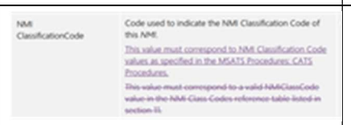
Table 1 – Standing Data for MSATS

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
1.	Evoenergy	Tables 1 to 13	Consistency of full stops for Description field	Please add a full stop to all tables (including the Release History, but excluding Related documents) at the end of each sentence in the "Description" fields where one is missing. Examples: Release History "*4.4 1 December 2017 Final Version"* missing full stop Table 2 is good Table 3 "*Actual Pulse Multipliers*" missing full stop	Corrections made.
2.	Origin Energy	1.3	Related Documents	Origin notes that link for Glossary and Framework does not work. Error response 'Page not found' returned. Please check that all links for all associated guides are correct.	Link corrected.
3.	Ergon Energy and Energex	2	Updated minimum requirements for NMI in CATS_NMI_DATA_STREAM table.	Ergon Energy and Energex would like to clarify what it means to be "used in MSATS". We suggest the wording is updated to "used in MSATS settlements" or updated to reflect that a data stream table entry is not required where a NMI is created prior data streams being activated e.g. Greenfield sites.	Reverted to original wording and clarified when CATS_NMI_DATA_STREAM records are required.
4.	Endeavour Energy	3.2	NMIs Affected	This section describes what NMI must be registered in MSATS but it is missing connection points that are connected to the distribution network. We suggest that the following be added as a bullet point: All market load connection points on a distribution network	Additional wording included.
5.	Evoenergy	3.2	NMIs Affected	New first dot point wording, reword to: All connection points points where a transmission network connects to another ~~to~~ transmission network Requires full stop on end of last dot point.	Corrections made.
6.	Origin Energy	3.2	NMIs Affected	1. Current text reads '*All connection points* points where a *transmission network connects* to another to *transmission network'* Reword to: *'All connection points* points where a *transmission network connects* to another *transmission network' (i.e. extra 'to')* 2. Add following text to: All distribution network connection points where energy is directly purchased from the spot market by a Market Customer. Ie. Small or large NMIs	1. Correction made. 2. Additional wording included.
7.	AGL	4	CATS Meter Register	Many of the CATS fields which are classed as Optional should be changed to 'Required' so that data starts to be uploaded. This has been discussed by AEMO as an outcome of Power of Choice and this is an opportunity to establish a new obligation for changes going forward. Existing NMIs could be grandfathered unless their data is updated.	AEMO acknowledges that changes need to occur to the Standing Data for MSATS document based on the 5MS rule change and this will overlap in timing with the CATS Standing Data Review. Changes will be consulted at different timings but consolidated in the system where required. The CATS Standing Data Review will occur during 2020.
8.	AGL	4	CATS Meter Register	A key requirement going forward within the 5-ms market will be to understand the recording interval the meter is operating at – eg 30, 15,5 or 1 minutes. We note that this could be undertaken by altering the meter type code – For example, COMMS401, COMMS405, COMMS415, COMMS430; MRAM30, MRAM05; VICAMI01, VICAMI 05, VICAMI15, VICAMI30.	AEMO suggested, at PWG #1 meeting, that a NEM22 metering data file could be implements to identify 5-minute metering data files. Participants, instead, elected to use the "Interval Length" field in the 200 record of the NEM12 metering data file to identify 5, 15 or 30-minute metering data.

