

# Electricity Industry Participation Code 2010

## Part 10 Metering

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## 10.1 Contents of this Part

This Part provides for—

- (a) ensuring the accuracy of the clearing and settlement of **electricity** trading in the wholesale **electricity** market by regulating how existing and new **metering installations** are used to accurately measure and record **electricity** conveyed; and
- (b) the responsibility for ensuring a **metering installation** is in place; and
- (c) the responsibility for ensuring the compliance of **metering installations**; and
- (d) the processes and procedures that apply to testing, **calibrating**, and **certifying metering installations**; and
- (e) *[Revoked]*
- (f) the processes and procedures that apply to approving **ATHs**; and
- (g) regulating the data use, handling, storage, and transmission processes associated with **metering installations** and **metering data**; and
- (h) regulating **metering installations** that are used for **electricity** trading; and
- (i) the processes and procedures relating to the **registry** and information for the purposes of Part 15; and
- (j) related matters, processes, and procedures.

Clause 10.1(e): revoked, on 1 June 2017, by clause 5 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

### Subpart 1—Preliminary provisions

## 10.2 Authority's discretion and powers

- (1) A clause in this Part that gives the **Authority** a discretion or power—
  - (a) confers an absolute discretion to the **Authority**—
    - (i) taking into account any specific requirements set out in the clause; and
    - (ii) observing the principles of natural justice; and
  - (b) to approve an application by a person to carry out an activity under this Part, may be exercised by—
    - (i) granting the application; or
    - (ii) declining the application; or
    - (iii) granting the application with any conditions that the **Authority** considers appropriate in the circumstances.
- (2) The **Authority**, when exercising a discretion or power under this Part, must act in a timely manner.
- (3) The **Authority** must give an applicant reasons for its decision if the **Authority**—
  - (a) declines an application for approval to carry out an activity under this Part; or
  - (b) grants an application for approval to carry out an activity under this Part with any conditions that the **Authority** considers appropriate in the circumstances.
- (4) Nothing in this Part limits any of the **Authority's** rights and obligations under the **Act**.

Heading: amended, on 5 October 2017, by clause 157(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 10.2(1), (2) and (3): amended, on 5 October 2017, by clause 157(2) and (3) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### 10.3 Use of contractors

- (1) A **participant** may perform its obligations and exercise its rights under this Part by using a contractor.
- (2) A **participant** who uses a contractor to perform the **participant's** obligation under this Part—
  - (a) remains responsible and liable for, and is not released from, the obligation, or any other obligation under this Part; and
  - (b) cannot assert that it is not responsible or liable for the obligation on the ground that the contractor—
    - (i) has done or not done something; or
    - (ii) has failed to meet a relevant standard; and
  - (c) must ensure that the contractor has at least the specified level of skill, expertise, experience, or qualification that the **participant** would be required to have if it were performing the obligation itself.
- (3) If a **participant** is a party to a contract or arrangement containing a provision, or part of a provision, which is inconsistent with this Part, the provision, or part of the provision, has no effect.

### 10.4 Participant obligations

- (1) If this Part provides that a **participant** must obtain a **consumer's** consent, approval, or authorisation, the **participant** must, if relevant, ensure that the consent, approval, or authorisation extends, for the full term of the contract or arrangement in relation to which the consent, approval, or authorisation is given, to any **participant** who may be expected to rely on that consent, approval, or authorisation to remain in compliance with this Part.
- (2) If a **participant** (**participant A**) incorrectly populates the **registry**, causing another **participant** (**participant B**) to breach an obligation under this Code, and **participant B** relies, in good faith, on the incorrect information in the **registry**, **participant B** has not breached its obligation.
- (3) A **participant** must comply with all applicable enactments.
- (4) A **participant** is, unless it is specified otherwise in this Part, responsible for all costs of its compliance with this Part.
- (5) A reference in this Part to a **participant** knowing, or being or becoming aware of, a fact, includes reference to when a **participant** should have, in the circumstances, known, or been or become aware of, the fact.

Clause 10.4(2): amended, on 5 October 2017, by clause 158 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### 10.5 References to timing

- (1) If an event is described in this Part as taking place on, or an obligation becoming effective from, a date, it takes place on, or becomes effective from, the beginning of the first **trading period** on the date, unless specified otherwise.
- (2) If a time period is expressed in this Part as—
  - (a) commencing on a date, it commences at the beginning of the first **trading period** on the date, unless specified otherwise:

- (b) ending on a date, it ends at the close of the final **trading period** on the date, unless specified otherwise.

#### 10.6 Participant to provide accurate information

- (1) A **participant** must take all practicable steps to ensure that information that it provides under this Part is—
  - (a) complete and accurate;
  - (b) not misleading or deceptive;
  - (c) not likely to mislead or deceive.
- (2) If a **participant** becomes aware that the information the **participant** provided under this Part does not comply with subclause (1)(a) to (c), even if the **participant** has taken all practicable steps to ensure that the information complies, the **participant** must, except if clause 10.43 applies, as soon as practicable provide such further information, or corrected information, as is necessary to ensure that the information complies with subclause (1)(a) to (c).

Clause 10.6(2): substituted, on 19 December 2014, by clause 20 of the Electricity Industry Participation Code Amendment (Minor Code Amendments) (No 3) 2014.

#### 10.7 Access to premises in which metering installation located

- (1) In this clause, access to a **metering installation**—
  - (a) means physical access to the premises in which the **metering installation** is located; but
  - (b) does not include access to the following, which are dealt with in Schedule 10.6:
    - (i) **raw meter data** from the **metering installation**; and
    - (ii) the **metering installation** itself and its **metering components**.
- (2) A **reconciliation participant** must, upon receiving a request from 1 of the following parties, arrange access to a **metering installation** for which it is responsible:
  - (a) the **Authority**;
  - (b) an **ATH**;
  - (c) an **auditor**;
  - (d) a **metering equipment provider**;
  - (e) a **gaining metering equipment provider**.
- (3) A party listed in subclause (2) may only request access to the **metering installation** for the purposes of exercising the party's rights and performing the party's obligations under this Code or any relevant **regulations** in relation to 1 or more of the following:
  - (a) the party's **audit** functions;
  - (b) the party's administration functions;
  - (c) the party's testing functions;
  - (d) the provision of **metering components**.
- (4) A **reconciliation participant** who is required to give a party listed in subclause (2) access to a **metering installation** must use its best endeavours to do so—
  - (a) in accordance with the authorisation, and any conditions or restrictions contained in the authorisation, referred to in subclause (5); and
  - (b) subject to and to the extent allowed by the authorisation, in a manner and within a timeframe which are appropriate in the circumstances, to enable the party to

exercise the party's rights, or perform the party's obligations, that are dependent, either directly or indirectly, on access being given.

- (5) If the **reconciliation participant** referred to in subclause (2) is a **trader** responsible for an **ICP** that—
- (a) has a **consumer**, the **trader** must have obtained the authorisation from the **consumer** to access the **metering installation** before arranging access; or
  - (b) does not have a **consumer**, the **trader** must arrange for access to the **metering installation**.
- (6) The **reconciliation participant** must arrange for the party listed in subclause (2) to be provided with any necessary facilities, codes, keys, or other means to enable the party to obtain access to the **metering installation** by the most practicable means.

Clause 10.7(3): amended, on 5 October 2017, by clause 159 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### 10.8 Requirements for information to be recorded, given, produced, or received

- (1) In this Part, a **participant** who must record, give, produce, or receive information, must do so in accordance with 1 or more of the following requirements **published** or **notified** by the **Authority**:
- (a) requirements providing for particular electronic technology;
  - (b) requirements providing for the use of a particular kind of **data storage device**;
  - (c) requirements providing for the use of a particular kind of electronic **communication**.
- (2) Subpart 3 of Part 4 of the Contract and Commercial Law Act 2017 does not, because of section 218(2)(a) of that Act, apply to this Part.
- (3) The **Authority** must act reasonably when determining the requirements referred to in subclause (1).

Clause 10.8(2): amended, on 1 November 2018, by clause 20(a) and (b) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

### 10.9 Demarcation of responsibility between metering equipment provider and reconciliation participant

- (1) The demarcation of the responsibility of a **metering equipment provider** under this Part and a **reconciliation participant** under Part 15, is at the **services access interface**.
- (2) A **metering equipment provider** is responsible for providing and maintaining the **services access interface**.
- (3) The **services access interface** for a **metering installation** is—
- (a) determined by the **ATH certifying** the **metering installation** under clause 10 of Schedule 10.4; and
  - (b) recorded in the **metering installation certification report** under clause 10 of Schedule 10.4.

