

# RETAIL ELECTRICITY MARKET PROCEDURES – GLOSSARY AND FRAMEWORK

PREPARED BY: AEMO MARKETS  
VERSION: 2.1~~2~~<sup>1</sup>  
EFFECTIVE DATE: 01 DECEMBER 2017  
STATUS: FINAL DRAFT

**Approved for distribution and use by:**

APPROVED BY: PETER GEERS  
TITLE: EXECUTIVE GENERAL MANAGER, MARKETS

DATE: 01/12/2017

## VERSION RELEASE HISTORY

| Version        | Effective Date             | Summary of Changes   |
|----------------|----------------------------|--|
| 1.0            | 1 December 2017            | First Issue  |
| 1.1            | 1 December 2017            | Updated for POC Procedure Changes (Package 2)  |
| 2.0            | 1 December 2017            | Updated to incorporate changes following IEC consultation (affecting B2B Procedures) and to include information required by NER clause 7.16.1(f) |
| 2.1            | 1 December 2017            | <del>Updated following first stage of consultation</del> Updated for POC Procedure Changes (Package 3).  |
| <del>2.2</del> | <del>1 December 2017</del> | <del>Updated following second stage of consultation.</del>   |

# CONTENTS

|           |  |             |
|-----------|--|-------------|
| <b>1.</b> | <b>INTRODUCTION</b>  | <b>4</b>    |
| 1.1       | Purpose and Scope  | 4           |
| 1.2       | Definitions and Interpretation                                   | 4           |
| 1.3       | Related AEMO Documents   | 5           |
| <b>2.</b> | <b>FRAMEWORK</b>   | <b>76</b>   |
| 2.1       | The Role of the Retail Market in the NEM                         | 76          |
| 2.2       | Structure of Retail Electricity Market Procedures                | 87          |
| 2.3       | Metrology Procedure  | 87          |
| 2.4       | Guidelines for the Clarification of the National Measurement Act | 98          |
| 2.5       | B2B Procedures   | 98          |
| 2.6       | MSATS Procedures   | 109         |
| 2.7       | Service Provision  | 1140        |
| 2.8       | Metering Data Provision Procedures                               | 1244        |
| 2.9       | Use of RP  | 1244        |
| 2.10      | Use of LNSP to refer to ENM                                      | 1244        |
| 2.11      | Temporal References to Roles                                     | 1244        |
| <b>3.</b> | <b>B2B PROCEDURES</b>  | <b>1312</b> |
| 3.1       | Basic Exchange Model   | 1312        |
| 3.2       | Diagrams   | 1312        |
| <b>4.</b> | <b>SUPPORTING DOCUMENTS</b>                                      | <b>1312</b> |
| 4.1       | Metrology  | 1443        |
| 4.2       | MSATS  | 1443        |
| 4.3       | B2B  | 1544        |
| 4.4       | Service Provision  | 1544        |
| <b>5.</b> | <b>GLOSSARY</b>  | <b>1615</b> |

## 1. INTRODUCTION

### 1.1 Purpose and Scope

This document is provided to assist users of the Retail Electricity Market Procedures in understanding the overall framework within which they operate and also contains a dictionary of terms used in the Retail Electricity Market Procedures.

This document forms part of each of the Retail Electricity Market Procedures and will be amended when another Retail Electricity Market Procedure requires amendment. The consultation process applicable to the relevant Retail Electricity Market Procedure will also apply to the necessary amendments to this document.

This document also fulfils AEMO's obligation under clause 7.16.1(f) of the NER and includes a list of procedures authorised under Chapter 7 of the NER and all supporting documentation.

### 1.2 Definitions and Interpretation

#### 1.2.1 Glossary

Where a defined term is used only in one Retail Electricity Market Procedure, that term will be defined in that Retail Electricity Market Procedure.

Capitalised words, phrases and abbreviations that are used in more than one Retail Electricity Market Procedure are set out in section 6 and have the meanings set out opposite them when used in this document and the Retail Electricity Market Procedures.

Italicised terms used in the Retail Electricity Market Procedures have the same meanings given to those terms in the National Electricity Rules (**NER**) unless otherwise specified.

#### 1.2.2 Business Documents & Business Signals in B2B Procedures

- (a) Business Documents, such as 'ServiceOrderRequest', are indicated by underlining and upper camel case.
- (b) Business Signals, such as '*BusinessReceipt*' are indicated by underlining, upper camel case and italics.
- (c) Fields within a Business Document or Business Signal are indicated by upper camel case and italics. For example: '*ServiceOrderType*'.

#### 1.2.3 Interpretation

The following principles of interpretation apply to the Retail Electricity Market Procedures unless expressly indicated otherwise:

- (a) This document and the Retail Electricity Market Procedures are subject to the principles of interpretation set out in Schedule 2 of the *National Electricity Law*.
- (b) The NER prevail over this document and the Retail Electricity Market Procedures to the extent of any inconsistency.
- (c) The MSATS Procedures prevail over the B2B Procedures to the extent of any inconsistency.
- (d) References to time in:
  - (i) Retail Electricity Market Procedures (except for *B2B Procedures*) are to Eastern Standard Time; and
  - (ii) *B2B Procedures* refer to the time applicable at the Site to which a B2B Transaction relates (local time).
- (e) The expressions 'within one Business Day' or 'next Business Day' in B2B Procedure: Service Order Process mean by 11:59pm on the next Business Day.

- (f) References to currency are to Australian dollars.
- (g) Diagrams are provided as an overview. In case of ambiguity between a diagram and the text of this document, the text will prevail over any diagram.

### 1.3 Related AEMO Documents

| Title  | Location   |
|--|--|
| B2B Guide  | <a href="http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2">http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2</a>  |
| B2B Procedure: Customer and Site Details Notification Process                    | <a href="http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2">http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2</a>  |
| B2B Procedure: Meter Data Process  | <a href="http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2">http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2</a>  |
| B2B Procedure: One Way Notification Process                                      | <a href="http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2">http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2</a>  |
| B2B Procedure: Service Order Process   | <a href="http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2">http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2</a>  |
| B2B Procedure: Technical Delivery Specification                                  | <a href="http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2">http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice-B2B-consultation-2</a>  |
| CATS Procedures  | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Market-Settlement-and-Transfer-Solutions">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Market-Settlement-and-Transfer-Solutions</a>  |
| Default and Deregistration Procedure   | <a href="http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice---AEMO-Procedure-Changes-Package-2">http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice---AEMO-Procedure-Changes-Package-2</a>  |
| Exemption Procedure – Metering Installation Malfunctions                         | <a href="http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice---AEMO-Procedure-Changes-Package-2">http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice---AEMO-Procedure-Changes-Package-2</a>  |
| <a href="#">Guide to the Role of Metering Coordinator</a>                        | <a href="#">Not yet established</a><br><a href="https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes">https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes</a> |
| <a href="#">Guidelines for the Clarification of the National Measurement Act</a> | <a href="http://aemo.com.au/media/Files/Other/electricityops">http://aemo.com.au/media/Files/Other/electricityops</a> <a href="https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering">https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering</a>            |
| MDFF Specification   | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes</a>  |
| MDM Procedures   | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Market-Settlement-and-Transfer-Solutions">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Market-Settlement-and-Transfer-Solutions</a>  |
| Metrology Procedure: Part A  | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering</a>  |
| Metrology Procedure: Part B  | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering</a>  |
| NEM RoLR Processes   | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Market-Settlement-and-Transfer-Solutions">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Market-Settlement-and-Transfer-Solutions</a>  |
| NMI Procedures   | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes</a>  |
| Qualification Procedure  | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes</a>  |
| Service Level Procedure (ENM)  | <a href="http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice---AEMO-Procedure-Changes-Package-2">http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Power-of-Choice---AEMO-Procedure-Changes-Package-2</a>  |
| Service Level Procedure (MDP)  | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes</a>  |
| Service Level Procedure (MP)   | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes</a>  |

| Title  | Location  |
|--|---|
| <a href="#">Special and Technology Siteslist of SSpecial Sitesand Techn ology Related Conditions within the NEMSites</a> | <a href="https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes">https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes</a> |
| Unmetered Load Guideline   | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering</a>   |
| WIGS Procedures  | <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Market-Settlement-and-Transfer-Solutions">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Market-Settlement-and-Transfer-Solutions</a>           |