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
9.	AGL	4	CATS Meter Register	AGL has suggested that there be some consistency in how meter serial numbers etc. are used in NCOMUML categories – for instance, they could have a standard dummy or use the customer device ID	Refer to response to Item 11.
10.	Ergon Energy and Energex	4 Table 3	Updated Table 3 CATS_METER_REGISTER related to SerialNumber for UMCP.	Ergon Energy and Energex would like to clarify whether we could use a series of internally generated values for each UMCP or NCONUML meter rather than the value of "DUMMY". Currently we use the NMI as the meter serial number.	Refer to response to Item 11.
11.	Evoenergy	4, 9	Table 3 & 8 – SerialNumber	Change the wording to the following to allow current functionality, clarification that aligns to other procedures, and extra flexibility for UMCP and NCUL, The Meter Serial ID uniquely identifies a meter for a given NMI. Maximum 12 Characters (alpha numeric). Unique for NMI and unique for each MP ID. Use a dummy number for UMCP (Type 7), and logical (meters) and non-contestable unmetered loads (NCUL). Except for UMCP, logical or NCUL (a dummy number), SerialNumber should be as displayed on the physical device (also known as property number if exists), otherwise the meter manufacturer's serial number.	The term "dummy value" has been included in Table 3 to provide flexibility to use internally generated numbers or identifiers.
12.	Evoenergy	4, 5, 6, 7, 8, 9, 10	Tables	Would be helpful to add an extra sentence under each heading, stating to refer to specific tables (as appropriate) for technical specifications and example tables to provide a complete view of requirements.	Document re-structured – refer to response to Item 40.
13.	AGL	7	CATS NMI DATA	The large amount of optional data in this section (eg address etc.) has been hampering the management of metering works since the introduction of Power of Choice This is an opportunity to establish a new obligation for changes going forward. Existing NMIs could be grandfathered unless their data is updated.	AEMO acknowledges that changes need to occur to the Standing Data for MSATS document based on the 5MS rule change and this will overlap in timing with the CATS Standing Data Review. Changes will be consulted at different timings but consolidated in the system where required. The CATS Standing Data Review will occur during 2020.
14.	Endeavour Energy	Section 7, Table 6		AEMO has highlighted in working group meetings that AEMO will update the NMI Classification Code field in certain scenario. Therefore for completeness, AEMO should also be listed under the 'Party to provide' column for the NMI Classification Code row.	Unnecessary to add AEMO as a a providing party as NMI Classification changes would be made by AEMO in accordance with new CATS clause 2.9(l). "Where a NMI is classified in conjunction with a Participant registration process and the LNSP has no role in the classification of the site, AEMO will update the NMI Classification Code if it believes it is clearly incorrect."
15.	Ergon Energy and Energex	7. Table 6	Updated Table 6 CATS_NMI_DATA related to the JurisdictionCode.	Ergon Energy and Energex suggest that the ISO jurisdiction code is included in the MSATS Procedures: CATS Procedure listing. Alternatively, update this document to indicate "except for ISO jurisdiction NMI's".	The implementation of ISO was for one part of Ergon's distribution area and NMIs with ISO jurisdiction code were not to be discoverable. By introducing ISO into the procedures will raise queries from other participants regarding this jurisdiction. AEMO and Ergon believed at the time that there wasn't a need for ISO to be in the procedures as no other participants were affected or needed to have knowledge of it.
16.	IntelliHUB	7	CATS NMI DATA	Why aren't we using this opportunity to implement the findings from the standing data workshop?	Customer Switching rule change design impacts on NMI Standing Data also needs to be considered before the NMI Standing Data Review can be completed.
17.	Energy Australia	8	Table 7 CATS_NMI_DATA_STREAM Data element name: ElectricityDataStream/Suffix	Suggest more specific cross referencing. As AEMO notes these can be updated without a lengthy consultation process if needed. Add:	AEMO considers that a reference to the appropriate Procedure is sufficient as changes to sections, clauses, tables, etc. in referenced Procedures may change.

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
				The Metering Datastream identifier (for MDM). Identifies the ElectricityDataStream Suffix as delivered to AEMO for NEM Settlement calculations, profile peeloff, UFE analysis and Vic TUOS sites. The value must be a valid as per Datastream suffix details specified in the MSATS Procedures: National Metering Identifier procedure *(Section 7 Datastream Suffix for Interval Metering Data).* The value must match the MDMContributorySuffix value provided in an MDFF File.	
18.	Energy Australia	8	Table 7 CATS_NMI_DATA_STREAM Data element name: ElectricityDataStream/Suffix	Suggest to add: ElectricityDataStream/Status Code used to indicate the status of the suffix. This value must correspond to a valid Datastream Status Code as specified in the MSATS Procedures: CATS procedures *(4.12.2, Table 4-I).*	Refer to response to Item 17.
19.	AGL	9	Controlled Load Identifier	Noting the issues AEMO has raised in regards to controlled load meters, AGL suggests that this is an opportunity to standardise the information contained within the controlled load field, including references to differentiate between network relay and time control.	AEMO acknowledges that changes need to occur to the Standing Data for MSATS document based on the 5MS rule change and this will overlap in timing with the CATS Standing Data Review. Changes will be consulted at different timings but consolidated in the system where required. The CATS Standing Data Review will occur during 2020.
20.	Ausgrid	Table 8	CATS_REGISTER_IDENTIFIER	Ausgrid objects to having to update the RegisterID within the register table for INTERVAL meters. This data is already stored in the Suffix field in the register table. Adding that the RegisterID must match the Suffix adds no value, and duplicating data stored in participant databases. AEMO should justify why these additional changes are required. Ausrgrid notes that we are not aware that these changes have been discussed at any of the 5MS working groups. This would impact Ausgrid's appointed MDP in having to update over 500,000 RegisterIDs in the Register table for no justified apparent benefit. If this was to go ahead AEMO will need to provide a transition plan for these NMIs.	The AEMO 5MS/GS Readiness Work Stream will provide further details on the transition plan for NMIs requiring updates to the CATS_REGISTER_IDENTIFIER table.
21.	Origin Energy		Table 8 – CATS_REGISTER_IDENTIFIER	Origin suggests for SerialNumber to be amended to read: *Unique for NMI. Valid for Types 1 to 6*	Refer to response to Item 11.
22.	Energy Australia	9	CATS_REGISTER_IDENTIFIER Table 8, Data element name: RegisterDetail/Status	Similar comments as above. Suggest adding: This value must correspond to a valid Register Identifier Status as specified in the MSATS Procedures: CATS Procedures *(table 4-K, 4.12.4)*	Refer to response to Item 17.
23.	Ergon Energy and Energex	9. Table 8	Updated Table 8 CATS_REGISTER_IDENTIFIER related to SerialNumber for non-contestable unmetered loads.	Ergon Energy and Energex would like to clarify whether we could use a series of internally generated values for each UMCP or NCONUML meter rather than the value of "DUMMY". Currently we use the NMI as the meter serial number.	Refer to response to Item 11.
24.	Ergon Energy and Energex	9. Table 8	Updated Table 8 CATS_REGISTER_IDENTIFIER related to RegisterID.	Ergon Energy and Energex do not believe it is current market practice for a range of MPB's to use E1, B1 etc for the Register ID. This change would be material to some MPB's in the market. It will be critical that transitional planning considerations are included for this change.	Refer to response to Item 20.
25.	Metering Dynamics	9 Table 8	Updated Table 8 CATS_REGISTER_IDENTIFIER related to RegisterID.	The interpretation of the register ID has been varied across MDPS with not all using the suffix E1 etc as now clearly defined in this document. This may have impact on some MDPS but will be good to get it standardised across the market.	Refer to response to Item 20.
26.	PlusES	9	Table 8 CATS_REGISTER_IDENTIFIER: Register ID	PlusES has strong objections to the amended wording for Register ID and recommends a 'no change to current state' unless justification is provided. AEMO to consider the impact to participants especially amongst all the other mandatory 5MS and global settlement changes.	Refer to response to Item 20.

