

# **Communications Guideline Northern Territory Electricity System and Market Operator**

Version 1.0

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# Version Release History

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# Disclaimer and Ownership

The Communications Guideline is prepared by Power and Water Corporation in its capacity as the Northern Territory Electricity System and Market Operator (NTESMO). To the extent permitted by law NTESMO has no liability of any nature (whether under statute, in tort (including negligence) or on any other legal basis whatsoever) for use of the Communications Guideline by any entity or person.

NTESMO is the publisher of this Guideline and associated procedures and retains ownership to and copyright in these documents. However some of the documents are based on documentation produced by AEMO, for which AEMO is the copyright holder.

. Any changes to these documents will be made in accordance with the rules contained within the Northern Territory National Electricity Rules.

# 1. Introduction

## 1.1. Purpose and Scope

The purpose of this Communications Guideline is to detail the information exchange rules for the Northern Territory Electricity Market (NTEM).

This Guideline covers all electricity sites in the Territory which are subject to the rules contained in the Northern Territory Electricity Retail Supply Code other than sites for which the network provider is also the retailer.

If the entity which is network provider is also the retailer for a site then for that site information exchange can occur directly between the relevant divisions of that entity and not via the rules in this Guideline.

## 1.2. Audience

The Communications Guideline is intended for use by registered participants in the Northern Territory Electricity Market (NTEM) and by intending participants who require details on the information exchange rules which apply in the NTEM.

## 1.3. What is in the Communications Guideline

The Communications Guideline together with the associated procedures and guides necessary for participants in the NTEM to develop and maintain their systems for the specified information exchange purposes contained within the Guideline.

The Guideline is a combination of the following documents:

Document Title	Purpose	Linkage to Guideline
NTESMO Communications Guideline	Guideline as required under NT NER.	This document.
NTESMO Business to Business(B2B) Procedure Service Order Process	Procedure detailing the service order process and how to manage B2B communication.	A procedure linked to the Guideline on how information exchange processes will operate.

Document Title	Purpose	Linkage to Guideline
NTESMO B2B Procedure Customer and Site Details Notification	B2B rules for customer and site notifications between participants including the life support process.	A procedure linked to the Guideline on how information exchange processes will operate.
NTESMO B2B Procedure Meter Data Process	B2B process for delivery and query of meter data and remote services from meters.	A procedure linked to the Guideline on how information exchange processes will operate.
NTESMO B2B Procedure One Way Notifications	B2B process for providing a one way notification of information to another market participant.	A procedure linked to the Guideline on how information exchange processes will operate.
NTESMO B2B Guide	A guide to the use of the B2B transactions and associated business rules.	A procedure linked to the Guideline on how information exchange processes will operate.
NTESMO B2B Procedure Technical Delivery Specification	The technical specification to assist in the design of the B2B transactions.	Technical specifications for B2B transactions.
NTESMO Market Settlements and Transfer Solution (MSATS Procedures – CATS Procedure Principles and Obligations)	The procedure for maintaining the site standing data within MSATS and providing updates to standing data for all participants associated with each site. It includes the customer transfer rules and NMI discovery process.	Types of site information to be maintained through the Guideline
NTESMO Standing Data For MSATS	Detail on what is required and allowed for each data field in MSATS.	Types of site information to be maintained through the Guideline
NTESMO Meter Data File Format Specification	The format for meter data files to be delivered within the NTEM.	A procedure linked to the Guideline on how information exchange processes will operate.

Table 1: List of documents associated with the Communications Guideline

The procedures are published and maintained as separate documents and are referenced through this Guideline.

#### **1.4. Legal basis for Communications Guideline**

Under the Northern Territory National Electricity Rules (NT NER) NTESMO is required to develop, maintain and publish a Communications Guideline as per clause S7A.1.3. The Guideline is required to set out specific details for how metering and energy data and other information exchange processes will be implemented in the NTEM.

S7A.1.3 of the NT NER also requires that the Guideline specify, or incorporate by reference, detailed technical specifications as to

- how data and information communication is to be processed and
- how the necessary information systems are to be designed and developed.

The Guideline must be in sufficient detail to enable a Registered Participant to design and commission their systems necessary to engage in communications with NTESMO for the purposes of the NT NER.

#### **1.5. Consultation process for publishing the Communications Guideline**

The NT NER requires that the Communications Guideline be published through a *Rules Consultation Procedures* as defined in the NT NER. The *Rules Consultation Procedures* are defined in clause 8.9 of the NT NER. NTESMO will publish and maintain any changes to the Guideline through this process, as amended from time to time in the NT NER.

The Procedures published in conjunction with this Guideline and referenced by this Guideline are published and maintained under the same *Rules Consultation Procedures*. Any changes to these procedure documents will only be made through a *Rules Consultation Procedures*.

A *Rules Consultation Procedures*, as defined in the NT NER, allows for any person or party to provide a submission on the documents that are subject to consultation. NTESMO will, as required by this process, consider and publish all submissions made through the consultation process.

#### **1.6. Communications Guideline published on NTESMO website**

The Communications Guideline, associated Procedures, and any consultation documents will be published and maintained on the NTESMO website <https://ntesmo.com.au/>. Any notices of consultation will be provided through this mechanism.

#### **1.7. Alignment with other NT Instruments**

Where there is an inconsistency between the NT NER, the Northern Territory Electricity Retail Supply Code and this Communications Guideline then the NT NER or the Northern Territory Electricity Retail Supply Code (as applicable) takes precedence over this Guideline.

## 2. NTEM Information Exchange Process

### 2.1 Use of AEMO MSATS system

NTESMO has determined that all information exchange processes for the NTEM will occur via the Australian Energy Market Operator (AEMO) MSATS system. Any participant wanting to transact with another registered participant in the NTEM (including minor centres) must do so via the AEMO MSATS system in accordance with the procedures published with this Guideline.

These procedures cover transferring the retailer for a site, maintaining the site standing data, service order requests for sites and the delivery of meter data.

Information exchange transactions between NTEM participants are to be structured in accordance with this Guideline and the associated procedures which are published under this Guideline. Market participants are allowed to decline information exchange processes that are not in accordance with this Guideline.

The delivery of meter data will occur in accordance with the rules contained in this Guideline. The Guideline also details the processes for market participants to query the delivery of meter data.

