

## **National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010 No. 12**

under the National Electricity Law as applied by:

- (a) the National Electricity (South Australia) Act 1996;
- (b) the Electricity (National Scheme) Act 1997 of the Australian Capital Territory;
- (c) the Electricity - National Scheme (Queensland) Act 1997 of Queensland;
- (d) the Electricity - National Scheme (Tasmania) Act 1999 of Tasmania;
- (e) the National Electricity (New South Wales) Act 1997 of New South Wales;
- (f) the National Electricity (Victoria) Act 2005 of Victoria; and
- (g) the Australian Energy Market Act 2004 of the Commonwealth.

The Australian Energy Market Commission makes the following Rule under the National Electricity Law.

John Pierce  
Chairman  
Australian Energy Market Commission

## **National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010 No. 12**

### **1 Title of Rule**

This Rule is the *National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010 No.12*.

### **2 Commencement**

Schedules 1, 2, 3, 5 and 6 commence operation on 16 December 2010.

Schedule 4 commences operation on 20 January 2011.

### **3 Amendment of the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 1.

### **4 Amendment of the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 2.

### **5 Amendment of the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 3.

### **6 Amendment of the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 4.

### **7 Amendment of the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 5.

### **8 Savings and Transitional Amendments to the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 6.

### **9 Notes**

Notes do not form part of this Rule, except for the notes in Item 2 of Schedule 5.

## **Schedule 1      Amendments of the National Electricity Rules**

(Clause 3)

### **[1] References to "Metering Providers" in various clauses**

In clauses 7.1.1(a), 7.2.8(c), 7.2A.4(h), 7.14.3(a)(1)(v) and 7.14.3(a)(4)(i) , after "*Metering Providers*" insert "and *Metering Data Providers*".

### **[2] References to "revenue" in various clauses**

In clauses 7.1.1(b)(1), 7.3.2(a)(1), 7.3.2(a)(2), 7.3.4(b), 7.5.1(a) and 7.5.2(a), omit "*revenue*" wherever occurring.

### **[3] Clause 7.1.1      Purpose**

In clause 7.1.1(b)(3), omit "and servicing of *data collection systems*" and substitute "of *metering data services*".

### **[4] Clause 7.1.1      Purpose**

Omit clause 7.1.1(b)(8) and substitute:

(8) *metering data services database* and the *metering database*;  
and

(9) *metering register* requirements.

### **[5] New clause 7.1.3 Obligation to establish, maintain and publish procedures**

After clause 7.1.2, insert:

#### **7.1.3      Obligation to establish, maintain and publish procedures**

- (a) *AEMO* is responsible for the establishment and maintenance of procedures specified in Chapter 7 except for procedures established and maintained under Rule 7.2A.
- (b) The procedures authorised by *AEMO* must be established and maintained by *AEMO* in accordance with the *Rules consultation procedures*.
- (c) The *Information Exchange Committee* is responsible for the establishment and maintenance of procedures specified in Rule 7.2A.
- (d) The procedures authorised by the *Information Exchange Committee* must be established and maintained in accordance with the requirements of Rule 7.2A.

- (e) The procedures established or maintained under this clause must be *published* by the party authorised to make the procedure.
- (f) *AEMO* must establish, maintain and *publish* a list of procedures authorised under the *Rules* relevant to this Chapter 7, irrespective of who authorised those procedures.

#### 7.1.4 Amendment of procedures in this Chapter

- (a) Any person (the '**proponent**') may submit to *AEMO* a proposal (the '**proposal**') to amend any procedure in Chapter 7 including the *metrology procedure* except:
  - (1) in relation to the *jurisdictional metrology material* which is contained within the *metrology procedure*; and
  - (2) procedures specified in Rule 7.2A,and must include reasons for the proposed change.
- (b) For proposals submitted under paragraph (a), *AEMO* must:
  - (1) give notice of receipt of the proposal to the proponent; and
  - (2) advise the proponent of the action that *AEMO* proposals to undertake under paragraphs (c) or (e).
- (c) Where *AEMO*:
  - (1) accepts the proposal, *AEMO* must conduct the *Rules consultation procedures* in relation to that proposal;
  - (2) requests further information from the proponent in relation to a proposal, on receiving that information *AEMO* must either accept, or reject the proposal; or
  - (3) rejects a proposal, *AEMO* must advise the proponent of its decision and reasons for the decision in writing.
- (d) *AEMO* may at the conclusion of the *Rules consultation procedures* amend the procedure (if necessary).
- (e) Where in *AEMO*'s reasonable opinion, a proposal referred to in paragraph (a) relates to amendments that are of a minor or administrative nature, *AEMO* is not required to undertake the *Rules consultation procedures* but must:
  - (1) *publish* the proposal including the accompanying reasons;

- (2) issue a notice to *Registered Participants, Metering Providers, Metering Data Providers, Ministers* and the *AER* advising that the amendment to the procedure has been *published*;
- (3) invite submissions on the proposal;
- (4) allow 10 *business days* for the receipt of submissions;
- (5) allow a reasonable extension of time for submissions if requested in writing by a *Registered Participant, Metering Provider* or *Metering Data Provider*;
- (6) *publish* submissions as soon as practicable after submissions have been received;
- (7) consider the submissions; and
- (8) *publish*, on or before the day of *publication* of the procedure identified in paragraph (a), reasons for the amendments to the procedure.

## **[6] Rule 7.2                      Responsibility for Metering Installation**

In the rule 7.2 heading, after "Metering Installation" insert ", Metering Data and Market Settlement and Transfer Solution Procedures".

## **[7] Clause 7.2.1              Responsible person**

In the heading, omit "Responsible person" and substitute "Responsibility of the responsible person".

## **[8] Clause 7.2.1              Responsible person**

Omit clause 7.2.1 in its entirety and substitute:

- (a) The *responsible person* is the person responsible for, in accordance with this Chapter 7, the *metrology procedure* and procedures authorised under the *Rules*, the:
  - (1) provision, installation and maintenance of a *metering installation*; and
  - (2) collection of *metering data* from each *metering installation* for which it is responsible, the processing of that data and the delivery of the processed data to the *metering database* and to parties entitled to that data under rule 7.7(a), except as otherwise specified in clause 7.2.1A(a).
- (b) The *responsible person* must perform its role in accordance with:
  - (1) this Chapter 7; and

- (2) procedures authorised under the *Rules*.
- (c) *AEMO* must establish, maintain and *publish* relevant explanatory material that sets out the role of the *responsible person* consistent with this Chapter 7.

**[9] New clause 7.2.1A Responsibility of AEMO for the collection, processing and delivery of metering data**

After clause 7.2.1, insert:

**7.2.1A Responsibility of AEMO for the collection, processing and delivery of metering data**

- (a) Where the *Market Participant* has selected a *responsible person* for a *metering installation* in accordance with clause 7.1.2(a)(2) and that *responsible person* is a *Transmission Network Service Provider*:
  - (1) the *Transmission Network Service Provider* is responsible for the provision, installation and maintenance of the *metering installation*; and
  - (2) *AEMO* is responsible for the collection of *metering data* from that *metering installation*, the processing of that data and the delivery of the processed data to the *metering database* and to parties entitled to that data under rule 7.7(a).
- (b) In performing its role under subparagraph (a)(2), *AEMO* must:
  - (1) permit the *financially responsible Market Participant* to engage a *Metering Data Provider* of its choice to perform the *metering data services* between the *metering installation* and the *metering database* as well as permit the *metering data* to be provided to parties entitled to that data under rule 7.7(a), subject to the limitations on that choice imposed by clauses 7.2.4(d) and 7.2.4A(e);
  - (2) where a *financially responsible Market Participant* has not chosen a *Metering Data Provider* in accordance with subparagraph (1), engage a *Metering Data Provider* to provide *metering data services* between the *metering installation* and the *metering database* as well as to provide *metering data* to parties entitled to that data under rule 7.7(a);
  - (3) comply with the processes for the collection, processing and delivery of *metering data* from the *metering installation* to the *metering database* as well as to provide *metering data* to parties entitled to that data under rule 7.7(a) in accordance with the requirements of the procedures authorised under the

*Rules*, and may establish additional processes if necessary in order to fulfil that role; and

- (4) if any additional processes established by *AEMO* for the purpose of fulfilling its obligations under subparagraph (3), and those processes impact on other persons, the relevant parts of those processes that impact on those persons must be incorporated in the *service level procedures*.

#### **7.2.1B Responsibility for interconnectors**

- (a) For an *interconnector*, the relevant *Transmission Network Service Provider* is responsible for the provision, installation and maintenance of a *metering installation*
- (b) For an *interconnector*, *AEMO* is responsible for the collection of *metering data* from that *metering installation*, the processing of that data and the delivery of the processed data to the *metering database*.

#### **[10] Clause 7.2.3 Responsibility of the Local Network Service Provider**

In clause 7.2.3(c)(1), omit "and" where last occurring.

#### **[11] Clause 7.2.3 Responsibility of the Local Network Service Provider**

Omit clause 7.2.3(c)(2) and substitute:

- (2) provide the *Market Participant* with the name of the *Metering Provider* and the name of the *Metering Data Provider* that would be engaged under clauses 7.2.5(a) and 7.2.5(c1), if requested by the *Market Participant*; and
- (3) provide the *Market Participant* with the terms and conditions relating to the offer,

#### **[12] Clause 7.2.4 Joint metering installations**

After clause 7.2.4(c), insert:

- (d) Where more than one *Market Participant* or *responsible person*, as the case may be, are affected by the same special site or technology related conditions as specified in clause 7.2.4A(c), either the affected *Market Participant* or the affected *responsible person* must notify *AEMO* of the *Metering Data Provider* that will provide the *metering data services* for the relevant *metering installation(s)*.
- (e) In the absence of such a notice specified in paragraph (d), *AEMO* may nominate a *Metering Data Provider* to provide the *metering data services* for those *metering installations*.

## **[13] New clause 7.2.4A      Special site or technology related conditions**

After clause 7.2.4, insert:

### **7.2.4A      Special site or technology related conditions**

- (a) Special site or technology related conditions are situations where *AEMO* determines that special arrangements are required to support the integrity of the collection and processing of *metering data* from nominated *metering installations*. These conditions include, but are not limited to, the following situations:
  - (1) a *transmission network connection point* where the *metering data collection* and/or processing arrangements from *metering installations* nominated in the document *published* in subparagraph (c)(1) require a single *Metering Data Provider*;
  - (2) a situation where two or more *metering points* are required to form a *metering installation* and the *metering data* determined from that *metering installation* is required to be identified as a virtual *NMI* in the *settlements* process;
  - (3) a *metering installation* on an *interconnector*;
  - (4) a *metering installation* on the interconnection between adjacent *distribution networks*.
- (b) Special site or technology related conditions do not exist until they are described and *published* in the document specified in subparagraph (c)(1).
- (c) Where *AEMO* determines that special site or technology related conditions exist under paragraph (a), it must:
  - (1) describe and *publish* those special site or technology related conditions including the nomination of *metering installations* affected by those conditions in a document;
  - (2) notify *responsible persons* and *financially responsible Market Participants* of the availability of the document specified in subparagraph (1) at the time of its *publication* and each time that document is revised; and
  - (3) clarify any matters with the *responsible person* or the *financially responsible Market Participant* in order for those persons to choose a *Metering Data Provider* for that *metering installation* that is mutually suitable to all parties.