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
				• For Interval Meters, the RegisterID **must** match the content of the 'Suffix' within the CATS_REGISTER_IDENTIFIER table. E.g. 'E1', 'B1', 'Q1', 'K1', etc. That is, the change would provide the following output: Register ID = E1, Suffix = E1 • This change has not been discussed previously in forums, that PlusES are aware of. • This would require additional logic and costs for participants to amend and align the values of the Register ID by duplicating the value of the Suffix. Effectively, participants are requested to make changes and incur additional costs for no determinable value or benefit. What is the justification and purpose of having mandatory data duplicated in MSATS database? What value will the RegisterID field provide to the industry? • If the changes were to proceed consideration needs to be given to a transition plan and whether the changes occur past a certain date with all existing metering remaining in MSATS.	
27.	TasNetworks	Table 8	RegisterID	TasNetworks does not agree that "For Interval Meters, the RegisterID must match the content of the 'Suffix' within the CATS_REGISTER_IDENTIFIER table. E.g. 'E1', 'B1', 'Q1', 'K1', etc." TasNetworks believes the RegisterID for interval meters, including Type 7 and NCONUML should still be able to be in the format of 1, 2, 01, 02 or E1, Q1 etc… Can AEMO please explain the reason for needing to update RegisterID?	Refer to response to Item 20.
28.	PlusES	9	Table 8 CATS_REGISTER_IDENTIFIER: Suffix	• For Interval Meters, the Suffix in the CATS_REGISTER_IDENTIFIER table must match the RegisterID in the CATS_REGISTER_IDENTIFIER table. E.g. 'E1', 'B1' As per above comments: noted against the RegisterID Description.	Refer to response to Item 20.
29.	TasNetworks	Table 8	Suffix	TasNetworks does not agree that "For Interval Meters, the Suffix in the CATS_REGISTER_IDENTIFIER table must match the RegisterID in the CATS_REGISTER_IDENTIFIER table. E.g. 'E1', 'B1' TasNetworks does not believe it should be necessary to match the Suffix and RegisterID as this creates transition effort on participants in addition to updating data streams. Can AEMO please explain why it is necessary to match the two data elements (RegisterID and Suffix) for interval meters?	Refer to response to Item 20.
30.	Ergon Energy and Energex	11	Updated Table 12 Valid Datastream Type Codes	Ergon Energy and Energex suggest that Basic NMI's have a specific DataStream Suffix type = Not available for settlements. Even though they are excluded from certain calculations, it is important for consistency sake that these specifically identified as not available for settlement. Interval meters not to be included in settlement have a DataStreamTypeCode of N available, whereas Basic meters do not currently have a code. An example of how this would apply is with ISO jurisdiction NMI's.	ISO Jurisidction NMIs are excluded from NEM Settlements where Jurisdiciton = 'ISO'. A DataStream Type Code to exclude a basic datastream from NEM Settlements is unnecessary.
31.	Ergon Energy and Energex	12	Updated use of NMI suffix to populate CATS_REGISTER_IDENTIFIER table.	In the CATS_METER_REGISTER diagram for the example of an Interval Meter 'Suffix' - Net DataStreams/Register Level Datastreams, NONCUML is to be updated to NCONUML as currently the code is spelt incorrectly.	Corrections made.