### 2.2 Procedure outline

The procedures detailed in *Table 1* above are based on and linked to corresponding procedure documents which operate in the National Electricity Market (NEM). These procedures are used to manage the information exchange processes in the NEM. The NT procedures are aligned to the NEM procedures in format and contents to deliver comparable information exchange processes in both the NTEM and the NEM.

Where the NEM MSATS procedures are amended, a review and potential amendment, via a *Rules Consultation Procedures*, will be completed on the NT MSATS procedures. The timing of any changes to the NT MSATS Procedures will be managed by NTESMO aiming to minimise the impacts on the NT market participants.

### 2.3 Rights of participants to change the information exchange process

All NT electricity market participants can propose a change to this Guideline or associated procedures. Any requests for revisions should be lodged with NTESMO who will review the request and if required commence a *Rules Consultation Procedures* on the proposed changes to these documents to determine feedback and support from other market participants.

NTESMO will liaise with AEMO to make the required changes to the MSATS system and associated services being provided to the NT electricity market participants.



## **2.4 Supporting documentation on the AEMO website**

AEMO publishes Guides to MSATS and the information exchange processes which occur using this system. Those Guides are listed in Appendix 1 and are available for NTEM participants to utilise when developing their information exchanges processes and systems.

## **2.5 MSATS data model**

The MSATS data model is structured to provide automated updates to participants for a site when any of the standing data related to that site is changed. This facilitates information exchange as one message is required to update multiple parties for a site. MSATS will then forward the message to all participants with a relationship at that site of the updated meter details.

## **2.6 No Customer Details**

MSATS stores site details only and does not store any customer details. There are no fields in MSATS for storing customer personal information. The system is not designed to provide personal information on the individual who is residing at a site, rather what metering is at a site and who has a relationship with that site.

## **2.7 aseXML and Schema**

All MSATS transactions must be submitted using the aseXML format and approved schema. Details are provided in the technical specification document published through this Guideline. Details on the aseXML standard and schemas can be found on the AEMO website. <https://aemo.com.au/energy-systems/market-it-systems/asexml-standards>

### 3. Customer Transfers

Customers in the Northern Territory are allowed to change retailer for the electricity at their site. The process whereby the registered retailer for a site is changed is called Customer Transfers. The Northern Territory Electricity Retail Supply Code (ERSC) provides the rules for retailers to contract with a customer. This Guideline does not replace the rules and obligations on retailers within the ERSC rather it outlines how a retailer is to notify other market participants that they are now the retailer for a specific site.

A retailer must process a customer transfer request on a timely basis as required under the ERSC. The legal obligation for a site does not commence for a retailer until the successful completion of the customer transfer transaction in MSATS.

MSATS is the Database of Record for customer site details. In the instance of a dispute over a site NTESMO will refer to the data contained within MSATS when determining the retailer for a site for any particular time period.

NTESMO will use the register of data in MSATS when calculating market settlements for the NTEM participants. Sites will be allocated to retailers based on the data contained in MSATS and the settlement calculations will reflect this data.

Under the ERSC all customer transfers can only occur for sites with interval meters. No customer transfers can occur for sites with basic meters or unmetered supplies. The Guideline does not change these rules. If a customer transfer request is raised for a site which does not have an interval meter, then other participants are entitled to object to the transfer request.

The MSATS system and procedures support retail competition by making certain site data available to prospective retailers to assist with quoting customers. There is the AEMO Guide 'Hints and Tips – CATS and NMI Discovery' which outlines how prospective retailers can access site data to assist with the quoting process.

To provide the data required for NMI Discovery all market participants have a requirement to maintain up to date data for each site in MSATS.

The MSATS system is only available for use by the registered market participants. It is not for use by third parties.

### 3.1 Customer Transfer Procedures

The rules for creating and maintaining customer site data and transferring sites are contained in the following two procedure documents published by NTESMO:

Procedure	Purpose
<b>NTESMO Market Settlements and Transfer Solution (MSATS Procedures – CATS Procedure Principles and Obligations)</b>	Rules for maintaining site standing data, transferring the retailer for a site and performing NMI discovery.
<b>NTESMO Standing Data for MSATS</b>	Detailed rules on the format for each data field contained within MSATS.

Both these procedures are supporting documents to this Guideline and will be published and maintained through the *Rules Consultation Procedures* outlined in the NT NER. No changes will be made to these documents without the changes going through the formal consultation process.

The documents detail what site data must be maintained in MSATS, the roles for maintaining the data and the obligations on each market participant. These documents facilitate the information exchange between market participants who have a relationship with each site.

The basis of MSATS is that any change to the standing data for a site is communicated by the system to all other participants with a relationship to that site. If the retailer for a site changes, then the system will provide an update to the network company and to the metering providers to update their systems with the details of the new retailer.

Appendix 2 to this Guideline contains the glossary to support the use of the MSATS system for standing data and customer transfers.

# 4. B2B Transactions

The Communications Guideline mandates the use of the AEMO eHUB for the management of Business to Business (B2B) transactions between the NTEM participants. The AEMO eHUB is a component of the MSATS system and it facilitates information exchange between market participants. The method is detailed in Figure 1.

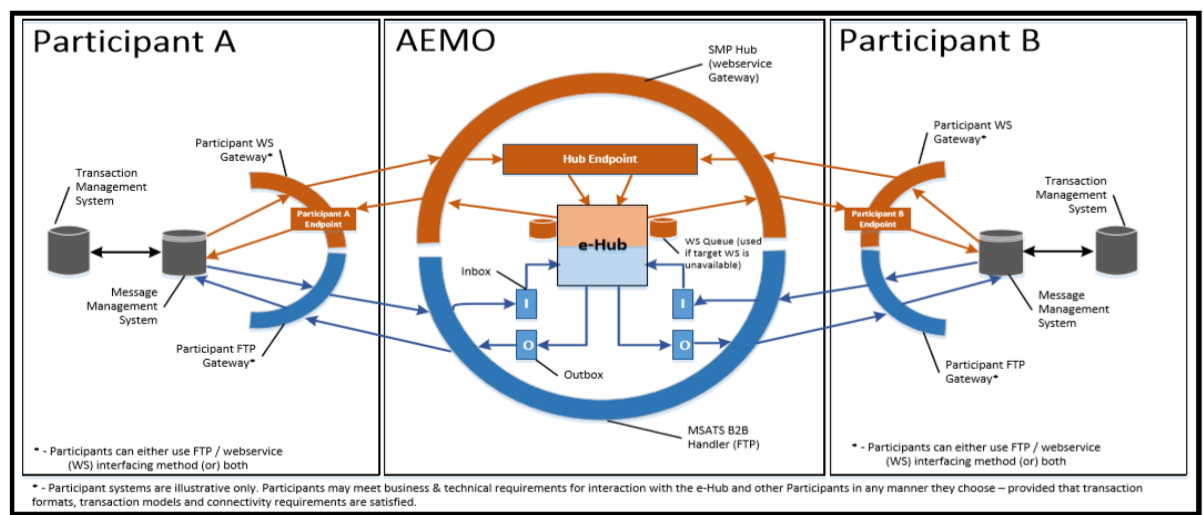


Figure 1: The AEMO eHUB B2B model

The communication method used by Participant A to send a B2B transaction can be different from the communication method used by Participant B to receive the B2B transaction. The AEMO eHUB translates the messages based on the agreed parameters.