- (d) A *responsible person* or *financially responsible Market Participant* may make alterations to a *metering installation* and its *metering data* collection arrangements in order to remove its classification as a special site or technology related condition, in which case *AEMO* must remove that *metering installation* from the document specified in clause 7.2.4A(c)(1).
- (e) Where a *financially responsible Market Participant* chooses to engage a *Metering Data Provider* under clause 7.2.1A(b)(1), it must:
  - (1) only engage a *Metering Data Provider* who can fully accommodate any special site or technology related conditions described in the document *published* under subparagraph (c)(1); and
  - (2) clarify any matters with *AEMO* in order to choose a *Metering Data Provider* for that *metering installation* that is mutually suitable to all parties.

#### **[14] Clause 7.2.5      Role of the responsible person**

In clauses 7.2.5(a)(1), 7.2.5(b)(1) and 7.2.5(c), after "*Metering Provider*" wherever occurring insert "*or Metering Providers*".

#### **[15] Clause 7.2.5      Role of the responsible person**

After clause 7.2.5(c), insert:

##### **Engagement of a Metering Data Provider**

- (c1) The *responsible person* (other than when the *Transmission Network Service Provider* is the *responsible person* for a *metering installation*) must, for each *metering installation* for which it is responsible:
  - (1) engage a *Metering Data Provider* (unless that person is a *Metering Data Provider*) to provide *metering data services* between the *metering installation* and the *metering database* and to parties entitled to that data under rule 7.7(a); and
  - (2) if the *responsible person* is a *Local Network Service Provider*, provide the *financially responsible Market Participant* with the name of the *Metering Data Provider* that would be engaged under subparagraph (1).

#### **[16] Clause 7.2.5      Role of the responsible person**

In clause 7.2.5(d)(1), omit "*metrology procedure*" and substitute "*Rules*, the *metrology procedure* and procedures authorised under the *Rules*".

**[17] Clause 7.2.5      Role of the responsible person**

In clause 7.2.5(d)(2), omit "and the *metrology procedure*" and substitute ", the *metrology procedure* and procedures authorised under the *Rules*".

**[18] Clause 7.2.5      Role of the responsible person**

In clause 7.2.5(d)(3), omit "provide and maintain the security control of the installation" and substitute "ensure that the security control of the installation is provided".

**[19] Clause 7.2.5      Role of the responsible person**

Omit clause 7.2.5(d)(4) and substitute:

- (4) where *remote acquisition* is used or is to be used for the collection of *metering data* ensure that a *communications interface* is installed and maintained to facilitate connection to the *telecommunications network*;

**[20] Clause 7.2.5      Role of the responsible person**

Omit clause 7.2.5(d)(5), 7.2.5(d)(8) and 7.2.5(f) and substitute "[Deleted]" in each case.

**[21] Clause 7.2.5      Role of the responsible person**

In clause 7.2.5(d)(6), omit "provide to *AEMO* (when requested)," and substitute "ensure that *AEMO* is provided (when requested) with".

**[22] Clause 7.2.5      Role of the responsible person**

In clause 7.2.5(d)(7), after ";" insert "and".

**[23] Clause 7.2.5      Role of the responsible person**

After clause 7.2.5(f), insert:

**Metering data services**

- (g) The *responsible person* (other than when the *Transmission Network Service Provider* is the *responsible person* for a *metering installation*) must, for each *metering installation* for which it is responsible:
  - (1) ensure that the *Metering Data Provider* chosen in paragraph (c1) accommodates any special site or technology related conditions determined by *AEMO* in accordance with clause 7.2.4A(c), and where necessary clarify any matters with

- AEMO* in order to choose a *Metering Data Provider* for that *metering installation* that is mutually suitable to all parties;
- (2) ensure that *metering data services* are provided in accordance with the *Rules* and procedures authorised under the *Rules*;
  - (3) ensure for any type 5 *metering installation* where the annual flow of electricity through the *connection point* is greater than the *type 5 accumulation boundary*, that *interval energy data* is collected; and
  - (4) arrange for the provision of relevant *metering data* to the *Metering Data Provider* if *remote acquisition*, if any, becomes unavailable.

**[24] Clause 7.2.7      Registration of metering installations**

In clause 7.2.7(a), after "establish", insert ", maintain".

**[25] Clause 7.2.8      Market Settlement and Transfer Solution Procedures**

In clause 7.2.8(a), omit "develop" and substitute "establish, maintain".

**[26] References to "and Metering Providers" in various clauses**

In clauses 7.2.8(d), 7.2A.4(i) and 7.14.1(c)(3), omit "and *Metering Providers*" and substitute ", *Metering Providers* and *Metering Data Providers*".

**[27] Clause 7.2.8      Market Settlement and Transfer Solution Procedures**

In clauses 7.2.8(e) and 7.2.8(f), omit "or *Metering Provider*" whenever occurring.

**[28] New Rule 7.2A    B2B Arrangements**

After clause 7.2.8, insert a new Rule heading:

**7.2A      B2B Arrangements**

**[29] Clause 7.3.1      Metering installation components**

In clause 7.3.1(a), after "*metering installation*" insert "unless it is classified as an *unmetered connection point* in accordance with schedule 7.2".

**[30] Clause 7.3.1      Metering installation components**

In clause 7.3.1(a)(1), omit "or, be classified as an *unmetered connection point* in accordance with schedule 7.2 and in which case such a device is not required".

**[31] Clause 7.3.1 Metering installation components**

Omit clause 7.3.1(a)(3) and substitute:

- (3) for *metering installations* types 1, 2, 3, or 4, have *electronic data transfer* facilities from the *metering installation* to the *metering data services database*;

**[32] Clause 7.3.1 Metering installation components**

Omit clause 7.3.1(a)(4) and substitute:

- (4) include a *communications interface* to meet the requirements of clause 7.2.5(d)(4);

**[33] Clause 7.3.1 Metering installation components**

Omit clauses 7.3.1(a)(6), 7.3.1(a)(7) and 7.3.1(a)(8), including the second note for clause 7.3.1(a)(6), and substitute:

- (6) record *energy data* in a manner that enables *metering data* to be collated in accordance with clause 7.11.5;
- (7) be capable of separately recording *energy data* for energy flows in each direction where bi-directional *active energy* flows occur or could occur;
- (8) have a *measurement element* for *active energy* and if required in accordance with schedule 7.2 a *measurement element* for *reactive energy*, both of which are recorded;

**[34] Clause 7.3.1 Metering installation components**

Omit clauses 7.3.1(a)(9), 7.3.1(a)(12), 7.3.1(a)(13), including the note for these clauses, as well as 7.3.1(b)(4), 7.3.1(b)(5), 7.3.1(b)(7), 7.3.1(b)(8) and 7.3.1(b)(9), and substitute "[Deleted]" in each case.

**[35] Clause 7.3.1 Metering installation components**

Omit clause 7.3.1(a)(10) and 7.3.1(a)(11), and substitute:

- (10) include facilities for storing *interval energy data* for a period of at least 35 *days* if the *metering installation* is registered as a type 1, 2, 3 or 4 *metering installation*;
- (11) include facilities for storing *interval energy data* for a period of at least 200 *days* or such other period as specified in the *metrology procedure* if the *metering installation* is registered as a type 5 *metering installation*; and

**[36] Clause 7.3.1 Metering installation components**

Omit clause 7.3.1(g) and substitute:

- (g) Where a *metering installation* is used for operational purposes in addition to metrology purposes, the *responsible person* must:
  - (1) use reasonable endeavours to ensure that there will be no infringement of the requirements of the *Rules*;
  - (2) co-ordinate with the persons who use the *metering installation* for such other purposes; and
  - (3) ensure that the *metering installation* must comply with the requirements for operational *metering* as detailed in Chapter 4 of the *Rules*.

**[37] Clause 7.3.1 Metering installation components**

In clause 7.3.1(i)(1), after "occur" insert "or could occur".

**[38] Clause 7.3.1 Metering installation components**

In clause 7.3.1(i)(5), omit "*metering equipment*" and substitute "*metering equipment*".

**[39] Clause 7.3.3 Use of metering data**

Omit clause 7.3.3 in its entirety, including the heading, and substitute "[Deleted]".

**[40] Clause 7.3.4 Metering installation types and accuracy**

Omit the heading and substitute "Metering installation types, accuracy and meter churn".

**[41] Clause 7.3.4 Metering installation types and accuracy**

Omit clause 7.3.4(j) and substitute:

- (j) *AEMO* must establish, maintain and *publish* procedures for the *financially responsible Market Participant* to consider in managing the alteration of a *metering installation* where one or more devices are to be replaced (the '**meter churn procedures**');

**[42] References to "meter churn guidelines" in various clauses and rule**

In clauses 7.3.4(k), 7.3.4(m)(1) and rule 7.7(a)(3), omit "meter churn guidelines" wherever occurring and substitute "meter churn procedures".

**[43] Clause 7.3.4 Metering installation types and accuracy**

Omit clause 7.3.4(1) and substitute:

- (l) *AEMO* must develop and *publish* the first meter churn procedures under paragraph (j) by 1 January 2008, and there must be such procedures available at all times after that date.

#### **[44] Clause 7.3.5 Data collection system**

Omit clause 7.3.5 in its entirety, including the heading, and substitute "[Deleted]".

#### **[45] Clause 7.3.6 Payment for metering**

Omit clause 7.3.6 in its entirety, including the heading, and substitute "[Deleted]".

#### **[46] New Clause 7.3.7 Meter installation malfunctions**

After clause 7.3.6, insert:

##### **7.3.7 Meter installation malfunctions**

- (a) Unless an exemption is obtained by the *responsible person* from *AEMO* under this clause 7.3.7, the *responsible person* must in respect of a *connection point* with:
  - (1) a type 1, 2 and 3 *metering installation*, if a *metering installation malfunction* occurs to the *metering installation*, cause repairs to be made to it as soon as practicable but no later than 2 *business days* after the *responsible person* has been notified of the *metering installation malfunction*; or
  - (2) a *metering installation* other than the installations referred to in subparagraph (1), if a *metering installation malfunction* occurs to the *metering installation*, cause repairs to be made to it as soon as practicable but no later than 10 *business days* after the *responsible person* has been notified of the *metering installation malfunction*.
- (b) *AEMO* must establish, maintain and *publish* a procedure applicable to the provision of exemptions for the purpose of paragraph (a).
- (c) If an exemption is provided by *AEMO* under this clause 7.3.7 then the *Metering Provider* must provide *AEMO* with a plan for the rectification of the *metering installation*.
- (d) A *Registered Participant*, *Metering Provider* or *Metering Data Provider* who becomes aware of a *metering installation malfunction* of a *metering installation* that cannot be rectified within the applicable timeframes as specified in paragraph (a) must notify the *responsible person* of the *metering installation malfunction* within 1 *business day*.

## **[47] New Rule 7.3A Payment for Metering Provision and Metering Data Services**

After clause 7.3.7, insert:

### **7.3A Payment for Metering Provision and Metering Data Services**

- (a) Subject to paragraph (b), the *financially responsible Market Participant* is responsible for payment of all costs associated with:
  - (1) the provision, installation, maintenance, routine testing and inspection of the *metering installation*;
  - (2) the provision of *metering data services*;
  - (3) the cost of preparing *settlements ready data* where such costs will not be recovered by *AEMO* in accordance with paragraph (c);
  - (4) the cost of additions and enhancements to *metering installations* undertaken in accordance with clause 7.3.1(c); and
  - (5) the cost of additional data services that exceed the minimum requirements in accordance with clause 7.11.2(b).
- (b) If a *responsible person* allows another person to engage a *Metering Provider* to install a *metering installation* in accordance with clause 7.2.5(a)(2), the *financially responsible Market Participant* is not responsible for the payment of the costs of installation of the relevant *metering installation* under paragraph (a).
- (c) When *AEMO* is required to undertake functions associated with a *metering installation* in accordance with the requirements of the *metrology procedure* (which could include the preparation and application of a profile), *AEMO's* cost is to be recovered through *Participant fees* in accordance with a budget prepared under clause 2.11.3(b)(3) unless the *metrology procedure* specifies an alternative method of cost recovery, in which case *AEMO* must not recover the costs through *Participant fees*.
- (d) Subject to paragraph (a), any costs incurred in gaining access to *metering data* must be paid by the party who accessed the *metering data*.
- (e) The cost of requisition testing and audits must be paid by the party requesting the test or audit, except where the *metering installation* is shown not to comply with this Chapter 7, in which case the *responsible person* in relation to that *metering installation* must bear the cost.