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
				In each of the examples the CATS_DATA_STREAM reference should be updated to CATS_NMI_DATA_STREAM as per the information provided earlier in the document.	
32.	Ergon Energy and Energex	12	Updated notes associated with use of NMI Suffix to populate CATS_REGISTER_IDENTIFIER table.	Ergon Energy and Energex disagree with this comment and suggest wording is updated to "a record must be created in the CATS_REGISTER_TABLE for each register required for settlement, profiling and UFE calculations".	Revised wording added.
33.	Ergon Energy and Energex	12	Updated Assignment of Data for Accumulation meters.	Ergon Energy and Energex request that the following section be updated as follows: "Twp Single Element Meters, no controlled load" be updated to "Two Single Element Meters, no controlled load"	Correction made.
34.	Evoenergy	12	Note	The following should not be deleted as it provides some clarifications on meanings. There is an inconsistent understanding across industry of the meaning of the terms 'register' and 'datastream'. Conventionally, to field metering personnel, a 'register' contains a single value, while a 'datastream' represents an array of time separated register values in chronological order. For Accumulation Meters, the RegisterID refers to the non-volatile storage of the cumulative energy register(s). The RegisterID will have identification with the displays of the meters, or identification of internal data stores. For Accumulation Meters, the ElectricityDataStream/Suffix data element in the CATS_REGISTER_IDENTIFIER table may have a many-to-one relationship with the ElectricityDataStream/Suffix data element in the CATS_NMI_DATA_STREAM table. That is, the same Suffix may occur several times in the CATS_REGISTER_IDENTIFIER table and occur once only in the CATS_NMI_DATA_STREAM table. For Interval Meters, the definition of the RegisterID field is less obvious. To make this field useful, the RegisterID should be associated with the ElectricityDataStream/Suffix. As Interval Meters may have multiple measurement elements and there may be multiple meters for a NMI, the MDP must manage Datastreams against a NMI to avoid duplication of ElectricityDataStream/Suffixes and provide correct mapping of RegisterIDs.	Text reinstated.
35.	Evoenergy	13.2	Heading	Should this read "Two"	Correction made.
36.	Evoenergy	14	All Tables – TimeOfDay value	The Value of "ALLDAY" is inconsistent with the Guide to MSATS Web Portal page 59, that specifies the value for Interval meters must be "INTERVAL". All participants are using this value in the CR30xx now, please update this document to align to NEM practice.	Correction made.
37.	Ergon Energy and Energex	14.5	Added requirement for non-contestable unmetered loads and UMCP to various CATS tables.	Ergon Energy and Energex would like to clarify whether we could use a series of internally generated "dummy" values for each UMCP or NCONUML meter rather than the value of "DUMMY". Currently we use the NMI as the meter serial number.	Refer to response to Item 11.
38.	Evoenergy	14.5	Table 35	Example meter serial number in table should say "Dummy123" for clarity.	Changed to "Dummy Value" for consistency with response to Item 11.
39.	Origin Energy		Table 35 - NCONMUL and UMCP	In line with Origin's MP2 submission, recommend Table 35 reflect the inclusion of NTC and Network additional information. -The Network Additional Information field in the MSATS Meter Register table provides the number of physical devices that are associated to the consumption from that Device/Register. -The NTC Description field in the MSATS CATS_NETWORKTARIFF_CODES table is used to reflect the description of the NTC as well as the Type of Device it relates to.	Number and type of unmetered devices to be included in Inventory Table for non-contestable unmtered loads in accordance with Metrology Procedure" Part B clauses 13.2.2 and 13.3.2.

<table>
<tr><th>#</th><th>RESPONDENT</th><th>CLAUSE</th><th>HEADING/ DEFINITION</th><th>PARTICIPANT COMMENT</th><th>AEMO RESPONSE</th></tr>
<tr><td></td><td></td><td></td><td></td><td>
<table>
<tr><td>Data Element:</td><td>Serial Number</td><td>RegisterID</td><td>UnitOfMeasure</td><td>TimeOfDay</td><td>Suffix</td><td>NTC</td><td>Network Additional Information</td></tr>
<tr><td>Values</td><td>Dummy</td><td>E1</td><td>KWH</td><td>ALLDAY</td><td>E1</td><td>M125</td><td>20</td></tr>
<tr><td></td><td>Dummy</td><td>E2</td><td>KWH</td><td>AllDAY</td><td>E2</td><td>M50</td><td>12</td></tr>
</table>

If NMI: x000000003 has 32 units of unmetered devices consisting of 2 device type (i.e. 20 x M125 Light Device, 12 x M50 Light Device) and each of these device types have a different load profile (eg. Flat) and Network tariff rates then this must be represented in MSATS in a 1 NMI to Many Device model as above.