The B2B Procedures are published as stand-alone documents under this Guideline. Each B2B procedure can only be published and maintained under a *Rules Consultation Procedures* as detailed in the NT NER.

The list of B2B Procedures which are covered under this Guideline are:

Procedure	Purpose
<b>NTSEMO B2B Procedure Customer and Site Details Notification (including life support notification)</b>	Process for the communication of customer and site data. MSATS does not store customer

Procedure	Purpose
	data so these B2B transactions provide the mechanism for communicating customer data.
<b>NTESMO B2B Procedure Service Order Process</b>	Detail on the service order requests that can be raised within the NTEM and the obligations on participants for these requests.
<b>NTESMO B2B Procedure Meter Data Process</b>	Process for the delivery and query of meter data including remote service requests for meters.
<b>NTESMO B2B Procedure One Way Notification</b>	A process for sending a notification to another party without requiring any action from the recipient party.
<b>NTESMO B2B Procedure Technical Delivery Specification</b>	The technical specifications for B2B communications enabling participants to develop their systems to support the listed B2B transactions.
<b>NTESMO B2B Guide</b>	A guide to the B2B transactions including any NT specific business rules.

In addition this Guideline contains the following procedure(s) to facilitate the information exchange process.

Procedure	Purpose
<b>NTESMO Meter Data File Format</b>	The required meter data file format for the delivery of meter data.

The B2B procedures align with the NEM procedures published by the Information Exchange Committee. The documents are maintained as separate procedures to enable efficient changes to be made to targeted areas without impacting on all the other procedures.

Where a section of a procedure from the NEM is not applicable in the Territory the section heading has been maintained to align the format of the documents with the NEM documents.

The B2B transactions provided through the MSATS e-HUB do not support the attachment of supporting documentation (like electrical safety certificates). Any supporting documentation that is required must be delivered through alternative means.

All meter data is to be delivered via these B2B transactions and any queries on meter data must be via the specified B2B transactions.

A participant is entitled to reject a request for work or meter data which is not via the specified B2B procedures.

## 5. MSATS Registration Process

### 5.1 Participant Registration Process

The Communications Guideline and use of MSATS are for registered electricity market participants in the Northern Territory. Licensing of market participants is through the NT Utilities Commissions. Once a participant holds the appropriate license then NTESMO will work with the participant on granting them access to the MSATS system.

NTESMO will work with AEMO to establish the participant with a

- valid username,
- password and
- participant code.

The participant code is a unique identifier for that participant up to eight characters in length. Each participant has a unique code which must be used to identify that participant in any transactions sent through the MSATS system.

The AEMO eHUB self-accreditation process must be completed by each participant prior to being able to send B2B transactions via the eHUB. It is the responsibility of each participant to complete this process. There is no formal accreditation to use MSATS for customer transfers.

Access is initially granted to the MSATS PRE-PROD (or test) system for participants to test their access and complete the eHUB self-accreditation process. Once the eHUB self-accreditation process is completed then access to the MSATS PROD system will be granted.

### 5.2 Monitoring usage of MSATS

NTESMO will monitor participant usage of the MSATS system. If a participant is the cause of the MSATS system not being used in accordance with this Guideline and associated procedures, then NTESMO will inform the participant of the activities that have occurred which are not in accordance with the Guideline and procedures.

NTESMO will provide a period of 60 days for the participant to rectify the stated issues. If the participant does not comply with the request from NTESMO then NTESMO reserves the right to suspend the participant's access to the MSATS system and associated information exchange processes.

### 5.3 Participant MSATS Access

Each market participant is granted access to MSATS via either a web Browser or through linking their IT systems into MSATS. Market participants are required to inform NTESMO of the method they will be utilising to access MSATS.

When a participant is implementing a change in mechanism for accessing MSATS they are required to advise NTESMO of the planned change. NTESMO can request evidence of testing completed by the participant to ensure that the system change, when implemented, will not impact on the operation of MSATS or other participant's information exchange processes.

## 6.IT requirements

MSATS is only available through the AEMO MarketNet. An application form and the IT requirements can be found on the NTESMO website. NTESMO will work with AEMO to facilitate each participant's MarketNet connection.

MSATS also contains data maintenance requirements. Each participant is provided an inbox and outbox for the sending of messages. Maintenance of the inboxes and outboxes is required. Each participant will have a volume limit based on their expected number of transactions. If the volume limit is exceeded, then the system will provide a STOP FILE and prevent any further MSATS communication until such time as that participant clears the old messages.

## 7.Assistance with MSATS and the Procedures

For assistance with the use of MSATS all NTEM participants can contact the AEMO helpdesk on 1300 236 600 or via email at [support.hub@aemo.com.au](mailto:support.hub@aemo.com.au). NTESMO has contracted with AEMO for the provision of support services and all queries on the use of MSATS should be directed in the first instance to AEMO.

Any queries on the NTESMO procedures or the Communications Guideline should be sent to [market.operator@powerwater.com.au](mailto:market.operator@powerwater.com.au)



# APPENDIX 1: List of Guides on the use of MSATS

The following Guides are available on the AEMO website (aemo.com.au) to assist with the use of the MSATS system.