- (f) Paragraph (a) does not apply to the recovery of costs by a *Local Network Service Provider* that are associated with type 5, 6 or 7 *metering installations*, to the extent that these costs can be recovered by the *Local Network Service Provider* in accordance with a determination made by the *AER*.
- (g) Where:
  - (1) a *financially responsible Market Participant* alters a type 5, 6 or 7 *metering installation* under clause 7.3.4 that leads to a change in the classification of that *metering installation*; and
  - (2) the *Local Network Service Provider* is no longer the *responsible person* for that *metering installation*,

the parties must negotiate in good faith to ensure the *Local Network Service Provider* is reasonably compensated for the alteration to the *metering installation*.

#### **[48] Rule 7.4                    Metering Providers**

In the Rule 7.4 heading, after "Metering Providers" insert "and Metering Data Providers".

#### **[49] Clause 7.4.1            Responsibility**

Omit the heading and substitute "Role of Metering Providers".

#### **[50] Clause 7.4.1            Responsibility**

In clause 7.4.1(b), omit "is responsible for providing and maintaining" and substitute "must provide and maintain".

#### **[51] New Clause 7.4.1A      Role of Metering Data Providers**

After clause 7.4.1, insert:

##### **7.4.1A    Role of Metering Data Providers**

- (a) The provision of *metering data services* must be carried out only by a *Metering Data Provider*.
- (b) A *Metering Data Provider* must provide and maintain the security controls associated with *metering data services* in accordance with clause 7.8.2.

#### **[52] Clause 7.4.2            Qualifications and registration of Metering Providers**

Omit clauses 7.4.2(ba) to 7.4.2(c), and substitute:



- (ba) *AEMO* must include requirements for accreditation of *Metering Providers* in the *service level procedures*. The adoption of the requirements by *Metering Providers* is to be included in the qualification process in accordance with clause S7.4.1(b). The requirements must include a dispute resolution process.
- (bb) A *Metering Provider* must comply with the provisions of the *Rules* and procedures authorised under the *Rules* that are expressed to apply to *Metering Providers* relevant to their category of registration.
- (bc) **[Deleted]**
- (c) *Network Service Providers*, who are *responsible persons* for *metering installations*, must either register as a *Metering Provider* or enter into agreements with *Metering Providers* for the provision, installation and maintenance services relating to the *metering installations* for which they are responsible.

### **[53] New Clause 7.4.2A      Qualifications and registration of Metering Data Providers**

After clause 7.4.2, insert:

#### **7.4.2A      Qualifications and registration of Metering Data Providers**

- (a) A *Metering Data Provider* is a person who:
  - (1) meets the requirements set out in schedule 7.6; and
  - (2) is accredited by and registered by *AEMO* in that capacity in accordance with the qualification process established under clause S7.6.1(b).
- (b) Any person may apply to *AEMO* for accreditation and registration as a *Metering Data Provider*.
- (c) *Network Service Providers*, who are responsible for *metering data services*, must either register as a *Metering Data Provider* or enter into agreements with *Metering Data Providers* for the provision of *metering data services* for those *metering installations*.
- (d) *AEMO* must include requirements for accreditation of *Metering Data Providers* in the *service level procedures*. The adoption of the requirements by *Metering Data Providers* is to be included in the qualification process in accordance with clause S7.6.1(b). The requirements must include a dispute resolution process.
- (e) A *Metering Data Provider* must comply with the provisions of the *Rules* and procedures authorised under the *Rules* that are expressed

to apply to *Metering Data Providers* relevant to their category of registration.

- (f) A *Market Generator* or *Market Customer* which is involved in the trading of *energy* must not be registered as a *Metering Data Provider* for *connection points* in respect of which the *metering data* relates to its own use of *energy*.
- (g) If a *Market Participant* is a *Market Customer* and also a *Network Service Provider* then the *Market Participant* may be registered as a *Metering Data Provider* for that *connection point* as specified in paragraph (f).

### **[54] Clause 7.4.3      Deregistration of Metering Providers**

In the heading, after "Metering Providers" insert "and Metering Data Providers".

### **[55] Clause 7.4.3      Deregistration of Metering Providers**

Omit clauses 7.4.3(a) to 7.4.3(c) and substitute:

- (a) *AEMO* must establish, maintain and *publish* a procedure for deregistration of *Metering Providers* and *Metering Data Providers* which incorporates the principles specified in paragraph (aa).
- (aa) A breach of the provisions of the *Rules* or of the procedures under the *Rules* must be determined against the following principles:
  - (1) the definition of breach must contain three or more levels of severity, the highest level of severity being a 'material breach';
  - (2) the de-registration of a *Metering Provider* or a *Metering Data Provider* can only occur if it can be demonstrated that the provider has performed a material breach; and
  - (3) the levels of a breach with severity below a material breach are to be treated as warnings with different levels of magnitude.
- (b) If *AEMO* reasonably determines that a *Metering Provider* or a *Metering Data Provider* has breached the provisions of the *Rules* or of procedures authorised under the *Rules* that applies to *Metering Providers* or *Metering Data Providers* then:
  - (1) *AEMO* must send to that *Metering Provider* or *Metering Data Provider* a notice in writing setting out the nature of the breach; and

- (2) *AEMO* must, if the *Metering Provider* or *Metering Data Provider* remains in breach for a period of more than 7 days after notice in accordance with subparagraph (1), conduct a review to assess the *Metering Provider's* or *Metering Data Provider's* capability for ongoing compliance with the *Rules* or procedures authorised under the *Rules*.
- (c) *AEMO* may, following a review conducted under paragraph (b) and in accordance with the procedure under paragraph (a), deregister the *Metering Provider* or *Metering Data Provider*, suspend the provider from some categories of registration or allow the provider to continue to operate under constraints agreed with *AEMO*.

### **[56] Clause 7.4.3      Deregistration of Metering Providers and Metering Data Providers**

After clause 7.4.3(c), insert:

- (d) If following a review under paragraph (c), *AEMO* deregisters or suspends from some categories of registration or allows the *Metering Provider* or *Metering Data Provider* to continue to operate under constraints, then *AEMO* must inform the relevant *responsible person(s)*, the relevant *financially responsible Market Participants* and the relevant *Local Network Service Providers* of the outcome of that review.

### **[57] Clause 7.6.3      Audits of metering**

Omit the heading "Audits of metering data" and substitute "Audits of information held in metering installations".

### **[58] Clause 7.6.3      Audits of metering**

Omit clause 7.6.3(a) and substitute:

- (a) A *Registered Participant* may request *AEMO* to conduct an audit to determine the consistency between the data held in the *metering database* and the data held in the relevant *metering installation*.

### **[59] Clause 7.6.3      Audits of metering**

Omit clause 7.6.3(d) and substitute:

- (d) *AEMO* must carry out periodic random audits of *metering installations* to confirm compliance with the *Rules* and must be given unrestrained access by *responsible persons* to *metering installations* for the purpose of carrying out such random audits where *AEMO* agrees to comply with the *responsible person's* reasonable security and safety requirements and has first given the *responsible person* at least two *business days'* notice of its intention to carry out an audit, which notice must include:

**[60] Rule 7.7 Entitlement to metering data**

In the rule 7.7 heading, after "metering data" insert "and access to metering installation".

**[61] Rule 7.7 Entitlement to metering data**

In rule 7.7(a), omit "The only persons entitled to receive *metering data, NMI Standing Data*" and substitute "The only persons entitled to access *energy data* or to receive *metering data, NMI Standing Data, settlements ready data*".

**[62] Rule 7.7 Entitlement to metering data**

In rule 7.7(a)(7), omit "and".

**[63] Rule 7.7 Entitlement to metering data**

In rule 7.7(a)(8), omit "." and insert:

; and

- (9) *Metering Data Providers* who have been engaged to provide *metering data services* for that *metering installation* or in accordance with clause 7.14.1A(c)(6).

**[64] Rule 7.7 Entitlement to metering data**

Omit rules 7.7(b) and 7.7(c), and substitute:

- (b) Electronic access to *energy data* recorded by a *metering installation* by persons referred to in paragraph (a) must only be provided where passwords in accordance with clause 7.8.2 are allocated, otherwise access shall be to *metering data* from the *metering data services database* or the *metering database*.
- (c) The *responsible person* or *AEMO* (as the case may be) who is responsible for the provision of *metering data services* must ensure that access is provided to *metering data* from the *metering data services database* to persons eligible to receive *metering data* in accordance with paragraph (a).

**[65] Rule 7.7 Entitlement to metering data**

After rule 7.7(c), insert:

- (c1) The *responsible person* must ensure that access to *metering data* from the *metering installation* by persons referred to in paragraph (a) is scheduled appropriately to ensure that congestion does not occur.

**[66] Rule 7.7 Entitlement to metering data**

After rule 7.7(f), insert:

- (g) The *Metering Provider* must provide electronic access to the *metering installation* in accordance with the requirements of paragraph (b) and electronic or physical access, as the case may be, to the *metering installation* to facilitate the requirements of rule 7.12(f).

**[67] Clause 7.8.1 Security of metering installations**

In clause 7.8.1(c), omit "or *Metering Provider*" and substitute "*Metering Provider*, or *Metering Data Provider*".

**[68] Clause 7.8.1 Security of metering installations**

In clause 7.8.1(e)(2), omit "or".

**[69] Clause 7.8.1 Security of metering installations**

In clause 7.8.1(e)(3), omit "," and substitute:

; or

- (4) by the *Metering Data Provider* if the seal was broken by the *Metering Data Provider*,

**[70] Clause 7.8.2 Security controls**

In clause 7.8.2(a), omit "*metering data*" and substitute "*energy data*".

**[71] Clause 7.8.2 Security controls**

In clause 7.8.2(a), omit "clause 7.8.2(c)" and substitute "paragraph (c)".

**[72] Clause 7.8.2 Security controls**

Omit clause 7.8.2(c) and substitute:

- (c) The *Metering Provider* must only allocate 'read-only' passwords to *Market Participants*, *Local Network Service Providers* and *AEMO*. For the avoidance of doubt, a *financially responsible Market Participant* may allocate that 'read-only' password to a customer who has sought access to its *energy data* or *metering data* in accordance with rule 7.7(a)(7).

**[73] Clause 7.8.2 Security controls**

In clause 7.8.2(e), omit "clause 7.8.2(d) to *AEMO*" and substitute "paragraph (d) to *AEMO* on request by *AEMO* for *metering installations* types 1, 2,3 and 4".

**[74] Clause 7.8.2 Security controls**

Omit clauses 7.8.2(f) and 7.8.2(g), and substitute:

- (f) *AEMO* must hold a copy of the passwords referred to in paragraph (e) for the sole purpose of revealing them to a *Metering Provider* in the event that the passwords cannot be obtained by the *Metering Provider* by any other means
- (g) Subject to the authorisation of the *responsible person* which is for the purpose of managing congestion in accordance with rule 7.7(c1), if a customer of a *financially responsible Market Participant* requests a 'read-only' password, the *financially responsible Market Participant* must:
  - (1) obtain a 'read-only' password from the *Metering Provider* in accordance with paragraph (c); and
  - (2) provide a 'read-only' password to the customer within 10 *business days*.