The Network Additional Information field in the MSATS Meter Register table provides the number of physical devices that are associated to the consumption from that Device/Register.
The NTC Description field in the MSATS CATS_NETWORKTARIFF_CODES table is used to reflect the description of the NTC as well as the Type of Device it relates to.
</td><td></td></tr>
<tr><td>40.</td><td>Evoenergy</td><td>16</td><td>Table 38</td><td>Move table up to follow Table 3, suggested wording below, so that values and data elements align and allows easier reading.
“The tables below list the names that are used in the MSATS browser for each of the MSATS tables detailed in this section The table also provides the aseXML data element names and the respective formats used in each context.
In some cases, such as date fields, the format of the field is shown differently in the Browser to that used in the related aseXML transactions. Also, aseXML uses full words throughout, rather than the coded values used in the Browser.”</td><td>Document re-structured where “Browser to aseXML Cross Reference” tables and “Example Field Value” tables, insections 16 and 17, are moved to follow the appropriate table in sections 4 to 10.</td></tr>
<tr><td>41.</td><td>Evoenergy</td><td>12</td><td>Table 39</td><td>Move table up to follow Table 4, with wording below, so that values and data elements align and allows better reading.
“The tables below list the names that are used in the MSATS browser for each of the MSATS tables detailed in this section The table also provides the aseXML data element names and the respective formats used in each context.
In some cases, such as date fields, the format of the field is shown differently in the Browser to that used in the related aseXML transactions. Also, aseXML uses full words throughout, rather than the coded values used in the Browser.”</td><td>Refer to response to Item 40.</td></tr>
<tr><td>42.</td><td>Evoenergy</td><td>16</td><td>Table 40</td><td>Move table up to follow Table 5, with wording below, so that values and data elements align and allows better reading.
“The tables below list the names that are used in the MSATS browser for each of the MSATS tables detailed in this section The table also provides the aseXML data element names and the respective formats used in each context.
In some cases, such as date fields, the format of the field is shown differently in the Browser to that used in the related aseXML transactions. Also, aseXML uses full words throughout, rather than the coded values used in the Browser.”</td><td>Refer to response to Item 40.</td></tr>
<tr><td>43.</td><td>Evoenergy</td><td>16</td><td>Table 41</td><td>Move table up to follow Table 6, with wording below, so that values and data elements align and allows better reading.
“The tables below list the names that are used in the MSATS browser for each of the MSATS tables detailed in this section The table also provides the aseXML data element names and the respective formats used in each context.</td><td>Refer to response to Item 40.</td></tr>
</table>

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
				In some cases, such as date fields, the format of the field is shown differently in the Browser to that used in the related aseXML transactions. Also, aseXML uses full words throughout, rather than the coded values used in the Browser."	
44.	Evoenergy	16	Table 42	Move table up to follow Table 8, with wording below, so that values and data elements align and allows better reading. "The tables below list the names that are used in the MSATS browser for each of the MSATS tables detailed in this section The table also provides the aseXML data element names and the respective formats used in each context. In some cases, such as date fields, the format of the field is shown differently in the Browser to that used in the related aseXML transactions. Also, aseXML uses full words throughout, rather than the coded values used in the Browser."	Refer to response to Item 40.
45.	Evoenergy	16	Table 43	Move table up to follow Table 9, with wording below, so that values and data elements align and allows better reading. "The tables below list the names that are used in the MSATS browser for each of the MSATS tables detailed in this section The table also provides the aseXML data element names and the respective formats used in each context. In some cases, such as date fields, the format of the field is shown differently in the Browser to that used in the related aseXML transactions. Also, aseXML uses full words throughout, rather than the coded values used in the Browser."	Refer to response to Item 40.
46.	Evoenergy	17	Table 49	Update TimeOfDay field for Interval example to "Interval" to align to *Guide to MSATS Web Portal* page 59	Correction made.

Table 2 – Understanding Load Profiles Published from MSATS

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
1.	Ergon Energy and Energex	NA	NA	We offer no comment to these changes.	AEMO notes respondent's comment.
2.	IntelliHUB			N/A	AEMO notes respondent's comment.
3.	Metering Dynamics			Metering Dynamics offer no comments to these changes.	AEMO notes respondent's comment.
4.	PlusES	N/a	N/a	N/a	AEMO notes respondent's comment.
5.	Evoenergy	2	Background	From the third paragraph, it is not clear and does not read well. *Two options considered were the use of Interval Meters for all second tier sites or the introduction of a mathematical process, called profiling, to approximate TI basic Meter Readings. This process effectively replicates the functionality of an Interval Meter and thus allows a Type 6 Meter Reading to be settled on the wholesale market.* Suggest rewording to: Several possible solutions were considered by Jurisdictions and regulators for resolving this issue for consumers of less than 160MWh/annum (150MWh/annum Tasmania, 100MWh/annum in Queensland and NSW), prior to the introduction of Full Retail Competition (FRC). The two options considered were:	Suggested changes made.