Document Name	Purpose
<a href="#">Introduction to MSATS</a>	This document provides an introduction to using the MSATS web portal.
<a href="#">Guide to MSATS Web Portal</a>	This document is a user interface guide for Participant Users of the MSATS web portal.
<a href="#">Guide to User Rights Management</a>	This document is a user interface guide assisting PAs (master users) with the user rights management functions available in AEMO's web portals.
<a href="#">Hints and Tips CATS and NMI discovery</a>	This document contains hints and tips that will assist Participant Users applying the NMI Discovery function to find the details about a <i>NMI</i> . It also contains answers to questions that Participants have asked about the NMI Discovery function.
<a href="#">Guide to MSATS reports</a>	This document provides a guide to the reports available from MSATS for users.
<a href="#">Participant Batcher Software latest version</a>	The 'Participant Batcher' software provides a simple batch interface to MSATS and the <i>B2B e-hub</i> by permitting Participant Users to deal with the raw .zip files only and its intended audience is Participants' technical and software development staff responsible for systems implementation.

Document Name	Purpose
<a href="#">Guide to MSATS B2B</a>	This document provides information about the <i>B2B e-hub</i> functions available in MSATS.
<a href="#">B2B mapping to aseXML Guide</a>	This document maps the Business Documents, Business Signals and business items to aseXML, sometimes including .csv payloads.
<a href="#">Guide to transition of aseXML</a>	Provides details to transition the aseXML schema version used by a participant.
<a href="#">Guide to B2B validation module software</a>	Covers the set up and use of the B2B validation module software.
<a href="#">Technical guide to MSATS</a>	Supplement to the MSATS CATS rules providing an understanding of the MSATS functionality and business rules.
<a href="#">Guide to B2B eHUB self accreditation</a>	A guide to assist participants with the B2B eHUB self accreditation process.
<a href="#">SMP Technical Guide</a>	Provides participants with the technical specifications for the delivery of B2B transactions using the eHUB.

## APPENDIX 2: MSATS Glossary of Terms

Term	Definition
Accelerate	A process initiated by NTESMO to complete In-Progress Change Requests following a RoLR Event, allowing for: <ul style="list-style-type: none"> <li>Completion of Change Requests that would otherwise require the MDP to submit the Actual Change Date, where that date has not yet been submitted.</li> <li>Specification of an Actual Change Date (<b>RoLR Effective Transfer Date</b>) to supersede any existing Proposed Change Date or Actual Change Date on the Change Request.</li> </ul>
Accept	The situation where a Recipient of a B2B Message has agreed to process it further.
Access Requirements	Site access requirements specified in a Service Order
Accreditation Checklists	Not used in the NT Procedures
Accumulation Meter	A <i>meter</i> that only measures total electricity use (kWh, MWh) between Meter Readings, and does not record the dates and times when the electricity flows occur. Also known as a 'basic meter'.
ACMA	Not used in the NT Procedures.
Actual Change Date	The effective date of changes specified in a Change Request. (It is the same date as the 'FromDate' in a C4 Report and the 'Start Date' seen on MSATS browser screens that display 'NMI master data').
Actual End Date	A date specifying the end of a period when updating existing data in CATS and is only ever specified in a Change Request for a Retrospective Change correcting a past error.
Actual Meter Read Date	The date an Actual Meter Reading is obtained.
Actual Meter Reading	The <i>accumulated metering data</i> or <i>interval metering data</i> collected from a <i>meter</i> when it is either Manually Read or Remotely Read (as applicable).
Actual Metering Data	<i>Accumulated metering data</i> or <i>interval metering data</i> that has passed Validation without Substitution.
ADL	Not used in the NT Procedures
AEMO Communication	Not used in the NT Procedures
Agreed Load	Not used in the NT Procedures
Appointment	An agreement between an End User (or their agent), a <i>retailer</i> and a Participant for the Participant to perform requested work at a specified time.
aseXML	A standard to facilitate the exchange of information between Participants in XML.
aseXML Guidelines	Guidelines for the development of a Standard for Energy Transactions in XML (aseXML).
aseXML Schema	Specification used to describe the structure of an aseXML message.
Asset Management Strategy	Not used in the NT Procedures
ASP	Not used in the NT Procedures
B2B	Business-to-Business: A generic term used to refer to certain business-to-business interactions between Participants through the <i>B2B e-hub</i> .
B2B Acknowledgement	A generic term used to refer to an aseXML Message or B2B Transaction acknowledgement, within the context of a B2B Interaction. Often referred to as being positive (indicating correctness of the associated file) or negative (indicating an error with the associated file).
B2B Interaction	A complete set of B2B Messages between two Participants involving Business Document, Business Receipt, and <u><i>Business Acceptance/Rejection</i></u> .
B2B Mapping to aseXML	A document detailing the specific aseXML interfaces to be used in the implementation of B2B Transactions.
B2B Message	A B2B Transaction or B2B Acknowledgement sent between an Initiator and a Recipient.
B2B Notification	A B2B Transaction that does not have a corresponding reply.
B2B Transaction	An aseXML realisation of a Business Document.
Backup RoLR	Not used in the NT Procedures
BCT	Bulk Change Tool: A component of MSATS used by NTESMO & AEMO to make bulk changes to data without requiring the submission of Change Requests.

Term	Definition
BMP	Not used in the NT Procedures
Bulk Supply Point	<i>Connection point where a transmission network connects to a distribution network.</i>
Bundling	A function in MSATS whereby AEMO 'bundles' Change Requests. This means that instead of sending Change Requests as individual XML messages containing a single transaction, many can be bundled into a single XML message (one message, with multiple transactions, in a single file).
Business	As defined in the <i>NER</i> .
<u>BusinessAcceptance</u>	A Business Signal indicating acceptance.
Business Day	Any weekday other than public holidays applicable to the Site to which a B2B Transaction applies.
Business Event	The reason for the acceptance or rejection of a B2B Transaction.
Business Document	The transaction that contains the business content for: <ul style="list-style-type: none"> <li>• <u>MeterDataNotification</u></li> <li>• <u>ProvideMeterDataRequest</u></li> <li>• <u>VerifyMeterDataRequest</u></li> <li>• <u>ServiceOrderRequest</u></li> <li>• <u>ServiceOrderResponse</u></li> <li>• <u>CustomerDetailsNotification</u></li> <li>• <u>CustomerDetailsRequest</u></li> <li>• <u>SiteAccessNotification</u></li> <li>• <u>OneWayNotification</u></li> <li>• <u>NotifiedPartyTransaction</u></li> </ul>
Business Group	A group of Participant companies (each with their own Participant IDs) that are part of a single commercial enterprise.
Business Hour	A period of one hour within a <i>business day</i> .
Business Hours	Normal operating hours for a Participant
<u>BusinessReceipt</u>	A Business Signal indicating that a Business Document has been received and is readable.
<u>BusinessRejection</u>	A Business Signal indicating that a Business Document failed a relevant business rule validation.
Business Signal	A response generated by a Recipient upon receipt of Business Document to indicate whether a Business Document: <ul style="list-style-type: none"> <li>• has been received and is readable (<u>BusinessReceipt</u>); or</li> <li>• is accepted or rejected by the Recipient (<u>BusinessAcceptance/Rejection</u>).</li> </ul>
C4 Report	An MSATS report that contains current CATS Standing Data for one or more <i>NMIs</i> .
Cancel	A <i>ServiceOrderStatus</i> indicating that the Service Order was cancelled.
Cancelled or CAN	A status point of a Change Request.
Category A	Not used in the NT Procedures
Category B	Not used in the NT Procedures
Category C	Not used in the NT Procedures
Category D	Not used in the NT Procedures
CATS	Consumer Administration and Transfer Solution, a part of MSATS.
CATS Procedures	The AEMO document entitled: MSATS Procedures: CATS Procedure Principles and Obligations
CATS Standing Data	The data held in the following database tables: <ul style="list-style-type: none"> <li>• CATS_NMI_Data_Stream</li> <li>• CATS_NMI_Data</li> <li>• CATS_Meter_Register</li> <li>• CATS_NMI_Participants_Relationship</li> <li>• CATS_Register_Identifier</li> </ul> <i>NMI Standing Data</i> is a sub-set of the CATS Standing Data.
CATS Standing Data Access Rules	The rules specifying which of the CATS Standing Data may be accessed, as specified in section 16.3.3 of the CATS Procedures.

