

# SERVICE LEVEL PROCEDURE

## EMBEDDED NETWORK MANAGER

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## VERSION RELEASE HISTORY

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| 1.0     | 1 Dec 2017     | <p>First Issue</p> <p>Document incorporates changes resulting from:</p> <ul style="list-style-type: none"><li>• National Electricity Amendment (Expanding competition in metering and related services) Rule 2015. No.12;</li><li>• National Electricity Amendment (Embedded Networks) Rule 2015 No. 15; and</li><li>• National Electricity Amendment (Meter Replacement Processes) Rule 2016 No. 2.</li></ul> |
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## CONTENTS

|   |          |
|---|----------|
| <b>1. INTRODUCTION</b>  | <b>4</b> |
| 1.1. Purpose and Scope  | 4        |
| 1.2. Definitions and Interpretation                           | 4        |
| 1.3. Related AEMO Documents                                   | 4        |
| <b>2. OBLIGATIONS</b>   | <b>4</b> |
| 2.1. Embedded Network Management Services                     | 4        |
| 2.2. Use of Sub-Contractors                                   | 5        |
| 2.3. Insurance  | 5        |
| <b>3. SYSTEMS AND ADMINISTRATION</b>                          | <b>6</b> |
| 3.1. Systems and Interface Requirements                       | 6        |
| 3.2. Embedded Network Information                             | 6        |
| 3.3. Audits Undertaken by AEMO                                | 6        |
| 3.4. Other Audits   | 7        |
| 3.5. Review of Accreditation                                  | 7        |
| 3.6. Disputes   | 7        |
| <b>4. MARKET INTERFACE FUNCTIONS</b>                          | <b>8</b> |
| 4.1. NMI Allocation   | 8        |
| 4.2. Distribution Loss Factors and Transmission Node Identity | 8        |
| 4.3. MSATS Setup  | 9        |
| <b>5. DELIVERY OF INFORMATION UPON DEREGISTRATION</b>         | <b>9</b> |

## 1. INTRODUCTION

### 1.1. Purpose and Scope

This Service Level Procedure (**Procedure**) is made in accordance with clause 7.16.6A of the NER.

This Procedure has effect only for the purposes set out in the NER. The NER and the *National Electricity Law* prevail over this Procedure to the extent of any inconsistency.

### 1.2. Definitions and Interpretation

The Retail Electricity Market Procedures – Glossary and Framework:

- (a) is incorporated into and forms part of this document; and
- (b) should be read with this Procedure.

### 1.3. Related AEMO Documents

| Title   | Location  |
|---|---|
| Retail Electricity Market Procedures – Glossary and Framework | <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Glossary-and-Framework">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Glossary-and-Framework</a>   |
| MSATS Procedures  | <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Market-Settlement-and-Transfer-Solutions">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Market-Settlement-and-Transfer-Solutions</a>         |
| Metrology Procedure: Part A                                   | <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering</a>   |
| Embedded Network Guideline                                    | <b>TBC</b>  |
| Qualification Procedure                                       | <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes</a> |
| Default and Deregistration Procedure                          | <a href="http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes">http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Metering-procedures-guidelines-and-processes</a> |

## 2. OBLIGATIONS

The ENM must carry out its obligations and provide its services in accordance with the NER, procedures authorised under the NER and relevant Jurisdictional codes and policies.

The ENM must be accredited and registered by AEMO in accordance with clause 7.4.2A of the NER and the Qualification Procedure.

### 2.1. Embedded Network Management Services

In addition to all NER requirements, the ENM must provide *embedded network management services*. The following is a list of those services:

- (a) comply with all directions from AEMO to fulfil any obligation under this Procedure;
- (b) co-operate in good faith with AEMO, all *Registered Participants*, MPs, MDPs and other ENMs;
- (c) ensure any information collected by the ENM is kept confidential and secure in accordance with the NER and only provided to persons entitled to have such access;
- (d) provide market interface services for *child connection point* End Users, which are services that link End Users to the *NEM* systems, for example:
  - (i) create Child NMI;
  - (ii) maintain Child NMI CATS Standing Data; and
  - (iii) maintain the Network Tariff Code for Child NMIs;

- (e) upon request from a *retailer*, apply to AEMO for *NMIs* for *child connection points* in the *embedded network* for which they are the ENM;
- (f) register Child NMIs in MSATS;
- (g) provide the MC, FRMP, and EENSP with the *NMI* of the *child connection point*;
- (h) establish and maintain the *NMI Standing Data* for its Child NMIs within MSATS;
- (i) allocate Embedded Network Codes for their Child NMIs in MSATS;
- (j) act in the Role of LNSP in MSATS for its *child connection points*;
- (k) maintain and manage relevant *EN wiring information* and *meter* arrangements;
- (l) assign a DLF to each *child connection point* in MSATS;
- (m) provide AEMO with a list of all DLFs for all their *child connection points* indicating which ones were calculated by the EENSP; and
- (n) maintain a register of all allocated Child NMIs.