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
				• the use of Interval Meters for all second tier sites, or • the introduction of a mathematical process, called profiling, to approximate TI basic Meter Readings. • By profiling, it effectively replicates the functionality of an Interval Meter and thus allows a Type 6 Meter Reading to be settled on the wholesale market. It was agreed the latter option was preferable as it was a more economically efficient metering solution.	
6.	AGL	3.2	NSLP Peel Off	Noting recent comments by Energy Queensland (although this may apply to other DBs) about triggering controlled load at irregular intervals during the day, does the profiling mechanism pick up this day time usage ?	CLP Peel-Off is calcluated for all Tis therefore sample meters will be involved with the measurment of controlled load at irregular intervals.
7.	Evoenergy	7	EXTRACTION OF PROFILE FROM PUBLISHED FILE	In dot points, please add a full stop to the end of: 7., 15., Remove from 9. fullstop before bracket at the end	Corrections made.
8.	Evoenergy	Appendix A Appendix B		Last sentence, appears to be a statement, add a fullstop please.	Corrections made.
9.	Energy Australia	Appendices A and B		minor typo in “unmetered” loads	Corrections made.
10.	Origin Energy	Appendix A	NSLP where there is no CLP (VICTORIA, ACT, TAS)	Origin requests AEMO to review the formula for calculating NLSP. Check that mathematical representation of ‘s’ and ‘t’ have not been transposed.	Corrections made.
11.	Energy Australia	Appendix B		s = Half hourly loads in LNSP area, which include: Should this be: s = ~~Half hourly~~ *TI* loads in LNSP area, which include:	Corrections made.
12.	Origin Energy	Appendix B	NSLP where there is CLP (QLD, SA)	1. Origin requests AEMO to review the formula for calculating NLSP. Check that mathematical representation of ‘s’ and ‘t’ have not been transposed, 2. Origin observes that in the ‘Terminology’ section, the definition of s still reflects 30 minute intervals, and should be corrected to TI.	Corrections made.

Table 3 – Accreditation Checklists - Metering Providers, MeteringData Providers & Embedded Network Managers

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
1.	IntelliHUB			N/A	AEMO notes respondent’s comment.
2.	Evoenergy	3	Consistency of full stops for	Please add a full stop to all tables, but excluding Related documents, at the end of each sentence in the “Description” fields where one is missing. Point 6.	Correction made.

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
			"Description" field		
3.	Evoenergy	4	Consistency of full stops for "Description" field	Point 6., Point 10.	Correction made.
4.	Origin Energy	MP Accreditation	Other	Origin requests that the checklist to be specific on the obligation that meters need to be capable of storing 5 minute data for the number of days defined under the Rules.	NER 7.8.2(a) prescribes the number of days of interval energy stroage to be facilitated by a metering installation. NER 7.8.2A requires new and replacement metering installations to record and produce TI interval metering data. NER 11.103 requires types 1, 2, 3 and 7, type 4 at transmission connection points and type 4 at distribution connection points where FRMP is a Market Generator or SGA must record and produce TI interval metering dats. MP SLP 3.1 requires MPs to comply with the NER.
5.	AGL	MP 40		Grammar – '…of of CT'	Correction made.
6.	Ergon Energy and Energex	4	Added Item 40…	Ergon Energy and Energex note the word "of" is repeated in the description column.	Correction made.
7.	Evoenergy	4	Point 40	Too many "of". Please delete repeated word	Correction made.
8.	PlusES	MP Checklist No 40		Typo – remove duplicate 'of' prior to CT	Correction made.
9.	Ausgrid	MP Checklist No 40	Metering Installation Maintenance - Please provide a copy of the applicant's policies and procedures for field testing of of CT and VT (as applicable).	There are still Type 5 and Type 6 LV CT and HV metering installations. Ausgrid suggested that that the category for 5B & 6B is also identified as having to provide copies of procedures for field testing for CTs and VTs.	5B and 6B included.
10.	PlusES	MP Checklist No 40	Metering Installation Maintenance - Please provide a copy of the applicant's policies and procedures for field	For information purposes only: There are still Type 5 CT metering in the field. PlusES proposes that the category for 5B &6B is also ticked.	5B and 6B included.

