUBMISSIONS AND AEMO RESPONSES

SA Power Networks provided an overarching response. SA Power Networks have reviewed the proposed changes that are part of this consultation and do not have any comments. AEMO acknowledges SA Power Networks submission.

Table 2 MSATS Procedures: CATS

No.	Section	Consulted person	Issue	AEMO response
1.	General	AGL	AGL notes the various changes of field/Data types that have been made to parts of the CATS Procedures, eg Datastream Type. However, these changes have not been made consistently through the document and various tables etc. – eg Datastream type which appears as 'Datastream type' and 'Datastream Type'. AGL suggests that as these changes have been started, they should be completed through the documents.	Agreed
2.	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.	AEMO to make table names and references consistent across the document.
3.	2.1.(h)	AGL	AGL Agrees with the proposed change	Noted
4.		Red/Lumo	Red Energy and Lumo Energy (Red and Lumo) support the amendment of this clause however, propose the following wording be considered; (h) Participants must ensure that CATS Standing Data is kept current and relevant for the on all NMIs for in which they are responsible.	Agreed
5.	2.1.(i)	Momentum	Agree to the proposed update	Noted
6.		TasNetworks	TasNetworks notes a change also made to clause 2.1(i). The word 'it' should be 'they are'. TasNetworks agrees with the change from 20 business days to 10 business days.	Agreed
7.		EVO Energy	Accept most wording changes. Please provide context and purpose for the change to 10 business days. What is the benefit to participants or customers for this change? There is no mention of this in Issues paper. Please correct grammatical error in 2(i) (add 'is') ...for which it is responsible	The change to 10 business days is to align with other standing data updates in time for final settlements. Refer to item #6



No.	Section	Consulted person	Issue	AEMO response
8.		Red/Lumo	We are supportive of changes and amendments to timeframes specified within this clause however have provided suggested grammatical amendments as follows: (i) Unless a different timeframe is specified in these Procedures, a Participant must update the CATS Standing Data, for all NMs in which they are responsible for which it responsible within 20 10 business days of; (i) being advised by a Participant that the CATS Standing Data # is no longer current or relevant or; (ii) becoming aware that the CATS Standing Data # is no longer current or relevant.	AEMO reworded the clause, however the current structure will be retained for consistency with other sections.
9.	2.1.(l)	Momentum	The terminology 'Promptly' is too vague and left to the interpretation of the participants, recommend to articulate the actual number of days, a Participant must take action after becoming aware of incorrect CATS Standing Data. Suggest 5 business days as the inaccuracy has an impact on wholesale settlement which is on a weekly basis	AEMO agrees with Momentum's suggested change as it adds more clarity and supports specified timeframes. The suggested timeframe is in line with similar other data correction timeframes. AEMO will update it to 5 business days.
10.		TasNetworks	Agreed	Noted
11.		Origin	Clarification required: What does AEMO define as promptly? As the clause is generic the notification method to advise other participants of incorrect standing data information is not defined. Is it assumed that it is up to the participants involved to work out the best method of communication i.e. transaction, email etc? In terms of incorrect standing data information what defines this i.e. does an unstructured address mean the standing data is incorrect?	In relation to timeframe, please refer to item #9 AEMO believes participants should determine how they communicate with other participants. AEMO believes that participants should follow the relevant rules and procedures to determine the correctness of standing data.



No.	Section	Consulted person	Issue	AEMO response
12.		Vector AMS	<p>When a Participant becomes aware that CATS Standing Data related to a NMI is incorrect, that Participant must promptly notify other impacted Participants and the Participants must cooperate with each other to facilitate the correction of the CATS Standing Data.</p> <p>Vector does not support this change as drafted. As drafted, this will have the unintended consequence of capturing all issues related to standing data and not just the issue raised in ICF M004 to address a specific scenario where a transposed meter exists or where a meter is recorded against the incorrect NMI.</p> <p>Vector believes that obligations already exist under the rules (NER 7.9.2) and the MP and MDP SLP's that cater for the intent of the ICF, therefore it is not necessary to introduce new clauses to reiterate what is already in place. For example, in order for a transposed meter to be recognised a site inspection is required. NER 7.9.2 will be triggered and affected NMI's will have their standing data in MSATS updated and meter data will need to be reissued by the relevant MDP's as required by NER 7.10.2 (e) and other obligations in the MDP SLP's such as 3.7.2 Erroneous data and 3.7.1(g) notify participants of substitutions.</p> <p>Vector believes that MP/MDP/MC's already work closely with Retailers and LNSP's when resolving these issues but suggest the communication can be strengthened with a new Substituted Reason code in the MDFF file that can accompany the substituted meter data when it is re-issued - NER 7.10.2 (e).</p> <p>Participants can use this code in their processes to understand the cause for the changes in standing data and meter data.</p> <p>Should AEMO deem 2.1.(l) be required then alternate drafting is required to limit the obligation to the issue of transposed metering only.</p>	The initial ICF referred to specific scenario of transposed metering. However, AEMO considers that it is appropriate for the proposed change to apply equally to all requirements to update standing data. Restricting it to one particular scenario is likely to give rise to inconsistency and uncertainty.
13.		EVO Energy	Agree with proposed inclusion, requires clarification on timeframe denoted by 'promptly' and method of notification e.g.: via B2B.	Refer to items #9 and #11
14.		Tango	Agree to the changes and the reduced timeframe.	Noted



No.	Section	Consulted person	Issue	AEMO response
15.		AusNet	<p>AusNet Services supports the intent of this new clause to encourage participants to cooperate with each other to correct CATS standing data. However, participants already have obligations to send the correct CATS standing data to the market in the form of CATS transactions. Where a registered participant confirms the CATS standing data for a record is incorrect and the registered participant can correct it by sending CATS transaction notifications without asking all impacted registered participants to investigate. We suggest obligations to send inefficient notifications to registered participants be removed while retaining the intent of the clause by making the following alteration.</p> <p>(l) When a Participant becomes aware that CATS Standing Data related to a NMI is incorrect, and that Participant must promptly notify notifies other impacted Participants. When notified Participants must cooperate with each other to facilitate the correction of the CATS Standing Data.</p>	Refer to item #9
16.		Energy Queensland	Energy Queensland supports the proposed change but considers that the change would be enhanced with the inclusion of 'promptly' prior to 'cooperate' as we regularly do not receive timely responses to these sorts of issues from other parties.	Refer to item #9
17.		Red/Lumo	<p>Red and Lumo support the purpose of changes to this obligation however, have provided suggested amendments to ensure define terms are italicised;</p> <p>(l) When a Participant becomes aware that CATS Standing Data related to a <i>NMI</i> is incorrect, that Participant must promptly notify other impacted Participants. and t The Participants must cooperate with each other to facilitate the correction of the CATS Standing Data.</p>	Refer to item #9
18.	2.4.(c)	Momentum	Agree	Noted
19.		intelliHUB	It is not always known when the connection point was made de-energised. As an MP we will initially treat a site that has stopped recording data as a fault.	When an LNSP de-energises a connection point in MSATS, MSATS will send notifications to all relevant parties including the MP and MDP.



No.	Section	Consulted person	Issue	AEMO response
20.		TasNetworks	With reference to 2.3(h), the MDP is dependent on being informed of a change in NMI status, which may take up to 5 business days. TasNetworks recommends that the obligation on the MDP should be to update the data stream(s) within 2 days of receiving the MSATS CR Completed Notification informing of the NMI status change.	AEMO agrees to amend the section 2.4(c) to clarify that the MDP should update the data stream(s) within 2 business days of becoming aware of the NMI status change.
21.		Origin	Agree	Noted
22.		Vector AMS	<p>The MDP will be unable to meet this obligation as it is currently drafted. The MDP can only be held to account once it has become <u>aware</u> that the site has been de-energised/re-energised by the LNSP. Awareness is provided by monitoring the NMI Status code in MSATS. The precedent for this is already well established numerous time in the CATS procedures -refer to clause 2.3.(j) and 2.2.(q) which shows obligations on participants when other parties are involved. Current drafting should be changed to:</p> <p>a. Where an MDP is to update an Interval Datastream Status Code to 'I' (Inactive) for a <i>connection point</i> that is de-energised, the Proposed Change Date must be the day after the <i>connection point</i> is de-energised within two five business days from the time the MDP become aware of the connection point being de-energised. (The Datastream Status Code is the key criterion used to include <i>metering data</i> in the <i>settlement process</i>).</p> <p>This change also needs to be considered along side the change requested by for ICF_M005 which is asking MDP to continue to read meters after a site has been de-energised by the LNSP. While Vector is supportive of ICF_M005, it is Vectors position that should this ICF proceed the most efficient process is for the datastream to remain active and the MDP to send Subs zero indicating a 'D'e-energised site (reason code 6) – See section 10 below for more detail.</p>	Refer to item #20
23.		EVO Energy	<p>Generally agree.</p> <p>For simplicity, suggest changing statement to "An MDP must within two business days." and remove timing from each dot point.</p> <p>As per additional comment at end of consultation document (p13), please include clarity on when the two business day count commences.</p>	AEMO to keep the clauses as per its current structure for consistency with other sections. Refer to item #20
24.		Endeavour	We support the timeframe obligation for updating datastreams	Noted