Term	Definition
Change Reason Code	A code that identifies a type of Change Request. It defines rules such as what <i>NMI</i> information can be updated and which Roles will receive a Change Request Notification each time the Change Request Status is updated.
Change Request	A transaction submitted by a Participant into MSATS whenever it wants to create or update data held within MSATS. Change Requests have numbers and are commonly referred to as CR [number].
Change Request Notification	A notification generated by MSATS and provided to one or more Participants as a consequence of a change of status of a Change Request.
Change Request Status	Nominated status points in the life cycle of a Change Request.
Change Request Status Notification Rules	Rules that specify which Roles are to be advised when a Change Request undergoes a change in status as described in the CATS Procedures for each Change Reason Code.
Child Name	Not used in the NT Procedures
Child NMI	Not used in the NT Procedures
CLP	Not used in the NT Procedures
Completed or COM	When used in the MSATS Procedures: One of the status points of a Change Request. When used in the B2B Procedures: A <i>ServiceOrderStatus</i> indicating that the Primary Work is completed.
Connection Date	The date the <i>connection point</i> is connected to a network.
Controlled Load	<i>Load</i> that is controlled by a process or mechanism, which includes the <i>metering installation</i> or a network device and may be separately metered from the remaining <i>load</i> at a <i>metering point</i> . Examples of controlled load devices include a frequency injection relay or time clock. The majority of Controlled Loads are associated with off-peak hot water, pool pumps and air conditioning units.
Controlled Unmetered Device	An Unmetered Device that has a predictable <i>load</i> and is switched in accordance with an On/Off Table (e.g. street lighting).
Cooling-Off Period	<ul style="list-style-type: none"> <li>In the NT as defined in the Electricity Retail Supply Code.</li> </ul>
CSV	Comma Separated Values; a file format for data using commas as delimiters.
CSVNotificationDetail	Is a defined data payload applicable only for some transactions in the One Way Notification Procedure.
CT	<i>Current transformer</i>
Customer and Site Details	The data elements identified in a Customer and Site Details Notification.
Customer and Site Details Changes	A change to one or more data elements identified in a Customer and Site Details Notification.
Customer Classification Code	A code used in MSATS to determine the classification of an End User. See section 4.51 of the CATS Procedures for further information.
Customer Threshold Code	A code used in MSATS to determine the consumption for an End User at a single <i>connection point</i> . See section 4.5.2 of the CATS Procedures for further information.
Data Delivery Calendar	Not used in the NT Procedures
Data Request	A transaction initiated by MSATS and sent to a Participant at the Pending Validation status of the Change Request life cycle.
Datastream	Not used in the NT Procedures.
Datastream Status Code	Not used in the NT Procedures.
Default and Deregistration Procedure	Not used in the NT Procedures
DLF	<i>distribution loss factor</i>
DLF Code	A code used in MSATS to identify a <i>distribution loss factor</i> .
DNSP	<i>Distribution Network Service Provider</i>
DPID	Delivery Point Identifier: A unique identifier assigned and used by Australia Post as a numeric descriptor for a postal address.
DRSP	Not used in the NT Procedures
EENSP	Not used in the NT Procedures

Term	Definition
Embedded Network Code	Not used in the NT Procedures
Embedded Network Local Retailer	Not used in the NT Procedures
End User	A person who acquires electricity for consumption purposes.
ENLR	Not used in the NT Procedures
ENM	Not used in the NT Procedures
Estimated Reading	An estimate of a Meter Reading where an Actual Meter Reading for a period in the past is not available.
Estimation	The forward estimation of <i>metering data</i> .
Exemption Guideline	Not used in the NT Procedures
Exemption Procedure	Not used in the NT Procedures
Explicit Informed Consent	In the NT as defined in the Electricity Retail Supply Code.
Failed Retailer	A <i>retailer</i> that is the subject of a RoLR Event.
Field Validation Rules	These rules specify for each Change Reason Code, which fields in MSATS need to be populated at creation of a transaction or at other times in the life cycle of a transaction.
Final Reading	The last Actual Meter Reading taken where: <ul style="list-style-type: none"> <li>an End User: <ul style="list-style-type: none"> <li>vacates an address; or</li> <li>changes <i>retailer</i>; or</li> </ul> </li> <li>all or any part of a <i>metering installation</i> is: <ul style="list-style-type: none"> <li>removed; or</li> <li>modified and the modification affects the <i>energy data</i> in the <i>metering installation</i>.</li> </ul> </li> </ul>
First Tier NMI	Not used in the NT Procedures
First-Tier Load	Not used in the NT Procedures
FRMP	<i>financially responsible Market Participant</i> , usually a <i>retailer</i> , <i>Generator</i> , <i>Market Customer</i> , identified as such in respect of a <i>connection point</i> in MSATS.
Good Industry Practice	In relation to any undertaking and any circumstances, the exercise of that degree of skill, diligence, prudence and foresight that would reasonably and ordinarily be expected from a skilled and experienced operator engaged in the same type of undertaking under the same or similar circumstances.
Historical Data	<i>Metering data</i> that has been provided for a previous reading period
HV	<i>High voltage</i> .
HV CT	<i>High voltage current transformer</i>
ILAC	International Laboratory Accreditation Cooperation.
Initiate	The first of the status points of a Change Request.
Initiation Rules	As described in section 4.5 of the CATS Procedures, the rules that specify who can initiate a Change Request in MSATS.
Initial MC	Not used in the NT Procedures
Initiator	The Participant who initiates a B2B Interaction.
Insolvency Official	An official appointed in respect of a <i>retailer</i> or any property of the <i>retailer</i> and includes a receiver, receiver and manager, administrator, provisional liquidator, liquidator, trustee in bankruptcy or person having a similar or analogous function.
Interval	Period over which <i>interval energy data</i> is recorded by the <i>metering installation</i> that corresponds to a TI or submultiples of a TI.
Interval Meter	A <i>meter</i> that records <i>interval energy data</i> . It is manually read, or remotely read using a communications network.
Inventory Table	A table of devices for unmetered <i>loads</i> associated with each <i>NMI</i> .
Jurisdiction	<i>participating jurisdiction</i>
Jurisdiction Code	A code used in MSATS to identify the Jurisdiction to which a <i>NMI</i> belongs and as specified in section 4.2 of the CATS Procedures.