### 10.10 Standards used

In this Part a reference to compliance with a standard, including an AS/NZS or IEC standard, is a reference to—

- (a) the version of the standard existing as at 29 August 2013; or
- (b) any amendment to or replacement of the standard incorporated by the **Authority**

- in accordance with section 32 of the **Act**; or
- (c) any equivalent standard incorporated by the **Authority** in accordance with section 32 of the **Act**.

Clause 10.10(a): amended, on 29 August 2013, by clause 11 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

### *Metering installations*

#### **10.11 Categories of metering installation**

- (1) An **ATH** must, before it **certifies a metering installation**, determine the category of the **metering installation** by reference to the characteristics of the **metering installation**, in accordance with clauses 5 and 6 of Schedule 10.7.
- (2) A **metering installation** used solely for **unmetered load** is category 0.
- (3) The category of each **metering installation**, other than a category 0 **metering installation**, is for all purposes of this Part—
  - (a) determined by the **ATH certifying the metering installation** under clauses 5 and 6 of Schedule 10.7; and
  - (b) recorded in the **metering installation certification report** under clause 8(4) of Schedule 10.7.

#### **10.12 Interference with metering installation**

A **participant** must not directly or indirectly interfere with a **metering installation** for which it is not the **metering equipment provider**, unless—

- (a) it is instructed or permitted to do so by the **metering equipment provider** responsible for the **metering installation**; or
- (b) the **participant** has an arrangement with the **trader** responsible for the **metering installation** as the **gaining metering equipment provider** who will be responsible for the **metering installation**.

#### **10.13 Electricity conveyed**

- (1) A **participant** must use the quantity of **electricity** measured by a **metering installation** for a **point of connection** as the **raw meter data** for the quantity of **electricity** conveyed through the **point of connection**.
- (2) Subclause (1) does not apply to **electricity** that is—
  - (a) estimated in accordance with this Code; or
  - (b) supplied by an **embedded generator** who has given notice to the **reconciliation manager** under clause 15.13.
- (3) A **metering equipment provider** must, for each **point of connection** at which it is the **metering equipment provider**, ensure that all **electricity** conveyed through the **point of connection** is measured by a **metering installation** or **metering installations**, in accordance with this Part.
- (4) Despite subclause (3), a **metering equipment provider** is not required to measure **electricity** conveyed through a **point of connection** if the **electricity** is—
  - (a) **unmetered load**; or
  - (b) supplied by an **embedded generator** who has given notice to the

**reconciliation manager** under clause 15.13.

Clause 10.13(2)(b): amended, on 1 November 2018, by clause 21(a) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

Clause 10.13(4)(b): amended, on 1 November 2018, by clause 21(b) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

*Unmetered load*

**10.14 Unmetered load**

- (1) This clause applies to a **retailer** who is recorded in the **registry** as being responsible for an **ICP**.
- (2) A **retailer**—
  - (a) must quantify any **unmetered load** at the **ICP** in accordance with Parts 11 and 15; and
  - (b) may, subject to subclause (3), only treat load as **unmetered load** if it reasonably expects, in any rolling 12 month period, the load to be not greater than—
    - (i) 3,000 kWh; or
    - (ii) 6,000 kWh if the load is predictable load of a type approved and **published** by the **Authority**.
- (3) Subclause (2)(b) does not apply to **distributed unmetered load** managed in accordance with Part 15.
- (4) If the load during a rolling 12 month period exceeds the applicable limit under subclause (2)(b), the **retailer** breaches this clause from the date on which the limit was, or was calculated or estimated to have been, first exceeded.
- (5) A **retailer** described in subclause (4) must—
  - (a) as soon as reasonably practicable, but no later than 20 **business days** after the limit was calculated or estimated to have been first exceeded, commence corrective measures to ensure that it complies with this Part; and
  - (b) within 20 **business days** of commencing the corrective measures referred to in paragraph (a), complete the corrective measures so that it complies with this Part; and
  - (c) as soon as reasonably practicable, but no later than 10 **business days** after it becomes aware of the limit having been calculated or estimated to have been first exceeded, advise each **participant** who is, or would reasonably be expected to be, affected, of—
    - (i) the date on which the limit was calculated or estimated to have been first exceeded; and
    - (ii) the details of the corrective measures that the **retailer** proposes to take, has taken, or is taking, to reduce the **unmetered load**.

Clause 10.14(5)(c)(ii): amended, on 29 August 2013, by clause 12 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

*Metering data*

**10.15 Security of metering data**

- (1) This clause applies to—

- (a) a **participant** who has the right to collect, obtain, use, or store **metering data**; and
  - (b) the **Authority**.
- (2) A person to whom this clause applies must take security measures, as are reasonable in the circumstances, to protect **metering data** against loss or unauthorised access, use, modification, or disclosure.
- (3) Subclause (2) is subject to—
- (a) the person's obligations under any other enactment; and
  - (b) the person being otherwise compelled by law; and
  - (c) any applicable material that the **Authority** incorporates into this Code under section 32(3) of the **Act**.

### 10.16 Metering data exchange timing and formats

- (1) A **participant** (other than a **market operation service provider**) must, if it is under an obligation to provide **metering data** under this Part, provide the **metering data** to the relevant person—
- (a) in the absence of any timeframe specified in this Code, within a reasonable timeframe specified by the **Authority**; and
  - (b) in the format the **Authority** specifies to **participants** from time to time.
- (2) The **Authority** must provide reasonable notice of any changes to the format the **Authority** specifies under subclause (1)(b).
- (3) Despite subclause (1)(b), a **participant** may provide the **metering data** in an alternative format if it has an arrangement with the recipient to use the alternative format.
- (4) Despite subclause (3), the **participant** must be able to comply with any format requirements the **Authority** specifies under subclause (1)(b), within 1 **business day** of ceasing to have an arrangement with the recipient under subclause (3).
- (5) Despite using an alternative format under subclause (3), a **participant** must still comply with all other obligations in this Code.

Clause 10.16(1)(a) amended, on 1 November 2018, by clause 22(a) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

Clause 10.16(1)(b): amended, on 1 November 2018, by clause 22(b) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

Clause 10.16(2) amended, on 1 November 2018, by clause 22(c) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

Clause 10.16(4): amended, on 1 November 2018, by clause 22(d) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

### *Audits*

### 10.17 [Revoked]

Clause 10.17(1): revoked, on 1 February 2016, by clause 25 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 10.17(1): inserted, on 1 May 2016, by clause 5(1) of the Electricity Industry Participation Code Amendment (Minor Code Amendments) 2016.

Clause 10.17(2): revoked, on 1 May 2016, by clause 5(2) of the Electricity Industry Participation Code Amendment (Minor Code Amendments) 2016.

Clause 10.17: revoked, on 1 June 2017, by clause 6 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

### **10.17A Metering equipment providers and ATHs to arrange for regular audits**

Each **metering equipment provider** and each **ATH** must arrange to be **audited** regularly in accordance with Part 16A in respect of the **metering equipment provider's** or **ATH's** obligations under this Part.

Clause 10.17A: inserted, on 1 June 2017, by clause 7 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

### **10.17B Authority and participant requested audits**

- (1) The **Authority** may at any time carry out, or appoint an **auditor** to carry out, an **audit** of a **participant** in respect of the **participant's** obligations under this Part.
- (2) If a **participant** considers that another **participant** may not have complied with this Part, the **participant** may request that the **Authority** carry out, or appoint an **auditor** to carry out, an **audit** of the other **participant**.
- (3) Part 16A applies to an **audit** carried out under this clause.

Clause 10.17B: inserted, on 1 June 2017, by clause 7 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

## Subpart 2—Ongoing obligations

### *Metering equipment providers*

### **10.18 Category 1 metering installations and higher categories of metering installations must have metering equipment provider**

- (1) A **participant** who is responsible under Part 15 for providing **submission information** to the **reconciliation manager** for a **point of connection** must ensure that, for each **metering installation** for the **point of connection** used for an activity regulated under this Code, there is a **metering equipment provider**.
- (2) A **participant** must not use, and must not permit any person to use, a **category 1 metering installation**, or higher category of **metering installation**, for a **point of connection** for an activity regulated under this Code unless, at the time of such use, there is a **metering equipment provider** for the **metering installation**.
- (3) Despite subclauses (1) and (2), a **point of connection** at which all **electricity** conveyed is **unmetered load**—
  - (a) does not require a **metering equipment provider**; and
  - (b) may be used for an activity regulated under this Code.
- (4) If there is more than 1 **metering installation** for a **point of connection**, the **metering equipment provider** for each **metering installation** must be the same **participant**.