No.	Section	Consulted person	Issue	AEMO response
25.		Plus ES	<p>Plus ES agrees with the intent of the clause; however, suggests a clarification so it cannot be interpreted as a requirement to de-activate Datastreams when a NMI is Inactive.</p> <p>An MDP should have the option to maintain active Datastreams irrespective of the energisation status of the NMI.</p> <p>Plus ES also suggests that the MSATS update should be from the time the MDP is notified not of the connection point being re-energised.</p>	<p>This is an existing obligation, and the proposed change is outside the scope of this consultation. Plus ES may wish to submit an ICF to facilitate further consideration of this change.</p> <p>Refer to item #20</p>
26.		Ausgrid	If the MDP changed the datastream status code to 'I' and detects energy consumption, the must change the datastream status code to 'A'. If they do not when the sites NMI status is changed to A, then this will cause an ADWNAN_INTERVAL error for the LNSP.	Refer to item #20
27.		Tango	Agree	Noted
28.		AusNet	AusNet Services considers the current timeframes of 5 business days do not impact on market settlements and reconciliations, and the change to 2 business days is inconsistent with existing B2B Procedure allow up to 5 days to complete a Service Order. The processing of the B2B Procedure Service Order subsequently triggers the update to CATS Standing Data. We consider this change has not been financially justified by AEMO or Participants.	Refer to item #20
29.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
30.		AGL	AGL Agrees with the proposed change in relation to the effective day. However, the two-day timeframe to update an interval datastream may be too short – see comments below	Refer to item #20



No.	Section	Consulted person	Issue	AEMO response
31.		Red/Lumo	<p>Red and Lumo support the changes to this clauses however, have provided suggested minor amendments to the way in which the clause reads;</p> <p>(c) Where an MDP is to update an Interval Datastream Status Code to 'I' (Inactive) for a <i>connection point</i> that is de-energised, the MDP must:</p> <ul style="list-style-type: none">(i) ensure the Proposed Change Date must be is the day after the <i>connection point</i> is de-energised, and;(ii) ensure Interval Datastream Status Code be is updated in MSATS within two business days of the <i>connection point</i> being de-energised. <p>(The Datastream Status Code is the key criterion used to include metering data in the settlement process).</p>	Refer to item #20
32.	2.4.(d)	Momentum	Agree	Noted
33.		intelliHUB	It is not always known when the connection point was made de-energised. As an MP we will initially treat a site that has stopped recording data as a fault.	Refer to item #19
34.		TasNetworks	With reference to 2.3(h), the MDP is dependent on being informed of a change in NMI status, which may take up to 5 business days. TasNetworks recommends that the obligation on the MDP should be to update the data stream(s) within 2 days of receiving the MSATS CR Completed Notification informing of the NMI status change.	Refer to item #20
35.		Origin	Agree	Noted
36.		Vector AMS	Obligations should require 5 days to update MSATs from when MDP becomes aware of a change in status. See comment for 2.4.(c)	Refer to item #20
37.		EVO Energy	Agree	Noted
38.		Plus ES	<p>PLUS ES agrees with the intent of the clause; however, suggests a clarification so it cannot be interpreted as a requirement to de-activate Datastreams when a NMI is Inactive.</p> <p>An MDP should have the option to maintain active Datastreams irrespective of the energisation status of the NMI.</p> <p>PLUS ES also suggests that the MSATS update should be from the time the MDP is notified not of the connection point being re-energised.</p>	Refer to item #25



No.	Section	Consulted person	Issue	AEMO response
39.		Tango	Agree	Noted
40.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
41.		AGL	AGL Agrees with the proposed change, but notes that the ICF was raised in relation to incorrect NMIs, while this obligation has been drafted to cover all standing data which may lead to unexpected consequences.	Noted
42.		Red/Lumo	Refer to feedback on item 2.4(c).	Noted
43.	2.4.(e)	Momentum	Agree	Noted
44.		intelliHUB	It is not always known when the connection point was made de-energised. As an MP we will initially treat a site that has stopped recording data as a fault.	Refer to item #19
45.		TasNetworks	With reference to 2.3(h), the MDP is dependent on being informed of a change in NMI status, which may take up to 5 business days. TasNetworks recommends that the obligation on the MDP should be to update the data stream(s) within 2 days of receiving the MSATS CR Completed Notification informing of the NMI status change.	Refer to item #20
46.		Origin	Agree	Noted
47.		Vector AMS	Obligations should require 5 days to update MSATS from when MDP becomes aware of a change in status. See comment for 2.4.(c)	Refer to item #20
48.		EVO Energy	Agree Grammatical correction – please add ‘the’ “...the Proposed Change Date must be <i>the</i> day the connection...”	Agreed
49.		Tango	Agree	Noted
50.		AusNet	AusNet Services considers the current timeframes of 5 business days do not impact on market settlements and reconciliations, and the change to 2 business days is inconsistent with existing B2B Procedure allow up to 5 days to complete a Service Order. The processing of the B2B Procedure Service Order subsequently triggers the update to CATS Standing Data. We consider this change has not been financially justified by AEMO or Participants.	Refer to item #20



No.	Section	Consulted person	Issue	AEMO response
51.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
52.		PLUS ES	<p>PLUS ES agrees with the intent of the clause; however, suggests a clarification so it cannot be interpreted as a requirement to de-activate Datastreams when a NMI is Inactive.</p> <p>An MDP should have the option to maintain active Datastreams irrespective of the energisation status of the NMI.</p> <p>PLUS ES also suggests that the MSATS update should be from the time the MDP is notified not of the connection point being re-energised.</p>	Refer to item #25
53.		AGL	<p>Many changes in NMI status are affected by a 'main-switch disconnect' which is often reversed by the consumer. The purpose in maintaining the interval datastream is to ensure that energy usage is detected and can be acted on.</p> <p>AGL suggests that the two business day timeframe is too short.</p> <p>AGL also notes that the timeframes for an LNSP to update a NMI status (2.3(e) and 2.4(i)) have not changed from the current five business days and are extensively covered in the CATS procedures.</p> <p>At the very least, AGL believes that these timeframes are sequential; that is five for the LNSP, seven (plus 2) for the MDP.</p> <p>AGL also considers that the timings could be different from customer requested disconnection to abolishment.</p>	Refer to item #20
54.		Red/Lumo	Refer to feedback on item 2.4(c).	Noted
55.	2.4.(f)	Momentum	Agree	Noted
56.		intelliHUB	This timeline does align with the MPB timelines of 5 business days to update MSATS after physically completing a meter install.	Refer to item #20 AEMO to reword the clause to include the term 'metering installation'
57.		TasNetworks	The MDP may not be aware of a need to create or update data stream(s) until receipt of a MSATS CR Completed Notification, therefore the two business days should commence from the time the MDP is made aware, either from a MSATS CR or from notification by the MPB (e.g. upon commissioning a new meter).	Refer to item #20



No.	Section	Consulted person	Issue	AEMO response
58.		Origin	<p><u>Clarification required:</u></p> <p>If you need to update the datastream within 2 business days of becoming MDP – is this after the 300X is issued. There would be value in seeing a mapped out step of 300X then 400X and the timeframes. If there is a longer timeframe to update MSATS – such as issuing 1500 how does this align?</p>	Refer to item #20
59.		Vector AMS	<p>Similarly to comments on 2.4.(c) it is not the MDP who is installing the meter therefore the allocation of the Datastreams cannot be performed until the MP has informed the MDP that the metering work has been completed. Obligations on the MDP can only commence once it has been made <u>aware</u> the metering is in place.</p> <p>In addition, current obligations on the LNSP and the MP require standing data updates to be completed within 5 business days. It is only reasonable that the MDP is also given this amount of time.</p> <p>Suggest the current drafting be change to:-</p> <p>(f) Create or update the datastream within two <ins>five</ins> business days from the time the MDP becomes aware that the meter is installed/removed/reconfigured or as required when the MDP becomes the Current MDP.</p>	Refer to item #20
60.		EVO Energy	Agree	Noted
61.		Tango	Agree	Noted
62.		AusNet	AusNet Services considers the current timeframes of 5 business days do not impact on market settlements and reconciliations, and the change to 2 business days is inconsistent with existing B2B Procedure allow up to 5 days to complete a Service Order. The processing of the B2B Procedure Service Order subsequently triggers the update to CATS Standing Data. We consider this change has not been financially justified by AEMO or Participants.	Refer to item #20
63.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted



No.	Section	Consulted person	Issue	AEMO response
64.		AGL	<p>AGL notes that the obligation as drafted is inadequate. The MDP can only create datastreams once it has been advised by the MP that the meter has been installed or reconfigured.</p> <p>Noting the proposed extension to 30 days for enabling communications to be made operational, there may be delays for meters with communication issues, which this obligation would have to account for.</p> <p>Finally, to enable datastreams to be delivered quickly, there would need to be changes made to the MP SLAs as they have 5 b/days to update MSATS, and this process follows MP activities.</p>	<p>Refer to item #20</p> <p>AEMO notes the 30 days to the length of the period to apply for an exemption, not a proposed extension for enabling communications.</p>
65.		Red/Lumo	<p>Red and Lumo support the inclusion of this obligation within the CATS procedures however, have provided suggested minor amendments to the way in which this clause reads;</p> <p>(f) Create or update the datastream within two <i>business days</i> from the time the meter is either installed, removed, reconfigured or as required when the MDP becomes the Current MDP.</p>	Agreed
66.	2.4.(h)	Momentum	Agree	Noted
67.		intelliHUB	This timeline does align with the MPB timelines of 5 business days to update MSATS after physically completing a meter install.	Refer to item #20 and #56
68.		TasNetworks	Agreed, but with reference to 2.4(c) to (f) as noted above.	Refer to item #20
69.		Vector AMS	Agreed	Noted
70.		EVO Energy	Agree	Noted
71.		Endeavour	The obligation to register and configure datastreams applies equally to a New MDP and a Current MDP. We suggest that clauses 2.4.h and 2.4.j be moved to be under "An MDP must:" section.	Agreed
72.		Tango	Agree	Noted
73.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
74.		AGL	AGL Agrees with the proposed change	Noted