**[75] Clause 7.8.2 Security controls**

After clause 7.8.2(h), insert:

- (i) The *Metering Provider* must allocate suitable passwords to the *Metering Data Provider* that enables the *Metering Data Provider* to collect the *metering data* and to maintain the clock of the *metering installation* in accordance with clause 7.12.
- (j) The *Metering Data Provider* must keep all *metering installation* passwords secure and not make the passwords available to any other person.

**[76] Clause 7.8.3 Changes to metering equipment, parameters and settings**

In the heading, after "settings" insert "within a metering installation".

**[77] Clause 7.8.4 Changes to metering data**

In the heading, after "Changes to" insert "energy data or to".

**[78] Clause 7.8.4 Changes to metering data**

In clause 7.8.4(a), omit "original stored *energy data* in a *meter*" and substitute "*energy data* held by a *metering installation*".

**[79] Clause 7.8.4 Changes to metering data**

Omit clauses 7.8.4(b) and 7.8.4(c), and substitute:

- (b) If an on-site test of a *metering installation* requires the injection of current, the *responsible person* must ensure that:
  - (1) the *energy data* stored in the *metering installation* is inspected; and
  - (2) if necessary following the inspection under subparagraph (1), alterations are made to the *metering data*, to ensure that the *metering data* in the *metering data services database* and the *metering database* is not materially different from the *energy* consumed at that *connection point* during the period of the test
- (c) If a *responsible person* considers alterations are necessary under paragraph (b)(2), the *responsible person* must:
  - (1) notify *AEMO* that alteration to the *metering data* is necessary; and
  - (2) advise the *financially responsible Market Participant* of the need to change the *metering data* and the *responsible person* must arrange for the *Metering Data Provider* to:
    - (i) alter the *metering data* for the *connection point* held in the *metering data services database* in accordance with the validation, substitution and estimation procedures in the *metrology procedure*; and
    - (ii) submit the altered *metering data* to the *Registered Participants* and the *Network Service Provider* who are entitled to the data in accordance with rule 7.7.

#### **[80] Clause 7.8.4 Changes to metering data**

In clause 7.8.4(d), omit "adjustment" and substitute "alteration".

#### **[81] Clause 7.9.1 Metering databases**

Omit clauses 7.9.1(b), 7.9.1(b1) and 7.9.1(f) and substitute "[Deleted]" in each case.

#### **[82] Clause 7.9.1 Metering databases**

In clause 7.9.1(d), omit "original *energy* readings and, where relevant, *metering data* and *settlements ready data*" and substitute "*metering data*, *settlements ready data*, and information for each *metering installation* registered with *AEMO* in accordance with rule 7.5".

#### **[83] Clause 7.9.1 Metering databases**

Omit clause 7.9.1(g) and substitute:

- (g) For all types of *metering installations*, the *metering database* must contain *metering data* that is:
  - (1) retained online in an accessible format for at least 13 months; and
  - (2) following the retention under subparagraph (1), archived in an accessible format for an overall period of not less than 7 years.

#### **[84] Clause 7.9.1 Metering databases**

After clause 7.9.1(g), insert:

- (h) The *settlements ready data* held in the *metering database* must be used by *AEMO* for *settlements* purposes.
- (i) The *settlements ready data* held in the *metering database* may be used by *Distribution Network Service Providers* for the purpose of determining *distribution service charges* in accordance with clause 6.20.1.
- (j) *AEMO* must retain *settlements ready data* for all *metering installations* for a period of 7 years.

#### **[85] Clause 7.9.2 Remote acquisition of data**

Omit clause 7.9.2 in its entirety, including the heading, and substitute "[Deleted]".

#### **[86] Clause 7.9.3 Periodic energy metering**

Omit clause 7.9.3 in its entirety, including the heading, and substitute "[Deleted]".

#### **[87] Clause 7.9.4 Data validation, substitution and estimation**

Omit clauses 7.9.4(a), 7.9.4(b) and 7.9.4(c), and substitute "[Deleted]" in each case.

#### **[88] Clause 7.9.4 Data validation, substitution and estimation**

Omit clauses 7.9.4(d) and 7.9.4(e), and substitute:

- (d) If *AEMO* in the preparation of *settlements ready data* detects *metering data* that fails validation *AEMO* must notify the *Metering Data Provider* within 1 *business day* of detection.
- (e) Where a *Metering Data Provider* receives notification under paragraph (d), the *Metering Data Provider* must use its best endeavours to provide corrected *metering data* to *AEMO* within 1 *business day* or advise *AEMO* that this time limit cannot be



achieved, and the reason for delay, in which case the parties must agree on a revised time limit by which the corrected *metering data* will be provided.

**[89] Clause 7.9.4 Data validation, substitution and estimation**

After clause 7.9.4(e), insert:

- (f) Where *metering data* fails validation by *AEMO* in the preparation of *settlements ready data* and replacement *metering data* is not available within the time required for *settlements* then *AEMO* must prepare a substitute value in accordance with the *metrology procedure*.

**[90] Clause 7.9.5 Errors found in metering tests, inspections or audits**

Omit clause 7.9.5(a) and substitute:

- (a) If a *metering installation* test, inspection or audit, carried out in accordance with rule 7.6, demonstrates errors in excess of those prescribed in schedule 7.2, the *responsible person* must ensure the *metering data* is substituted in accordance with clauses 7.9.5 and 7.11.2 as appropriate.

**[91] Clause 7.9.5 Errors found in metering tests, inspections or audits**

After clause 7.9.5(a), insert:

- (aa) If *AEMO* or the *responsible person* is not aware of the time at which the error that was identified in paragraph (a) arose, the error is to be deemed to have occurred at a time half way between the time of the most recent test or inspection which demonstrated that the *metering installation* complied with the relevant accuracy requirement and the time when the error was detected
- (ab) The time that the error was deemed to occur, as determined in paragraph (aa), is to be used by the *Metering Data Provider* in performing substitution of the *metering data*.

**[92] Clause 7.9.5 Errors found in metering tests, inspections or audits**

Omit clause 7.9.5(c) and substitute:

- (c) If any substitution is required under paragraph (b), *AEMO* must request the *responsible person* or the *financially responsible Market Participant* or the *Metering Data Provider*, as appropriate, to

arrange for a suitable substitution of the incorrect *metering data* to be undertaken in accordance with the recommendations of any audit report provided by *AEMO* (under clauses 7.6.1(j), 7.6.3(a) and 7.6.3(d)), or if no audit report is provided, in accordance with the substitution requirements of the *metrology procedure*.

**[93] Rule 7.10 Confidentiality**

In rule 7.10, omit "*Metering data* and passwords are confidential data" and substitute "*Energy data, metering data, NMI Standing Data*, information in the *metering register* and passwords are confidential".

**[94] Rule 7.11 Performance of Metering Installation**

Omit the rule 7.11 heading and substitute "Metering Data Arrangements".

**[95] Clause 7.11.1 Metering data**

In the heading, after "data" insert "performance standards".

**[96] Clause 7.11.1 Metering data**

Omit clauses 7.11.1(a) to 7.11.1(d), including the note in clauses 7.11.1(a) and 7.11.1(c), and substitute:

- (a) **[Deleted]**
- (b) *Metering data* is required by *AEMO* for all *trading intervals* where the *metering installation* has the capability for *remote acquisition* of actual *metering data*, and that data must be:
  - (1) derived from a *metering installation* compliant with clause 7.3.4(a);
  - (2) within the timeframe required for *settlements* and *prudential requirements* specified in the *metrology procedure*, and the relevant *service level procedures*;
  - (3) actual or substituted in accordance with the *metrology procedure*;
  - (4) in accordance with the performance standards specified in the *metrology procedure*;
  - (5) the performance standards specified in subparagraph (4) must be set at a level that does not impose a material risk on *AEMO's* ability to meet its *settlements* and *prudential requirements* obligations imposed by the *Rules*; and

- (6) *AEMO* may relax or exempt the performance standards specified in subparagraph (4) in circumstances, including those referred to in clause 7.3.4(f), when *AEMO* and the *responsible person* agree on a lower performance standard that does not place a material risk on *AEMO*'s ability to meet its *settlements* and *prudential requirements* obligations in the *Rules*.
- (c) **[Deleted]**
- (d) Where the *metering installation* does not have the capability for *remote acquisition* of actual *metering data*, *metering data* must be provided to *AEMO*:
  - (1) derived from a *metering installation* compliant with clause 7.3.4(a)
  - (2) within the timeframe required for *settlements* specified in the *metrology procedure* and the relevant *service level procedures*;
  - (3) as actual, substituted or estimated data in accordance with the *metrology procedure*; and
  - (4) in accordance with the performance standards specified in the *metrology procedure*.

### **[97] Clause 7.11.2 Metering installation malfunctions**

Omit the heading and substitute "Metering Data Services".

### **[98] Clause 7.11.2 Metering installation malfunctions**

Omit clauses 7.11.2(a) to 7.11.2(d), including the note in clause 7.11.2(d), and substitute:

- (a) *Metering Data Providers* must provide *metering data services* in accordance with the *Rules* and procedures authorised under the *Rules*, including:
  - (1) collecting *metering data* by manual reading or by *remote acquisition*;
  - (2) the validation and substitution of *metering data* for a type 1, 2, 3 and 4 *metering installation*;
  - (3) the validation, substitution and estimation of *metering data* for a type 5 and 6 *metering installation*;
  - (4) the calculation, estimation and substitution of *metering data* for a type 7 *metering installation*;

- (5) establishing and maintaining a *metering data services database* associated with each *metering installation*;
  - (6) delivery of *metering data* and relevant *NMI Standing Data* for a *metering installation* to a person entitled to receive data in accordance with rule 7.7;
  - (7) the delivery of *metering data* and relevant *NMI Standing Data* to *AEMO* for *settlements*;
  - (8) ensuring the *metering data* and other data associated with the *metering installation* is protected from direct local or remote electronic access while being collected and while held in the *metering data services database* and that data is provided only in accordance with rule 7.7;
  - (9) maintaining the standard of accuracy of the time setting of the *metering data services database* and the *metering installation* in accordance with rule 7.12;
  - (10) notifying the *responsible person* of any *metering installation malfunction* of a *metering installation* within 1 *business day*; and
  - (11) management and storage of *metering data* in accordance with clause 7.11.3.
- (b) *Metering Data Providers* may provide additional data services that exceed the minimum requirements of the *Rules*, *service level procedures* or the *metrology procedure* at the request of a relevant *Market Participant* or *Local Network Service Provider* provided that:
- (1) the full costs of this work is met by the *Market Participant* or *Local Network Service Provider*; and
  - (2) the provision of additional data services must not impact the provision of *metering data services*.
- (c) Despite anything to the contrary in the *Rules*, *AEMO* may obtain *metering data* directly from a *metering installation* for the *settlements* process.
- (d) **[Deleted]**

### **[99] New Clause 7.11.3      Data management and storage**

After clause 7.11.2, insert:

### 7.11.3 Data management and storage

- (a) *Metering Data Providers* must:
  - (1) retain *metering data* for all relevant *metering installations* in the *metering data services database*:
    - (i) online in an accessible format for at least 13 months;
    - (ii) following the retention under subparagraph (1)(i), in an accessible format for an overall period of not less than 7 years; and
  - (2) archive in an accessible format for a period of 7 years:
    - (i) *metering data* in its original form collected from the *metering installation*;
    - (ii) records of each substitution to *metering data* in respect of a *metering installation*.
- (b) *Metering Data Providers* accredited for type 7 *metering installations* must maintain techniques for determining *calculated metering data* for type 7 *metering installations* that are *market loads* under schedule 7.2 in accordance with the *metrology procedure*.
- (c) *Metering Data Providers* must maintain *electronic data transfer* facilities in order to deliver *metering data* from the *metering data services database* to the *metering database* in accordance with the relevant *service level procedures*.
- (d) *Check metering data*, where available, and appropriately adjusted for differences in *metering installation* accuracy, where applicable, must be used by the *Metering Data Provider* to validate *metering data*.
- (e) If the *Metering Data Provider* becomes aware that the *metering data* that has been delivered into the *metering database* from a *metering data services database* is incorrect, then the *Metering Data Provider* must provide corrected *metering data* to the *financially responsible Market Participant*, the *Local Network Service Provider* and AEMO within 1 *business day* of detection.
- (f) *Metering data* may only be altered by a *Metering Data Provider* except in the preparation of *settlements ready data*, in which case AEMO may alter the *metering data* in accordance with clause 7.9.4(f).
- (g) A *Metering Data Provider* may only alter *metering data* in the *metering data services database* in accordance with the *metrology procedure*.