## 2. FRAMEWORK

### 2.1 The Role of the Retail Market in the NEM

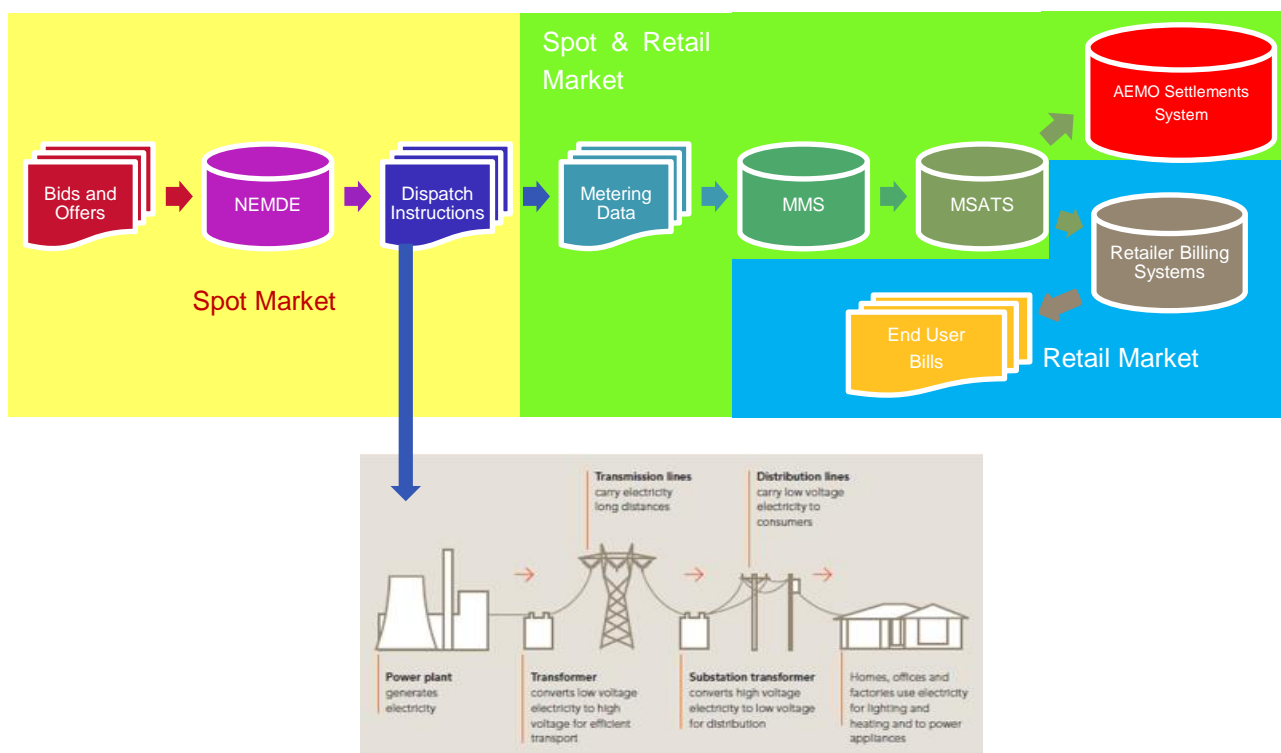
The physical production of electricity is carried out using various technologies and transported through high voltage *transmission lines* to *distribution networks* that operate at *low voltage* and deliver electricity to End Users at the required *voltage*.

In financial terms, *Generators* who produce electricity in the *NEM* are required to sell their output through the *spot market* operated by AEMO (the *NEM* is a wholesale market). *Retailers*, referred to as *Market Customers* in the *spot market*, purchase this electricity from the *spot market* and then sell it to End Users.

Full retail contestability prevails throughout the *NEM*, which means that any End User can purchase electricity from a *retailer* of their choice. For this to work, however, it is necessary to have processes and systems that facilitate an orderly transfer of End Users from one *retailer* to another, and to ensure that payment streams are not disrupted. This is the function of the retail market.

The retail market processes and systems are designed to operate alongside the *spot market* processes. Figure 1 contains a high level view (but by no means comprehensive) of these processes and systems.