No.	Section	Consulted person	Issue	AEMO response
75.		Red/Lumo	Red and Lumo support the proposed amendments to this clause.	Noted
76.	2.5.(a)	Momentum	Agree	Noted
77.		TasNetworks	It is not the 'connection point' that is de-energised, it is the meter. The clause should be rewritten to reflect this.	Agreed
78.		Origin	Origin request AEMO to provide an example of this proposal. The understanding is that MSATS would show the end date of the active record to be the actual date of the de-energisation. Then the start date of the de-energisation + 1 e.g. 05/06/19 De-en remotely occurred on this date. MSATS would show end date of active record as of 05/06/19. MSATS would show start date of de-en record as of 06/06/19. If De-en occurs at 1pm on 05/06/19, expect actual reads expected from midnight to 1pm, then remainder of day to be zero temporary substitutions. And should then they sub zeros from the point of de-en upto midnight on that day?	AEMO does not propose to include examples of the applications of clauses in the procedures as they are consistent with generally followed current practice.
79.		Vector AMS	Agreed	Noted
80.		EVO Energy	Agree Need to add a timeframe in the same way as has been added for MDP Suggested wording to get added to the heading An MPB must, within two business days:	AEMO prefers to retain the current structure of the clauses for consistency with other sections.
81.		Endeavour	We support defining the dates to be used when a metering installation is remotely disconnected and reconnected	Noted
82.		Tango	Agree	Noted



No.	Section	Consulted person	Issue	AEMO response
83.		AusNet	<p>AusNet Services currently updates remote de-energisations on the same day not the day after the connection point is de-energised. Making the change will be costly. The change has not been financially justified by AEMO or by participants, nor is it necessary. One day, when MSATS becomes a near real-time system remote de-energisations will have to be updated on the same day and not the day after the de-energisations.</p> <p>However, if AEMO and other participants consider this change is justified or necessary then we request its implementation is not mandatory until July 2021 to reduce system implementation costs. This could be done, by adding the following words at the end of the clause:</p> <p>(a) Where an MPB is to update an Interval Meter Register Status Code to 'D' (De-energised) for a connection point that is remotely de-energised, the Proposed Change Date must be the day after the connection point is de-energised. This obligation only becomes mandatory by 1 July 2021.</p>	AEMO considers the proposed timeframes are appropriate as they are consistent with the NER and allow for all partial day meter readings to be delivered for settlement purposes. Changing the de-energisation update timeframe to the day of de-energisation would remove the ability to capture part day meter readings that need to be included in settlement.
84.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
85.		AGL	AGL notes the proposed update for remote services but suggests that as an MPB may also be able to energise and de-energise a meter locally (eg 4A meters), that the proposed wording should have 'remotely' removed. i.e.: <u>...that is remotely de-energised, the Proposed Change Date...</u>	AEMO does not propose to broaden the clauses to cover both remote and physical de-energisations, as the Rules do not provide for the MP to manually open or close the contactor in the meter.



No.	Section	Consulted person	Issue	AEMO response
86.		Red/Lumo	<p>While acknowledging the process for updating the status overnight due to the market request. Red and Lumo believe that there is benefit in changing this requirement to the date the connection point is de energised which will align with 2.5 (b) and the date of de-energisation.</p> <p>We have also provided minor amendments to the way in which this clause reads and consistent with how similar clauses in procedures are written;</p> <p style="padding-left: 40px;">Where an MPB is to update an Interval Meter Register Status Code A an MPB must:</p> <p class="list-item-l1">(a) Where an MPB is to update an Interval Meter Register Status Code Update the Interval Meter Register Status Code to 'D' (De-energised) for a connection point that is remotely de-energised, the Proposed Change Date must be the day after the connection point is de-energised.</p> <p class="list-item-l1">(b) Where an MPB is to update an Update the Interval Meter Register Status Code for Interval Meter to 'A' (Active) for a connection point that is remotely re-energised, the Proposed Change Date must be the day the connection point is re-energised.</p>	<p>AEMO considers the proposed timeframes are appropriate as they are consistent with the NER and allow for all partial day meter readings to be delivered for settlement purposes. Changing the de-energisation update timeframe to the day of de-energisation would remove the ability to capture part day meter readings that need to be included in settlement.</p> <p>AEMO notes that corrections will be made to the clauses, however, AEMO prefers to retain the current structure of the clauses for consistency with other sections.</p>
87.	2.5.(b)	Momentum	Agree	Noted
88.		TasNetworks	It is not the 'connection point' that is re-energised, it is the meter. The clause should be rewritten to reflect this.	Agreed
89.		Origin	<p>Should the MPB sub zeros up to the re-en point from midnight?</p> <p>Eg. 05/06/19: Re-en remotely occurred on this date.</p> <p>MSATS would show end date of de-en record as of 04/06/19.</p> <p>MSATS would show start date of re-en record as of 05/06/19.</p> <p>If Re-en occurs at 1pm on 05/06/19, expect substituted reads from midnight to 1pm, then remainder of day to be actual reads.</p>	AEMO does not propose to include examples of the applications of clauses in the procedures as they are consistent with generally followed current practice.
90.		Vector AMS	Agreed	Noted



No.	Section	Consulted person	Issue	AEMO response
91.		EVO Energy	<p>Agree</p> <p>Need to add a timeframe in the same way as has been added for MDP</p> <p>Suggested wording at heading as per above</p> <p>Should also consider adding timeframe to each heading of "A New MPB must" add ", within five business days."</p> <p>2.5(j) – please have consistency of numerical representation, either 'five' or '5'. This is an issue throughout the document.</p>	AEMO prefers to retain the current structure of the clauses for consistency with other sections.
92.		Endeavour	<p>'A' is not a valid Meter Register Status Code. We suggest updating clause 2.5.b to reference the Code of 'C' – see suggested wording below:</p> <p>Where an MPB is to update an Interval Meter Register Status Code for Interval Meter to 'C' (Current) for a connection point that is remotely re-energised, the Proposed Change Date must be the day the connection point is re-energised.</p>	AEMO will make the correction as Meter Register Status code should be C and not A.
93.		Plus ES	<p>PLUS ES notes:</p> <p>The Interval Meter Register Status Code should be 'C' (Current), not 'A'</p>	Refer to item #92
94.		Ausgrid	Interval Meter Status Code should be changed to 'C' not 'A'.	Refer to item #92
95.		Tango	Agree	Noted
96.		AusNet	<p>AusNet Services currently updates remote re-energisations on the same day not the day after the connection point is re-energised. Making the change will be costly. The change has not been financially justified by AEMO or by participants, nor is it necessary. One day, when MSATS becomes a near real-time system remote re-energisations will have to be updated on the same day and not the day after the re-energisations.</p> <p>However, if AEMO and other participants consider this change is justified or necessary then we request its implementation is not mandatory until July 2021 to reduce system implementation costs. This could be done, by adding the following words at the end of the clause:</p> <p>(b) Where an MPB is to update an Interval Meter Register Status Code for Interval Meter to 'A' (Active) for a connection point that is remotely re-energised, the Proposed Change Date must be the day the connection point is re-energised. This obligation only becomes mandatory by 1 July 2021.</p>	AEMO notes this change allows for all metering data delivered for settlements.



No.	Section	Consulted person	Issue	AEMO response									
97.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted									
98.		AGL	AGL notes the proposed update for remote services but suggests that as an MPB may also be able to energise and de-energise a meter locally (eg 4A meters), that the proposed wording should have 'remotely' removed. i.e.: <u>...that is remotely de-energised, the Proposed Change Date...</u>	Refer to item #85									
99.		Red/Lumo	Refer to feedback on item 2.5(a)	Noted									
100.	4.9	EVO Energy	Need to align the table as appears thresholds are not portrayed correctly.	Agreed									
101.	4.10 Table 4.10	AGL	<p>AGL notes that this section refers to Meter Register, but the description refers to the meter. In an environment where the state of the meter and the state of the register can be managed by different parties, AGL believes that this section should be clearer.</p> <p>AGL suggests that the titles of cl 4.11.3 be updated to 'Meter Register Status Codes'.</p> <p>AGL also notes that a disconnected register does not mean that a meter is disconnected, on that register is disconnected. For a meter to be disconnected all registers would have to be disconnected.</p> <p>AGL suggest that the of Meter Register Status 'D' be updated to remove the word 'remotely' reflect that it is disconnect by the MP (either locally or remotely).</p> <p>NOTE – Under the NER the meter is the device, whereas this clause it is not clear if this covers the device or the meter registers.</p> <table border="1"><tr><td></td><td>Current</td><td>Applies when a <i>meter</i> at the <i>NMI</i> is current and not disconnected.</td></tr><tr><td></td><td>Removed</td><td>Applies when a <i>meter</i> at the <i>NMI</i> is removed.</td></tr><tr><td>D</td><td>Remotely Disconnected</td><td>Applies when a <i>meter register</i> at the <i>NMI</i> is Disconnected</td></tr></table>		Current	Applies when a <i>meter</i> at the <i>NMI</i> is current and not disconnected.		Removed	Applies when a <i>meter</i> at the <i>NMI</i> is removed.	D	Remotely Disconnected	Applies when a <i>meter register</i> at the <i>NMI</i> is Disconnected	<p>AEMO does not agree with the proposed change to field name and rules as this refers to the name of the field in MSATS.</p> <p>AEMO does not propose to broaden the clauses to cover both remote and physical de-energisations, as the Rules do not provide for the MP to manually open or close the contactor in the meter.</p>
	Current	Applies when a <i>meter</i> at the <i>NMI</i> is current and not disconnected.											
	Removed	Applies when a <i>meter</i> at the <i>NMI</i> is removed.											
D	Remotely Disconnected	Applies when a <i>meter register</i> at the <i>NMI</i> is Disconnected											