- (h) *Metering Data Providers* must maintain *electronic data transfer* facilities in order to deliver *metering data* from the *metering data services database* to *Market Participants* and *Network Service Providers* who are entitled to receive *metering data*.
- (i) The *Metering Data Provider's* rules and protocols for the collection of *metering data* from a *metering installation* must be approved by *AEMO* and *AEMO* must not unreasonably withhold such approval.
- (j) The *Metering Data Provider* must arrange with the *responsible person* to obtain the relevant *metering data* if *remote acquisition*, if any, becomes unavailable.

#### **7.11.4 Use of check metering data**

- (a) *Check metering data*, where available and provided that the *check metering data* has been appropriately adjusted for differences in *metering installation* accuracy, must be used by *Metering Data Providers* or *AEMO*, as the case may be, for:
  - (1) validation;
  - (2) substitution; and
  - (3) estimationof *metering data* as required by clauses 7.9.4(d) and 7.11.2.

#### **7.11.5 Periodic energy metering**

- (a) For type 1, 2, 3, 4 and 5 *metering installations*, *metering data* relating to:
  - (1) the amount of *active energy*; and
  - (2) *reactive energy* (where relevant) passing through a *connection point*,must be collated in *trading intervals* within a *metering data services database* unless it has been agreed between *AEMO*, the *Local Network Service Provider* and the *Market Participant* that *metering data* may be recorded in sub-multiples of a *trading interval*.
- (b) For type 6 *metering installations*, *metering data* relating to the amount of *active energy* passing through a *connection point* must be converted into *trading intervals* in the *profiling* process undertaken by *AEMO* in accordance with the *metrology procedure* and the *metrology procedure* must specify:

- (1) the parameters to be used in preparing the *trading interval metering data* for each *market load*, including the algorithms;
  - (2) the *metering data* from *first-tier loads* that is to be used in the conversion process;
  - (3) the quality and timeliness of the *metering data* from the *first-tier loads*;
  - (4) the party responsible for providing the *metering data* from the *first-tier loads*; and
  - (5) if required, the method of cost recovery in accordance with clause 7.3A(c).
- (c) For type 7 *metering installations*, *metering data* relating to the amount of *active energy* passing through a *connection point* must be prepared by a *Metering Data Provider* in accordance with clause 7.11.2(a)(4) in *trading intervals* within a *metering data services database*.

**[100] Rule 7.12 Time settings**

Omit rule 7.12(a) and substitute:

- (a) The *Metering Provider* must set the times of clocks of all *metering installations* with reference to *Eastern Standard Time* to a standard of accuracy in accordance with schedule 7.2 relevant to the *load* through the *connection point* when installing, testing and maintaining *metering installations*.

**[101] Rule 7.12 Time settings**

Omit rules 7.12(b) and 7.12(c), including the note in rule 7.12(b), and substitute "[Deleted]".

**[102] Rule 7.12 Time settings**

In rule 7.12(d), omit "for a type 1, 2, 3 and 4 *metering installation*".

**[103] Rule 7.12 Time settings**

Omit rule 7.12(e) and substitute:

- (e) The *Metering Data Provider* must maintain the *metering data services database* clock within - 1 second and + 1 second of *Eastern Standard Time*.

**[104] Rule 7.12 Time settings**

After rule 7.12(e), insert:

- (f) The *Metering Data Provider* must:
- (1) check the accuracy of the clock of the *metering installation* with reference to *Eastern Standard Time* to a standard of accuracy in accordance with schedule 7.2 relevant to the *load* through the *connection point* on each occasion that the *metering installation* is accessed;
  - (2) reset the clock of the *metering installation* so that it is maintained to the required standard of accuracy in accordance with schedule 7.2 relevant to the *load* through the *connection point* where the clock error of a *metering installation* does not conform to the required standard of accuracy on any occasion that the *metering installation* is accessed; and
  - (3) notify the *Metering Provider* where the *Metering Data Provider* is unable to reset the clock of the *metering installation* in accordance with subparagraph (2).

**[105] Rule 7.14 Metrology procedure**

Omit the heading and substitute "Metrology and service level procedures".

**[106] Clause 7.14.1 Requirements of the metrology procedure**

In clause 7.14.1(a), omit "develop" and substitute "establish, maintain".

**[107] Clause 7.14.1 Requirements of the metrology procedure**

Omit clause 7.14.1(b) and substitute:

- (b) The *metrology procedure* must include a minimum period of 3 months between the date when the *metrology procedure* is *published* and the date the *metrology procedure* commences unless the change is made under clause 7.1.4(e) in which case the effective date may be the same date as the date of *publication*.

**[108] Clause 7.14.1 Requirements of the metrology procedure**

In clause 7.14.1(c)(1)(ii), omit "using *communication link(s)*".

**[109] Clause 7.14.1 Requirements of the metrology procedure**

In clause 7.14.1(c)(3), after "*responsible persons*" insert ", *financially responsible Market Participants, Local Network Service Providers*".



**[110] Clause 7.14.1 Requirements of the metrology procedure**

In clause 7.14.1(c)(4)(ii), omit "extraction or delivery of *metering data* from" and substitute "delivery of *metering data* relating to".

**[111] Clause 7.14.1 Requirements of the metrology procedure**

In clause 7.14.1(c)(6), omit "the preparation of *settlements ready data* on the following matters".

**[112] Clause 7.14.1 Requirements of the metrology procedure**

In clause 7.14.1(c)(6)(i), omit "data validation and substitution in accordance with clause 7.9.4" and substitute "the validation and substitution of *metering data*".

**[113] Clause 7.14.1 Requirements of the metrology procedure**

Omit clause 7.14.1(c)(6)(ii) and substitute:

(ii) the estimation of *metering data*;

**[114] Clause 7.14.1 Requirements of the metrology procedure**

In clause 7.14.1(c)(6)(iii), omit "in relation to the matters specified in clause 7.9.3,".

**[115] Clause 7.14.1 Requirements of the metrology procedure**

In clause 7.14.1(c)(6)(iii)(A), omit "into *trading interval data*" and substitute "by *AEMO into trading interval metering data*".

**[116] Clause 7.14.1 Requirements of the metrology procedure**

In clause 7.14.1(c)(6)(iii)(B), omit "*first-tier load energy data* that is necessary to enable the conversion referred to in subparagraph (1)" and substitute "*first-tier load metering data* that is necessary to enable the conversion referred to in subparagraph (A)".

**[117] New clause 7.14.1A Requirements of the service level procedures**

After clause 7.14.1, insert:

### 7.14.1A Requirements of the service level procedures

- (a) *AEMO* must establish, maintain and *publish* the *service level procedures* that will apply to the relevant categories of registration that apply to *Metering Providers* and *Metering Data Providers*, in accordance with this Chapter 7 and this rule 7.14.
- (b) *AEMO* must establish and *publish* the *service level procedures* in accordance with clause 7.1.3.
- (c) The *service level procedures* must include:
  - (1) the requirements for the provision, installation and maintenance of *metering installations* by *Metering Providers*;
  - (2) requirements for the systems and processes for the collection, processing and delivery of *metering data* by *Metering Data Providers*;
  - (3) the performance levels associated with the collection, processing and delivery of *metering data*;
  - (4) the data formats that must be used for the delivery of *metering data*;
  - (5) the requirements for the management of relevant *NMI Standing Data*;
  - (6) the requirements for the processing of *metering data* associated with *connection point* transfers and the alteration of *metering installations* where one or more devices are replaced;
  - (7) other matters in the Rules required to be included in the *service level procedures*; and
  - (8) information to ensure consistency in practice between the *service level procedures* and other documents developed and published by *AEMO*, including the practices adopted in the *Market Settlement and Transfer Solutions Procedures*.
- (d) The *service level procedures* must include requirements for accreditation, and for *Metering Providers* and *Metering Data Providers* (the '**service providers**'), may include requirements for but are not limited to:
  - (1) requirements relating to cooperation with *AEMO*;
  - (2) the confidentiality of information collected by the service providers;

- (3) the resolution of disputes between *AEMO* and the service providers, including disputes associated with a breach of the *Rules* and procedures authorised under the *Rules*;
  - (4) the access of *AEMO* to and the inspection and audit by *AEMO* of any equipment or database maintained by the service providers;
  - (5) the insurance which must be taken out by or on behalf of the service providers;
  - (6) subcontracting by the service providers;
  - (7) the software and systems that are used by the service providers;
  - (8) maintenance of quality systems accreditation;
  - (9) the ownership of intellectual property that is developed or used by the service providers; and
  - (10) the delivery up to *AEMO* of data, works, material and other property that *AEMO* has the right to in the event of the deregistration of a service provider.
- (e) The *service level procedures* must contain information to ensure consistency in practice between the procedures and other documents developed and *published* by *AEMO*, including the practices adopted in the *Market Settlement and Transfer Solutions Procedures*.

**[118] Clause 7.14.2 Jurisdictional metrology material in metrology procedure**

In clause 7.14.2(b), omit the note.

**[119] Clause 7.14.2 Jurisdictional metrology material in metrology procedure**

In clause 7.14.2(h), omit "extracted or emanating from a *data logger* as *interval energy data*" and substitute "collected as *interval metering data*".

**[120] Clause 7.14.3 Additional matters**

Omit the heading and substitute "Additional metrology procedure matters".

**[121] Clause 7.14.3 Additional matters**

In clause 7.14.3(a)(1)(iii), omit "*energy data services*" and substitute "*metering data services*".

**[122] Clause 7.14.3 Additional matters**

Omit clause 7.14.3(a)(1)(vi) and substitute:

- (vi) with respect to the provision, installation and maintenance of *metering installations* and the provision of *metering data services*, the obligations of *responsible persons, financially responsible Market Participants, Local Network Service Providers, AEMO, Metering Providers* and *Metering Data Providers*;

**[123] Clause 7.14.3 Additional matters**

Omit clause 7.14.3(a)(2)(ii) and substitute "[Deleted]".

**[124] Clause 7.14.3 Additional matters**

In clause 7.14.3(a)(2)(iv), after "*Metering Provider*" insert "and *Metering Data Provider* capabilities in accordance with schedule 7.4 and 7.6 respectively, and".

**[125] Clause 7.14.3 Additional matters**

Omit clause 7.14.3(a)(2)(v) and substitute:

- (v) the standards and/or technical requirements for the *metering data services database*; and

**[126] Clause 7.14.3 Additional matters**

In clause 7.14.3(a)(4), omit "in relation to type 5 and 6 *metering installations*".