Term	Definition
Life Support	A situation where an End User relies on electricity for the operation of ‘life support equipment’.
LNSP	In the context of a <i>Network Service Provider’s distribution network: Local Network Service Provider</i> For the purposes of the Metrology Procedure: If there is more than one <i>Local Network Service Provider</i> for a local area, a reference to the LNSP in respect of a <i>metering installation or connection point</i> is a reference to the LNSP that holds a licence in respect of the <i>network</i> to which that <i>metering installation or connection point</i> is connected.
Load Profile	Not used in the NT Procedures
Load Table	Not used in the NT Procedures
Lot Number	The lot reference number allocated to a street address prior to street numbering (except in the ACT).
LR	<i>Local Retailer</i> . For NT, LR will be populated with GLOPOOL.
LV	A <i>Voltage</i> equal to or less than 1kV.
LV CT	<i>Low voltage current transformer</i>
MAMP	Not used in the NT Procedures
Manually Read	Collecting <i>metering data</i> other than by <i>remote</i> – as opposed to when a <i>meter</i> is Remotely Read.
MarketNet	AEMO’s private network available to Participants having a Participant ID
MC	<i>Metering Coordinator</i> The Role Code used in MSATS for an MC is ‘RP’.
MDFF	Metering Data File Format: The standard format for the delivery of <i>metering data</i> .
MDFF Specification	The Communications Guideline document entitled: Meter Data File Format Specification NEM12 & NEM 13.
MDM	Not used in the NT Procedures.
MDM Contributory Suffix	Not used in the NT Procedures
MDM Data File	Not used in the NT Procedures
MDM Procedures	Not used in the NT Procedures
MDP	<i>Metering Data Provider</i>
Meter Alarm	Any alarm within a <i>metering installation</i> designed to detect any unexpected occurrence, such as a loss of <i>supply</i> , VT or phase failure, tamper detection, reverse energy flow, pulse overflow, cycle redundancy check error and temperature or time tolerance.
Meter Churn	Any alteration or replacement of a <i>metering installation</i> .
Meter Provision	The provision, installation and maintenance of the components of a <i>metering installation</i> .
Meter Reading	Electricity metering data taken from a <i>metering installation</i> , regardless of how it is obtained.
Meter Register	The meter register data stored in MSATS, which includes both the <i>metering register</i> and other data.
Meter Register Status Code	A code used in MSATS to delineate the status of a <i>meter</i> . See also section 4.12.3 of the CATS Procedures.
Meter Serial ID	A faceplate serial number that uniquely identifies each <i>meter</i> associated with a <i>NMI</i> .
Metering Data Notification Process	The process of providing <i>metering data</i> to Participants by an MDP.
Metering Data Type	A value that describes how <i>metering data</i> is obtained i.e. Manually Read or Remotely Read
Metering Data Verification Process	The process by which a Participant queries the <i>metering data</i> received from an MDP.
Metering Installation Type Code	The type of <i>meter</i> attached to a <i>NMI</i> as described in section 4.8 of the CATS Procedures.
Metrology Procedure: Part A	Not used in the NT Procedures
Metrology Procedure: Part B	Not used in the NT Procedures
MMS	AEMO’s Market Management Systems.

Term	Definition
MP	<i>Metering Provider.</i> In MSATS, it is referred to as an MPB.
MPB	A Metering Provider accredited to install, provide and maintain <i>metering installations</i> .
MPC	A Meter Data Provider accredited only to collect <i>metering data</i> , not process or transfer it.
MSATS	Market Settlements and Transfer Solution
MSATS Procedures	The following procedures, collectively: CATS Procedures, WIGS Procedures, MDM Procedures, NMI Standing Data Schedule, NMI Procedure and Part A of the NEM RoLR Processes.
MSGA	Not used in the NT Procedures
NEM Retail Operations Contacts List	Not used in the NT Procedures
NEM RoLR Processes	Not used in the NT Procedures.
NER	The National Electricity Rules made under Part 7 of the <i>National Electricity Law</i> .
Network Tariff	The rate an NSP charges a <i>retailer</i> for the use of its <i>network</i> .
Network Tariff Code	A nominated code for the Network Tariff charged by the NSP.
NMI Address	The physical location of the <i>connection point</i> .
NMI Checksum	A single digit number used to validate that a <i>NMI</i> supplied to MSATS is valid.
NMI Classification Code	A code used in MSATS that identifies the nature of the flow of electricity through a <i>connection point</i> . See section 4.4 of the CATS Procedures.
NMI Datastream	Not used in the NT Procedures
NMI Discovery Search 1	The process of finding a <i>NMI</i> and the NMI Checksum by searching MSATS using the Site, the DPID or the Meter Serial ID. See also the NMI Search Rules in section 16.3.1 of the CATS Procedures.
NMI Discovery Search 2	The process of entering a <i>NMI</i> and NMI Checksum in MSATS to obtain the <i>NMI Standing Data</i> . See also the NMI Standing Data Access Rules detailed in section 16.3.2 of the CATS Procedures.
NMI Discovery Search 3	The search process that can only be used for one of the purposes detailed in section 16.3.4 of the CATS Procedures.
NMI Master Record	The NMI master record with an end date set to the year 9999.
NMI Procedure	The NTESMO document entitled: National Metering Identifier.
NMI Search Rules	See Table 16-A in the CATS Procedures. The search that is available in MSATS to enable a Participant identify a <i>NMI</i> when the only information available is the DPID, the <i>meter</i> serial number or the Site address.
NMI Standing Data Access Rules	The search that is available in MSATS to enable a Participant to identify nominated CATS Standing Data. See section 16.3.4 of the CATS Procedures.
NMI Standing Data Schedule	The AEMO document entitled: NMI Standing Data Schedule.
NMI Status Code	A code used in MSATS to determine whether a <i>NMI</i> can be the subject of a retail transfer. See also section 4.6.1 of the CATS Procedures.
Non-Controlled Load	A <i>load</i> that is not a Controlled Load.
Not Completed	A <i>ServiceOrderStatus</i> indicating that the Primary Work is not completed.
Notification	A B2B Transaction that does not require a corresponding reply. Could be a Meter Data, Customer and Site Details or a Notified Party Notification.
<u>NotificationDetail</u>	Data Payload for the <u>OneWayNotification</u>
Notified Party	The receiver of a B2B Transaction or B2B Acknowledgement for notification purposes only and not required to perform any services for the Initiator.
NSLP	Not used in the NT Procedures
NSP	<i>Network Service Provider</i>
NSP2	Not used in the NT Procedures
NSRD	Next Scheduled Reading Date: The next scheduled Actual Meter Reading.