No.	Section	Consulted person	Issue	AEMO response
102.	4.13	EVO Energy	<p>ER – We should reference here that this is really a Substituted read, as the Old FRMP will need to provide an invoice to the customer. The New FRMP needs a starting billable read. An Estimated read for types 4A, 5 and 6 are Forward Estimates in accordance with metrology procedures, so no retailer invoices on receipt of this. Change wording in Description of code only and replace "Estimated" to "Substituted".</p> <p>SP – The MDP or MPC (or LNSP) will not arrange for a special read until a B2B Service Order is received. This will indicate the type of special read to be undertaken, allowing appropriate charges to be applied.</p> <p>Suggest Reword Description of code to:</p> <p>Used where the New FRMP requires an End User transfer date that does not align with the scheduled reading cycle, or where other Read Type Codes do not fall within the boundaries of the End User request. The New FRMP must set the Proposed Change Date to the scheduled date as per the appropriate B2B Service Order.</p> <p>Applies to type 4A, 5 and type 6 metering installations.</p> <p>Note: that if this wording is accepted, need to update HINTS AND TIPS - CATS & NMI DISCOVERY</p>	This is outside the scope of this consultation; EVO Energy may wish to submit an ICF to facilitate further consideration of this change.
103.	4.18	Momentum	Agree	Noted
104.		TasNetworks	4.18(b)iv: Agreed 4.18(d): Agreed 4.18(f): Agreed	Noted
105.		Origin	Agree Can we include the timeframe AEMO has to publish the embedded network code?	As per 2.9(e) AEMO must populate MSATS with the Embedded Network Code that had been provided to AEMO by the LNSP within two <i>business days</i> of receipt.
106.		Vector AMS	Agreed	Noted
107.		EVO Energy	Agree Seeking clarification on how this will be monitored.	AEMO notes it will explore what options exist for monitoring of the proposed amendments



No.	Section	Consulted person	Issue	AEMO response
108.		Tango	Agree	Noted
109.		AusNet	We support the proposed change to clarify the LNSP's obligations in relation to creating Embedded Network Codes and ENM's obligations in relation to application of the Embedded Network Code.	Noted
110.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
111.		AGL	<p>Noted</p> <p>AGL supports the obligations to ensure that child NMIs are created and established quickly.</p> <p>However, AGL queries why there is a requirement to generate and provide an Embedded Network Code triggered by the ENM appointment. Many sites will have ENMs appointed as a regulatory obligation, but these sites may not require Embedded Network Codes or Child NMIs at the time of ENM appointment. It seems inefficient to require EN Codes when they are not needed.</p>	<p>AEMO notes having a valid ENC and information about the appointed ENM are conditions required to ensure child NMIs are established quickly when an EN customer wishes to join the market.</p> <p>Note that many ENs will not be required to have ENMs appointed until a customer wishes to join the market.</p>
112.		Red/Lumo	Red and Lumo support the inclusion of this obligation within the CATS procedures and offer no further comment at this stage.	Noted
113.	15.1.	AGL	Correction Noted	Noted
114.	16.2.(e)	AGL	<p>AGL notes that the Conditions Precedent for a meter exchange is for the new meter to have a different serial number from the old meter.</p> <p>In the Post PoC environment, AGL does not believe that this requirement can be made mandatory, as there are now multiple meter providers any of which may have duplicate serial numbers, and no obligation to have differing meter serial numbers from other providers.</p> <p>AGL suggests that this clause be deleted or modified to make the requirement preferred, but not mandatory.</p>	Agreed
115.	17.4.(e)	AGL	AGL notes that the end of clause (e) has a different font colour. Is there a reason for this?	Agreed



No.	Section	Consulted person	Issue	AEMO response
116.	19.2.(e)	AGL	<p>AGL notes that the Conditions Precedent for a meter exchange is for the new meter to have a different serial number from the old meter.</p> <p>IN the Post PoC environment, AGL does not believe that this requirement can be made mandatory, as there are now multiple meter providers any of which may have duplicate serial numbers, and no obligation to have differing meter serial numbers.</p> <p>AGL suggests that this clause be deleted or modified to make the requirement p[referred, but not mandatory].</p>	Agreed

**Table 3 MSATS Procedures: WIGS**

No.	Section	Consulted person	Issue	AEMO response
1.	Version	Momentum	Agree to the update of the document version and the revised way to identify the tables within the document	Noted
2.		TasNetworks	Agreed	Noted
3.		Vector AMS	Agreed	Noted
4.		EVO Energy	Agree	Noted
5.		Tango	Agree	Noted
6.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
7.		AGL	Noted	Noted
8.		Red/Lumo	Red and Lumo support the minor updates to version numbering.	Noted
9.	General	AGL	Note – there seem to be a number of table references within the MSATS: WIGS Procedures which have not been updated – examples below	AEMO to make table names and references consistent across the document.
10.	2.7.	AGL	Note – change of table ID required from 2-A to 2-1 in this clause.	Refer to item #9
11.	2.8.	AGL	Note – change of table ID required from 2-A to 2-1 in this clause.	Refer to item #9
12.	7.6.	AGL	Note – change of table ID required from 7-A to 7-1 in this clause.	Refer to item #9

Table 4 Metrology Procedure: Part A

No.	Section	Consulted person	Issue	AEMO response
1.	3.1.(a)	Momentum	Suggest the following: Meters used in type 1, 2, 3, 4, 4A, 5 and 6 metering installations, must comply with <i>all</i> applicable specifications or guidelines (including transitional arrangements) specified by the National Measurement Institute under the National Measurement Act, and must also meet <i>all</i> the requirements of the Australian Standards and International Standards:	Agreed, AEMO will update the clause.
2.		TasNetworks	Agreed	Noted



No.	Section	Consulted person	Issue	AEMO response
3.		Vector AMS	Agreed	Noted
4.		Ausgrid	Support change	Noted
5.		Tango	Agree	Noted
6.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
7.		AGL	Noted – unclear if this change has value	Noted
8.		Red/Lumo	Red and Lumo support and have no further comment	Noted
9.	3.1.(b)	Momentum	Suggest the following for clarity: CTs for type 1, 2, 3, 4, 4A , 5 and 6 metering installations, must meet the requirements of AS 60044.1,	Agreed, AEMO will update the clause.
10.		TasNetworks	Agreed	Noted
11.		Vector AMS	Agreed	Noted
12.		EVO Energy	Agree	Noted
13.		Ausgrid	Support change	Noted
14.		Tango	Agree	Noted
15.		AusNet	Agree with the change to International Standards.	Noted
16.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
17.		AGL	Noted	Noted
18.		Red/Lumo	Red and Lumo support the changes proposed however as previously advised the national measurement institute (NMI) is currently reviewing "the standards" and will likely impact the procedures. Has this been considered in the consultation by AEMO?	AEMO has reviewed the National Measurement Institute (NMI) Measurement Law Review and has not identified any required changes to the Metrology Procedures.
19.	3.1.(c)	Momentum	Suggest the following for clarity: VTs for type 1, 2, 3, 4, 5 and 6 metering installations, must meet the requirements of AS 60044.2	Agreed, AEMO will update the clause.
20.		TasNetworks	Agreed	Noted
21.		Vector AMS	Agreed	Noted



No.	Section	Consulted person	Issue	AEMO response
22.		EVO Energy	Agree	Noted
23.		Endeavour	Grammatical error: Remove the duplicate 'or' word	Agreed, AEMO will update the clause.
24.		Ausgrid	Support change	Noted
25.		Tango	Agree	Noted
26.		AusNet	Agree with the change to International Standards.	Noted
27.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
28.		AGL	Noted	Noted
29.		Red/Lumo	Red and Lumo support the changes proposed however as previously advised the national measurement institute (NMI) is currently reviewing "the standards" and will likely impact the procedures. Has this been considered in the consultation by AEMO?	Refer to item #18
30.	3.1(d)	Momentum	Suggest the following for clarity: New CTs and VTs must comply with current Australian Standards or International Standards as identified in Sections 3.1 (b) and 3.1(c)	AEMO believes that the current use of paragraphs is more appropriate as the clauses referenced are within the same section.
31.		TasNetworks	Agreed	Noted
32.		Vector AMS	Agreed	Noted
33.		EVO Energy	Agree	Noted
34.		Ausgrid	Support change	Noted
35.		Tango	Agree	Noted
36.		AusNet	Agree with the change to International Standards.	Noted
37.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
38.		AGL	Noted Noting clause 3.1(e) AGL suggests that for clarity this clause be amended to clarify that it applies to 'New "New <u>Newly purchased</u> CTs..." as opposed to Newly used (eg old unused stock)	Agreed, AEMO will update the clause.