**Figure 1 High Level View of Retail Electricity Market Processes**

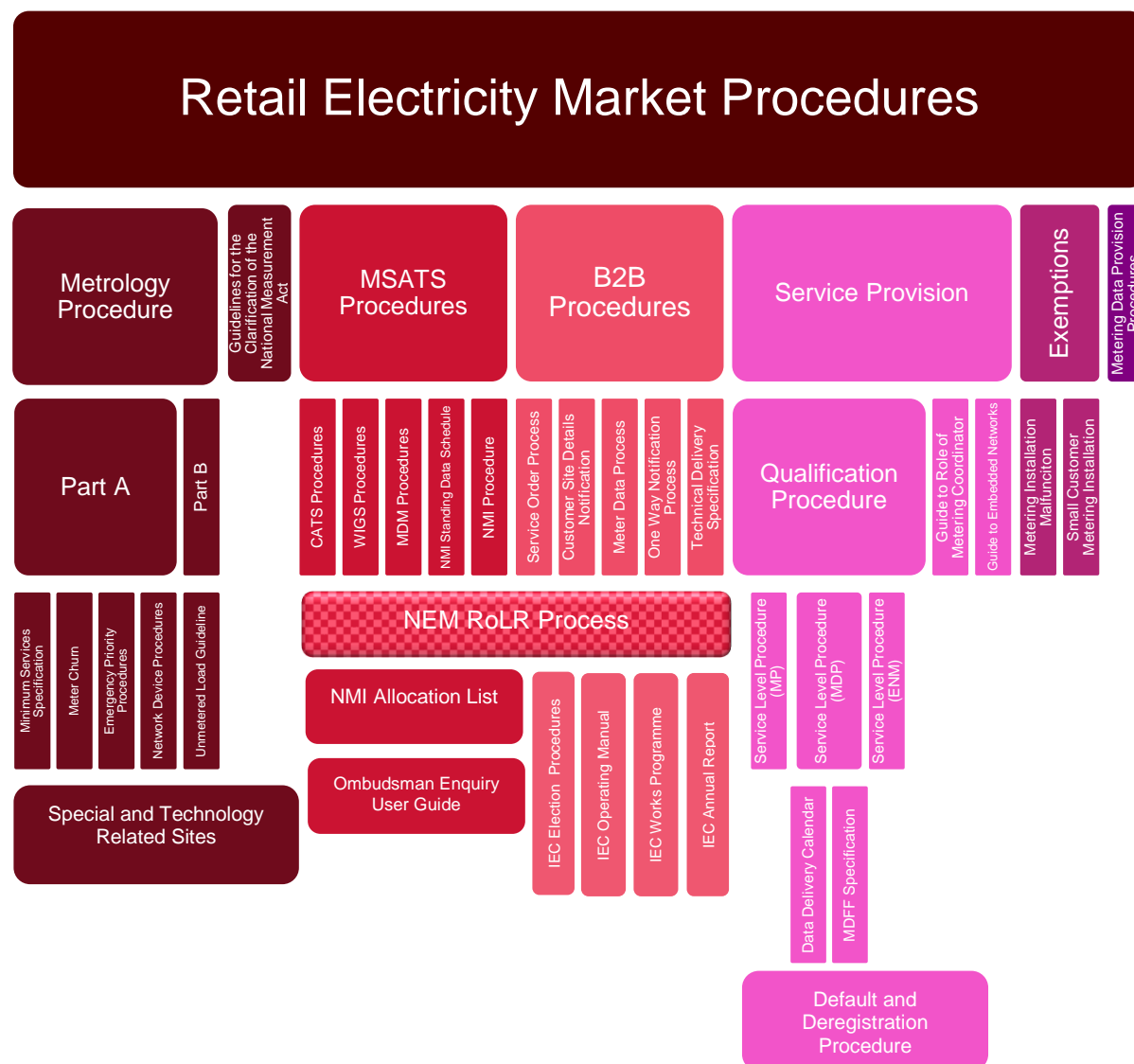


## 2.2 Structure of Retail Electricity Market Procedures

In this document, ‘Retail Electricity Market Procedures’ refers to a number of procedures that govern the operation of the retail market.

Figure 2 depicts how the Retail Electricity Market Procedures fit together. A fuller description follows.

**Figure 2 Retail Electricity Market Procedures**



## 2.3 Metrology Procedure

The *metrology procedure* is made in accordance with clauses 7.16.3, 7.16.4 and 7.16.5 of the NER and it is *published* in two parts, namely:

- Metrology Procedure: Part A National Electricity Market; and
- Metrology Procedure: Part B Metering Data Validation, Substitution and Estimation Procedure.

Clause 7.16.3 prescribes the mandatory content, whereas clause 7.16.5 details additional matters that may be addressed in the *metrology procedure*. Clause 7.16.4 details the process by which AEMO may include *jurisdictional metrology material* in the *metrology procedure*, which only applies to type 5, 6 and 7 *metering installations*.



### 2.3.1 Metrology Procedure: Part A

For convenience, the following procedures under the NER have been included in the Metrology Procedure: Part A:

- procedures relating to the *minimum service specification* under clause 7.8.3(b) of the NER;
- *meter churn procedures* under clause 7.8.9(f) of the NER;
- procedures relating to *network devices* under clause 7.8.6(i) of the NER; and
- *emergency priority procedures* under 7.8.5(b) of the NER.

### 2.3.2 Metrology Procedure: Part B

The Unmetered Load Guideline, *published* separately from Metrology Procedure: Part B is not the subject of consultation under the NER. It details the process by which the Load Table is updated.

This document is not subject to consultation under the NER.

### 2.3.3 Special Sites and Technology Related Conditions within the National Electricity Market

AEMO may determine under clause 7.8.2(a) of the NER that special arrangements are required to support the integrity of the collection and processing of *metering data* from nominated *metering installations* and is required by clause 7.8.12(c) to describe and *publish* those Special Sites, including the nomination of *metering installations* affected by those conditions.

AEMO has *published* the Special and Technology Sites Document to fulfil this requirement.

## 2.4 Guidelines for the Clarification of the National Measurement Act

AEMO is required by clause 7.16.8 of the NER to establish guidelines that clarify the application of the requirements of the National Measurement Act 1960 (Cth) to *metering installations*.

These guidelines have been developed in consultation with the National Measurement Institute and are *published* on AEMO's website.

## 2.5 B2B Procedures

*B2B Procedures* are developed and *published* in accordance with clause 7.17.2(i) of the NER. As permitted by clause 7.17.4(g) of the NER, they are as follows:

- B2B Procedure: Customer and Site Details Notification Process
- B2B Procedure: Meter Data Process
- B2B Procedure: Service Order Process
- B2B Procedure: Technical Delivery Specification
- B2B Procedure: RoLR Process
- B2B Procedure: One Way Notification Process.

The *Information Exchange Committee* is also required to develop the following documents relating to its operations that AEMO is required to *publish* under clause 7.17.2 of the NER, as follows:

- IEC Election Procedures
- IEC Operating Manual
- IEC Works Program
- IEC Annual Report

## 2.6 MSATS Procedures

MSATS is a system operated by AEMO to fulfil its obligations under the NER. CATS is a part of MSATS.

The MSATS Procedures:

- facilitate and support an efficient process for the:
  - provision and maintenance of CATS Standing Data;
  - discovery of approved *NMI Standing Data*;
  - transfer of End Users between *retailers*;
  - registration of *metering installations*;
  - *settlements* and the administration of *NMIs*; and
- define the roles and obligations of Participants and AEMO.

The MSATS Procedures are made under clause 7.16.2 of the NER and are *published* as separate documents along functional lines.

### 2.6.1 CATS Procedures

The CATS Procedures apply to End User transactions.

### 2.6.2 WIGS Procedures

The WIGS Procedures apply to wholesale, *interconnector* and *generation connection points* and sample data used in *settlements*.

### 2.6.3 MDM Procedures

The MDM Procedures detail the management of *metering data* within MSATS in order to facilitate:

- the implementation of the *metrology procedure* into AEMO's operational procedures;
- efficient processes for:
  - Transfer of data for *market* purposes;
  - Calculation and management of profiles;
  - Conversion of Meter Readings to half-hourly data for *settlements*; and
  - Reconciliation of Participant data.

### 2.6.4 NMI Standing Data Schedule

This document is *published* under clauses 3.13.12 and 3.13.12A of the NER. It details the data items that make up the *NMI Standing Data*.

### 2.6.5 NMI Procedure

This document addresses the matters contemplated in clauses 7.8.2(d)(2), and 7.8.2(ea)(3) of the NER. It sets out the structure of *NMIs*, the process under which they are allocated, and is *published* as an MSATS Procedure under clause 7.16.2 of the NER.

### 2.6.6 RoLR Procedures

Although the *RoLR Procedures* are prescribed under the National Energy Retail Law (**NERL**), they are, in fact, made up of obligations that form part of the MSATS Procedures and the *B2B Procedures* and so are made under clause 7.16.2 and clause 7.17.2(i) of the NER. AEMO has consolidated all requirements arising out of a RoLR Event into a document entitled: NEM RoLR Processes and for the purposes of clarity, delineates which parts are made under which part of the NER.

## 2.6.7 Ombudsman Enquiry User Interface Guide

AEMO, acting jointly with each *energy ombudsman*, is required by clause 7.11.1(k) of the NER to develop procedures for the efficient management of timely access to data by an *energy ombudsman*.

## 2.7 Service Provision

### 2.7.1 Qualification Procedure

The NER require AEMO to have a qualification process for the accreditation and registration of MPs, MDPs and ENMs. As the process is identical for each role, it is consolidated into one document.

### 2.7.2 Metering Service Level Procedures

There are two *service level procedures*: one for MDPs and one for MPs, both made under clause 7.16.6 of the NER.

#### (a) Service Level Procedure - Metering Data Provider

The Service Level Procedure (MDP) details the obligations, technical requirements, measurement processes and performance requirements to be met by MDPs in the provision of *metering data services* for all *metering installation* types and the maintenance of a *metering data services database*.