**[127] Clause 7.14.3 Additional matters**

In clause 7.14.3(a)(5), omit "*energy data held in metering installations*" and substitute "*metering data held in the metering data services database*".

**[128] Clause 7.14.4 Amendment of the metrology procedure**

Omit clause 7.14.4 in its entirety, including the heading, and substitute "[Deleted]".

**Schedule 2      Amendments of the National Electricity  
Rules**

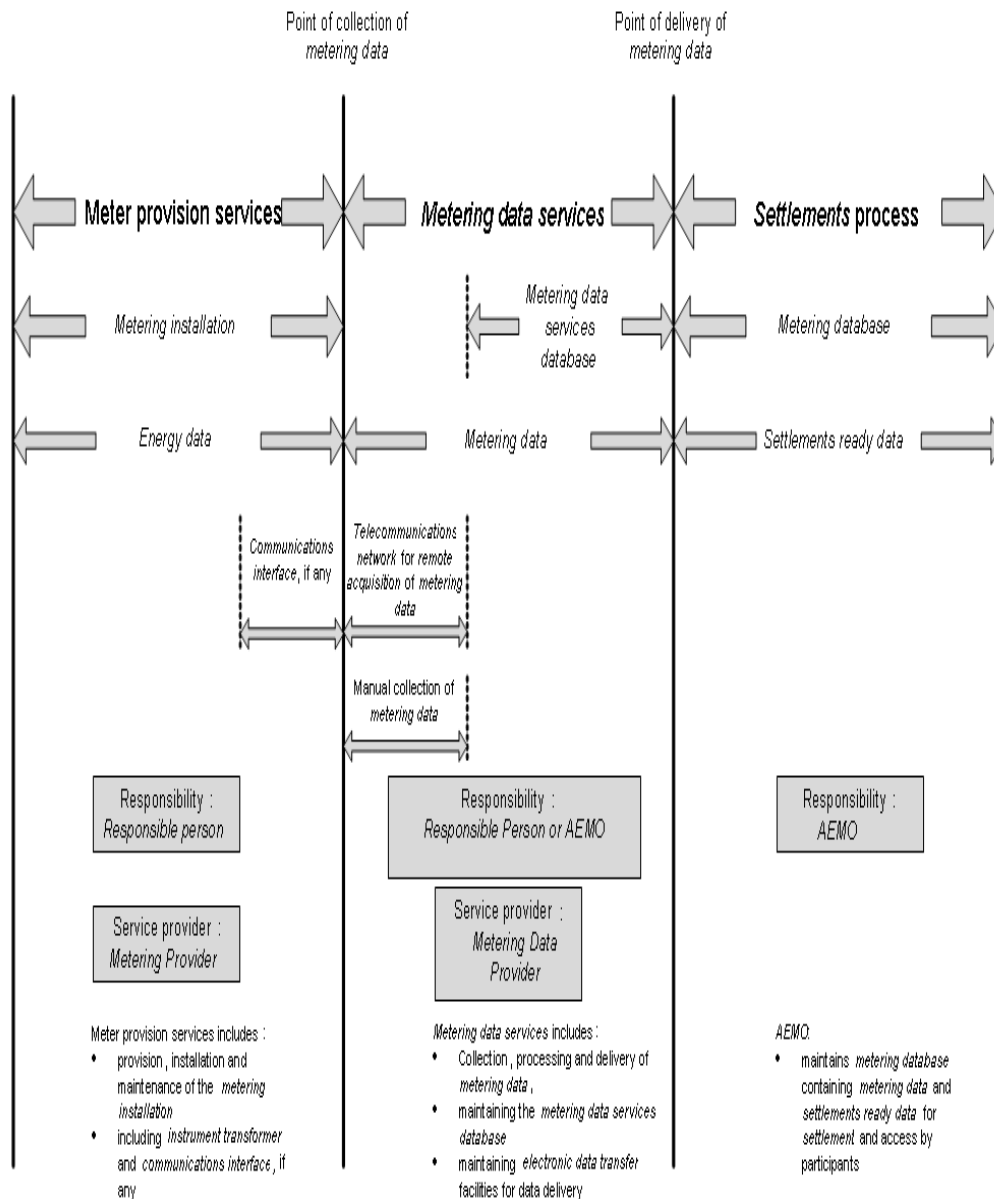
(Clause 4)

**[1] Schedule 7.1      Responsibility for Metering**

In the Schedule 7.1 heading, omit "Metering" insert "metering installation and metering data".

**[2] Schedule 7.1      Responsibility for Metering**

In clause S7.1, omit the figure and insert:



### [3] Clause S7.2.1 General requirements

In clause S7.2.1(a), omit "The following are" and substitute "This Schedule 7.2 sets out".

### [4] Clause S7.2.1 General requirements

In clause S7.2.1(b), omit "may install a metering installation with" and substitute "may require the responsible person to arrange for a metering installation to meet".

**[5] Clause S7.2.3 Accuracy requirements for metering installations**

Omit the Table S7.2.3.1 Overall Accuracy Requirements of Metering Installation Components (Item 1) including the table heading, and substitute: Table S7.2.3.1 Overall Accuracy Requirements of Metering Installation Components

Type	Volume limit per annum per connection point	Maximum allowable overall error ( $\pm\%$ ) at full load (Item 7)		Minimum acceptable class or standard of components	Metering installation clock error (seconds) in reference to EST
		active	reactive		
1	greater than 1000GWh	0.5	1.0	0.2CT/VT/ <i>meter Wh</i> 0.5 <i>meter varh</i>	$\pm 5$
2	100 to 1000GWh	1.0	2.0	0.5CT/VT/ <i>meter Wh</i> 1.0 <i>meter varh</i>	$\pm 7$
3	0.75 to less than 100 GWh	1.5	3.0	0.5CT/VT 1.0 <i>meter Wh</i> 2.0 <i>meter varh</i> (Item 1)	$\pm 10$
4	less than 750 MWh (Item 2)	1.5	n/a	Either 0.5 CT and 1.0 <i>meter Wh</i> ; or whole current general purpose <i>meter Wh</i> :  <ul style="list-style-type: none"> <li>• meets requirements of clause 7.3.1(a)(10); and</li> <li>• meets the requirements of clause 7.11.1(b).</li> </ul> (Item 1)	$\pm 20$ (Item 2a)
5	less than x MWh (Item 3)	1.5 (Item 3b)	n/a	Either 0.5 CT and 1.0 <i>meter Wh</i> ; or whole current connected general purpose <i>meter Wh</i> :	$\pm 20$ (Item 3a)

Type	Volume limit per annum per connection point	Maximum allowable overall error ( $\pm\%$ ) at full load (Item 7) active reactive		Minimum acceptable class or standard of components	Metering installation clock error (seconds) in reference to EST
				<ul style="list-style-type: none"> <li>• meets requirements of clause 7.3.1(a)(11); and</li> <li>• meets the requirements of clause 7.11.1(d).</li> </ul> (Item 1)	
6	less than y MWh (Item 4)	2.0 (Item 4b)	n/a	CT or whole current general purpose <i>meter</i> Wh recording <i>accumulated energy data</i> only. Processes used to convert the <i>accumulated metering data</i> into <i>trading interval metering data</i> and <i>estimated metering data</i> where necessary are included in the <i>metrology procedure</i> .  (Item 1)	(Item 4a)
7	volume limit not specified (Item 5)	(Item 6)	n/a	No <i>meter</i> . The <i>metering data</i> is <i>calculated metering data</i> determined in accordance with the <i>metrology procedure</i> .	n/a

**[6] Clause S7.2.3 Accuracy requirements for metering installations**

In clause S7.2.3 Item 1(a), omit "direct connected" and substitute "whole current".

**[7] Clause S7.2.3 Accuracy requirements for metering installations**



In clause S7.2.3 Item 2, omit "750MWh" and substitute "750 MWh".

**[8] Clause S7.2.3 Accuracy requirements for metering installations**

In clause S7.2.3 Item 2a, after "clock" insert "error".

**[9] Clause S7.2.3 Accuracy requirements for metering installations**

Omit clauses S7.2.3 Item 3(1), S7.2.3 Item 3(4), S7.2.3 Item 3(5), S7.2.3 Item 3(6), S7.2.3 Item 4(4), S7.2.3 Item 4(5) and S7.2.3 Item 6, and substitute "[Deleted]" in each case.

**[10] Clause S7.2.3 Accuracy requirements for metering installations**

Omit clause S7.2.3 Item 3(2) and substitute:

- (2) the value of "x" must be determined by each *Minister of a participating jurisdiction* and:
  - (i) the "x" value must be provided to *AEMO*; and
  - (ii) *AEMO* must record the "x" value in the *metrology procedure*;

**[11] Clause S7.2.3 Accuracy requirements for metering installations**

In clause S7.2.3 Item 3(3), after ";" and insert "and".

**[12] Clause S7.2.3 Accuracy requirements for metering installations**

Omit clause S7.2.3 Item 4(2) and substitute:

- (2) the value of "y" must be determined by each *Minister of a participating jurisdiction* and:
  - (i) the "y" value must be provided to *AEMO*; and
  - (ii) *AEMO* must record the "y" value in the *metrology procedure*;

**[13] Clause S7.2.3 Accuracy requirements for metering installations**

In clause S7.2.3 Item 4(6), omit "devices within the installation may provide" and substitute "devices within the *metering installation* may record".

**[14] Clause S7.2.3 Accuracy requirements for metering installations**

In clause S7.2.3 Item 5(a), omit "*energy data* that is deemed to flow in the power conductor" and substitute "*metering data* that is deemed to correspond to the flow of electricity in the power conductor".

**[15] Clause S7.2.3 Accuracy requirements for metering installations**

In clause S7.2.3 Item 5(d), omit "limit that *connection point* from being metered" and substitute "prevent that *connection point* from being subject to *metering*".

**[16] Clause S7.2.3 Accuracy requirements for metering installations**

After clause S7.2.3 Item 6, insert:

Item 7: The maximum allowable overall error ( $\pm\%$ ) at different *loads* and *power factors* is set out in Table S7.2.3.2 to Table S7.2.3.6.

**[17] Clause S7.2.3 Accuracy requirements for metering installations**

In clause S7.2.3 after Table S7.2.3.6 Type 6 Installation – Annual Energy Throughput less than 0.75 GWh for note (b), omit "*metering system*" and substitute "*metering data*".

**[18] Clause S7.2.4 Check metering**

In clause S7.2.4(a), omit the table and substitute:

Metering Installation Type in accordance with Table S7.2.3.1	Check Metering Requirements
1	Check metering installation
2	Partial check metering
3	No requirement
4, 5 and 6	No requirement

**[19] Clause S7.2.4 Check metering**

In clause S7.2.4(d), omit "clause 7.9.4" and substitute "the *metrology procedure*".

**[20] References to "revenue" in various clauses**

In clauses S7.2.4(c), S7.2.4(f), S7.4.3(e) and S7.5.2(b), omit "revenue" wherever occurring.

**[21] Clause S7.2.5 Resolution and accuracy of displayed or captured data**

In clause S7.2.5, omit ", *data logger*".

**[22] Clause S7.2.6.1 Design requirements**

In clauses S7.2.6.1(a) and S7.2.6.1(b), omit "*metering point*" and substitute "*connection point*" wherever occurring.

**[23] Clause S7.2.6.1 Design requirements**

In clauses S7.2.6.1(a) and S7.2.6.1(b), omit "*revenue meter*" and substitute "*meter(s)*".