No.	Section	Consulted person	Issue	AEMO response
39.		Red/Lumo	Red and Lumo support the changes proposed however as previously advised the national measurement institute (NMI) is currently reviewing "the standards" and will likely impact the procedures. Has this been considered in the consultation by AEMO?	Refer to item #18
40.	3.6.(a)	AGL	AGL queries if there should continue to be any differentiation between 1 st and 2 nd tier obligations, such as component approvals, or should these now have an end date.	AEMO does not agree, the end date for this clause is when the meter is exchanged.
41.	12.5.(a)	Momentum	Suggest a change to the following to retain consistency within the Metrology Procedure: Replace the word 'Each' with 'The' to indicate the verification must be carried out by the Current MC.	AEMO does not agree with the suggested change to 'each' MC is appropriate, as MCs require a plan regardless of the NMIs they do or do not have a relationship with.
42.		TasNetworks	Agreed	Noted
43.		Vector AMS	Agreed	Noted
44.		EVO Energy	Agree	Noted
45.		Ausgrid	Support change	Noted
46.		Tango	Agree	Noted
47.		AusNet	Agree with the removal of obsolete standard AS2490.	Noted
48.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
49.		AGL	AGL notes the removal of AS2490 from the procedure and queries what impact it may have on existing sample plans currently being deployed which use AS 2490. Do current testing programs need to be grandfathered?	The expectation would be to switch to the new clarified test requirements at the next required test sample cycle, and AEMO does not consider grandfathering is necessary.
50.		Red/Lumo	Red and Lumo support the changes proposed however as previously advised the national measurement institute (NMI) is currently reviewing "the standards" and will likely impact the procedures. Has this been considered in the consultation by AEMO?	Refer to item #18
51.	12.5.(b)	Momentum	Refer to 12.5(a)	Refer to item #41
52.		TasNetworks	Agreed	Noted



No.	Section	Consulted person	Issue	AEMO response
53.		Vector AMS	Agreed	Noted
54.		EVO Energy	Agree	Noted
55.		Ausgrid	Can AEMO please outline their expectation how verification of Type 6 metering installations is to be conducted? The energy data stored in the Type 6 meter changes (assuming there is load on the meter) as soon as the meter is read, therefore it would never align with what is in the metering data services database. Is AEMO expecting the MC to send out a meter reader to a site, collect another read and use the DAL to determine if the prior meter read was correct? These meters are read every 3 months, so the data is verified every quarter.	Type 6 metering installation verification should be conducted as per current practice. AEMO has not changed this requirement the intention is to clarify what the AQL should be set and how to select samples for normal and tightened inspection based on the result outcome of the sampling.
56.		Tango	Agree	Noted
57.		AusNet	Not opposed to the proposed change.	Noted
58.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
59.		AGL	Noted – see comment for 12.5(a)	Refer to item #49



No.	Section	Consulted person	Issue	AEMO response
60.		Red/Lumo	<p>Proposed amendments:</p> <p>(a) Each MC must ensure that a Sample Test Plan is established and maintained in accordance with Australian Standards "AS 1199: Sampling procedures for inspection by attributes –Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection <i>"or AS 2490: Sampling Procedures and Charts for Inspection by Variables for Percent Nonconforming"</i> to Validate that all metering data stored in the metering data services database is consistent with the energy data stored in the metering installation or the Physical Inventory (as applicable).</p> <p>Any reference throughout this clause needs to be consistent in wording, the use of "test sample" and "Sample Test Plan" are used consistently throughout this section.</p> <p>(c) A test <i>Sample Test Plan</i> sample is deemed to have passed the verification test when the metering data stored in the metering data services database is consistent with the energy data stored in the metering installation. If these do not match, then the test sample is deemed to have failed the verification test and must be rectified.</p>	AEMO believes the suggested wording changes the meaning of the clause and has not changed the wording.
61.	12.5.(c)	Momentum	<p>Suggest inserting a comma after the word database to emphasise the intent and provide clarity to the participants when there is a discrepancy or anomaly between the metering data and the energy data:</p> <p><i>A test sample is deemed to have passed the verification test when the metering data stored in the metering data services database, is consistent with the energy data in the metering installation.</i></p> <p><i>If the metering data stored in the metering data services database, does not match the energy data stored in the metering installation, then the test sample is deemed to have failed the verification test and must be rectified</i></p>	Agreed, AEMO will update the clause.
62.		TasNetworks	Agreed	Noted
63.		Vector AMS	Agreed	Noted



No.	Section	Consulted person	Issue	AEMO response
64.		EVO Energy	Agree	Noted
65.		Tango	Agree	Noted
66.		AusNet	Not opposed to the proposed change.	Noted
67.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
68.		AGL	Noted – see comment for 12.5(a)	Refer to item #49
69.		Red/Lumo	Refer to feedback to item 12.5(b).	Refer to item #60
70.	12.5.(d)	Momentum	Refer to 12.5(a) The MC must take the following steps after each round of verification:	Refer to item #41
71.		TasNetworks	Agreed	Noted
72.		Origin	Origin's view is that it should be included in the Metrology Procedure Part A, that the MP must verify all Metering Installations belonging to the failed sample/family/type of meters. As the meters belong to the Meter Providers they should be verifying and rectifying their assets. Whilst the MC needs to ensure that the metering installations are verified, we request that an additional clause be added in under (d)(iii) as (e) to avoid the ambiguity around who will verify and resolve the metering non-conformities with the rule. Further suggestion that the MP must be required to provide the MC with an updated test plan tailored on how they address the identified Family Failures.	AEMO disagrees, the requested addition is part of the MAMS and the MC-MP contractual arrangements.
73.		Vector AMS	Agreed	Noted
74.		EVO Energy	Agree	Noted
75.		Tango	Agree	Noted
76.		AusNet	Not opposed to the proposed change.	Noted
77.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
78.		AGL	Noted – see comment for 12.5(a)	Refer to item #49
79.		Red/Lumo	Refer to feedback to item 12.5(b).	Refer to item #60



No.	Section	Consulted person	Issue	AEMO response
80.	12.5(d)(ii)	Momentum	If the two <i>consecutive</i> rounds pass, then on the third round switch back to a normal inspection sample size	Agreed, AEMO will update the clause.
81.		TasNetworks	Agreed	Noted
82.	12.5.(e)	Momentum	To assist MC meter management including test sample verification, suggestion is to revise for clarity: Verification tests must be conducted in accordance with the Sample Test Plan once every 12 <i>consecutive</i> months	AEMO does not agree, the proposed wording aligns with clause 12.6.
83.		TasNetworks	Agreed	Noted
84.		Vector AMS	Agreed	Noted
85.		EVO Energy	Agree	Noted
86.		Tango	Agree	Noted
87.		AusNet	Not opposed to the proposed change.	Noted
88.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
89.		AGL	Noted	Noted
90.		Red/Lumo	Red and Lumo support the proposed amendments at this stage and have no further comment.	Noted

Table 5 Metrology Procedure: Part B

No.	Section	Consulted person	Issue	AEMO response
1.	2.3(a)	AGL	This clause continues with "By n" Is there an incomplete statement or is this a typo?	Agree, AEMO will delete this.
2.	2.3	AGL	There is a note associated with this Jurisdictional Provision that indicates it is to be reviewed by 31 Dec 2017. Has this review been completed and is this provision still current?	AEMO has not received jurisdictional direction from the Victorian government to update this.



No.	Section	Consulted person	Issue	AEMO response
3.	2.4	AGL	Should the list of Meter Data Quality Flags be extended to recognise Customer Own Reads (CoR) separately given the more extensive use of CoRs and the likely impact of proposed Rules. AGL notes that CoRS are presently considered Type 67 Substitutions, which makes their hierarchy greater than Estimate.	This is outside the scope of this consultation; AGL may wish to submit an ICF to facilitate further consideration of this change.
4.	2.6	Momentum	Agree to inclusion	Noted
5.		TasNetworks	Agreed	Noted
6.		Origin	What is considered validated meter readings? Origin suggests this should be undertaken between actual quality reads.	Agreed, AEMO will update the clause to: To perform a type 69 Substitution, the MDP must calculate the energy consumption between two Actual Meter Readings and pro-rata this calculated energy consumption for the number of days to produce a substituted Meter Reading.
7.		Vector AMS	Agreed	Noted
8.		EVO Energy	Agree	Noted
9.		Endeavour	We support introducing the new substitution type 69	Noted
10.		Tango	Agree	Noted
11.		AusNet	Not opposed to the proposed change.	Noted
12.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
13.		AGL	AGL supports the inclusion of the Linear Interpolation methodology.	Noted
14.		Red/Lumo	Red and Lumo support the proposed amendments at this stage and have no further comment.	Noted