AEMO has *published* two additional documents to facilitate the timely and accurate provision of *metering data*. These are:

- **Data Delivery Calendar** – a document that lists the dates on which specified actions need to occur for the provision of *metering data* and *settlements ready data* to AEMO.
- **MDFF Specification** – a document specifying the MDFF for *interval metering data* (NEM12 File) and *accumulated metering data* (NEM13 File).

#### (b) Service Level Procedure - Metering Provider

The Service Level Procedure (MP) details the obligations, technical requirements, measurement processes and performance requirements to be met by MPs in the provision, installation and maintenance of *metering installations*.

### 2.7.3 Service Level Procedure - Embedded Network Managers

The Service Level Procedure (ENM) is *published* under clause 7.16.6A of the NER and it details the obligations, technical requirements and performance requirements to be met by ENMs in the provision of *embedded network management services*.

### 2.7.4 Guide to Embedded Networks

AEMO is required to *publish* a guide to *embedded networks* under clause 7.16.6B of the NER and provides information on:

- the nature of exemptions granted by the *AER* in respect of *embedded networks*;
- which *retailers* and other persons can sell electricity to End Users supplied with electricity through *embedded networks*; and
- the roles, responsibilities and obligations of ENMs under the NER and procedures under the NER.

### 2.7.5 Guide to the Role of Metering Coordinator

AEMO is required to *publish* relevant explanatory material setting out the role of the MC under clause 7.3.1(c) of the NER.

### 2.7.6 Default & Deregistration Procedure

AEMO is required to have a default and deregistration procedure for:

- MPs, MDPs and ENMs under clause 7.4.4 of the NER; and
- MCs under clause 7.7.3 of the NER.

The processes involved are almost identical, so they are documented in the one procedure. Key differences in the treatment of different types of default are highlighted.

Where an MP, MDP, ENM or MC's performance fails to meet the NER, relevant procedures under the NER, or *service level procedures* (in the case of MPs, MDPs or ENMs), this document details how AEMO will address the breach and the consequences to the MP, MDP, ENM or MC of failing to rectify the breach.

### 2.7.7 Exemptions

#### (a) Exemption Procedure – Metering Installation Malfunctions

AEMO is required to *publish* this procedure under clause 7.8.10 of the NER. The procedure documents the process an MC must follow when seeking exemption from the requirement to repair a *metering installation malfunction* within the timeframe imposed by the NER.

#### (b) Exemption Guideline (Small Customer Metering Installation)

AEMO may exempt an MC from the requirement to install a type 4 *metering installation* that meets the *minimum services specification* in accordance with clause 7.8.4 of the NER.

Although there is no obligation to *publish* this procedure, AEMO has determined it would be beneficial for Participants to know the process and grounds on which AEMO may grant the exemption.

This Guideline is not subject to consultation under the NER.

## 2.8 Metering Data Provision Procedures

AEMO is required to *publish* these procedures in accordance with clause 7.14(a) of the NER. These procedures establish the minimum requirements for the manner and form in which *metering data* should be provided to a *retail customer* (or its *customer authorised representative*) in response to a request from that *retail customer* or its *customer authorised representative* to the *retailer* or the DNSP.

## 2.9 Use of RP

Although the Role of RP, or '*responsible person*', has been replaced with the *Metering Coordinator*, the code used in MSATS will remain as 'RP'.

The term 'MC' is used in the Retail Electricity Market Procedures to identify the *Metering Coordinator*, where reference is made to the code used in MSATS, 'RP' will be used, instead.

### 2.10 Use of LNSP to refer to ENM

The acronym 'LNSP' is used as defined in section 4 and as a code in MSATS to refer to the defined term.

In most cases where the MSATS code 'LNSP' is used it means the LNSP as defined in section 4, however, where it is used in the context of an *embedded network*, the same code will be used to refer to relevant ENM.

The term 'ENM' is used in the Retail Electricity Market Procedures to identify the *Embedded Network Manager*. There is no 'ENM' code in MSATS.

### 2.11 Temporal References to Roles

Roles are used in MSATS transactions in a temporal sense.

The NMI Master Record will always detail the ‘Current’ Roles associated with a *NMI*.

Many transactions involve a change in Role; the Participant that will be taking over a Role following Completion of a Change Request is referred to as ‘New’.

### 3. B2B PROCEDURES

#### 3.1 Basic Exchange Model

The exchange of B2B Messages is based on following model:

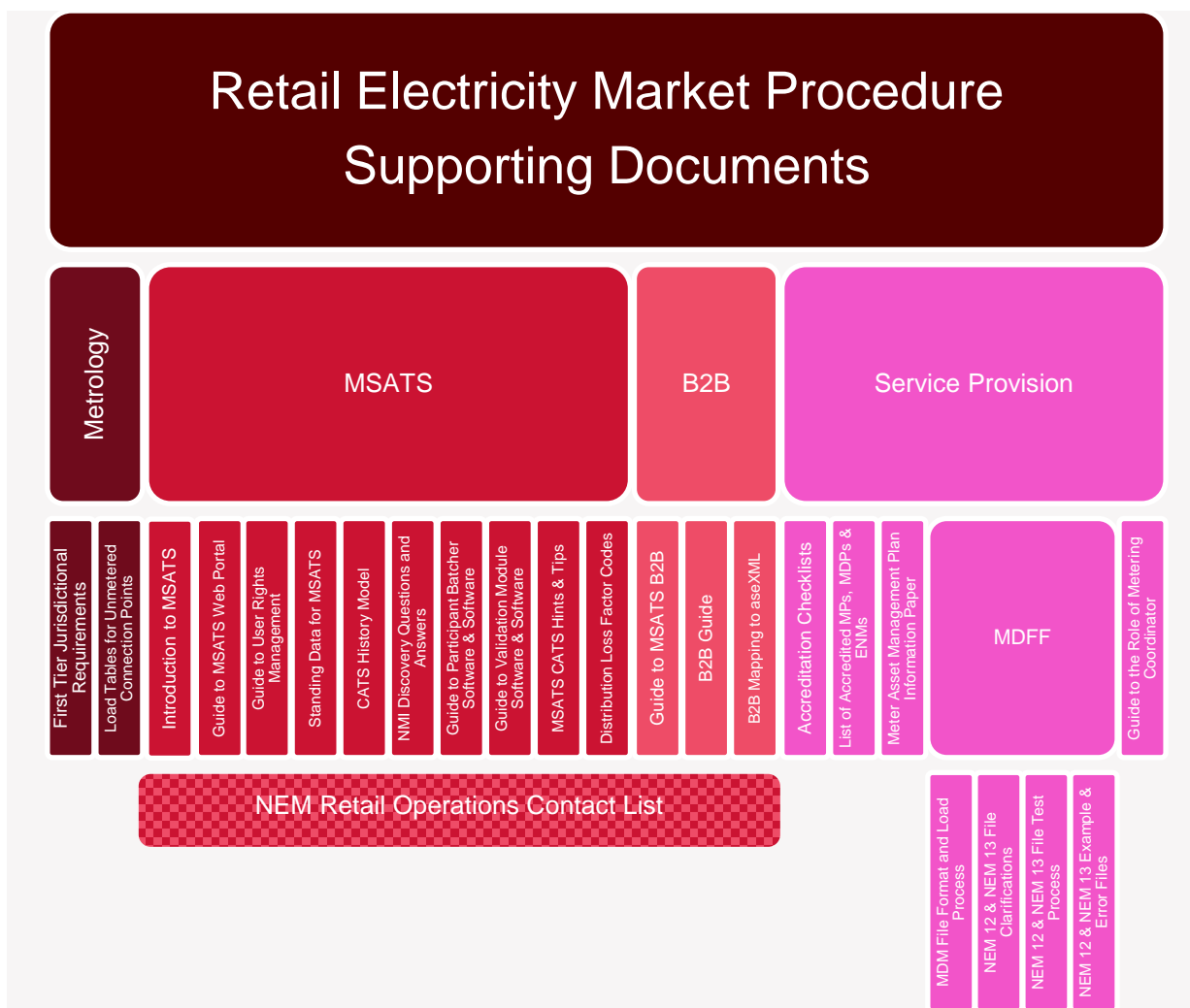
- Initiator initiates *B2B Communication* by sending a Business Document to a Recipient.
- Recipient sends a *BusinessReceipt* to the Initiator.
- Recipient then returns a *BusinessAcceptance/Rejection* to the Initiator to communicate the acceptance or rejection of the Business Document.
- Recipient sends a response to the Initiator.
- Initiator sends a *BusinessReceipt* to the Recipient.
- Initiator then returns a *BusinessAcceptance/Rejection* to the Recipient to communicate the acceptance or rejection of the Business Document.