### **10.19 Metering equipment provider**

- (1) The **metering equipment provider** for each existing **category 1 metering installation**, or higher category of **metering installation**, being used on 29 August 2013 for an activity regulated under this Code, for a **point of connection**—
  - (a) that is an **ICP** and not also an **NSP**, is the **participant**, or a **consumer**, who is identified in the **registry** as being the primary metering contact at 2400 hours on 28 August 2013;
  - (b) that is an **NSP** and not also a **point of connection** to the **grid**—
    - (i) is the **participant** who owns the **meter** for the **point of connection**:

- (ii) if there is more than 1 **meter** for the **point of connection**, is the **participant** who is appointed by the **meter** owners for the **point of connection**, or failing agreement, appointed by the **Authority**;
  - (c) to the **grid**, is the **participant** responsible for **metering** as set out in the **NSP** table on the **Authority's** website at 2400 hours on 28 August 2013.
- (2) The **metering equipment provider** for each **category 1 metering installation**, or higher category of **metering installation** for a **point of connection**, other than a **metering installation** referred to in subclause (1),—
- (a) that is an **ICP** and not also an **NSP**, is the person recorded in the **registry** as accepting responsibility as the **metering equipment provider** under clause 1(1)(a)(ii) of Schedule 11.4:
  - (b) that is an **NSP** and not also a **point of connection** to the **grid**, is—
    - (i) the **network** owner referred to in clause 10.25(2)(a)(i); or
    - (ii) if a person has contracted with the **network** owner under clause 10.25(2)(a)(ii), that person:
  - (c) that is a **point of connection** to the **grid**, is—
    - (i) the **participant** referred to in clause 10.26(7)(b); or
    - (ii) if a person has contracted with the **participant** responsible for providing a **metering installation** under clause 10.26(7)(b), that person.

Clause 10.19(1): amended, on 29 August 2013, by clause 13(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.19(1)(a): amended, on 29 August 2013, by clause 13(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.19(1)(b)(ii): amended, on 5 October 2017, by clause 160(a) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 10.19(1)(c): amended, on 29 August 2013, by clause 13(3) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.19(2)(a): amended, on 5 October 2017, by clause 160(b) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

## 10.20 Obligations of metering equipment provider

A **metering equipment provider** must—

- (a) *[Revoked]*
- (b) comply with all of its obligations in this Code including the obligations under Schedules 10.6, 10.7, and 10.8.

Clause 10.20(a): revoked, on 1 June 2017, by clause 8 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

## 10.21 When metering equipment provider's obligations come into effect

- (1) The obligations under this Part of a person who assumes responsibility, or is appointed to be responsible, as the **metering equipment provider**, under clauses 10.19(2) or 10.22, for a **metering installation**, commence,—
  - (a) for an **ICP** that is not also an **NSP**, on the date that is recorded in the **registry** as being the date on which the **metering installation equipment** was installed; or
  - (b) for an **NSP**, on the effective date set out in the **NSP** table on the **Authority's** website.
- (2) Despite subclause (1), if a person fails to become the **metering equipment provider** due solely to an administrative failure or similar reason, the **Authority** may determine

the date that the person becomes the **metering equipment provider**.

Clause 10.21(1)(a): substituted, on 29 August 2013, by clause 14 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

### 10.22 Change of metering equipment provider

- (1) The **metering equipment provider** for a **metering installation** may change only if the **participant** responsible for ensuring there is a **metering installation** under clause 10.24, 10.25, or 10.26 enters into an arrangement with another person to become the **metering equipment provider** for the **metering installation** and—
  - (a) in the case of a **metering installation** for an **ICP** that is not also an **NSP**—
    - (i) the **trader** for the **metering installation** records the name of the **gaining metering equipment provider** in the **registry** in accordance with Part 11; and
    - (ii) the **gaining metering equipment provider** records in the **registry** that it accepts becoming the **metering equipment provider** (including the effective date from which the **gaining metering equipment provider** assumes its responsibility as **metering equipment provider** for the **metering installation**) in accordance with Part 11; or
  - (b) in the case of a **metering installation** for an **NSP**, the **participant** responsible for the provision of the **metering installation** under clause 10.25 advises the **reconciliation manager** of the **gaining metering equipment provider**.
- (2) The **gaining metering equipment provider** must, within 20 **business days** of assuming responsibility for a **metering installation**, pay the **losing metering equipment provider** the proportion of the costs described in subclause (3).
- (3) The costs payable under subclause (2) are those directly and solely attributable to the **certification** tests and **calibration** tests of the **metering installation** or any of its **metering components** from the period beginning on the date the **gaining metering equipment provider** assumes responsibility for the **metering installation**, for the remainder of the **certification** validity period for the **metering installation** or the **metering component**.

Clause 10.22(1)(a)(i) and (ii): amended, on 5 October 2017, by clause 161(a) and (b) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### 10.23 Termination of metering equipment provider responsibility

- (1) Subject to subclause (2), a **metering equipment provider's** obligations under this Part for a **metering installation** terminate only when—
  - (a) for an **ICP** that is not also an **NSP**, the **metering equipment provider** changes under clause 10.22(1)(a), in which case the **metering equipment provider's** obligations terminate from the date on which the **gaining metering equipment provider** assumes responsibility, set out in clause 10.21(1)(a); or
  - (b) for an **NSP**, the **metering equipment provider** changes under clause 10.22(1)(b), in which case the **metering equipment provider's** obligations terminate from the date on which the **gaining metering equipment provider** assumes responsibility, set out in clause 10.21(1)(b); or
  - (c) the **metering installation** is no longer required for the purposes of Part 15 and the

- point of connection** for the **metering installation** has been **decommissioned**; or
- (d) the **ICP** for the **metering installation** is converted to be used solely for **unmetered load** in accordance with this Code.
- (2) Despite subclause (1), a **metering equipment provider** must either—
- (a) comply with its continuing obligations, including record keeping obligations, which—
- (i) are expressed in this Part as having minimum time periods, until that period expires; or
- (ii) by their nature extend beyond the date or event referred to in subclause (1); or
- (b) before its obligations terminate under subclause (1), enter into an arrangement with a **participant** to assume its obligations referred to in paragraph (a).

#### 10.23A Decommissioning of metering installation at ICP

- (1) If a **metering installation** at an **ICP** is to be **decommissioned**, but the **ICP** is not being **decommissioned**, the **metering equipment provider** that is responsible for **decommissioning** the **metering installation** must,—
- (a) if the **metering equipment provider** is responsible for **interrogating** the **metering installation**—
- (i) arrange for a final **interrogation** to take place before the **metering installation** is **decommissioned**; and
- (ii) provide the **raw meter data** from the **interrogation** to the **trader** that is recorded in the **registry** as being responsible for the **ICP**; or
- (b) if another **participant** is responsible for **interrogating** the **metering installation**, advise the other **participant** not less than 3 **business days** before the **decommissioning**—
- (i) of the date and time of the **decommissioning**; and
- (ii) that the **participant** must carry out a final **interrogation**.
- (2) To avoid doubt, if a **metering installation** at an **ICP** is to be **decommissioned** because the **ICP** is being **decommissioned**—
- (a) the **metering equipment provider** is not responsible for arranging a final **interrogation** of the **metering installation**; and
- (b) the **trader** that is recorded in the **registry** as being responsible for the **ICP** must arrange for a final **interrogation** of the **metering installation** under clause 11.18(3).

Clause 10.23(A): inserted, on 1 November 2018, by clause 23 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

#### *Responsibility for ensuring there are metering installations*

#### 10.24 Responsibility for ensuring there is metering installation for ICP that is not also NSP

A **trader** must, for each **electrically connected ICP** that is not also an **NSP**, and for which it is recorded in the **registry** as being responsible, ensure that—

- (a) there is 1 or more **metering installations**; and
- (b) all **electricity** conveyed is quantified in accordance with this Code; and
- (c) it does not use subtraction to determine **submission information** for the purposes

of Part 15.