No.	Section	Consulted person	Issue	AEMO response
15.	5.3.9	Momentum	<p>Please update:</p> <p>To perform a type 69 Substitution, the MDP must calculate the ADL between two validated Meter Readings and apply this <i>calculated</i> ADL pro-rated to the number of days for the substituted read</p>	<p>Agreed, AEMO will update with a new clause to indicate when to use this method:</p> <p>When to use Type 69 Substitution</p> <p>When an Actual Meter Reading for an accumulation meter has a value lower than a previous substituted Meter Reading, the MDP may re-substitute the substituted Meter Reading using the type 69 Linear Interpolation method</p>
16.		TasNetworks	<p>Type 69 needs to be added to section 5.2.1(d)(i) and needs a 'When to use' section in section 5.2 (would be 5.2.7 if added at the end).</p> <p>The 'When to Use' section could say:</p> <p>"When to use Type 69 Substitution: When a validated actual read for an accumulation meter has a reading that is lower than the previous substituted read, then the MDP may re-substitute the reading using the liner interpolation method whereby the reading is calculated using the ADL between 2 validated meter readings and applying this ADL pro-rated to the number of days for the substituted read."</p>	Refer to item #15
17.		Origin	What is considered validated meter readings? Origin suggests this should be undertaken between actual quality reads.	Refer to item #6
18.		Vector AMS	<p>The use of ADL in this drafting is confusing as ADL refers to the Average Daily Load allocated to the datastream and contained within the CATS_NMI_DATA_STREAM table in MSATs.</p> <p>It is Vectors understanding that this is a different ADL (one between two actual reads). Suggest replacing ADL with load. E.g.</p> <p>To perform a type 69 Substitution, the MDP must calculate the <i>ADL load</i> between two validated Meter Readings and apply this <i>ADL calculated load</i> pro-rated to the number of days for the substituted read.</p>	Refer to item #6
19.		EVO Energy	Agree	Noted
20.		Endeavour	For completeness we suggest that clause 5.2.1.d.i be updated to add type 69 as an allowable type for substitutions	Agreed, AEMO will update the clause.
21.		Ausgrid	Support change	Noted



No.	Section	Consulted person	Issue	AEMO response
22.		Tango	Agree	Noted
23.		AusNet	Not opposed to the proposed change.	Noted
24.		Energy Queensland	Energy Queensland supports the proposed change. However, we question whether ADL or ADC should be used in this calculation given the other Accumulation metering substitution methodologies use ADC in their calculations.	Refer to item #6
25.		AGL	AGL supports the inclusion of the Linear Interpolation methodology.	Noted
26.		Red/Lumo	Red and Lumo support the proposed amendments at this stage and have no further comment.	Noted

Table 6 Service Level Procedure Meter Data Provider Services

No.	Section	Consulted person	Issue	AEMO response
1.	2.4.1(ix)	Momentum	<p><i>Specific Obligations for MDP – Category D / Generally Activate Datastreams in MSATS within 1 business day when the MDP becomes aware that energy is being recorded from a metering installation and deliver validated metering data to AEMO regardless of NMI status.</i></p> <p><i>The above is based on SLP: Metering Data Provider Services Section 7.3 (b) – Corrective Action</i></p> <p><i>where the MDP becomes aware that incorrect metering data has been delivered to AEMO and Registered participants, the MDP must provide corrected metering data to all affected parties, as required by NER clause 7.10.2(e) within one business day of detection.</i></p>	AEMO agrees with adding a timeframe, the timeframe will be 2 business days to align with the CATS Procedure.
2.		intelliHUB	CATS 2.4c – Requires the inactivation of a data stream when a connection point is de-energised. This seems like a contradiction.	AEMO does not consider that there is a contradiction with clause 2.4(c). Clause 2.4.1(ix) is the first step to be performed to align the details in MSATS with the status of the metering installation on site. The second step will be the LNSP updating the NMI status.
3.		TasNetworks	Agreed	Noted



No.	Section	Consulted person	Issue	AEMO response
4.		Origin	<p><u>Clarification required:</u></p> <p>How will the MDP determine/identify that energy is being recorded on the NMI?</p>	MDPs will become aware of recorded energy flows through the MDPs normal meter reading collection processes.
5.		Vector AMS	Ok with this drafting but the issue related to requiring the Data stream status to reflect whether there is usage at a site is outstanding. Refer to item 2.4.(c) above and section 10 below.	Noted, an additional ICF is currently being explored on this subject.
6.		EVO Energy	<p>Agree</p> <p>Please consider the inclusion of a specified timeframe for action e.g.: two business days.</p>	AEMO agrees with adding a timeframe, the timeframe will be 2 business days to align with the CATS Procedure.
7.		Endeavour	<p>We support defining that delivery of metering data must not be dependent on the NMI status. However, the current wording suggests that metering data must be delivered even when it is not required for settlements, for example tier 1 accumulation metering data. Also, delivery of metering data to participants should not be dependent on the datastream status. We suggest that this be clarified as follows:</p> <p>when the MDP becomes aware that energy is being recorded from a <i>metering installation</i> then:</p> <ul style="list-style-type: none">i) activate Datastreams in MSATS if the <i>metering data</i> is required for <i>settlements</i> and deliver validated <i>metering data</i> to AEMO regardless of the NMI status; andii) deliver validated <i>metering data</i> to all Participants with responsibilities for that NMI regardless of the NMI status or datastream status.	The proposed amendments are aligning with global settlements readiness activities in relation to the delivery of metering data.
8.		Plus ES	<p>PLUS ES agrees with the intent of the clause; however, suggests a clarification so it cannot be interpreted as a requirement to de-activate Datastreams when a NMI is Inactive.</p> <p>An MDP should have the option to maintain active Datastreams irrespective of the energisation status of the NMI.</p>	As the clause relating to deactivation has not been revised, there does not appear to be room for misinterpretation.



No.	Section	Consulted person	Issue	AEMO response
9.		Ausgrid	<p>Support Change –This requirement should be that the MDP must continue to read and validate (but not deliver to participants) metering data from sites where the datastreams are 'I'. At the moment its just states that once they are aware, if they only validate one a month for example then this will cause an ADWNAN_INTERVAL error for the LNSP. Even if it is read weekly, it has the potential to could cause either ADWNAN_INTERVAL or NMIST1 errors on the LNSP.</p> <p>The data must also be sent to the LNSP. If they do not when the sites NMI status is changed to A, then this will cause an ADWNAN_INTERVAL error for the LNSP.</p>	Refer to item #5
10.		Tango	Agree	Noted
11.		AusNet	AusNet Services considers the effect of this obligation and the changes to section 2.4 MSATS Procedures: CATS would be to create a two business day obligation to update the NMI status of energy is being recorded. We do not support the proposed changes that would have this effect because in order to reliably meet a two business day timeframe, the process of updating the NMI status would need to be automated. Automating NMI status updates would be costly.	AEMO notes organisations have flexibility to build their processes as appropriate to comply with the procedures.
12.		Energy Queensland	Energy Queensland supports the proposed change to data stream activity noting the benefit to the timely provision of data.	Noted
13.		Red/Lumo	<p>Red and Lumo support the proposed amendments however, have provided suggested amendments to the wording of this clause;</p> <p>(ix) ensure metering activate Datastreams are updated in accordance with clause 2.4(e) MSATS procedures when the MDP becomes aware that energy is being recorded from a metering installation, and deliver validated metering data to AEMO regardless of the NMI status;</p>	Agree, AEMO will update the clause accordingly.
14.	2.4.1(x)	Momentum	<p><i>Specific Obligations for MDP – Category D / Generally</i></p> <p>Agree</p>	Noted
15.		TasNetworks	Agreed	Noted



No.	Section	Consulted person	Issue	AEMO response
16.		Origin	<p><u>Suggested update to working of this section:</u></p> <p><i>Deliver validated metering data to all Participants with responsibilities for that NMI when Datastreams are active in MSATS, regardless of the NMI Status.</i></p> <p>If a NMI is de-energised and consumption is being recorded, this falls into an unauthorised usage.</p>	AEMO does not agree with the inclusion of 'regardless of the NMI Status' in clause 2.4.1(x). This is because clause 2.4.1(ix) contains the words 'regardless of the NMI Status' and the two clauses are contingent upon one another.
17.		Vector AMS	Ok with this drafting but the issue related to requiring the Data stream status to reflect whether there is usage at a site is outstanding. Refer to item 2.4.(c) above and section 10 below.	Noted, an additional ICF on this subject is currently being explored.
18.		EVO Energy	Agree Please consider the inclusion of a specified timeframe for action e.g.: two business days.	AEMO agrees with adding a timeframe, the timeframe will be 2 business days to align with the CATS Procedure.
19.		Ausgrid	Support change	Noted
20.		Tango	Agree	Noted
21.		AusNet	See comments to section 2.4.1.(ix) above	Noted
22.		Energy Queensland	Energy Queensland supports the proposed change to data stream activity noting the benefit to the timely provision of data.	Noted
23.		Red/Lumo	Red and Lumo support the proposed amendments at this stage and have no further comment.	Noted
24.	2.4.1(xi)	AGL	<p>AGL notes the requirement to de-activate data streams when a NMI has the service fuse removed, however, the MSATS standing data doesn't differentiate between service fuse removal and main switch seal. Rather either physical outcome will lead to the LNSP marking the NMI Status as "D".</p> <p>While this criteria may function when the LNSP and MDP are the same party, there may be greater difficulties for third party MDPs to meet this obligation.</p>	<p>AEMO notes that only LNSPs perform physical on-site disconnections and have the obligation to update the NMI Status accordingly.</p> <p>Contestable MPs/MDPs are not involved in updating the NMI Status.</p>