#### 3.2 Diagrams

- (a) Process diagrams adhere to Unified Modelling Language (UML) conventions.
- (b) Diagrams have been provided by way of explanation only and do not indicate binding obligations on Participants.

### 4. SUPPORTING DOCUMENTS

In addition to the Retail Electricity Market Procedures, AEMO has *published* a number of documents that explain, or provide additional information to enable Participants to fulfil their obligations under the NER and procedures under the NER. How these fit in with the Retail Electricity Market Procedures is depicted in Figure 3, using the same colour coding for ease of reference:

**Figure 3 Supporting Documents**

## 4.1 Metrology

### 4.1.1 First Tier Jurisdictional Requirements

AEMO is required to publish the First Tier Jurisdictional Requirements under clause 11.20.6 of the NER in consultation with the Jurisdictions. It contains the applicable jurisdictional requirements referred to in clauses 11.20.2, 11.20.3 and 11.20.4 of the NER.

### 4.1.2 Load Tables for Unmetered Connection Points

As contemplated by section 12.1 of the Metrology Procedure: Part B, AEMO *publishes* tables of Unmetered Device *market loads*.

## 4.2 MSATS

### 4.2.1 Introduction to MSATS

This document provides an introduction to using the MSATS web portal.

### 4.2.2 Guide to MSATS Web Portal

This document is a user interface guide for Participant Users of the MSATS web portal.

### 4.2.3 Guide to User Rights Management

This document is a user interface guide assisting PAs with the user rights management functions available in AEMO's web portals.

### 4.2.4 Standing Data for MSATS

This document provides a detailed description of the data items populated in the MSATS *NMI Standing Data* tables and contains information on the type of data, a brief description of each data item and whether the input of that data is mandatory.

### 4.2.5 CATS History Model

This is a detailed description of how the MSATS data model is used to manage information that changes over time. It is essential reading for business analysts and IT support staff who are involved in managing data interfaces with MSATS.

### 4.2.6 NMI Discovery Questions and Answers

This document contains hints and tips that will assist Participant Users applying the NMI Discovery function to find the details about a *NMI*. It also contains answers to questions that Participants have asked about the NMI Discovery function.

### 4.2.7 Guide to Participant Batcher Software & Software

The 'Participant Batcher' software provides a simple batch interface to MSATS and the *B2B e-hub* 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.

### 4.2.8 MSATS CATS Hints and Tips

This document provides hints and tips on how to ensure that requests are successfully loaded into MSATS, information on MSATS validations and tips on using MSATS reports. It should be used as an addendum to CATS Procedures.

### 4.2.9 Distribution Loss Factor Codes

This document provides an explanation of the DLF Codes and the requirements on LNSPs to maintain the DLF values against the DLF Codes in MSATS.

## 4.3 B2B

### 4.3.1 Guide to MSATS B2B

This document provides information about the *B2B e-hub* functions available in MSATS.

### 4.3.2 B2B Guide

This document describes how *B2B communications* are typically used in standard processes in the *NEM*. It aims to provide interested parties with an understanding of how *B2B communications* defined in the B2B Procedures are used in the context of the broader industry scenarios, and to assist participants when forming their respective bilateral/commercial agreements.

### 4.3.3 B2B Mapping to aseXML

This document maps the Business Documents, Business Signals and business items to aseXML, sometimes including .csv payloads.

## 4.4 Service Provision

### 4.4.1 Accreditation Checklists

This document contains the Accreditation Checklists for applicant MPs, MDPs and ENMs, as contemplated by the Qualification Procedure.



Each Accreditation Checklist contains questions the applicants are required to complete as part of the qualification process set out in the Qualification Procedure. They are intended to provide verification of what is required of an applicant through demonstration of systems, processes and procedures that allow AEMO to assess the applicant's application.

#### 4.4.2 List of Accredited MPs, MDPs & ENMs

AEMO publishes an up-to-date list of each accredited MP, MDP and ENM.

#### 4.4.3 Meter Asset Management Plan Information Paper

This document provides assistance to service providers in the establishment of a Metering Asset Management Plan.

#### 4.4.4 MDFF

##### (a) MDM File Format and Load Process

This document details the MDFF format and load process.

##### (b) NEM12 & NEM13 File Clarifications

This document provides clarifications that will assist Participants conform to the technical format requirements detailed in the MDFF NEM12 and NEM13 Specification.

##### (c) NEM12 & NEM13 File Test Process

This document details various implementation test scenarios required for acceptance of the NEM12 and NEM13 file format specification by MDPs.

##### (d) NEM12 & NEM13 Example & Error Files

These documents detail various MDP test file-build scenarios, and those examples that have been accepted following the inter-MDP test process and data scenarios that have deliberate file syntax and information errors to assist Participants in the verification and build of MDFF loaders.

## 5. GLOSSARY

The Retail Electricity Market Procedures often use common terminology. For ease of reference, all terms in the Retail Electricity Market Procedures are defined in the table below.

For ease of reference:

- Terms and definitions written in **blue** are used in *B2B Procedures* only.
- Terms and definitions written in **green** are used in *B2B Procedures* and in one or more other types of Retail Electricity Market Procedures.
- Terms and definitions written in black are used in Retail Electricity Market Procedures other than *B2B Procedures*.

| Term                     | Definition   |
|--------------------------|--|
| Accelerate               | A process initiated by AEMO 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 | The questions an applicant for Accreditation as MDP, MP or ENM must complete to be accredited.   |



| Term                      | Definition  |
|---------------------------|---|
| 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                      | Australian Communications and Media Authority.  |
| Actual Change Date        | The effective date of changes specified in a Change Request.<br>(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> either manually or by <i>remote acquisition</i> (as applicable).  |
| Actual Metering Data      | <i>Accumulated metering data</i> or <i>interval metering data</i> that has passed Validation without Substitution.  |
| ADL                       | Average Daily Load: The net electricity delivered through a <i>connection point</i> over an extended period averaged to a daily amount.   |
| AEMO Communication        | An email from AEMO to a distribution list of <i>Registered Participant</i> contacts broadcasting NEM-related information.   |
| 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 | A strategy for the testing of <i>metering installations</i> submitted by an MC and approved by AEMO under clause S7.6 of the NER.   |
| ASP                       | <i>Accredited Service Provider</i> to provide connection services in NSW  |
| 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 <i>Business Acceptance/Rejection</i> .   |
| 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               | As defined in the AER RoLR Guidelines.  |
| BCT                       | Bulk Change Tool: A component of MSATS used by AEMO to make bulk changes to data without requiring the submission of Change Requests.   |
| BMP                       | Basic Meter Profiler: The application of <i>profile shape data</i> to <i>accumulated metering data</i> to create half-hourly <i>interval metering data</i> for a Profile Area.  |
| 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 NERL.   |
| <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.  |