Clause 10.24: amended, on 5 October 2017, by clause 162 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### **10.25 Responsibility for ensuring there is metering installation for NSP that is not point of connection to grid**

- (1) A **distributor** must, for each **NSP** that is not a **point of connection** to the **grid**, and for which it is recorded in the **NSP** table on the **Authority's** website as being responsible, ensure that—
  - (a) there is 1 or more **metering installations**; and
  - (b) all **electricity** conveyed is quantified in accordance with this Code:
- (2) A **distributor** must, if it proposes the creation of a new **NSP** that is not a **point of connection** to the **grid**,—
  - (a) for each **metering installation** for the **NSP**, either—
    - (i) assume responsibility for being the **metering equipment provider**; or
    - (ii) contract with a person who, in that contract, assumes responsibility for being the **metering equipment provider**; and
  - (b) no later than 20 **business days** after assuming responsibility or entering into the contract under paragraph (a), advise the **reconciliation manager** of—
    - (i) the **reconciliation participant** for the **NSP**; and
    - (ii) the **participant identifier** of the **metering equipment provider** for the **metering installation**; and
  - (c) no later than 20 **business days** after the date of **certification** of each **metering installation**, advise the **reconciliation manager** of the **certification** expiry date of the **metering installation**.
- (3) In relation to an **NSP** of the type described in subclause (1), a **distributor** must, no later than 20 **business days** after a **metering installation** for such an **NSP** is **recertified**, advise the **reconciliation manager** of the following:
  - (a) the **reconciliation participant** for the **NSP**;
  - (b) the **participant identifier** of the **metering equipment provider** for the **metering installation**;
  - (c) the **certification** expiry date of the **metering installation**.

Clause 10.25(1): amended, on 29 August 2013, by clause 15(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.25(2): amended, on 29 August 2013, by clause 15(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.25(2)(b)(ii): amended, on 29 August 2013, by clause 15(3) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.25(2)(b)(ii): amended, on 1 February 2016, by clause 26(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 10.25(2)(c): amended, on 1 February 2016, by clause 26(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 10.25(3): inserted, on 1 February 2016, by clause 26(3) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

### **10.26 Responsibility for ensuring there is metering installation for point of connection to grid**

- (1) A **grid owner** must, for each **GXP** which connects to its **grid**, ensure that there is 1 or more **certified metering installations** for the **GXP**.

- (2) An **asset owner** must, for each **GIP** which connects to the **grid**, ensure that there is 1 or more **certified metering installations** for the **GIP**.
- (3) A **participant** who proposes to connect to the **grid** at a new **point of connection** must take all practicable steps and use its best endeavours to agree with the **grid owner** and any other affected **participants**, on which **participant** will provide the **metering installation** for the proposed new **point of connection**.
- (4) If the **participants** cannot agree, within 60 **business days** of the **grid owner** first being advised of the proposed new **point of connection** to the **grid**, on the **participant** to be responsible for providing the **metering installation**,—
  - (a) any affected **participant** may advise the **Authority**—
    - (i) that agreement has not been reached; and
    - (ii) of the identity of all affected **participants**; and
    - (iii) of the reasons (if and to the extent known) that agreement was not reached; and
  - (b) the **Authority** must determine which **participant** must provide the **metering installation**; and
  - (c) the **Authority** must advise—
    - (i) the relevant **participant** of its responsibility to provide the **metering installation**; and
    - (ii) the **participant** intending to connect to the **grid** of its determination; and
    - (iii) the **grid owner** of its determination.
- (5) When determining which **participant** is responsible for providing the **metering installation**, the **Authority** must, unless it is satisfied that there is good reason not to do so, do so on the basis that—
  - (a) the **grid owner** is responsible if the **Authority** anticipates that the **point of connection** is a **GXP**; and
  - (b) the **participant** connecting **assets** to the **grid** at the **point of connection** is responsible if the **Authority** anticipates that the **point of connection** is a **GIP**.
- (6) The **participant** responsible for providing the **metering installation** (unless the **participant** is a **grid owner**) must also, for each proposed new **metering installation** for a **point of connection** to the **grid**,—
  - (a) provide a copy of the **metering installation** design to the **grid owner** before ordering equipment; and
  - (b) provide the **grid owner** with at least 3 months to review and comment on the **metering installation** design; and
  - (c) respond, within 3 **business days** of receipt, to any request from the **grid owner** for additional details or required changes to the **metering installation**; and
  - (d) ensure that any reasonable changes to the **metering installation** or the **metering installation** configuration requested by the **grid owner** are carried out.
- (7) The **participant** responsible for providing the **metering installation** must—
  - (a) advise the **reconciliation manager** of the **certification** expiry date of the **metering installation** no later than 10 **business days** after **certification** of the **metering installation**; and
  - (b) assume responsibility for being the **metering equipment provider** for the **metering installation** or contract with a person to assume responsibility for being the **metering equipment provider** for the **metering installation**; and

- (c) advise the **reconciliation manager** of the **participant identifier** of the **metering equipment provider** under paragraph (b) by no later than 20 **business days** after,—
  - (i) if it is appointed under a contract, entering into the contract under paragraph (b); or
  - (ii) if it assumes responsibility for being the **metering equipment provider**, other than under a contract, assuming responsibility.
- (8) The **participant** responsible for providing the **metering installation** (unless the **participant** is a **grid owner**) must, in the case of a proposed modification to an existing **metering installation** under clause 19 of Schedule 10.7—
  - (a) provide a copy of the **metering installation** design to the **grid owner** before ordering equipment or carrying out the modification to the **metering installation** design; and
  - (b) provide the **grid owner** with at least 3 months to review and comment on the **metering installation** design; and
  - (c) respond, within 3 **business days** of receipt, to any request from the **grid owner** for additional details or required changes to the **metering installation** or its configuration; and
  - (d) ensure that any reasonable changes to the **metering installation** or the **metering installation** configuration requested by the **grid owner** are carried out.
- (9) If the **grid owner** considers, acting reasonably, that a proposed new **metering installation**, or a proposed change to an existing **metering installation**, or its configuration, requires subtraction or a **loss compensation** or **error compensation** process to determine **submission information** for the purposes of Part 15, the **grid owner** must, unless an **error compensation** process is to be applied to the **metering installation** that is already within the applicable accuracy tolerances set out in Table 1 of Schedule 10.1—
  - (a) provide all relevant details to the **Authority**, in the **prescribed form**, at least 20 **business days** before—
    - (i) the proposed date for installing the **metering installation**; or
    - (ii) the proposed date for changing the **metering installation** or **metering installation's** configuration; and
  - (b) respond, within 3 **business days** of receipt, to any request from the **Authority** for additional details; and
  - (c) ensure that any reasonable changes to the **metering installation** or its configuration requested by the **Authority** are carried out.
- (10) A **metering equipment provider** must ensure that the quantity of **electricity** conveyed through a **point of connection** to the **grid** for which there is a **metering installation** for which it is responsible is measured using a **half-hour metering installation**.
- (11) If a **metering installation** for a **point of connection** to the **grid** is **recertified**, the **participant** responsible for providing the **metering installation** must, within 10 **business days** of the date of **recertification**, advise the **reconciliation manager** of the **metering installation's** new **certification** expiry date.

Clause 10.26(1): amended, on 29 August 2013, by clause 16(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.26(2): amended, on 29 August 2013, by clause 16(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.26(3): amended, on 23 February 2015, by clause 75 of the Electricity Industry Participation Code Amendment (Distributed Generation) 2014.

Clause 10.26(4)(c)(ii): amended, on 23 February 2015, by clause 75 of the Electricity Industry Participation Code Amendment (Distributed Generation) 2014.

Clause 10.26(5)(b): amended, on 23 February 2015, by clause 75 of the Electricity Industry Participation Code Amendment (Distributed Generation) 2014.

Clause 10.26(3), (4), (5) and 9: amended, on 5 October 2017, by clause 163 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### **10.27 Change in responsibility for ensuring metering installation for point of connection to grid**

- (1) If a **participant** considers, on the basis of historical **metering data**, that there has been a change in the overall net flow of **electricity** at a **point of connection** to the **grid** over any 12 month period, the **participant** who is responsible for ensuring there is a **metering installation** may initiate the process under clauses 10.26(3) to 10.26(5) with all necessary amendments, in order to change the **participant** responsible for providing the **metering installation**.
- (2) If the **participant** who is responsible for ensuring there is a **metering installation** changes under subclause (1), the responsibility for providing **submission information** to the **reconciliation manager** under Part 15 changes.

#### *Connecting and electrically connecting points of connection*

Heading: amended, on 29 August 2013, by clause 17(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Heading: amended, on 5 October 2017, by clause 164 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### **10.28 [Revoked]**

Clause 10.28: substituted, on 29 August 2013, by clause 17 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.28(2)(a), (2)(b) and (3): amended, on 23 February 2015, by clause 75 of the Electricity Industry Participation Code Amendment (Distributed Generation) 2014.

Clause 10.28: revoked, on 5 October 2017, by clause 165 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### **10.29 When grid owner may connect point of connection to grid**

- (1A) Only a **grid owner** may connect a **point of connection** to the **grid**.
- (1) Despite subclause (1A), a **grid owner** must not connect a **point of connection** to the **grid** unless it has—
  - (a) ensured that the processes described in clause 10.26 have been carried out; and
  - (b) requested, in the **prescribed form**, not less than 20 **business days** before the proposed connection date, authorisation from the **Authority**, to connect the **point of connection**; and
  - (c) obtained the authorisation referred to in paragraph (b) from the **Authority**.
- (2) The **grid owner** must, within 5 **business days** of connecting a **point of connection** to the **grid**, advise the **reconciliation manager** of—
  - (a) the **point of connection** that has been connected; and
  - (b) the connection date.