Term	Definition
Objected or OBJ	One of the status points of a Change Request.
Objection	A type of transaction raised in relation to a Change Request whereby a Participant may object to the Completion of a Change Request on grounds that are permitted by the applicable Jurisdiction.
Objection Clearing Period	The number of <i>business days</i> an Objection can remain in MSATS. If the Objection has not been withdrawn by the end of the Objection Clearing Period, it will be Cancelled by MSATS.
Objection Code	A code used in MSATS representing the only grounds on which an Objection can be lodged. See Table 4-C of the CATS Procedures for a list of the Objection Codes.
Objection Logging Period	The number of <i>business days</i> available to a Participant for entering an Objection in MSATS.
Objection Rules	The rules applicable in MSATS that determine how Objections are used for each Change Reason Code. See also section 4.3 of the CATS Procedures.
Old Retailer	Any previous <i>retailer</i> for a <i>NMI</i> .
Off-Market	Not used in the NT Procedures
On-Market	Not used in the NT Procedures.
On/Off Table	Not used in the NT Procedures
<u>OneWayNotification</u>	A one-way message from an Initiator to a Recipient concerning one or more <i>NMIs</i> .
PA	Participant Administrator: A person employed by a Participant who can create and maintain Participant Users for that Participant.
Parent FRMP	Not used in the NT Procedures
Parent Name	Not used in the NT Procedures
Partially Completed	A <i>ServiceOrderStatus</i> indicating that the Recipient has completed the Primary Work but that there are outstanding matters to be attended to.
Participant	An organisation with a Participant ID to sign into MSATS.
Participant ID	An organisation's participant identifier in MSATS.
Participant User	A user of MSATS on behalf of a Participant.
Pending or PEND	One of the status points of a Change Request.
Pending Validation or PVAL	One of the status points of a Change Request.
Physical Inventory	A physical count of Unmetered Devices.
PPS	Not used in the NT Procedures
Previous Read Dates	Not used in the NT Procedures
Previous Read Quality Flag	Not used in the NT Procedures
Primary Work	The activity described by the <i>ServiceOrderType</i> field of a <u>ServiceOrderRequest</u> .
Profile Area	Not used in the NT Procedures
Profile Name	Not used in the NT Procedures.
Proposed Change Date	The proposed date on which a Role will transfer from one Participant to another.
Prospective Change	A change to a <i>NMI</i> record that will take effect on a date after the date the Change Request is submitted.
Prospective Days	A situation where the number of <i>days</i> under consideration occur after the current date.
Prospective Period	The maximum period in which a Prospective Change can be made.
Qualification Procedure	Not used in the NT Procedures.
Read Type Code	A code that provides direction to the MDP on the type of <i>meter</i> reading that is to be used to facilitate the End User transfer. Read Type Codes are detailed in Table 4-L of the CATS Procedures.
REC	Registered Electrical Contractor: A person who is registered by the relevant safety regulator in each jurisdiction.
Recipient	The receiver of a B2B Transaction or B2B Acknowledgement. This can be either a notification, request for data or request to perform work.

Term	Definition
Register Identifier Status Code	A code in MSATS that indicates if a Meter Register is active. See also section 4.6.4 of the CATS Procedures.
Regulator	Not used in the NT Procedures.
Rejected or REJ	One of the status points of a Change Request. It means that a Change Request fails a validation test in MSATS.
Remotely Read	Collecting <i>metering data by remote acquisition</i> – as opposed to when a <i>meter</i> is Manually Read.
Requested or REQ	One of the status points of a Change Request.
Required Timeframe	The time allowed for the completion of work requested in a Service Order, which could be a jurisdictional requirement or an agreed period of time.
Residential	As defined in the <i>NER</i> .
Retail Electricity Market Procedures	Not included in the NT Procedures
Retrospective Change	A change to a NMI record that is to be effective on or before the date the Change Request is submitted.
Retrospective Days	A situation where the <i>days</i> under consideration must either be the date of a Change Request or a date preceding the date of the Change Request.
Retrospective Period	The maximum period in which a Retrospective Change can be made.
RoC	Not used in the NT Procedures
Role	The role an organisation has with a <i>connection point</i> in CATS. A single organisation can have more than one role associated with a <i>NMI</i> .
Role Code	A code used in MSATS to identify the association a Participant has with a <i>NMI</i> .
RoLR	Retailer of Last Resort being the retailer who is appointed in case of a RoLR Event.
RoLR Effective Transfer Date	The first <i>day</i> after the declaration of RoLR Event. This is the date from which <i>NMIs</i> for which the Failed Retailer was the FRMP are transferred to their <i>RoLR</i> , making the RoLR the FRMP for those <i>NMIs</i> .
RoLR Event	An event that triggers the transfer of End Users to a <i>RoLR</i> .
RoLR Event Affected Jurisdiction	Jurisdiction affected by a RoLR Event.
RoLR Event Affected MSATS Participant	MSATS Participants potentially affected by a RoLR Event include: <ul style="list-style-type: none"> <li>MSATS Participants with a current Role for any <i>NMI</i> where the Failed Retailer was assigned to one or more MSATS roles on the RoLR Effective Transfer Date, including: <ul style="list-style-type: none"> <li>The Failed Retailer (the current FRMP, LR or both).</li> <li>The Current LNSP.</li> <li>The Current MDP.</li> <li>The Current MPB.</li> </ul> </li> <li>The <i>RoLR</i> for each RoLR Event Affected <i>NMI</i>.</li> <li>If the Failed Retailer is a LR, the replacement LR.</li> <li>MSATS Participants that have a Role for a <i>NMI</i> for which, at the time of the RoLR Event, the Failed Retailer was nominated as the New FRMP on an incomplete Change Request or MSATS Participants nominated in a new Role on such a Change Request.</li> </ul>
RoLR Event Affected <i>NMI</i>	<ul style="list-style-type: none"> <li><i>NMIs</i> where the Failed Retailer was assigned to one or more Roles for the RoLR Effective Transfer Date; and</li> <li><i>NMIs</i> for which at the time of the RoLR Event, the Failed Retailer was nominated as the New FRMP on a Change Request that is at one of the following status points: Requested (REQ), Objected (OBJ) or Pending Validation (PVAL).</li> </ul>
RoLR Key Contact	Not included in the NT Procedures
RoLR Post Implementation Review	Not used in the NT Procedures.
RoLR Transition Period	Not used in the NT Procedures
Routine Testing	Not used in the NT Procedures