| Term                              | Definition   |
|-----------------------------------|--|
| Business Document                 | <p>The transaction that contains the business content for:</p> <ul style="list-style-type: none"> <li>• <a href="#">MeterDataNotification</a></li> <li>• <a href="#">ProvideMeterDataRequest</a></li> <li>• <a href="#">VerifyMeterDataRequest</a></li> <li>• <a href="#">ServiceOrderRequest</a></li> <li>• <a href="#">ServiceOrderResponse</a></li> <li>• <a href="#">CustomerDetailsNotification</a></li> <li>• <a href="#">CustomerDetailsRequest</a></li> <li>• <a href="#">SiteAccessNotification</a></li> <li>• <a href="#">OneWayNotification</a></li> <li>• <a href="#">PlannedInterruptionNotification</a></li> <li>• <a href="#">MeterFaultandIssueNotification</a></li> <li>• <a href="#">NoticeOfMeteringWorksTransaction</a></li> <li>• <a href="#">NotifiedPartyTransaction</a></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   |
| <a href="#">BusinessReceipt</a>   | A Business Signal indicating that a Business Document has been received and is readable.   |
| <a href="#">BusinessRejection</a> | A Business Signal indicating that a Business Document failed a relevant business rule validation.  |
| Business Signal                   | <p>A response generated by a Recipient upon receipt of Business Document to indicate whether a Business Document:</p> <ul style="list-style-type: none"> <li>• has been received and is readable (<a href="#">BusinessReceipt</a>); or</li> <li>• is accepted or rejected by the Recipient (<a href="#">BusinessAcceptance/Rejection</a>).</li> </ul>  |
| C4 Report                         | An MSATS report that contains current CATS Standing Data for one or more NMIs.   |
| <a href="#">Cancel</a>            | A <a href="#">ServiceOrderStatus</a> indicating that the Service Order was cancelled.  |
| Cancelled or CAN                  | A status point of a Change Request.  |
| Category A                        | A category of MP accredited to install whole current <i>meters</i> of a manually read <i>metering installation</i> only.   |
| Category B                        | A category of MP accredited to provide, install and maintain a <i>metering installation</i> .  |
| Category C                        | A category of MDP accredited to collect <i>metering data</i> from manually read <i>metering installations</i> only.  |
| Category D                        | A category of MDP accredited to provide <i>metering data services</i> related to the collection, processing, storing and delivery of <i>metering data</i> .  |
| 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                | <p>The data held in the following database tables:</p> <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_Relationships</li> <li>• CATS_Register_Identifier</li> </ul> <p><i>NMI Standing Data</i> is a sub-set of the CATS Standing Data.</p>   |
| CATS Standing Data Access Rules   | The rules specifying which of the CATS Standing Data may be accessed, as specified in section 42.3.3 of the CATS Procedures.   |
| 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                    | <p>A transaction submitted by a Participant into MSATS whenever it wants to create or update data held within MSATS.</p> <p>Change Requests have numbers and are commonly referred to as CR [number].</p>  |
| 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.   |

| Term                                     | Definition  |
|--|---|
| 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                               | The Embedded Network Code populated in the 'EMBNETCHILD' field in MSATS for a Child NMI to indicate that the <i>NMI</i> is a child for a specified <i>embedded network</i> .  |
| Child NMI                                | The <i>NMI</i> assigned to a <i>child connection point</i> .  |
| CLP                                      | Controlled Load Profile; a type of load <i>profile</i> calculated in accordance with the <i>metrology procedure</i> .   |
| Completed or COM                         | When used in the MSATS Procedures: One of the status points of a Change Request.<br>When used in the B2B Procedures: A <i>ServiceOrderStatus</i> indicating that the <i>Primary Work</i> is completed.  |
| Connection Date                          | The date the <i>connection point</i> is connected to a <i>network</i> .   |
| Controlled Load                          | <i>Load</i> that is controlled by the <i>metering installation</i> (e.g. frequency injection relay or time clock) and may be separately metered from the remaining <i>load</i> at a <i>metering point</i> . The majority of Controlled Loads are associated with off-peak hot water, pool pumps and airconditioning 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 <i>NEM</i>, apart from Victoria: As defined in the <i>NERR</i>.</li> <li>In Victoria: As defined in the Energy Retail Code published by the Essential Services Commission of Victoria.</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>  |
| Current [Participant/Role]               | See section 3.3.  |
| 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.<br>See section 4.10.1 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> .<br>See section 4.10.2 of the CATS Procedures for further information.   |
| Data Delivery Calendar                   | The AEMO document entitled: Data Delivery Calendar.   |
| Data Request                             | A transaction initiated by MSATS and sent to a Participant at the Pending Validation status of the Change Request life cycle.   |
| Datastream                               | A stream of <i>metering data</i> associated with a <i>connection point</i> as represented by a <i>NMI</i> . A <i>NMI</i> can have multiple Datastreams (e.g. from one or more <i>meters</i> , or from one or more channels or registers that comprise a single <i>meter</i> ). Each Datastream is identified by a unique suffix associated with the <i>NMI</i> to which it belongs. |
| Datastream Status Code                   | A code used in MSATS to indicate whether a Datastream is to be used in <i>settlements</i> .<br>See section 4.11.2 of the CATS Procedures.   |
| Default and Deregistration Procedure     | The AEMO document entitled: Default and Deregistration Procedure: Metering Providers, Metering Data Providers, Embedded Network Managers and Metering Coordinators.   |
| 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.  |
| EENSP                                    | <i>Exempt Embedded Network Service Provider</i> . Referred to as an Embedded Network Operator by the <i>AER</i> . For the purposes of the Retail Electricity Market Procedures, references to an EENSP can be taken to mean the Embedded Network Operator.  |
| Embedded Network Code                    | A code used in MSATS to identify an <i>embedded network</i> .   |
| End User                                 | A person who acquires electricity for consumption purposes.   |

| Term                       | Definition   |
|----------------------------|--|
| ENM                        | <i>Embedded Network Manager</i>  |
| 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        | The AEMO document entitled: Exemption Guideline (Small Customer Metering Installation).  |
| Exemption Procedure        | The AEMO document entitled: Exemption Procedure – Metering Installation Malfunctions.  |
| Explicit Informed Consent  | <ul style="list-style-type: none"> <li>In the <i>NEM</i>, apart from Victoria: As defined in the <i>NERL</i>.</li> <li>In Victoria: As defined in the Energy Retail Code published by the Essential Services Commission of Victoria.</li> </ul>  |
| Failed Retailer            | A <i>retailer</i> that is the subject of a RoLR Event.   |
| Field Validation Rules     | As described in section 4.14 of the CATS Procedures, these 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              | <p>The last Actual Meter Reading taken where:</p> <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             | The <i>NMI</i> associated with a <i>first tier load</i> .  |
| First-Tier Controlled Load | <p>A Controlled Load that is a <i>first-tier load</i>.</p> <p>For the purposes of the Metrology Procedure, a <i>first-tier load</i> also includes the electricity purchased at a <i>connection point</i> directly and in its entirety from the <i>Local Retailer</i> even if it has not been so classified.</p>  |
| FRMP                       | <i>financially responsible Market Participant, usually a retailer, Generator, Market Customer or an MSGA, identified as such in respect of a connection point in MSATS.</i>  |
| 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 4.4 of the CATS Procedures, the rules that specify who can initiate a Change Request in MSATS.   |
| Initiator                  | <i>The Participant who initiates a B2B Interaction.</i>  |
| 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> as described in sections 12.2.2, 12.2.3 and 12.5.2 of Metrology Procedure: Part B.   |
| 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 4.5 of the CATS Procedures.  |