Heading: amended, on 5 October 2017, by clause 166(1) of the Electricity Industry Participation Code Amendment

(Code Review Programme) 2017.

Clause 10.29(1A): inserted, on 5 October 2017, by clause 166(2)(a) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 10.29(1) and (2): amended, on 5 October 2017, by clause 166(2)(b) to (d) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017. Clause 10.29: substituted, on 29 August 2013, by clause 18 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.29: amended, on 23 February 2015, by clause 75 of the Electricity Industry Participation Code Amendment (Distributed Generation) 2014.

### **10.29A When grid owner may temporarily electrically connect point of connection to grid**

- (1) Subject to clause 10.33, only a **grid owner** may temporarily **electrically connect a point of connection** to the **grid**.
- (2) A **grid owner** may temporarily **electrically connect a point of connection** to the **grid** that is to be quantified with a **category 1 metering installation**, or higher category of **metering installation**, only if a **metering equipment provider** requests that the **grid owner** temporarily **electrically connect the point of connection** to the **grid** for the purposes of—
  - (a) **certifying a metering installation** at the **point of connection** to the **grid**; or
  - (b) **maintaining, repairing, testing, or commissioning a metering installation** at the **point of connection** to the **grid**.
- (3) Despite subclause (2), a **metering equipment provider** must not request that a **grid owner** temporarily **electrically connect a point of connection** to the **grid** unless—
  - (a) the **grid owner** responsible for the **point of connection** has authorised the **metering equipment provider** to do so; and
  - (b) the **metering equipment provider** has an arrangement with that **grid owner** to provide **metering services**.

Clause 10.29A: inserted, on 5 October 2017, by clause 167 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### **10.30 When distributor or embedded network owner may connect NSP that is not point of connection to grid**

- (1A) Only a **distributor** that initiates, under Part 11, the creation of an **NSP** on the **distributor's network** that is not a **point of connection** to the **grid** may connect the **NSP** to—
  - (a) an **embedded network**, if the **embedded network** owner has agreed to the connection; or
  - (b) a **local network**, if the **local network** owner has agreed to the connection.
- (1B) Only an **embedded network** owner that initiates, under Part 11, the creation of an **NSP** on its **embedded network**—
  - (a) may connect the **NSP** to another **embedded network**; but
  - (b) can only do so if the other **embedded network** owner has agreed to the connection.
- (1) Despite subclause (1A), a **distributor** must not connect an **NSP** on its **network** that is not a **point of connection** to the **grid** unless requested to do so by the **reconciliation participant** responsible for ensuring there is a **metering installation** for the **point of connection**.

- (2) A **distributor** must, within 5 **business days** of connecting an **NSP**, advise the **reconciliation manager** of the following:
- (a) the **NSP** that has been connected; and
  - (b) the connection date; and
  - (c) the **participant identifier** of the **metering equipment provider** for each **metering installation** for the **NSP**; and
  - (d) the **certification** expiry date of each **metering installation** for the **NSP**.

Clause 10.30: substituted, on 29 August 2013, by clause 19 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.30: amended, on 23 February 2015, by clause 75 of the Electricity Industry Participation Code Amendment (Distributed Generation) 2014.

Clause 10.30: replaced, on 5 October 2017, by clause 168 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### **10.30A When distributor may temporarily electrically connect NSP that is not point of connection to grid**

- (1) Subject to clause 10.33, only a **distributor** that initiates, under Part 11, the creation of an **NSP** on the **distributor's network** that is not a **point of connection** to the **grid** may temporarily **electrically connect** the **NSP** to—
- (a) an **embedded network**, if the **embedded network** owner has agreed to the temporary **electrical connection**; or
  - (b) a **local network**, if the **local network** owner has agreed to the temporary **electrical connection**.
- (2) Subject to clause 10.33, only an **embedded network** owner that initiates, under Part 11, the creation of an **NSP** on its **embedded network**—
- (a) may temporarily **electrically connect** the **NSP** to another **embedded network**; but
  - (b) can only do so if the other **embedded network** owner has agreed to the temporary **electrical connection**.
- (3) A **distributor** may only temporarily **electrically connect** an **NSP** that is not a **point of connection** to the **grid** if a **metering equipment provider** requests that the **distributor** temporarily **electrically connect** the **NSP** for the purposes of—
- (a) **certifying** a **metering installation** at the **NSP**; or
  - (b) maintaining, repairing, testing, or **commissioning** a **metering installation** at the **NSP**.
- (4) Despite subclause (3), a **metering equipment provider** must not request that a **distributor** temporarily **electrically connect** an **NSP** that is not a **point of connection** to the **grid** unless—
- (a) the **reconciliation participant** responsible for the **NSP** authorises the **metering equipment provider** to do so; and
  - (b) the **metering equipment provider** has an arrangement with that **reconciliation participant** to provide **metering** services.

Clause 10.30A: inserted, on 5 October 2017, by clause 169 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### **10.31 When distributor may connect ICP that is not NSP**

- (1) Only a **distributor** may, on its **network**, connect an **ICP** that is not an **NSP**.

- (2) Despite subclause (1), a **distributor** must not connect an **ICP** that is not an **NSP** unless—
- (a) the **trader** trading at the **ICP** has requested the connection; or
  - (b) in the following circumstances:
    - (i) there is only **shared unmetered load** at the **ICP**; and
    - (ii) in accordance with clause 11.14, the **distributor** has—
      - (A) assigned the **shared unmetered load**; and
      - (B) advised each **trader**, that is responsible under clause 11.18(1) for the **ICPs** across which the **unmetered load** is shared, of that assignment.

Clause 10.31: substituted, on 29 August 2013, by clause 20 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.31(a): amended, on 23 February 2015, by clause 75 of the Electricity Industry Participation Code Amendment (Distributed Generation) 2014.

Clause 10.31: replaced, on 5 October 2017, by clause 170 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 10.31(1): amended, on 1 November 2018, by clause 24(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

Clause 10.31(2): replaced, on 1 November 2018, by clause 24(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

### **10.31A When distributor may temporarily electrically connect ICP that is not NSP**

- (1) Subject to clause 10.33, only a **distributor** may, on its **network**, temporarily **electrically connect** an **ICP** that is not an **NSP**.
- (2) A **distributor** may only temporarily **electrically connect** an **ICP** that is not an **NSP**—
- (a) if a **metering equipment provider** requests that the **distributor** temporarily **electrically connect** the **ICP** for the purposes of—
    - (i) **certifying a metering installation** at the **ICP**; or
    - (ii) **maintaining, repairing, testing, or commissioning a metering installation** at the **ICP**; or
  - (b) in the following circumstances:
    - (i) there is only **shared unmetered load** at the **ICP**; and
    - (ii) in accordance with clause 11.14, the **distributor** has—
      - (A) assigned the **shared unmetered load**; and
      - (B) advised each **trader**, that is responsible under clause 11.18(1) for the **ICPs** across which the **unmetered load** is shared, of that assignment; and
    - (iii) the **distributor** has advised those **traders** of the **distributor's** intention to temporarily **electrically connect** the **ICP**.
- (3) Despite subclause (2)(a), a **metering equipment provider** must not request that a **distributor** temporarily **electrically connect** an **ICP** that is not an **NSP** unless—
- (a) the **trader** responsible for the **ICP** has authorised the **metering equipment provider** to do so; and
  - (b) the **metering equipment provider** has an arrangement with that **trader** to provide **metering** services.
- (4) Despite subclause (2)(b), the **distributor** need not advise the **traders** of the **distributor's** intention to temporarily **electrically connect** the **ICP** if—
- (a) advising all **traders** would impose a material cost on the **distributor**; and

(b) in the **distributor's** reasonable opinion, advising the **traders** would not result in any material benefit to any of the **traders**. Clause 10.31A: inserted, on 5 October 2017, by clause 171 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.  
Clause 10.31A(1): amended, on 1 November 2018, by clause 25(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.  
Clause 10.31A(2): replaced, on 1 November 2018, by clause 25(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.  
Clause 10.31A(3): amended, on 1 November 2018, by clause 25(3) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.  
Clause 10.31A(4): inserted, on 1 November 2018, by clause 25(4) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

### **10.31B When distributor may electrically connect ICP that is not NSP**

- (1) A **distributor** may **electrically connect** an **ICP** that is not an **NSP** only if—
- (a) there is only **shared unmetered load** at the **ICP**; and
  - (b) in accordance with clause 11.14, the **distributor** has—
    - (i) assigned the **shared unmetered load**; and
    - (ii) advised each **trader**, that is responsible under clause 11.18(1) for the **ICPs** across which the **unmetered load** is shared, of that assignment; and
  - (c) the **distributor** has advised those **traders** of the **distributor's** intention to **electrically connect** the **ICP**.
- (2) Despite subclause (1)(b), the **distributor** need not advise the **traders** of the **distributor's** intention to **electrically connect** the **ICP** if—
- (a) the **distributor** is doing so following a maintenance outage; and
  - (b) advising all **traders** would impose a material cost on the **distributor**; and
  - (c) in the **distributor's** reasonable opinion, advising the **traders** would not result in any material benefit to any of the **traders**.