**[24] Clause S7.3.1 General**

In clause S7.3.1 in Table S7.3.2 Maximum Period Between Tests, omit "Whole-current (Direct Connected Meter)" and substitute "Whole current Meter".

**[25] Clause S7.3.1 General**

In clause S7.3.1 in Table S7.3.3 Period Between Inspections, omit " $2 \leq \leq 10$  GWh: 3 years" and substitute " $2 \leq$  GWh  $\leq 10$ : 3 years".

**[26] Clause S7.4.2 Categories of registration**

Omit clauses S7.4.2(a) and S7.4.2(b), and substitute:

- (a) Registrations for *Metering Providers* in relation to the provision, installation and maintenance of *metering installation* types 1, 2, 3 and 4 must be categorised in accordance with Tables S7.4.1, S7.4.2 and S7.4.3, or other procedures approved by *AEMO*.
- (b) Registrations for *Metering Providers* in relation to the provision, installation and maintenance (unless otherwise specified) of *metering installation* types 5 and 6 must be categorised in accordance with Table S7.4.4 with the capabilities established in the *metrology procedures*.

**[27] Clause S7.4.2 Categories of registration**

In clause S7.4.2, in Table S7.4.1 Categories of registration for accreditation, omit "cos $\delta$ %" and substitute "cos $\phi$ %".

**[28] Clause S7.4.2 Categories of registration**

In clause S7.4.2, in Table S7.4.3 Categories of registration for accreditation, omit "Communication Link" and substitute "*Communications Interface*".

**[29] Clause S7.4.2 Categories of registration**

In clause S7.4.2, after Table S7.4.3 Categories of registration for accreditation insert:

**Table S7.4.4 Categories of registration for accreditation**

Category	Competency
5A Installation only	Class 1.0 and class 1.5 whole current Wh meters with $<0.3/\cos\phi\%$ uncertainty.
6A Installation only	Class 1.5 whole current Wh meters with $<0.3/\cos\phi\%$ uncertainty.
5B	Class 1.0 and class 1.5 whole current or CT connected Wh meters with $<0.3/\cos\phi\%$ uncertainty.
6B	Class 1.5 whole current or CT connected Wh meters with $0.3</math>\cos\phi\% uncertainty.$

**[30] Clause S7.4.3 Capabilities of Metering Providers for metering installations types 1, 2, 3 and 4**

In clause S7.4.3(b)(4), omit "*data loggers, etc.,*" and substitute "and other components of the *metering installation*".

**[31] Clause S7.4.3 Capabilities of Metering Providers for metering installations types 1, 2, 3 and 4**

In clause S7.4.3(c), omit "including the remote accessing of data" and substitute " and, where necessary, the *communications interface* to facilitate the *remote acquisition* of *metering data*".

**[32] Clause S7.4.3 Capabilities of Metering Providers for metering installations types 1, 2, 3 and 4**

In clause S7.4.3(d)(1), omit "*data loggers* or recorders to be" and substitute "recording is".

**[33] Clause S7.4.3 Capabilities of Metering Providers for metering installations types 1, 2, 3 and 4**

After clause S7.4.3(f), insert:

- (g) All of the capabilities relevant to that type of *metering installation* which are set out in the *Rules* and procedures authorised under the *Rules*.

**[34] Clause S7.4.4 Capabilities of Metering Providers for metering installations types 5 , 6 and 7**

In the heading, omit "5, 6 and 7" and substitute "5 and 6".

**[35] Clause S7.4.4 Capabilities of Metering Providers for metering installations types 5 , 6 and 7**

In clause S7.4.4, omit "5, 6 and / or 7" and substitute "5 and/or 6".

**[36] Clause S7.4.4 Capabilities of Metering Providers for metering installations types 5 , 6 and 7**

In clause S7.4.4(a), omit "included in clause S7.4.3;" and substitute "set out in the *Rules* and procedures authorised under the *Rules*."

**[37] Clause S7.4.4 Capabilities of Metering Providers for metering installations types 5 , 6 and 7**

Omit clauses S7.4.4(b) and the second S7.4.4(a), and substitute "[Deleted]" in each case.

**[38] Clause S7.4.5 Capabilities of the Accredited Service Provider category**

In clause S7.4.5(c)(1), omit "service requirements" and substitute "capabilities".

**[39] Clause S7.5.2 Metering register information**

In clause S7.5.2(b)(8), after "*Metering Provider(s)*" insert "and *Metering Data Provider(s)*".

**[40] Clause S7.5.2 Metering register information**

In clause S7.5.2(c)(1), omit "data" and substitute "*energy data*".

**[41] New Schedule 7.6 Metering Data Provider**

After clause S7.5.2, insert:

**Schedule 7.6 Metering Data Provider**

**S7.6.1 General**

- (a) A *Metering Data Provider* must be accredited by and registered by AEMO.

- (b) *AEMO* must accredit and register a *Metering Data Provider* only for the type of work the *Metering Data Provider* is qualified to provide.
- (c) *AEMO* must establish a qualification process for *Metering Data Providers* that enables registration to be achieved in accordance with the requirements of this schedule 7.6.
- (d) A *Metering Data Provider* must ensure that *metering data services* are carried out in accordance with the *Rules* and procedures authorised under the *Rules*.

### S7.6.2 Categories of registration

Categories of registration are set out in Table S7.6.2.

**Table S7.6.2 Categories of registration for accreditation**

<i>Metering installation type</i>	<b>Categories of registration</b>	
1, 2 3 and/or 4	Category 1D, 2D, 3D and/or 4D (for <i>remote acquisition</i> , processing and delivery of <i>metering data</i> for <i>connection points</i> )	
5 and/or 6	Category 5C and/or 6C (for manual collection or <i>remote acquisition</i> of <i>metering data</i> )	Category 5D and/or 6D (for manual collection, processing and delivery of <i>metering data</i> ) (for <i>remote acquisition</i> , processing and delivery of <i>metering data</i> )
7	Category 7D (for processing and delivery of <i>metering data</i> )	

### S7.6.3 Capabilities of Metering Data Providers

*Metering Data Providers* must be able to exhibit to the reasonable satisfaction of *AEMO* the following capabilities, as applicable, for the categories of *Metering Data Provider* accreditation sought:

- (a) Detailed understanding of the *Rules*, and all procedures authorised under the *Rules* including the relevant *service level procedures* relating to the function of a *Metering Data Provider* and the carrying out of *metering data services*.
- (b) Detailed understanding of the participant role relationships and obligations that exist between the *Metering Data Provider*, *Metering Provider*, *financially responsible Market Participant*, *Local Network Service Provider*, *AEMO* and the *responsible person*.

- (c) An understanding of *metering* arrangements, including knowledge of *metering* equipment (*meters, current transformers* and *voltage transformers*).
- (d) Authorised access to *metering* software for the:
  - (1) collection of *metering data*;
  - (2) establishment, maintenance and operation of a *metering data services database* for the storage and management of *metering data* and *NMI Standing Data*; and
  - (3) the validation, substitution and estimation of *metering data*.
- (e) Processes and systems for the collection of *metering data* including:
  - (1) knowledge of manual collection and *remote acquisition* of *metering data* (as applicable);
  - (2) collection technologies and methodologies; and
  - (3) *metering* protocols and equipment.
- (f) Systems for the processing of *metering data* including:
  - (1) processes for the verification and commissioning of *metering data* and relevant *NMI Standing Data* pertaining to each *metering installation* into the *metering data services database*;
  - (2) processes for validation, substitution and estimation of *metering data*;
  - (3) processes for the storage, adjustment and aggregation of *metering data*; and
  - (4) the secure storage of historical data.
- (g) Processes for the delivery of *metering data* and relevant *NMI Standing Data* to *Registered Participants* and *AEMO* including:
  - (1) delivery performance requirements for *metering data*; and
  - (2) an understanding of the relevant *metering data* file formats.
- (h) The availability of trained and competent staff to:
  - (1) read or interrogate the *metering installation*;
  - (2) collect and process metering data into the *metering data services database*;

- (3) validate, substitute or estimate *metering data* as the case may be;
  - (4) maintain the physical and logical security of the *metering data services database* and only allow access to *metering data* by those persons entitled to receive *metering data*; and
  - (5) ensure the ongoing performance and availability of the collection process and the *metering data services database* are maintained inclusive of necessary system supports for backup, archiving and disaster recovery.
- (i) The establishment of a quality system which will:
- (1) underpin all operational documentation, processes and procedures;
  - (2) facilitate good change control management of procedures, IT systems and software;
  - (3) provide audit trail management of *metering data* and *NMI Standing Data*;
  - (4) maintain security controls and data integrity; and
  - (5) maintain knowledge and understanding of the *Rules* and relevant procedures, standards and guides authorised under the *Rules*.
- (j) Understanding of the required logical interfaces necessary to support the provision of *metering data services* including the interfaces needed to:
- (1) access *AEMO's* systems for the management and delivery of *metering data*;
  - (2) support *B2B procedures*; and
  - (3) support *Market Settlement and Transfer Solution Procedures* for delivery and update of *NMI Standing Data*.



## **Schedule 3      Amendments of the National Electricity Rules**

(Clause 5)

### **[1] References to "Metering Providers" in various rules**

In rules 3.19(a) and 3.19(c), omit "and *Metering Providers*" and substitute ", *Metering Providers* and *Metering Data Providers*" wherever occurring.

### **[2] Clause 5.3.7      Finalisation of connection agreements**

Omit clause 5.3.7(g)(4) and substitute:

- (4) arrangements to obtain physical access to the *metering installation* for the *Metering Provider* and the *Metering Data Provider* for *metering installations* type 5 and 6; and

### **[3] References to "communications interface" in various clauses**

In clauses S5.2.6.2(d), S5.2.6.2(e), S5.3a.4.3, omit "communications interface" and substitute "interface for communication purposes" wherever occurring.

### **[4] Clause S5.6      Terms and Conditions of Connection agreements**

In clause S5.6(1), after "*Metering Provider*" insert "and access to *metering installations* type 5 and 6 for the *Metering Data Provider*".

### **[5] References to "energy data" in various clauses**

In clauses 6.20.1(e) and 6.20.1(e) in Appendix 1 of Chapter 11, omit "*energy data*" wherever occurring and substitute "*metering data*".

### **[6] Clause 8.2.1      Application and guiding principles**

In clause 8.2.1(a1), omit "and *Connection Applicants*" and substitute ", *Connection Applicants*, *Metering Providers* and *Metering Data Providers*".

### **[7] Clause 8.2.1      Application and guiding principles**

Omit clause 8.2.1(h)(11) and substitute:

- (11) a decision by AEMO whether or not to deregister a *Metering Provider* or *Metering Data Provider* under clause 7.4.3(d) or to suspend a *Metering Provider* or *Metering Data Provider* from a category of registration under clause 7.4.3(c) or to impose agreed constraints on the continued operation of a *Metering Provider* or *Metering Data Provider*;

**[8] Clause 9.9B.6 Agency data collection systems and agency metering databases**

Omit the clause in its entirety, including the heading, and substitute "[Deleted]".

**[9] Clause 9.9B.7 Remote acquisition of data by the responsible person**

Omit the clause in its entirety, including the heading, and substitute "[Deleted]".

**[10] Schedule 9G1 Metering Transitional Arrangements**

In Schedule 9G1 of Chapter 9 in clause 5.1(c), omit "for *revenue metering*".

**Schedule 4      Amendments of the National Electricity  
Rules**

(Clause 6)

**[1] Clause 11.36.5    Agency data collection systems and  
agency metering databases**

Omit clause 11.36.5 in its entirety, including the heading, and substitute "**[Deleted]**".

**Note:**

Clause 11.36.5 arises under the National Electricity Amendment (Ministerial Smart Meter Roll Out Determinations) Transitional Rule 2010.