| Term                               | Definition  |
|------------------------------------|---|
| Life Support                       | A situation where an End User relies on electricity for the operation of 'life support equipment', a term defined in: <ul style="list-style-type: none"> <li>the <i>NEM</i>, apart from Victoria, in the <i>NERR</i>; and</li> <li>Victoria, in the Electricity Distribution Code and Energy Retail Code.</li> </ul>  |
| LNSP                               | <p>In the context of a <i>Network Service Provider's distribution network</i>: <i>Local Network Service Provider</i></p> <p>In relation to a <i>child connection point</i>: EENSP.</p> <p>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</i> or <i>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</i> or <i>connection point</i> is connected.</p> |
| Load Profile                       | A <i>profile</i> of <i>metering data</i> aggregated across a specified set of <i>connection points</i> .  |
| Load Table                         | A table of Unmetered Device <i>market loads</i> published by AEMO at <a href="http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering">http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering</a> .  |
| Lot Number                         | The lot reference number allocated to a street address prior to street numbering (except in the ACT).   |
| LR                                 | <i>Local Retailer</i>   |
| LV                                 | A <i>Voltage</i> equal to or less than 1kV.   |
| LV CT                              | <i>Low voltage current transformer</i>  |
| MAMP                               | Metering Asset Management Plan. A test plan developed and maintained by an MP in accordance with the Service Level Procedure (MP).  |
| MarketNet                          | AEMO's private network available to Participants having a Participant ID  |
| MC                                 | <p><i>Metering Coordinator</i></p> <p>The Role Code used in MSATS for an MC is 'RP'.</p>  |
| MDFF                               | Metering Data File Format: The standard format for the delivery of <i>metering data</i> .   |
| MDFF Specification                 | The AEMO document entitled: Meter Data File Format Specification NEM12 & NEM 13.  |
| MDM                                | The part of MSATS called 'Metering Data Management'.  |
| MDM Contributory Suffix            | A suffix defined in sections 6 and 7 of the NMI Procedure used to identify a stream of <i>metering data</i> and is consistent with the ' <i>NMI Suffix</i> ' contained in the 200 record of the MDFF <i>interval metering</i> datafile and the 250 record of the MDFF <i>accumulated metering data</i> file.  |
| MDM Data File                      | Meter Data Management Data File: The standard file for delivery of <i>metering data</i> to AEMO.  |
| MDM Procedures                     | The AEMO document entitled: MSATS Procedure: MDM 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 consumption data taken from a <i>meter</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 4.11.3 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 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 4.12 of the CATS Procedures.  |
| Metrology Procedure: Part A        | The AEMO document entitled: Metrology Procedure: Part A National Electricity Market.  |
| Metrology Procedure: Part B        | The AEMO document entitled: Metrology Procedure: Part B Metering Data Validation, Substitution and Estimation Procedure.  |

| Term                                | Definition   |
|-------------------------------------|--|
| MMS                                 | AEMO's Market Management Systems.  |
| MP                                  | <i>Metering Provider.</i><br>In MSATS, it is referred to as an MPB.  |
| MPB                                 | <i>A Category B Metering Provider. An MP accredited to install, provide and maintain metering installations.</i>   |
| MPC                                 | <i>A Category C Metering Data Provider. An MDP accredited only to collect metering data, not process or transfer it.</i>   |
| 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                                | <i>Market Small Generator Aggregator</i>   |
| NEM Retail Operations Contacts List | The AEMO document entitled: NEM Retail Operations Contact List. Commonly referred to as: ROCL.   |
| NEM RoLR Processes                  | The AEMO document entitled: NEM RoLR Processes – Part A: MSATS Procedure: RoLR Procedures – Part B: B2B Procedure: RoLR Process.   |
| NER                                 | <i>The National Electricity Rules made under Part 7 of the 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.  |
| New [Participant/Role]              | See section 3.3.   |
| NMI Address                         | The physical location of the <i>connection point</i> .   |
| NMI Checksum                        | <i>A single digit number used to validate that a NMI supplied to MSATS is valid.</i>   |
| NMI Classification Code             | A code used in MSATS that identifies the nature of the flow of electricity through a <i>connection point</i> .<br>See section 4.9 of the CATS Procedures.  |
| NMI Datastream                      | The term used to represent a <i>NMI</i> suffix required by MDM to enable the <i>metering data</i> associated with a <i>NMI</i> to be correctly identified.   |
| 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.<br>See also the NMI Search Rules in section 42.3.1 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> .<br>See also the NMI Standing Data Access Rules detailed in section 42.3.2 of the CATS Procedures.                          |
| NMI Discovery Search 3              | The search process that can only be used for one of the purposes detailed in section 42.3.4 of the CATS Procedures.  |
| NMI Master Record                   | The NMI master record with an end date set to the year 9999.   |
| NMI Procedure                       | The AEMO document entitled: MSATS Procedures: National Metering Identifier.  |
| NMI Search Rules                    | See Table 43-B in the CATS Procedures.<br>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.<br>See section 42.3.4 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.<br>See also section 4.11.1 of the CATS Procedures.   |
| Non-Controlled Load                 | A <i>load</i> that is not a Controlled Load.   |
| Not Completed                       | <i>A ServiceOrderStatus indicating that the Primary Work is not completed.</i>   |
| Notification                        | <i>A B2B Transaction that does not require a corresponding reply. Could be a Meter Data, Customer and Site Details or a Notified Party Notification.</i>   |
| <u>NotificationDetail</u>           | <u>Data Payload for the OneWayNotification</u>   |



| Term                               | Definition  |
|------------------------------------|---|
| 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                               | Net System Load Profile: A type of load <i>profile</i> calculated by MSATS in accordance with the <i>metrology procedure</i> .  |
| NSP                                | Network Service Provider  |
| NSP2                               | Second Network Service Provider: The Role assigned to a DNSP for a <i>transmission connection point</i> (wholesale <i>NMIs</i> ) that have two NSP roles.   |
| NSRD                               | Next Scheduled Reading Date: The next scheduled Actual Meter Reading.   |
| 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-D 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.<br>See also section 4.8 of the CATS Procedures.   |
| Old Retailer                       | Any previous <i>retailer</i> for a <i>NMI</i> .   |
| Off-Market                         | An End User within an <i>embedded network</i> who purchases electricity from the EENSP who supplies the electricity.  |
| On-Market                          | An End User at a <i>child connection point</i> who purchases electricity from a <i>retailer</i> .   |
| On/Off Table                       | A table recording the switching status (On = 1, Off = 0) for each TI for unmetered <i>loads</i> associated with a <i>NMI</i> as described in the Metrology Procedure: Part B.   |
| <a href="#">OneWayNotification</a> | 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                        | The <i>retailer</i> who is the Current FRMP for a <i>parent connection point</i> .  |
| Parent Name                        | The Embedded Network Code populated in the 'EMBNETPARENT' field in MSATS for a Parent <i>NMI</i> to indicate that the <i>NMI</i> is a parent for a specified <i>embedded network</i> .  |
| 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                                | Profile Preparation Service: It calculates <i>profile</i> shapes by using algorithms and <i>interval energy data</i> . The calculation of the NSLP or the CLP.  |
| Primary Work                       | The activity described by the <i>ServiceOrderType</i> field of a <a href="#">ServiceOrderRequest</a> .  |
| Profile Area                       | A geographical area comprising a group of one or more <i>TNIs</i> for which a single NSLP is calculated. If part of an LNSP local area is located within the local area of another LNSP, that part of the local area of the first LNSP is considered to be part of the profile area of the second LNSP. |
| Profile Name                       | A code identifying the name of the algorithmically derived shape that is used to allocate a Datastream's <i>metering data</i> to <i>TIs</i> .   |
| 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.   |