Clause 10.31B: inserted, on 1 November 2018, by clause 26 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

### **10.32 Reconciliation participant requesting connection of point of connection**

For the purposes of clauses 10.30(1) and 10.31(2), a **reconciliation participant** must only request the connection of a **point of connection** if the **reconciliation participant**—

- (a) accepts responsibility for the **reconciliation participant's** obligations in this Part and Parts 11 and 15 for the **point of connection**; and
- (b) has an arrangement with a **metering equipment provider** to provide 1 or more **metering installations** for the **point of connection**.

Clause 10.32 Heading: amended, on 29 August 2013, by clause 21(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.32 Heading: amended, on 5 October 2017, by clause 172(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 10.32: amended, on 29 August 2013, by clause 21(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.32: amended, on 5 October 2017, by clause 172(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### **10.33 When reconciliation participant may temporarily electrically connect point of connection**

- (1) A **reconciliation participant** may temporarily **electrically connect** a **point of connection**, or authorise a **metering equipment provider** to temporarily **electrically connect** a **point of connection** under subclause (2), only if—

- (aa) for an **NSP** that is a **point of connection** to the **grid**, the **grid owner** has approved—
  - (i) the **reconciliation participant** temporarily **electrically connecting** the **point of connection**; or
  - (ii) the **reconciliation participant** authorising the temporary **electrical connection** of the **point of connection**:
- (ab) for an **NSP** that is not a **point of connection** to the **grid**, the **distributor** that gave notice to the **reconciliation manager** under clause 25 of Schedule 11.1 has approved—
  - (i) the **reconciliation participant** temporarily **electrically connecting** the **point of connection**; or
  - (ii) the **reconciliation participant** authorising the temporary **electrical connection** of the **point of connection**:
- (a) for a **point of connection** that is an **ICP**, but which is not an **NSP**,—
  - (i) the **reconciliation participant** is recorded in the **registry** as the **trader** responsible for the **ICP**; and
  - (ii) if the **ICP** has metered load, 1 or more **certified metering installations** are in place at the **ICP** in accordance with this Part; and
  - (iii) if the **ICP** has not previously been **electrically connected**, the owner of the **network** to which the **point of connection** is connected has given written approval of the temporary **electrical connection**.
- (b) *[Revoked]*
- (c) *[Revoked]*
- (2) A **reconciliation participant** described in subclause (1) may authorise a **metering equipment provider**, with which the **reconciliation participant** has an arrangement, to request the temporary **electrical connection** of a **point of connection** only for the purposes of—
  - (a) **certifying a metering installation** at the **point of connection**; or
  - (b) **maintaining, repairing, testing, or commissioning a metering installation** at the **point of connection**.
- (3) *[Revoked]*
- (4) *[Revoked]*

Heading: amended, on 5 October 2017, by clause 173(a) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 10.33: substituted, on 29 August 2013, by clause 22 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.33(1): amended, on 5 October 2017, by clause 173(b) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 10.33(1)(aa) and (ab): inserted, on 1 November 2018, by clause 27(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

Clause 10.33(1)(a): replaced, on 1 November 2018, by clause 27(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

Clause 10.33(1)(b) and (c): revoked, on 1 November 2018, by clause 27(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

Clause 10.33(1)(c): amended, on 23 February 2015, by clause 75 of the Electricity Industry Participation Code Amendment (Distributed Generation) 2014.

Clause 10.33(1)(c): amended, on 1 February 2016, by clause 27 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 10.33(2): replaced, on 5 October 2017, by clause 173(c) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 10.33(2): amended, on 1 November 2018, by clause 27(3) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

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Clause 10.33(3) and (4): revoked, on 5 October 2017, by clause 173(d) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

**10.33A When reconciliation participant may electrically connect point of connection**

- (1) A **reconciliation participant** may electrically connect a **point of connection**, or authorise the **electrical connection** of a **point of connection**, only if—
- (aa) for an **NSP** that is a **point of connection** to the **grid**, the **grid owner** has approved—
    - (i) the **reconciliation participant electrically connecting the point of connection**; or
    - (ii) the **reconciliation participant** authorising the **electrical connection** of the **point of connection**:
  - (ab) for an **NSP** that is not a **point of connection** to the **grid**, the **distributor** that gave notice to the **reconciliation manager** under clause 25 of Schedule 11.1 has approved—
    - (i) the **reconciliation participant electrically connecting the point of connection**; or
    - (ii) the **reconciliation participant** authorising the **electrical connection** of the **point of connection**:
  - (a) for a **point of connection** that is an **ICP**, but which is not an **NSP**,—
    - (i) the **reconciliation participant** is recorded in the **registry** as the **trader** responsible for the **ICP**; and
    - (ii) if the **ICP** has metered load, 1 or more **certified metering installations** are in place at the **ICP** in accordance with this Part; and
    - (iii) if the **ICP** has not previously been **electrically connected**, the owner of the **network** to which the **point of connection** is connected has given written approval of the **electrical connection**.
  - (b) *[Revoked]*
  - (c) *Revoked]*
- (2) Further to subclause (1), a **reconciliation participant** described in subclause (1)(a)(i)—
- (a) may authorise the **electrical connection** of an **ICP** if—
    - (i) a **metering installation** is in place at the **ICP**; and
    - (ii) the **metering installation** is operational but not **certified**; and
    - (iii) the **reconciliation participant** arranges for the **certification** of the **metering installation** to be completed within 5 **business days** of the **ICP** being **electrically connected**:
  - (b) may **electrically connect** an **ICP** if the **point of connection** is solely for **unmetered load**.
- (3) A **reconciliation participant** must not authorise the **electrical connection** of a **point of connection** in either of the following circumstances:
- (a) a **distributor** has **electrically disconnected** the **point of connection** for safety reasons, and has not subsequently approved the **electrical connection** of the **point of connection**:
  - (b) **electrically connecting** the **point of connection** would breach the Electricity (Safety) Regulations 2010.
- (4) No **participant** may **electrically connect** a **point of connection**, or authorise the **electrical connection** of a **point of connection**, other than—

- (a) a **reconciliation participant** in the circumstances described in subclauses (1), (2), or (3):
  - (b) a **distributor** in the circumstances described in clause 10.31B(1).
- Clause 10.33A: inserted, on 5 October 2017, by clause 174 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.
- Clause 10.33A(1)(aa) and (ab): inserted, on 1 November 2018, by clause 28(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.
- Clause 10.33A(1)(a): replaced, on 1 November 2018, by clause 28(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.
- Clause 10.33A(1)(b) and (c): revoked, on 1 November 2018, by clause 28(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.
- Clause 10.33A(2): amended, on 1 November 2018, by clause 28(3) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.
- Clause 10.33A(4): replaced, on 1 November 2018, by clause 28(4) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

### *General metering installation requirements*

#### **10.34 Installation and modification of metering installations**

- (1) This clause applies to a **metering equipment provider** that proposes to install or modify a **metering installation** at a **point of connection** other than a **point of connection** to the **grid**.
- (2) The **metering equipment provider** must consult with the **distributor** and the **trader** for the **point of connection** on the matters specified in subclause (2A), before—
  - (a) finalising the design of a **metering installation** for the **point of connection**; or
  - (b) modifying the design of a **metering installation** installed at the **point of connection**.
- (2A) The matters referred to in subclause (2) are the **metering installation's**—
  - (a) required functionality; and
  - (b) terms of use; and
  - (c) required interface format; and
  - (d) integration of the ripple receiver and the **meter**; and
  - (e) functionality for controllable load.
- (3) Each **participant** involved in the consultation referred to in subclause (2) must—
  - (a) use its best endeavours to reach agreement; and
  - (b) act reasonably and in good faith.
- (4) If the **participants** referred to in subclause (2) cannot agree, within 20 **business days** of the **distributor** first being advised of the proposed new or modified **metering installation**, on the **metering installation's** requirements set out in subclause (2A)(a) to (e)—
  - (a) an affected **participant** may refer the matter to the **Authority** under clause 10.50 by advising the **Authority**—
    - (i) that agreement has not been reached; and
    - (ii) of the identity of all affected **participants**; and
    - (iii) the reasons (if and to the extent known) why agreement was not reached; and
  - (b) the **Authority**—
    - (i) may, at its discretion, determine the **metering installation** requirements; and
    - (ii) must, if it determines the **metering installation** requirements,—

(A) do so in accordance with clause 10.50(4); and

(B) advise each affected **participant** of the determination it has made

Clause 10.34(1) and (2): substituted, on 1 February 2016, by clause 28(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 10.34(2): amended, on 1 May 2016, by clause 6 of the Electricity Industry Participation Code Amendment (Minor Code Amendments) 2016.