## 2.2. Use of Sub-Contractors

Where an ENM engages a sub-contractor to perform any of its obligations specified in the NER or this Procedure, the ENM:

- (a) must ensure that auditable processes are in place to certify that all work performed by the sub-contractor complies with the NER and this Procedure;
- (b) remains liable for all acts and omissions of any sub-contractor;
- (c) must have policies and procedures for assessing the sub-contractor's capability and competency where the ENM engages a sub-contractor to provide opinions and interpretations of technical information, and must provide the authorisation for the sub-contractor to provide the opinion and interpretation;
- (d) must provide AEMO, upon request, with any information pertaining to the sub-contractor that AEMO reasonably considers necessary for the discharge of the ENM's responsibilities under the NER; and
- (e) must notify AEMO immediately if the ENM elects to engage or change a sub-contractor for the delivery of any part of the services for which the ENM is accredited and subject to AEMO's assessment of the notification:
  - (i) the ENM may be required to undertake an accreditation review to approve the engagement or change; and
  - (ii) where practicable, the accreditation review may take place as part of the next scheduled ENM audit.

## 2.3. Insurance

The ENM must:

- (a) hold public liability insurance for an amount not less than \$5,000,000 per occurrence;
- (b) hold professional indemnity insurance for an amount of not less than \$1,000,000 per occurrence, which must be maintained for a period of seven years after termination of the ENM's accreditation; and
- (c) provide AEMO with certified current copies of insurance policies upon request.

### 3. SYSTEMS AND ADMINISTRATION

#### 3.1. Systems and Interface Requirements

- (a) Each ENM must establish and maintain systems and business interfaces to:
  - (i) MSATS for the management of *child connection point* creation, updates, notifications, objections, reports, and relevant CATS Standing Data;
  - (ii) the *B2B e-Hub* for the interface with *B2B Participants*; and
  - (iii) other technologies for the general management of information and alternative delivery of information to *Registered Participants*, MDPs, MPs and other ENMs.
- (b) Each ENM must maintain a MarketNet connection for the purposes of communication and file transfer with MSATS.
- (c) Each ENM will be provided with an inbox and outbox directory on the MSATS file server, which must be used for the transfer of files to and from AEMO via MarketNet and manage the appropriate directories in accordance with the MSATS Procedures.
- (d) Each ENM must interface with MSATS either via the browser or a batch interface, or both, using the market aseXML file format in accordance with the aseXML Guidelines and schemas.
- (e) The provision of any documents, plans or other information required to be kept by the ENM(**information**), regardless of form, and provided by ENM to AEMO or any other person in accordance with this Procedure, does not give rise to any intellectual property rights in the recipient. Nevertheless, the ENM grants AEMO and each other person to whom such information is provided (**recipient**), a perpetual, irrevocable, royalty-free, transferable and non-exclusive licence (including sub-licence) to copy and use any intellectual property forming part of that information for the purpose of fulfilling the recipient's obligations under the NER or any procedure under the NER.

#### 3.2. Embedded Network Information

The ENM must maintain information about each *embedded network* it is responsible for, which includes:

- (a) type and configuration of *metering installations* for all *child connection points*;
- (b) subtractive or other arrangements used in respect of those *metering installations*;
- (c) *EN wiring information*;
- (d) version control of *embedded network* wiring plans or designs;
- (e) calculations of DLFs; and
- (f) correspondence with all persons.

#### 3.3. Audits Undertaken by AEMO

- (a) The ENM must undertake all services in a manner that is auditable by AEMO and must provide all reasonable assistance to AEMO in discharging its obligations under the NER in relation to *embedded network child connection points*.
- (b) AEMO will undertake periodic certification reviews to a negative assurance level of any relevant database maintained by the ENM to assess the ENM's compliance with the NER, applicable procedures under the NER and this Procedure and for the maintenance of its accreditation as an ENM.
- (c) All scheduled reviews will be through a centralised review process established by AEMO and will be undertaken at the ENM's cost.

##### 3.3.1. ENM to Assist

Where a review is conducted under this Procedure, the ENM must, at its cost, provide all reasonable assistance including making databases, equipment and premises available for inspection, making personnel available for questioning, and providing copies of any data or information as requested.

### 3.3.2. Timing of Audits

Scheduled reviews of the ENM's performance will be as follows:

- (a) the first audit to be nominally within six months after accreditation; and
- (b) at AEMO's discretion annually based on previous satisfactory audit reviews.

### 3.3.3. Notice of Audit

AEMO must provide the ENM a minimum of:

- (a) 30 *business days*' notification prior to a scheduled review; and
- (b) 15 *business days*' notification for the provision of any specific data requests as part of the audit.

### 3.4. Other Audits

- (a) Audits may be undertaken at any time by AEMO in accordance with the NER and may be carried out following a request from a *Registered Participant*.
- (b) Each ENM must assist AEMO with reasonable requests for the provision of information about the types and configuration of *metering installations*, or CATS Standing Data relating to *child connection points* that are the subject of a *market* audit.