| Term                                  | Definition  |
|---------------------------------------|---|
| Prospective Period                    | The maximum period in which a Prospective Change can be made.   |
| Qualification Procedure               | The AEMO document entitled: Qualification Procedure: Metering Providers, Metering Data Providers and Embedded Network Managers.   |
| Read Type Code                        | Types of <i>meter</i> readings detailed in Table 4-M 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.   |
| Register Identifier Status Code       | A code in MSATS that indicates if a Meter Register is active.<br>See also section 4.11.4 of the CATS Procedures.  |
| Regulator                             | In the context of a RoLR Event, the AER for the NEM, apart from Victoria, and the Essential Services Commission of Victoria for Victoria.   |
| Rejected or REJ                       | One of the status points of a Change Request. It means that a Change Request fails a validation test in MSATS.  |
| 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 NERL.   |
| Retail Electricity Market Procedures  | See the description in section 2.2.   |
| 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                                   | RoLR of Choice: The nomination of a RoLR by an End User (as appropriately classified in s.2 of the National Energy Retail Law) and agreed by the <i>retailer</i> to be its FRMP in a RoLR Event.  |
| 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 NMI.   |
| Role Code                             | A code used in MSATS to identify the association a Participant has with a NMI.<br>See Table 4-B of the CATS Procedures for a list of the Role Codes.  |
| RoLR Effective Transfer Date          | The first <i>day</i> after the declaration of RoLR Event. This is the date from which NMIs for which the Failed Retailer was the FRMP are transferred to their RoLR, making the RoLR the FRMP for those NMIs.   |
| RoLR Event                            | An event that triggers the transfer of End Users to a RoLR.   |
| 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 NMI 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 RoLR for each RoLR Event Affected NMI.</li> <li>If the Failed Retailer is a LR, the replacement LR.</li> <li>MSATS Participants that have a Role for a NMI 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 NMI               | <ul style="list-style-type: none"> <li>NMIs where the Failed Retailer was assigned to one or more Roles for the RoLR Effective Transfer Date; and</li> <li>NMIs 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                      | A contact specified in the NEM Retail Operations Contacts List.   |



| Term                                  | Definition  |
|---------------------------------------|---|
| RoLR Post Implementation Review       | A review managed by AEMO to assess how a RoLR Event was managed.  |
| RoLR Transition Period                | The period of time from when a RoLR Event occurs to the time a RoLR Post Implementation Review is completed.  |
| Routine Testing                       | For the purposes of the Metrology Procedure, includes the ongoing and regular maintenance testing, compliance testing and in-service testing of a <i>metering installation</i> initiated by the MC or MP to fulfil their obligations under clause S7.3 of the NER.  |
| Sample Test Plan                      | A statement of the sample size to be taken, the frequency of sample testing and the required accuracy.  |
| 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 NMI                       | The electricity associated with a <i>second tier load NMI</i> , which is purchased from a <i>retailer</i> other than the <i>Local Retailer</i> .  |
| Second-Tier Controlled Load           | A Controlled Load that is a <i>second-tier load</i> .   |
| Second-Tier Non-Controlled Load       | A Non-Controlled Load that is a <i>second-tier load</i> .   |
| Service Level Procedure (ENM)         | The AEMO document entitled: Service Level Procedure: Embedded Network Managers.   |
| Service Level Procedure (MDP)         | The AEMO document entitled: Service Level Procedure: Metering Data Provider Services.   |
| Service Level Procedure (MP)          | The AEMO document entitled: Service Level Procedure: Metering Provider Services Category B for Metering installation Types 1, 2, 3, 4, 5 and 6.   |
| <a href="#">Service Order</a>         | <a href="#">A B2B request to perform specified work.</a>  |
| <a href="#">Service Order Process</a> | <a href="#">The process of requesting the performance of specified work through a ServiceOrderRequest and receiving notification of the outcome of the request through a ServiceOrderResponse.</a>  |
| <a href="#">ServiceOrderRequest</a>   | <a href="#">A B2B Communication for a service to be performed at a connection point.</a>  |
| <a href="#">ServiceOrderResponse</a>  | <a href="#">A B2B Communication in response to a <a href="#">ServiceOrderRequest</a>, which will include an explanation if the work is incomplete.</a>  |
| <a href="#">Service Paperwork</a>     | <a href="#">Paperwork required to carry out certain <a href="#">ServiceOrderRequests</a>. For example: electrical work request or certificate of electrical safety.</a>   |
| 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                          | A Site that AEMO determines requires special arrangements to support the integrity of the collection and processing of <i>metering data</i> from nominated <i>metering installations</i> , under clause 7.8.12(a) and <i>published</i> by AEMO in the Special Sites and Technology Related Conditions within the National Electricity Market.   |
| Special Sites Document                | The AEMO document entitled: Special Sites and Technology Related Conditions within the National Electricity Market.   |
| 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> |

| Term                          | Definition   |
|-------------------------------|--|
| 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                   | It is a site where the FRMP is the LR. This could be the case where: <ul style="list-style-type: none"> <li>• The End User has transferred back to the LR as their <i>retailer</i> (FRMP) after a period with another <i>retailer</i>;</li> <li>• The site is not <i>contestable</i>; or</li> <li>• The site is <i>contestable</i> but the End User has not transferred to another <i>retailer</i>.</li> </ul> See also <i>first-tier load</i> . |
| Tier 2 Site                   | It is a site where the FRMP is not the same as the LR. This could be the case if: <ul style="list-style-type: none"> <li>• a <i>contestable</i> End User has elected to transfer from the LR; or</li> <li>• an End User signed a contract with a <i>retailer</i> other than the LR prior to the <i>connection point</i> being established in the MSATS System and it was created as a Tier 2 Site.</li> </ul> See also <i>second-tier load</i> . |
| Timeframe Rules               | As described in section 4.6 of the CATS Procedures, 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.  |
| 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> .  |
| TNSP                          | <i>Transmission Network Service Provider</i>   |
| Transaction Type Code         | As described in section 3.3 of the CATS Procedures, a code used in MSATS to identify a need to change CATS Standing Data.<br>See Table 3-A of the CATS Procedures for a list of the Transaction Type Codes.  |
| 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> .<br>There are two types of Unmetered Devices: Controlled Unmetered Devices and Uncontrolled Unmetered Devices.  |
| Unmetered Load Guideline      | The AEMO document entitled: Unmetered Load Guideline.  |
| 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>   |
| Validated                     | <i>Metering data</i> that has passed Validation.   |
| Validation                    | A process to test the veracity and integrity of <i>metering data</i> .   |
| VICAMI Meter                  | A <i>meter</i> installed in Victoria as part of the Advanced Metering Infrastructure mandate in Victoria.  |
| VT                            | <i>Voltage transformer</i>   |
| WIGS                          | Wholesale, Interconnector, Generator and Sample.   |
| WIGS Procedures               | The AEMO document entitled: MSATS Procedures: Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs.   |