Clause 10.34(2A): inserted, on 1 February 2016, by clause 28(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 10.34(4): amended, on 1 February 2016, by clause 28(3) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

### 10.35 Physical location of metering installations

- (1) A **reconciliation participant** responsible for ensuring there is a **category 1 metering installation** or **category 2 metering installation** must ensure that the **metering installation** is located as physically close to a **point of connection** as practical in the circumstances.
- (2) A **reconciliation participant** responsible for ensuring there is a category 3 or higher **metering installation** must,—
  - (a) if practical in the circumstances, ensure that the **metering installation** is located at a **point of connection**; or
  - (b) if it is not practical in the circumstances to locate the **metering installation** at the **point of connection**, calculate the quantity of **electricity** conveyed through the **point of connection** using a **loss compensation** process approved by the **certifying ATH**.
- (3) If a calculation is carried out under subclause (2)(b), the certifying **ATH** must record in the **metering installation certification report**—
  - (a) the details of the calculation; and
  - (b) any assumption used; and
  - (c) any measurement used.
- (4) This clause does not apply to an existing **metering installation** that is in place on 29 August 2013.

Clause 10.35(3): amended, on 29 August 2013, by clause 23(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.35(4): amended, on 29 August 2013, by clause 23(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

### 10.36 Reconciliation participant to have arrangement with metering equipment provider

A **reconciliation participant** must, before accepting responsibility to be the **reconciliation participant** for a **point of connection**, enter into an arrangement with a **metering equipment provider**—

- (a) for the **reconciliation participant** to provide the **metering equipment provider** with physical access to the **metering installation** for the **point of connection** and the premises at which it is situated; and
- (b) arranging for the **electrical disconnection** of the **point of connection**, if required by the **metering equipment provider** to enable the **metering equipment provider** to comply with its obligations under this Part; and
- (c) for the **metering equipment provider** to provide the **reconciliation participant** with access at the **services access interface** to the **metering data** from the

**metering installation** for the **point of connection**, in accordance with an authorisation from—

- (i) in the case of an **ICP**, the **consumer**; or
- (ii) in the case of an **NSP**, the **network** owner.

Clause 10.36(b): amended, on 5 October 2017, by clause 175 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

*Active and reactive energy metering*

**10.37 Active and reactive measuring and recording requirements**

- (1) A **metering equipment provider** must ensure that each **half-hour metering installation** that is a **category 3 metering installation**, or higher category of **metering installation**, **certified** after 29 August 2013, measures and separately records, in accordance with this Part,—
  - (a) if the measuring and recording requirement is for consumption only—
    - (i) import **active energy**; and
    - (ii) import **reactive energy**; and
    - (iii) export **reactive energy**; or
  - (b) if the measuring and recording requirement is for consumption and generation, or generation only—
    - (i) import **active energy**; and
    - (ii) export **active energy**; and
    - (iii) import **reactive energy**; and
    - (iv) export **reactive energy**.
- (1A) A **metering equipment provider** must ensure that each **half-hour metering installation** that is a **category 2 metering installation**, **certified** after 29 August 2013, is capable of measuring and recording—
  - (a) import **active energy**; and
  - (b) export **active energy**; and
  - (c) import **reactive energy**; and
  - (d) export **reactive energy**.
- (1B) A **metering equipment provider** must ensure that each **half-hour metering installation** that is a **category 2 metering installation**, **certified** after 29 August 2013, measures and separately records, in accordance with this Part,—
  - (a) if the measuring and recording requirement is for consumption only, import **active energy**; or
  - (b) if the measuring and recording requirement is for consumption and generation, or generation only—
    - (i) import **active energy**; and
    - (ii) export **active energy**.
- (2) Despite subclauses (1)(a) and (1B)—
  - (a) each **metering installation**, for a **point of connection** to the **grid**, **certified** after 29 August 2013, must measure and separately record—
    - (i) import **active energy**; and
    - (ii) export **active energy**; and

- (iii) import **reactive energy**; and
- (iv) export **reactive energy**; and
- (b) the accuracy of each local service **metering installation** for **electricity** used in and by a **grid** substation must be within the applicable accuracy tolerances set out in Table 1 of Schedule 10.1.

Clause 10.37: amended, on 29 August 2013, by clause 24 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.37(1): amended, on 1 February 2016, by clause 29(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 10.37(1A) and (1B): inserted, on 1 February 2016, by clause 29(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 10.37(2): amended, on 1 February 2016, by clause 29(3) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

### *Certification of metering installations*

#### **10.38 Certification of metering installations**

A **metering equipment provider** must—

- (a) obtain and maintain **certification** in accordance with this Part—
  - (i) for each **metering installation** for which it is responsible; and
  - (ii) for each **metering component** in a **metering installation** for which it is responsible; and
- (b) ensure that any tests required for **certification** under paragraph (a) are conducted in accordance with this Code including the obligations under Schedule 10.7 or 10.8 (whichever is applicable) by an **ATH** contracted by the **metering equipment provider**.

### *Metering infrastructure*

#### **10.39 Responsibility for metering infrastructure integration**

- (1) A **metering equipment provider** must ensure that—
  - (a) for each **metering installation** for which it is responsible, an appropriately designed **metering infrastructure** is in place; and
  - (b) in each **metering installation** for which it is responsible,—
    - (i) each **metering component** is compatible with, and will not cause any interference with the operation of, any other **metering component** in the **metering installation**; and
    - (ii) collectively, all **metering components** integrate to provide a functioning system; and
  - (c) each **metering installation** for which it is responsible is correctly and accurately integrated within the associated **metering infrastructure**.
- (2) Subclause (1) does not apply to an **electrically disconnected metering installation** for an **ICP**.

Clause 10.39(2): amended, on 5 October 2017, by clause 176 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### *Approved test houses and ATHs*

#### **10.40 General requirements for approval as ATH**

- (1) A person wishing to be approved as an **ATH**, or an **ATH** wishing to renew its approval, must apply to the **Authority**—
  - (a) at least 2 months before the intended effective date of the approval or renewal;  
and
  - (b) in writing; and
  - (c) in the **prescribed form**; and
  - (d) in accordance with Schedule 10.3.
- (2) A person making an application must satisfy the **Authority** (providing, where appropriate, suitable evidence) that the person—
  - (a) has the facilities and procedures to reliably meet, for the requested term of the approval, the minimum requirements of this Code for the class or classes of **ATH** for which it is seeking approval; and
  - (b) has had an **audit** under Part 16A; and
  - (c) is a fit and proper person for approval.
- (3) Any **approved test house** operated solely by an **ATH** is, for all purposes of this Code and the **Act**, deemed to be approved in accordance with the procedures in the Code.  
Clause 10.40(2)(b): amended, on 1 June 2017, by clause 9 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

#### 10.41 Requirements applying to ATHs

An **ATH** must, when carrying out activities under this Part,—

- (a) only carry out activities for which it has been approved by the **Authority**; and
- (b) exercise a degree of skill, diligence, prudence, foresight, and economic management, taking into account the technological complexity of the **metering components** and **metering installations** being tested—
  - (i) determined by reference to good industry practice; and
  - (ii) that would reasonably be expected from a skilled and experienced **ATH** engaged in the management and operation of an **approved test house**; and
- (c) comply with all applicable safety, employment, environmental, and other enactments; and
- (d) exercise any discretion given to it under this Part by—
  - (i) taking into account the relevant circumstances of the particular instance; and
  - (ii) acting professionally; and
- (e) record the manner in which it carried out its activities and its reasons for carrying the activities out in that manner.

#### 10.42 ATH's functions and ongoing obligations

- (1) An **ATH** must comply with this Code including Schedules 10.4, 10.7, and 10.8.
- (2) An **ATH** must, if this Part requires an **ATH** to complete a function or activity before a **metering installation** is **certified**, complete the function or activity as part of the process undertaken to obtain **certification** for the **metering installation**.