No.	Section	Consulted person	Issue	AEMO response
25.	3.12.6	AGL	AGL notes the clause requires immediate notification, however, general practice is more likely 2 hours to allow the participant to resolve the issue. Noting that most data transfers occur around midnight, it's unlikely that any party (except the MDP) will be available. Should this clause be amended?	This is outside the scope of this consultation; AGL may wish to submit an ICF to facilitate further consideration of this change.
26.	4.2.(g)	Momentum	Time Settings Agree	Noted
27.		TasNetworks	Agreed	Noted
28.		Vector AMS	Agreed	Noted
29.		EVO Energy	Agree	Noted
30.		Tango	Agree	Noted
31.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
32.		AGL	Noted	Noted
33.		Red/Lumo	Red and Lumo support the proposed amendments at this stage and have no further comment.	Noted
34.	6.4.1.(c)	Momentum	Access to data Agree	Noted
35.		TasNetworks	Agreed	Noted
36.		Vector AMS	Agreed	Noted
37.		EVO Energy	Agree	Noted
38.		Tango	Agree	Noted
39.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
40.		AGL	Noted	Noted



No.	Section	Consulted person	Issue	AEMO response
41.		Red/Lumo	<p>Red and Lumo would like to confirm the objective AEMO is trying to achieve by amending the Rule reference to a specific sub clause?</p> <p>The current wording in the procedures is in relation to not only the restriction of registered participants to access relevant CATS standing data and MSATS reports but also relates directly to access to metering data. We propose that AEMO amend this rule reference to extend to the entire section of the rule 7.15.5 (Access to data) as the current proposed rule referenced in the procedure is not accurate.</p> <p>Example: NERR 7.15.5(d),(e) and (f)and reference in NER 7.10.2(a)(3)</p>	Noted. The objective was to correct an incorrect reference 7.15(c) which does not exist.
42.	7.3.(b)	Momentum	<p>Corrective Action</p> <p>Agree</p>	Noted
43.		TasNetworks	Agreed	Noted
44.		Vector AMS	Agreed	Noted
45.		EVO Energy	Agree	Noted
46.		Tango	Agree	Noted
47.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
48.		AGL	Noted	Noted
49.		Red/Lumo	<p>Red and Lumo suggest that the rule reference be extended to both NER 7.10.2(e) and 7.11.3(e), as both clearly outline obligations when changes are made to metering installation and should be referenced together.</p> <p><i>(b) Where an MDP becomes aware that incorrect metering data has been delivered to AEMO and Registered Participants, the MDP must provide corrected metering data to all affected parties, as required by clause 7.10.2(e) and 7.11.3 (c) of the NER, within one business day of detection.</i></p>	Noted. The objective of this change was to correct the NER clause no. Clause 7.11.3(e) does not exist and 7.10.2(e) relates to incorrect metering data.

**Table 7 Service Level Procedure Meter Provider Services**

No.	Section	Consulted person	Issue	AEMO response
1.	4.2.(a)(iii)	Momentum	Metering Data Validation Requirements <i>Refer to the feedback for Metrology Procedure Part A Section 12.5(a)- 12.5(e)</i>	Noted, see AEMO response for Metrology Procedure Part A Section 12.5(a)- 12.5(e).
2.		TasNetworks	Agreed	Noted
3.		Vector AMS	Agreed	Noted
4.		EVO Energy	Agree	Noted
5.		Tango	Agree	Noted
6.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
7.		AGL	Noted	Noted
8.		Red/Lumo	Please confirm the amended reference was in fact to the Metrology Procedures: Part A not a rule. The description of changes suggests this was an outdated rule reference.	AEMO confirms the changes to the Service Level Procedure Meter Provider Services is in regard to Rule references.
9.	5.2.(a)	Momentum	Management of Metering Installation Malfunctions (Reference NER v 121 Section 7.8.10(aa)) Agree	Noted
10.		TasNetworks	Agreed	Noted
11.		Vector AMS	Agreed	Noted
12.		EVO Energy	Agree	Noted
13.		Tango	Agree	Noted
14.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
15.		AGL	Noted	Noted
16.		Red/Lumo	Red and Lumo support the amendment and inclusion of rule references within this clause.	Noted

**Table 8 Service Level Procedure Embedded Network Manager**

No.	Section	Consulted person	Issue	AEMO response
1.	General	AGL	The procedure has specifically identified a situation when an ENO has no exemption but hasn't covered off the situation where the ENO loses its exemption or the ENM loses its accreditation.	AEMO agrees that the clause should cover the scenario where an ENO's exemption is no longer valid. AEMO considers that the loss of an ENM's accreditation is already covered in the Default and Deregistration Procedure.
2.	2.1.2.(d)	Momentum	Please take into consideration for clarity and interpretation <i>Ensure the Embedded Network Owner (ENO) has secured an exemption from the AER and is registered as a Network Service Provider</i> <i>Additionally the term ENO - with the definition 'Embedded Network Owner' to be added to Section 5 - Glossary of the Retail Electricity Market Procedures – Glossary and Framework v3.1</i>	The Embedded Network Owner (ENO) may be a different party to the EENSP and AEMO will update the footnote to confirm this.
3.		TasNetworks	No comment	Noted
4.		Origin	Origin support the addition of this new section.	Noted
5.		Vector AMS	No Comment	Noted
6.		EVO Energy	Agree	Noted
7.		Tango	Agree	Noted
8.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
9.		AGL	AGL supports the additional obligation but believes that the procedures should define what the ENM must do if the network owner does not have, or is not seeking, an exemption from the AER.	Refer to item #1
10.		Red/Lumo	Red and Lumo support the proposed amendments at this stage and have no further comment.	Noted
11.	4.2.1.	Momentum	Agree to update	Noted
12.		TasNetworks	In 4.2.1(e), the (e) should be (d). Otherwise, no comment.	Noted



No.	Section	Consulted person	Issue	AEMO response
13.		Origin	Origin support this update.	Noted
14.		Vector AMS	No Comment	Noted
15.		EVO Energy	Agree	Noted
16.		Tango	Agree	Noted
17.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
18.		AGL	Noted	Noted
19.		Red/Lumo	Red and Lumo support the proposed amendments at this stage and have no further comment.	Noted
20.	4.2.2.	Momentum	<p><i>Suggest the following narrative:</i></p> <p><i>Section 4.2.2 Site-specific DLF</i></p> <p><i>EENSP calculates the DLF Code for the Parent NMI and also the site-specific DLF Code for Child connection point if and when required.</i></p> <p><i>The ENM must:</i></p> <ul style="list-style-type: none"> <i>(a) Assign the related site-specific DLF Code to the Child NMI as the DLF Code in accordance with MSATS Procedures</i> <i>(b) Liaise with AEMO to have the site-specific DLF Code created in MSATS</i> <i>(c) Provide to AEMO, for publication by 1 April each year, the site-specific DLF codes and the related DLFs.</i> 	AEMO has revised the wording in this section. Please see updated Procedure.
21.		TasNetworks	No comment	Noted
22.		Vector AMS	No Comment	Noted
23.		EVO Energy	Agree, but suggest wording to avoid confusion when trying to read this, that start of point (a) should read: “provide to AEMO the DLF value for the site-specific DLF Code, as calculated...”	Refer to item #20
24.		Plus ES	PLUS ES suggests rewording 4.2.2 (a) as it is confusing as currently worded.	Refer to item #20
25.		Tango	Agree	Noted



No.	Section	Consulted person	Issue	AEMO response
26.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
27.		AGL	<p>Noted</p> <p>However, there seems to be no SLA on AEMO to publish or update the site specific DLF, or how to deal with a site specific DLF if it is generated post 1 April in any year.</p> <p>There should be a clear obligation to provide it to AEMO and for AEMO to update, or add, the Site Specific DLFs into MSATS within 5 b/days of receiving it and update any associated publications.</p>	<p>AEMO notes that the MSATS: CATS Procedure clause 2.9(b) has an AEMO obligation to update the DLF in MSATS within two business days of receiving it, AEMO has modified the CATS obligation to include receiving the DLF from LNSP or ENM.</p> <p>Procedure has been updated to require the ENM to liaise with AEMO within 5 business days of receiving an approval from the AER. Please see updated Procedure.</p>
28.		Red/Lumo	Red and Lumo support the proposed amendments at this stage and have no further comment.	Noted
29.	4.3.2	AGL	<p>AGL notes that CI 4.3.1(b) specifically exempts an ENM from the requirement to maintain MSATS standing Data while a Child NMI has a status code of 'N'. However, 4.3.2 does not require the ENM to update the NMI Standing Data when the NMI resumes its role as a child connection Point.</p> <p>AGL suggests an additional obligation be included that requires the ENM to ensure that <u>all</u> standing data has been updated prior to the NMI status code changed to 'A'.</p>	This is outside the scope of this consultation; AGL may wish to submit an ICF to facilitate further consideration of this change.
30.	4.3.3.(a)	Momentum	<p>Agree and suggest update based on information detailed in Section 2.1.2(d)</p> <p>(a) <i>Liaise with the Embedded Network Owner (ENO) to ensure that the Network Tariff Code <u>assigned</u> by the MPB when the meter was recorded in MSATS for a Child NMI is valid; and</i></p>	AEMO will retain the word 'populated' in clause 4.3.3(a) as it considers it more accurate than 'assigned' in this context.
31.		TasNetworks	No comment	Noted
32.		Origin	<p>Origin suggest updating to working of this clause by adding in 'controller'.</p> <p><i>liaise with the embedded network owner/controller to ensure that the Network Tariff Code created populated by the MPB when the meter was recorded in MSATS for a child connection point</i></p>	AEMO does not agree with the addition of the word 'controller' to clause 4.3.3(a), but will replace embedded network owner with EENSP as the EENSP is the party that an ENM needs to liaise with to ensure the Network Tariff Code is correct.