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
			testing of of CT and VT (as applicable).		
11.	Evoenergy	5	Consistency of full stops for "Description " field	NA	AEMO notes respondent's comment.
12.	Evoenergy	5	Point 4 & 25	Are there 4AD, 5D, 6D, 7D meters at a TNI 'special site? If yes, then why is this group not selected at point 25 (checkbox)? Else remove selection at point 4.	Selection removed from point 4.
13.	Evoenergy	5	Point 22	Why is the box selected for Category 1D, 2D, 3D, 4D, 4S and 4AD when there is no Estimation type allowed in Part B of Metrology? Is this to account for VIC only? If yes then add a comment or footnote please.	4AD removed from 1D, 2D, 3D, 4D, 4S category.
14.	Metering Dynamics	#17 of the MDP CHECKLIST Metering Data Processing	Please provide a copy of the applicant's policies and procedures for *metering data* processing, including: • • assignment of the date/time stamp; • • ensuring the correct type codes, reason codes and quality flags are assigned; • • checking for missing *metering data* and overlaps; and	Metering Dynamics would like AEMO to clarify the modification to item 17 Metering Data Processing of the MDP checklist with the addition of "15-minute or" and "where required or by agreement." 15-minute or is this purely for the "processing" ability of the MDPs systems to have the ability to aggregate meter data as prescribed in procedures where interval changes occur to ensure the same data intervals for a full trading day ? eg Churn scenario, reprogramme of meter from 15 or 30 to 5 so the final day of the 15/30 min meter to be aggregated/stored provided in the old interval length. Can AEMO clarify the use of "where required" other than market rules obligations what scenarios are MDPS required to aggregate data without agreement. Would like to clarify to ensure MDPS are clear on what flexibility our MDM systems require.	Inclusion of the terms "15-minute" and "where required" are to support meter churn scenario where 15 or 30-minute metering is churned or converted to 5-minute metering.

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
			• • aggregation of *metering data* to 15-minute or 30-minute intervals where required or by agreement.		
15.	AGL	MDP 26/27		Checklist sufficient for data management, but inadequate for inventory management If bulk NMIs are employed then per feedback on metrology procedures, there needs to be a review of policy / process for maintaining device information (load, profile, location, customer) and policy process for ensuring retailer authorisation for energisation.	Refer to Metrology Procedure: Part B changes – 13.3.2.
16.	Endeavour Energy	Item 27 under MDP CHECKLIST		The definition of non-contestable unmetered loads is "Unmetered load that does not meet the criteria in the Rules or procedures authorised under the Rules for classification as a type 7 metering installation". Therefore placing this checklist item under the category of 4AD, 5D, 6D, 7D would not be valid because by definition non-contestable unmetered loads are not a type 7, nor are they a type 4AD, 5D, 6D because these are not metered loads. We also note that under S7.3.2 of the NER there is no MDP category of registration for non-contestable unmetered loads. We suggest that this check list item be removed from this document and this item be managed through the Readiness Working Group.	Section 4.6 of the GS Final Rule Determination requires AEMO to specify in procedures and guidelines how loads for non-contestable unmetered loads are to be calculated. "..the Commission considers the best way to allow for this discretionary treatment of different types of unmetered loads is to place the specifics of how these loads are calculated into AEMO's unmetered load guidelines and procedures. By giving AEMO discretion to determine these details the final rule provides the necessary flexibility to adapt to the range of circumstances of unmetered load supply." Section 13 of Metrology Procedure: Part B details the approaches to calculating non-contestable unmetered loads and MDP SLP sections 3.10, 3.11 and 3.12 detail MDP obligations to process and deliver non-contestable unmetered load metering data.
17.	Origin Energy	MDP Accreditation	Item 27 – Data Processing of Unmetered noncontestable loads	Origin recommends rewording to: "Please provide a copy of the applicant's policies and procedures for the *metering data* processing requirements including profiling methods for *non-contestable unmetered loads*.	Suggested wording added.
18.	Evoenergy	5	New Point 32 ROLR	Why call out only manually read meters? I would have thought that this would apply to all MDP's to ensure data delivery. Suggest remove "manually read"	As metering data delivery for remotely read interval metering installations would be delivered as usual during a ROLR event, this requirement is only related to manually read metering installations to facilitate the requirements of Metrology Procedure: Part B section 14 – Substitution for Transfer. Consequently the selection is removed from the remotely read Category 1D, 2D, 3D, 4D, 4S.
19.	Evoenergy	5	New Point 33 & 35 Type 6	Does this still apply? Can this be removed?	These items need to be retained until South Australia removes reversion to type 6.

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
20.	Evoenergy	5	New Point 35	Does this still apply? Can this be removed?	Refer to response to Item 19 above.
21.	Evoenergy	6	Consistency of full stops for "Description " field	NA	AEMO notes respondent's comment.