Term	Definition
Sample Test Plan	Not used in the NT Procedures
SCADA	Supervisory Control and Data Acquisition
Scheduled Meter Reading	An Actual Meter Reading on a Meter Reading date scheduled by the relevant MDP.
Scheduled Reading Date	The date on which a Scheduled Meter Reading has occurred or might occur.
Second-Tier Load	Not used in the NT Procedures
Second Tier NMI	Not used in the NT Procedures
Service Level Procedure (ENM)	Not used in the NT Procedures
Service Level Procedure (MDP)	Not used in the NT Procedures
Service Level Procedure (MP)	Not used in the NT Procedures
Service Order	A B2B request to perform specified work.
Service Order Process	The process of requesting the performance of specified work through a ServiceOrderRequest and receiving notification of the outcome of the request through a ServiceOrderResponse.
<u>ServiceOrderRequest</u>	A B2B Communication for a service to be performed at a <i>connection point</i> .
<u>ServiceOrderResponse</u>	A B2B Communication in response to a <u>ServiceOrderRequest</u> , which will include an explanation if the work is incomplete.
Service Paperwork	Paperwork required to carry out certain <u>ServiceOrderRequests</u> . For example: electrical work request or certificate of electrical safety.
Shared Fuse Arrangement	Shared Fuse Arrangement is where multiple NMIs are supplied via a common isolation point. The value will be set to N for the NT.
Site	The physical location of an End User's premises.
Special Meter Reading	An Actual Meter Reading taken on a date other than a Scheduled Reading Date.
Special Read Date	A date on which a Special Meter Reading is to occur.
Special Site	Not used in the NT Procedures
Special Sites Document	Not used in the NT Procedures
SSL	Secure Socket Layer: A protocol for encrypting information over the internet.
Start Date	The date entered is the date from which the change will occur.
Structured Address	The structured address format contains the following information: <ul style="list-style-type: none"> <li>• Flat type and flat number</li> <li>• Floor type and floor number</li> <li>• Building name</li> <li>• Location descriptor</li> <li>• House number and suffix</li> <li>• Lot number</li> <li>• Street name and street type</li> <li>• Suburb</li> <li>• Postcode</li> <li>• State</li> </ul>
Substitution	A process undertaken for the replacement of missing (null) or erroneous <i>accumulated metering data</i> or <i>interval metering data</i> where <i>metering data</i> has failed Validation.
TI	<i>trading interval</i>
Tier 1 Site	Not used in the NT Procedures
Tier 2 Site	Not used in the NT Procedures
Timeframe Rules	The rules that allocate the number of <i>business days</i> to the following categories: <ul style="list-style-type: none"> <li>• Objection Logging Period.</li> <li>• Objection Clearing Period.</li> <li>• Retrospective Period.</li> <li>• Prospective Period.</li> </ul>
Timing Period	The time between two Timing Points.

Term	Definition
Timing Point	Point in time when an activity occurs.
Timing Requirement	The Timing Points when an activity must be initiated or completed.
TNI Code	Transmission Node Identity: A four character alpha-numeric code used to identify a <i>virtual transmission node</i> or <i>transmission network connection point</i> .
TNI2	Not used in the NT Procedures
TNSP	<i>Transmission Network Service Provider</i>
Transaction Type Code	A code used in MSATS to identify a need to change CATS Standing Data.
UFE	Unaccounted for energy
Uncontrolled Unmetered Device	An Unmetered Device that operates 24 hours per <i>day</i> and has a variable <i>load</i> over a repeated operating cycle (e.g. traffic signal, where applicable).
Unmetered Device	Any electricity-consuming device that is installed at or near a <i>connection point</i> that is unmetered, and the <i>load</i> consumed at that <i>connection point</i> is a <i>market load</i> .
Unmetered Device Type	Controlled Unmetered Devices or Uncontrolled Unmetered Devices
Unmetered Load Guideline	Not used in the NT Procedures.
Unstructured Address	An address with the following format: <ul style="list-style-type: none"> <li>• A string of text characters with a maximum length of 80 per line.</li> <li>• A maximum of 3 lines.</li> </ul>
UOM	Unit of Measure – Refer to Appendix B of MDFF Specification for format and allowed UOM values
Validated	<i>Metering data</i> that has passed Validation.
Validation	A process to test the veracity and integrity of <i>metering data</i> by the MDP when preparing <i>metering data</i> delivery to Participants.
Verification	A process to compare <i>energy data</i> held in the <i>metering installation</i> with <i>metering data</i> held in the <i>metering data services database</i> inclusive of scaling constants. This process typically occurs when a <i>metering installation</i> is first installed, modified or reconfigured (i.e. commissioned), or when the <i>metering installation</i> is tested.
VICAMI Meter	Not used in the NT Procedures
VT	<i>Voltage transformer</i>
WIGS	Not used in the NT Procedures
WIGS Procedures	Not used in the NT Procedures

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