No.	Section	Consulted person	Issue	AEMO response
33.		Vector AMS	No Comment	Noted
34.		EVO Energy	Agree	Noted
35.		Tango	Agree	Noted
36.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
37.		AGL	Noted	Noted
38.		Red/Lumo	Red and Lumo do not believe that this proposed change is necessary in light of the existing obligation.	AEMO notes that the change is necessary as AEMO has received queries from participants on how to obtain the Network Tariff Code.

Table 9 Exemption Procedure Meter Installation Malfunctions

No.	Section	Consulted person	Issue	AEMO response
1.	1.1.	TasNetworks	Agreed	Noted
2.		Vector AMS	Agreed	Noted
3.		EVO Energy	Agree	Noted
4.		Tango	Agree	Noted
5.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
6.		AGL	Noted	Noted
7.		Red/Lumo	Red and Lumo support the amendment and inclusion of rule references within this clause.	Noted
8.	2.2.	TasNetworks	Agreed	Noted
9.		Vector AMS	Agreed	Noted
10.		EVO Energy	Agree	Noted
11.		Tango	Agree	Noted



No.	Section	Consulted person	Issue	AEMO response
12.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
13.		AGL	Noted	Noted
14.		Red/Lumo	Red and Lumo support the amendment and inclusion of rule references within this clause.	Noted
15.	Appendix A	TasNetworks	Agreed	Noted
16.		Vector AMS	Agreed	Noted
17.		EVO Energy	Agree	Noted
18.		Tango	Agree	Noted
19.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
20.		AGL	Noted	Noted
21.		Red/Lumo	Red and Lumo support the amendment and inclusion of rule references within this clause.	Noted
22.	Appendix B	TasNetworks	Agreed	Noted
23.		Vector AMS	Agreed	Noted
24.		EVO Energy	Agree	Noted
25.		Tango	Agree	Noted
26.		Energy Queensland	Energy Queensland supports the proposed change and offers no further comment.	Noted
27.		AGL	Noted	Noted
28.		Red/Lumo	Red and Lumo support the amendment and inclusion of rule references within this clause.	Noted

**Table 10 Other Issues Related to Consultation Subject Matter**

No.	Heading	Consulted person	Issue	AEMO response
1.	Are there better options to accommodate the change proposals, that better achieve the required objectives? What are the pros and cons of these options? How would they be implemented?	TasNetworks	TasNetworks agrees with the change proposals, taking into account the comments provided in this document.	Noted



No.	Heading	Consulted person	Issue	AEMO response
2.		Vector AMS	<p>Vector believes the changes proposed to meet ICF_M005 are contradictory with other obligations. ICF_M005 effectively requires the MDP to continue to read a meter yet other obligations require the MDP's to 'deactivate' the datastream in MSATs when the LNSP has indicated it has de-energised the site. New obligations in this consultation then require MDPS' to 'reactivate' the datastream should it detect usage. The net result will be that there will be legitimately 'Active' Datastreams on 'De-energised' NMI's. Vector questions this direction and believes that should MDP's be required to continue to attempt to read meters regardless of energisation status then the obligations to maintain NMI Datastream status should be reviewed.</p> <p>It is already common for MDP's to continue to read meters regardless of energisation status indicated by the LNSP. Where communications to the meter are established participants will receive this data. Where comms is not established substituted data is provided with an appropriate reason code. This data is not sent to AEMO due to validation rules in CATS which will reject this due to NDS status code which must be consistent with the energisation status.</p> <p>Proposed changes for ICF_M005 and ICF_008 layer new obligations on already complex set of rules.</p> <p>Vector believes this area could be simplified and made more transparent by removing the requirements on MDP's to constantly change DataStream Status as sites are theoretically 'de-energised' and 'energised', or when load is detected as proposed by ICF 005.</p> <p>MDP's should be required to provide all data they collect from a meter that is registered in MSATS regardless of any statuses in CATS tables and where communications is lost - presumably as a result of a 'de-energisation' by the LNSP - the MDP can provide substitutes with an appropriate reason code e.g.. 6 – de-energised site. (<i>continues next page</i>)</p>	<p>Noted, an additional ICF on this subject is currently being explored.</p>



No.	Heading	Consulted person	Issue	AEMO response
		Vector AMS <i>(continued from previous page)</i>	<p>Taking this simplified approach has the following advantages.</p> <ul style="list-style-type: none">1) No complex process required to update standing data based on the NMI status and whether a remote meter can be communicated with or not.2) Any usage that is collected from a nominally de-energised site will automatically be visible to retailers and LNSP's so that Retailers can commence processes to engage with the customer and that LNSP can bill for usage.3) Any usage that is collected from a nominally de-energised site will be accepted by AEMO and included settlements - Datastream will always be active in MSATS but should it truly be de-energised then usage will be zero. Note, for remote de-energisations the meter remains active and readable but the site is effectively de-energised with zero usage. <p>Reduced overhead for MDP's who currently send data to market for 'de-energised' sites – no need to update Data stream status. Note: this is already cumbersome and error prone which is reflected in the MDP 'Active meter with no active Datastream' monthly performance report.</p>	
3.		EVO Energy	Stated above in consultation response	Noted
4.		Plus ES	PLUS ES would like to provide comment as per the following: Clause 12.5 Metrology Procedure – what objectives are being achieved with validating data on manually read metering installations? For Type 4A and Type 5 metering installation, data collection is via probe reading therefore there isn't any opportunity for transcription error, as the data that is collected automatically and automatically associated with the meter device ID, as part of the communications with the meter. One could argue if data collection is of this nature, then it is not required to be validated	<p>Clause 12.5 is related to verification of energy data stored within the metering installation and corresponds with metering data stored within the metering data services database when metering installation are tested.</p> <p>Validation of manually read metering data is covered in MDP Service Level Procedure.</p>



No.	Heading	Consulted person	Issue	AEMO response
5.		Ausgrid	<p>Clause 12.5 of the Metrology Procedure Part A. What is AEMO attempting to validate here? Is it that the energy data collected from the meter is not corrupted between collection and validation and storage in the metering data services database? Is that not what the purpose of validation of metering data is for once its collected?</p> <p>For Type 5 metering installations, data is downloaded via probe reading directly into a handheld device, there isn't any opportunity for transcription error even if multiple meters onsite, as the data that is collected automatically is linked to the meters serial number.</p>	Refer to item #4
6.		Tango	Refer to the comment below.	Refer to item #14
7.		Energy Queensland	Energy Queensland offers no comment.	Noted
8.		AGL	The majority of the proposed changes within this consultation are relatively separate from the 5ms and Global changes. However, ensuring that consequential changes are reviewed correctly is complex.	Noted
9.		Red/Lumo	Red and Lumo support the proposed amendments to the procedures at this stage and have no further comment.	Noted
10.	What are the main challenges in adopting these proposed changes? How should these challenges be addressed?	intelliHUB	Some of these proposed changes do not line up with other market requirements and therefore could be seen as setting up participants to fail in this regard.	Noted
11.		TasNetworks	TasNetworks does not foresee any challenges in implementing the proposed changes.	Noted



No.	Heading	Consulted person	Issue	AEMO response
12.		Vector AMS	ICF_M005 will require system changes to monitor usage in the Meter Data Management Systems and trigger the updating of the DataStream status from the Market system. The complexity to meet this requirement is yet to be determined but given that industry has a program of work already underway for 5MS Vector requests that this change be deferred to coincide with the 5MS program of work to leverage the one development team.	Timing was reviewed by the ERCF and determined as 20 May 2020 based on industry feedback.
13.		EVO Energy	Versioning with the 5MS & GS changes coming, ensuring that when these are approved, they are working/revising latest changes, especially since this consultation changed the table numbers in the CATS procedures, but the consulted 5MS & GS was based on old table references.	Noted and reviewed
14.		Tango	The degree of impact to participants' systems and processes will vary depending on the change as detailed above. This may influence their ability to deliver the changes for 20 May 2020. The current timeline for the 5MS and Global Settlement project and other change initiatives, (e.g. Customer Switching) yet to be finalised, may impact participants' ability to deliver the changes for 20 May 2020. Assess if the changes can be integrated into an appropriate 5MS/Global Settlement release.	Refer to item #12
15.		Energy Queensland	Energy Queensland offers no comment.	Noted
16.		AGL	The main challenge with the co-consultation is ensuring the sequence of changes being undertaken don't lead to unintended consequences – eg reviewing the various procedures to ensure that a change is not included and then and then later removed incorrectly, or including a change which is inconsistent with the applicable market.	Noted
17.	CATS Procedure	EVO Energy	Throughout the document additional clarity on when timeframe counts commence is required. For example, MDP two business days. Please define when the count commences.	AEMO will take this under consideration



No.	Heading	Consulted person	Issue	AEMO response
18.	CATS Procedure	EVO Energy	The document references 'connection points' and 'meter register status code'. Where there are multiple meters at a connection point, and there is a mismatch in individual meter register codes (e.g.: date, status), which takes precedent? The connection point or the meter register status code?	There is no precedent. Standing data needs to be corrected.