Table 4 – Special Sites and Technology Related Conditions within the National Electricity Market

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
1.	Ergon Energy and Energex	NA	NA	We offer no comment to these changes.	AEMO notes respondent's comment.
2.	IntelliHUB			N/A	AEMO notes respondent's comment.
3.	Metering Dynamics			Metering Dynamics support all changes and no further comments relating to this document.	AEMO notes respondent's support for the proposed change.
4.	PlusES	N/a	N/a	N/a	AEMO notes respondent's comment.
5.	Evoenergy	General		Have any special sites ever been removed? Why not?	Special sites have been removed in the past.
6.	AGL	3	Characteristics	Since cross Boundary metering is included in this document, then AGL suggests that the various cross boundary diagrams also be included in this document as an appendix.	Cross boundary example added.
7.	Evoenergy	3	CHARACTERISTICS OF SPECIAL SITES	Need to fix sentence wording to provide additional clarity (d) metering installations that relate to cross boundary connection…	Correction made.
8.	Evoenergy	4	SPECIAL SITE CATEGORIES	Need to fix sentence wording to provide additional clarity AEMO considers that there are five categories of a Special Site.	Correction made.
9.	Evoenergy	4	Table 1	Can this table, at the end of each description and in brackets, refer back to 3, e.g.? Type E ….[3.(b)&(d)]	References included.
10.	AGL	6	Special Sites	It seems unusual to have a list of sites within the middle of a document. We would expect the document to specify the requirements and a list such as this to be in the appendices.	"Special Sites" section moved to an Appendix, example diagrams moved into body of the document.
11.	Origin Energy	6.3	Generator Special Site Connection Point	Origin asks whether all reference to Hazelwood PS should be removed from this table, following the full decommissioning, and ceasing registration as a Generator in the NEM over two years ago.	Special Sites list updated – including removal of Hazelwood PS.
12.	AGL	Appendix		These diagrams are the content of this procedure and we would expect to see within the core of the document, rather than as an appendix.	Refer to response to Item 10.
13.	Evoenergy	Appendix A	Type B - Complex	Formatting of punctuation with this algorithm is not consistent with other documents.	Calculations expressed as equations for consistency with other Procedures.

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
			Algorithm – Example 2		
14.	Origin Energy	Appendix A – Examples of Special Site Categories	Type D – Cross Border – Example 1	Origin observes that points d) and e) still reference FRMP 2, and believes that this should be corrected to LNSP2	Correction made.

Table 5 – Unmetered Load Guideline - Determination of Device Loadand Annual Energy Consumption for Unmetered DeviceTypes

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
1.	Ergon Energy and Energex	NA	Purpose of Type 7 addition to document	Ergon Energy and Energex seek clarification on the purpose of adding Type 7 to the various clauses. The purpose appears to be to exclude non-contestable unmetered load from this document in which case we are happy with the document. We note there is a lack of clarity around the use of the term "type 7" across all the AEMO procedures.	Correct, the intent is to exclude non-contestable unmetered loads from the document as non-contestable unmetered loads do not meet all requirements to be a type 7 load.
2.	IntelliHUB			N/A	AEMO notes respondent's comment.
3.	Metering Dynamics			Metering Dynamics is not acreddited to operate in the type 7 MDP space. Support all changes and no further comments relating to this document	AEMO notes respondent's support for the proposed change.
4.	Origin Energy			No comment	AEMO notes respondent's comment.
5.	TasNetworks	1.1	Purpose and Scope	Reference to clause 13.1.4(d) of Metrology Procedure: Part B should be 13.1.5(d)	Clause reference corrected.
6.	AGL	3	Disclaimer	Grammar '..inclusion of an type 7..'	Correction made.
7.	PlusES	N/a	N/a	N/a	AEMO notes respondent's comment.
8.	Evoenergy	3	DISCLAIMER	Fix sentence in same way you fixed 1.1 to: The inclusion of a~~n~~ type 7 Unmetered Device in the Load Table:	Correction made.
9.	Evoenergy	4.1(vi)(A)	250V	Please confirm this remains relevant after Australian Standards change from 240V to 230V?	250V is still valid as it is at the upper level for the old 240V +/-6% standard and the current 230V +10%/-6% standard. Street lighting supply voltage around 250V is highly likely as distribution networks are lightly loaded at night.
10.	AGL	4.4	Load Value	In the energy consumed calculation the period is divided by 12, which assumes that the period is in hours. For clarity, should this be defined in this formula, as the period could for instance be 30 minutes; Eg '(Period load is switched on in hours)'	Suggested change made, i.e. added "in hours".

#	RESPONDENT	CLAUSE	HEADING/ DEFINITION	PARTICIPANT COMMENT	AEMO RESPONSE
				Again, for clarity, should 'Unmetered Load wattage' be 'Device Load (Watts)' or 'Device Load (Kilowatts)' as network and retail tariffs are based on kW not W.	Unmetered Device wattage retained for consistency with Metrology Procedure: Part B.