**[2] Clause 11.36.6    Remote acquisition of data by the  
responsible person**

Omit clause 11.36.6 in its entirety, including the heading, and substitute "**[Deleted]**".

**Note:**

Clause 11.36.6 arises under the National Electricity Amendment (Ministerial Smart Meter Roll Out Determinations) Transitional Rule 2010.

## **Schedule 5            Amendments of the National Electricity Rules**

(Clause 7)

### **[1] Chapter 10            Deleted definitions**

In Chapter 10, omit the following definitions:

#### ***agency data collection system***

The system used by the operator of an *agency metering database* to collect, process and transfer the *metering data* from a *meter* to the *AEMO settlements* process.

#### ***agency metering database***

A *metering database* which is operated under a service level agreement with *AEMO*.

#### ***communication link***

All communications equipment, processes and arrangements that lie between the *meter* and the *data logger*, where the *data logger* is external to the device that contains the *measurement elements*, and/or the *data logger* and the telecommunications network.

#### ***data collection system***

All equipment and arrangements that lie between the *metering database* and the point where the *metering data* enters the *telecommunications network*.

#### ***data logger***

A *metering installation* database or a device that collects electronic signals from a *measurement element* and packages it into 30 minute intervals (or sub-multiples). This device may contain data storage capability, be a separate item of equipment, and/or be combined with the *energy* measuring components within one physical device.

#### ***energy data services***

The services that involve:

- (1) collation of *energy data* from the *meter* or *meter/associated data logger*;
- (2) the processing of the *energy data* in the *metering installation* database;

- (3) storage of the *energy data* in the *metering installation database*; and
- (4) the provision of access to the data for those parties that have rights of access to the data.

***estimated energy data***

The data that results from an estimation of the flow of electricity in a power conductor where the data applies to a *trading interval* or a period in excess of a *trading interval*. The estimation is made in relation to a *market load* and would not apply to a *metering point* where *accumulated energy data* or *interval energy data* is not available, or an *unmetered connection point*.

***revenue meter***

The *meter* that is used for obtaining the primary source of *metering data*.

***revenue metering data***

The *metering data* obtained from a *revenue metering installation*.

***revenue metering installation***

A *metering installation* used as the primary source of *metering data* for the *settlements* process.

***revenue metering point***

The *metering point* at which the *revenue metering installation* is *connected*.

## **[2] Chapter 10      Substituted definitions**

In Chapter 10, substitute the following definitions:

***accumulated energy data***

The data that results from the measurement of the flow of electricity in a power conductor where the data represents a period in excess of a *trading interval*. *Accumulated energy data* is held in the *metering installation* and the *metering database*. The measurement is carried out at a *metering point*.

***check meter***

An additional *meter* used as a source of *check metering data* for Type 1 and Type 2 *metering installations* as specified in schedule 7.2.

***check metering data***

The *energy data*, once collected from a *check metering installation*, is *check metering data*. *Check metering data* is held in a *metering data services database* and the *metering database*.

***check metering installation***

A *metering installation* that includes a *check meter* which is used as the source of *check metering data* for validation in the *settlements* process.

***interval energy data***

The data that results from the measurement of the flow of electricity in a power conductor where the data is prepared and recorded by the *metering installation* in intervals which correspond to a *trading interval* or are sub-multiples of a *trading interval*. *Interval energy data* is held in the *metering installation*.

***Market Management Systems Access Procedures***

The procedures to be followed by *Registered Participants*, *Metering Providers* and *Metering Data Providers* in connecting to and making use of the *market management systems* from time to time *published* by AEMO under rule 3.19.

***metering data***

*Accumulated metering data*, *interval metering data*, *calculated metering data*, *substituted metering data*, *estimated metering data* and *check metering data*.

***metering installation***

The assembly of components including the *instrument transformer*, if any, measurement element(s) and processes, if any, recording and display equipment, *communications interface*, if any, that are controlled for the purpose of metrology and which lie between the *metering point(s)* and the point at or near the *metering point(s)* where the *energy data* is made available for collection.

**Notes:**

- (1) The assembly of components may include the combination of several metering points to derive the metering data for a connection point.
- (2) The metering installation must be classified as being for revenue purposes and/or as a check metering installation.
- (3) An unmetered connection point in accordance with schedule 7.2 does not require a meter; it is nevertheless considered as having a metering installation.

***profile***

*Metering data* or costs for a period longer than a *trading interval* allocated into *trading intervals*.

***Registered Participant***

A person who is registered by *AEMO* in any one or more of the categories listed in rules 2.2 to 2.7 (in the case of a person who is registered by *AEMO* as a *Trader*, such a person is only a *Registered Participant* for the purposes referred to in rule 2.5A). However, as set out in clause 8.2.1(a1), for the purposes of some provisions of rule 8.2 only, *AEMO*, *Connection Applicants*, *Metering Providers* and *Metering Data Providers* who are not otherwise *Registered Participants* are also deemed to be *Registered Participants*.

***remote acquisition***

The acquisition of *interval metering data* from a *metering installation*, where a *telecommunications network* transmits the *metering data* from the *communications interface* at site of the *metering point* to the *metering data services database*, and:

- (a) does not, at any time, require the presence of a person at, or near, the *interval meter* for the purposes of data collection or data verification (whether this occurs manually as a walk-by reading or through the use of a vehicle as a close proximity drive-by reading); and
- (b) includes but is not limited to methods that transmit *metering data* via:
  - (1) fixed-line telephone ('direct dial-up');
  - (2) satellite;
  - (3) the internet;
  - (4) wireless or radio, including mobile telephone networks;
  - (5) power line carrier; or
  - (6) any other equivalent technology.

**Note:**

For the requirements of clause 7.3.4(f) remote acquisition may collect other than interval metering data.

***responsible person***

Has the meaning given in clause 7.2.1(a).

***settlements ready data***

The *metering data* that has undergone a validation and substitution process by *AEMO* for the purpose of *settlements* and is held in the *metering database*.

***telecommunications network***

A telecommunications network that provides access for public use or an alternate telecommunications network that has been approved by *AEMO* for the *remote acquisition of metering data*.

***type 5 accumulation boundary***

The volume of *energy* for a *connection point* that has a *type 5 metering installation* above which the *metering data* must be collected as *interval metering data* for the purpose of producing *settlements ready data*.

**Note:**

Below the type 5 accumulation boundary, the metering data may be collected from the metering installation as accumulated metering data for the purpose of producing settlements ready data, in which case the metering installation must be registered with *AEMO* as a type 6 metering installation. Otherwise, the metering data may be collected as interval metering data for the purpose of producing settlements ready data in which case the metering installation must be registered with *AEMO* as a type 5 metering installation.

**[3] Chapter 10      New definitions**

In Chapter 10, insert the following definitions:

***accumulated metering data***

The *accumulated energy data*, once collected from a *metering installation*, is *accumulated metering data*. *Accumulated metering data* is held in a *metering data services database* and the *metering database*.

***calculated metering data***

The *trading interval* data corresponding to the calculation of consumed *energy* for a *type 7 metering installation* in accordance with the *metrology procedure*. *Calculated metering data* is held in the *metering data services database* and the *metering database*.

***communications interface***

The modem and other devices and processes that facilitate the connection between the *metering installation* and the *telecommunications network* for the purpose of the *remote acquisition of metering data*.



***estimated metering data***

The estimated values of *accumulated metering data*, *interval metering data* or *calculated metering data* that have been prepared in accordance with the *metrology procedure*. *Estimated metering data* is held in a *metering data services database* and the *metering database*.

***interval metering data***

The *interval energy data*, once collected from a *metering installation*, is *interval metering data*. *Interval metering data* is held in a *metering data services database* and the *metering database*.

***Metering Data Provider***

A person who meets the requirements listed in schedule 7.6 and has been accredited and registered by *AEMO* as a *Metering Data Provider*.

***metering data services***

The services that involve the collection, processing, storage and delivery of *metering data* and the management of relevant *NMI Standing Data* in accordance with the *Rules*.

***metering data services database***

The database established and maintained by the *Metering Data Provider* that holds *metering data* and relevant *NMI Standing Data* relating to each *metering installation* for which the *responsible person* or the *financially responsible Market Participant* or *AEMO* as the case may be has engaged the *Metering Data Provider* to provide *metering data services*.

***metering installation malfunction***

The full or partial failure of the *metering installation* in which the *metering installation* does not:

- (a) meet the requirements of schedule 7.2; or
- (b) record, or incorrectly records, *energy data*; or
- (c) allow, or provides for, collection of *energy data*.

***service level procedures***

The procedures established under the *Rules consultation procedures* by *AEMO* in accordance with clause 7.14.1A.

***substituted metering data***

The substituted values of *accumulated metering data*, *interval metering data* or *calculated metering data* prepared in accordance with the *metrology procedure*. *Substituted metering data* is held in a *metering data services database* and the *metering database*.

## Schedule 6 Savings and Transitional Amendments to the National Electricity Rules

(Clause 8)

### [1] Chapter 11 Savings and Transitional Rules

After rule 11.36, insert:

#### Note:

Part ZF and rule 11.36 of Chapter 11 arises under the National Electricity Amendment (Ministerial Smart Meter Roll Out Determinations) Transitional Rule 2010.

### Part ZG Provision of Metering Data Services and Clarification of Existing Metrology Requirements

#### 11.37 Rules consequential on the making of the National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010

##### 11.37.1 Definitions

For the purposes of this rule 11.37:

**Amending Rule** means the National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010.

**commencement date** means 16 December 2010.

##### 11.37.2 Commencement of special site or technology related conditions

- (a) *AEMO* is not required to comply with the obligation set out in clause 7.2.4A(c) until 6 months after the commencement date (but may comply with that obligation any time earlier than 6 months).
- (b) Prior to the publication of the document referred to in clause 7.2.4A(c)(1), *AEMO* may notify a *responsible person* or a *financially responsible Market Participant*, as appropriate, of the existence of a special site or technology related condition and that notification will operate to fulfil the requirement of clauses 7.2.4A(c)(1) and 7.2.4A(c)(2).

### 11.37.2 Initial service level procedures

- (a) *AEMO* is not required to comply with the obligation set out in clause 7.14.1A(b) until 9 months after the commencement date (but may comply with that obligation any time earlier than 9 months).
- (b) *AEMO* must establish and *publish* the *initial service level procedures* in accordance with clauses 7.1.3 and 7.14.1A within 9 months after the commencement date.
- (c) Prior to the publication of the *initial service level procedures*, *AEMO* may use service level requirements that are *published* and in common use by the *responsible person*, the *Metering Provider*, and the *Metering Data Provider*.
- (d) If, during the period between the commencement date and the *publication* of the *initial service level procedures*, *AEMO*:
  - (1) receives a request from a *responsible person*, a *Metering Provider* or a *Metering Data Provider*; and
  - (2) if that request relates to:
    - (i) an inconsistency between the *published* service level requirements and the requirements in clause 7.14.1A(c); or
    - (ii) an inadequacy in the *published* service level requirements when compared to the requirements in clause 7.14.1A(c),

*AEMO* must:

  - (3) make a determination in regard to that request in accordance with clause 7.1.4(e) if, in *AEMO*'s reasonable opinion, the request referred to in paragraph (d) relates to matters that warrant resolution prior to *publication* of the *initial service level procedures*.
- (e) For the purpose of this clause 11.37.2, the reference to procedure in clause 7.1.3(e) is a reference to any document that carries the determination specified in paragraph (d) (but not to the *service level procedures* referred to in clause 7.14.1A(b)).

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[END OF RULE AS MADE]

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