### 3.5. Review of Accreditation

AEMO may review an ENM's accreditation and subsequently require the ENM to apply for re-accreditation in accordance with the Qualification Procedure if:

- (a) an ENM has been suspended from providing *embedded network management services* and seeks to have the suspension lifted;
- (b) there are changes to the NER, procedures under the NER, or *service level procedures*. This is likely to apply where changes to the NER have been made or new versions of the *metrology procedure* have been issued that require significant functional system, process or procedural changes to be made by ENMs;
- (c) the ENM is proposing to make significant changes or upgrades to an ENM's existing systems, *telecommunications networks* or a system platform; and
- (d) the ENM is the subject of organisational mergers and acquisitions.

### 3.6. Disputes

For the purposes of dispute resolution in accordance with clause 8.2 of the NER, the ENM is considered to be a *Registered Participant*. If a dispute arises between an ENM and AEMO, a *Registered Participant*, an MDP, an MP, or any other ENM in relation to the provision of services or this Procedure, the process detailed in clause 8.2 of the NER shall apply.

## 4. MARKET INTERFACE FUNCTIONS

### 4.1. NMI Allocation

The ENM must do the following to allocate a *NMI* to a *child connection point* that did not already have a *NMI*:

- (a) Cooperate with the LNSP to establish the Embedded Network Code and the Parent NMI for the *embedded network* in MSATS.
- (b) Upon request from a *retailer* for a new *connection* for a *metering installation* at a *child connection point*, issue a *NMI* to the *retailer* for that *child connection point* in accordance with the NMI Procedure from a block of *NMIs* allocated to the ENM by AEMO or, if AEMO has not allocated a block of *NMIs* to the ENM, apply to AEMO for a *NMI* for that *child connection point*.
- (c) Provide the Child NMI to the MC, FRMP and EENSP for the *metering installation* within five *business days* of allocating the *NMI*.
- (d) Create the Child NMI in MSATS in accordance with the MSATS Procedures.

Indicative TNI Codes for the *parent connection point* is available to the ENM through the MSATS C1 report.

### 4.2. Distribution Loss Factors and Transmission Node Identity

#### 4.2.1. Overview

- (a) In accordance with clause 3.6.3 of the NER and the *AER's* Electricity Network Service Provider Registration Exemption Guideline, a *child connection point* with actual or forecast *energy* volume more than 40GWh per year or an electrical demand or output more than 10MW must have a site-specific DLF. A *child connection point* with actual or forecast *energy* volume less than 40GWh per year or an electrical demand or output less than 10MW must have a small load DLF.
- (b) AEMO expects a site-specific DLF and DLF Code for a *child connection point* will be calculated by the EENSP using the same methodology published by the LNSP or an alternative methodology approved by the *AER*.
- (c) A small load DLF for a *child connection point* is the *published* DLF that would be applied by an LNSP as if the LNSP supplied the *child connection point* directly.
- (d) Indicative DLF Codes and TNI Codes for the *parent connection point* are available to the ENM through the MSATS C1 report.

#### 4.2.2. Site-specific DLF

The ENM must:

- (a) provide to AEMO, for *publication* by 1 April each year, the *AER*-approved site-specific DLFs and the site-specific DLF Codes; and
- (b) identify the appropriate EENSP site-specific DLF for a *child connection point* and assign the related site-specific DLF Code to the Child NMI as the DLF Code in accordance with the MSATS Procedures.

#### 4.2.3. Small Load DLF

The ENM must identify the appropriate LNSP-published DLF for a *child connection point* and assign the related LNSP's DLF Code to the Child NMI in accordance with the MSATS Procedures.

#### 4.2.4. TNI



The ENM must assign the TNI Code of the Parent NMI to each Child NMI in accordance with the MSATS Procedures.

### 4.3. MSATS Setup

#### 4.3.1. Market Exit

When a *child connection point* is no longer settled in the *market*, the following applies:

- (a) The ENM must update the NMI Status Code of the Child NMI in MSATS to 'N' upon request from the FRMP of the Child NMI within five *business days* of the *connection point* no longer being settled in the *NEM*.
- (b) The *NMI Standing Data* maintenance and obligations on the ENM do not apply for the Child NMI while it has the NMI Status Code of 'N'.
- (c) The Roles do not need to be updated. Current Roles (i.e. Current ENM) remain recorded against the Child NMI.

#### 4.3.2. Resumption as Child Connection Point

When the *connection point* returns to being settled in the *market*, the ENM must update MSATS in accordance with the MSATS Procedures.

#### 4.3.3. Physical Rewiring to Join an Embedded Network

When a *NMI* moves from a *distribution network* to an *embedded network* the ENM must update MSATS in accordance with the MSATS Procedures.

#### 4.3.4. Network Tariff Code Update

The ENM must ensure the Network Tariff Code for each of its Child NMIs in MSATS is correct and update the Network Tariff Code in MSATS within 2 *business days* of any change in accordance with the MSATS Procedures.

## 5. DELIVERY OF INFORMATION UPON DEREGISTRATION

All data, documents, plans or other information required to be kept by the ENM, regardless of form, must be delivered by the ENM to AEMO (or AEMO's nominee) in a format required by AEMO if the ENM is to be deregistered in accordance with the Default and Deregistration Procedure.