*Metering installations that are inaccurate, defective, or not fit for purpose*

#### 10.43 Metering installations that are inaccurate, defective, or not fit for purpose to be

**investigated**

- (1) For the purposes of this clause and clauses 10.44 to 10.48, a **metering installation** is—
  - (a) accurate, if it is within the applicable accuracy tolerances set out in Table 1 of Schedule 10.1;
  - (b) inaccurate, if it is outside the applicable accuracy tolerances set out in Table 1 of Schedule 10.1.
- (2) A **participant** must comply with this clause and clauses 10.44 to 10.48 if—
  - (a) in the case of a **metering equipment provider**, it is advised under subclause (3)(a); or
  - (b) it becomes aware of an event or circumstance that leads it to believe a **metering installation** is or could be—
    - (i) inaccurate; or
    - (ii) defective; or
    - (iii) not fit for purpose.
- (3) A **participant** referred to in subclause (2)(b), other than the **metering equipment provider** responsible for the **metering installation**, must—
  - (a) advise the **metering equipment provider** responsible for the **metering installation** that it has become aware of an event or circumstance that leads it to believe the **metering installation** is or could be—
    - (i) inaccurate; or
    - (ii) defective; or
    - (iii) not fit for purpose; and
  - (b) include, with the advice (if and to the extent they are known), all relevant details.
- (4) A **metering equipment provider** must, if it is advised under subclause (3)(a), or becomes aware as referred to in subclause (2)(b), within the period set out in subclause (5),—
  - (a) investigate—
    - (i) if it is advised under subclause (3)(a), the event or circumstance that it is advised of; or
    - (ii) if it becomes aware as referred to in subclause (2)(b), the event or circumstance that leads it to believe the **metering installation** is or could be—
      - (A) inaccurate; or
      - (B) defective; or
      - (C) not fit for purpose; and
  - (b) complete, or arrange the completion of, a report that contains details of the **metering equipment provider's** investigation, its conclusion, and the reasons for its conclusion; and
  - (c) provide the report to all affected **participants**.
- (5) The time period for the purposes of subclause (4) is as soon as reasonably practicable, but no later than—
  - (a) 20 **business days** after becoming aware of the event or circumstance, for a **category 1 metering installation**;
  - (b) 10 **business days** after becoming aware of the event or circumstance, for a

**category 2 metering installation:**

- (c) **5 business days** after becoming aware of the event or circumstance, for a category 3 or higher **metering installation**.

**10.44 Metering installations that are inaccurate, defective, or not fit for purpose to be tested**

- (1) A **metering equipment provider** must, if a report provided under clause 10.43(4)(c) demonstrates that a **metering installation** for which it is responsible is inaccurate, defective, or not fit for purpose—
- (a) arrange testing of the **metering installation** by an **ATH**; and
  - (b) arrange the provision of a statement of situation referred to in clause 10.46 by the **ATH**.
- (2) If the report demonstrates that a **metering installation** is accurate, not defective, and fit for purpose, a **participant** who believes that the **metering installation** is inaccurate, defective, or not fit for purpose, may require testing of the **metering installation** by—
- (a) advising the **metering equipment provider** responsible for the **metering installation**, within **5 business days** of receiving the report, of—
    - (i) its reasons for requiring testing; and
    - (ii) the scope of the testing required; and
  - (b) using its best endeavours to agree with the **metering equipment provider** on an **ATH** who will test the **metering installation** and provide a statement of situation under subclause (1).
- (3) A **metering equipment provider** who has been advised under subclause (2)(a) that a **participant** believes that a **metering installation**, for which the **metering equipment provider** is responsible, requires testing, must arrange for an **ATH**—
- (a) to test the **metering installation**; and
  - (b) to provide the **metering equipment provider** with a statement of situation under subclause (1)(b) within **5 business days** of—
    - (i) becoming aware that a **metering installation** for which it is responsible may be inaccurate, defective, or not fit for purpose under subclause (1); or
    - (ii) reaching an agreement with the **participant** under subclause (2)(b).
- (4) If the **metering equipment provider** and the **participant** requesting the test under subclause (2) cannot, within **5 business days** of the **metering equipment provider** being advised under subclause (2)(a), agree on an **ATH**, either **participant** may advise the **Authority**, including the reasons, if and to the extent known, why agreement was not reached.
- (5) The **Authority** must, within **5 business days** of being advised under subclause (4), advise the **metering equipment provider** of the **ATH** that it must instruct to carry out the testing and to provide a statement of situation under subclause (1)(b).
- (6) The **metering equipment provider** must instruct the **ATH** referred to in subclause (5) within **5 business days** of being advised by the **Authority**.
- (7) The **metering equipment provider** must ensure that the **ATH**, as soon as practicable after being contracted under subclause (1) or subclause (5), carries out the required testing and delivers the statement of situation to the **metering equipment provider**.

- (8) Despite anything else in this Code, a **participant** is in breach of this Code from when the tests carried out by an **ATH** under this clause demonstrate that a **metering installation** is—
- (a) inaccurate; or
  - (b) defective; or
  - (c) not fit for purpose.

Clause 10.44(4), (5) and (6): amended, on 5 October 2017, by clause 177 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

#### 10.45 Investigation and testing costs

The **ATH's** costs incurred by the **metering equipment provider** under clause 10.44 must be borne by—

- (a) the **metering equipment provider**, if the investigation or test demonstrates that the **metering installation** is—
  - (i) defective; or
  - (ii) inaccurate; or
  - (iii) not fit for purpose; or
- (b) the **participant** who required that the **metering installation** be investigated or tested, if the investigation or test demonstrates that the **metering installation** is—
  - (i) not defective; and
  - (ii) accurate; and
  - (iii) fit for purpose.

#### 10.46 Statement of situation

- (1) A statement of situation provided by an **ATH** under clause 10.44(1)(b) must include—
- (a) details of the tests carried out; and
  - (b) results of the tests carried out; and
  - (c) full details of what was found; and
  - (d) conclusions of whether the **metering installation** is—
    - (i) accurate;
    - (ii) defective;
    - (iii) fit for purpose; and
  - (e) the reasons for the conclusions in paragraph (d); and
  - (f) an assessment of the risk to the completeness and accuracy of the **raw meter data**; and
  - (g) the details of any remedial action proposed or undertaken; and
  - (h) any correction factors to apply to **raw meter data** to ensure that the **volume information** is accurate; and
  - (i) the period over which the correction factor must be applied to the **raw meter data**.
- (2) A **metering equipment provider** must, within 3 **business days** of receiving the statement of situation, provide copies of it—
- (a) to the relevant affected **participants** for all **metering installations**; and
  - (b) to the **Authority**—
    - (i) for all category 3 and above **metering installations**; and

- (ii) if requested by the **Authority**, for each **category 1 metering installation** and each **category 2 metering installation**.

Clause 10.46(2): substituted, on 15 May 2014, by clause 13 of the Electricity Industry Participation (Minor Code Amendments) Code Amendment 2014.

Clause 10.46(2) (b): amended, on 5 October 2017, by clause 178 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

#### **10.47 Correction of defects and inaccuracies in metering installation**

An **ATH** must, when taking action to remedy an inaccuracy or defect within a **metering installation**, ensure that records of any modifications that are carried out to the **metering installation** are kept for each **metering component** of the **metering installation** in the **metering records** and in a manner reasonable in the circumstances to ensure that further investigation can be carried out.

#### **10.48 Correction of defects and inaccuracies in raw meter data**

- (1) A **participant** may, within 40 **business days** of receiving a statement of situation under clause 10.46(2), advise the **metering equipment provider** of any questions, or requests for clarification, it has in relation to the corrections needed to the **raw meter data** from the **metering installation**.
- (2) A **metering equipment provider** must, within 10 **business days** of being advised under subclause (1), respond in detail to the questions or requests for clarification.
- (3) A **metering equipment provider** must, within 10 **business days** of being advised under subclause (1), advise the **reconciliation participant** responsible for providing **submission information** for the **point of connection**, of the correction factors referred to in clause 10.46(1)(h) and the period referred to clause 10.46(1)(i).
- (4) The **reconciliation participant** must apply the correction factors advised under subclause (3), for the period advised under subclause (3), to the **raw meter data** to obtain more accurate information as required under clause 15.12.

#### *NSP table*

#### **10.49 NSP table**

- (1) The **Authority** must **publish** an **NSP** table.
- (2) The **reconciliation manager** must advise the **Authority** of any change to the information contained in the **NSP** table within 1 **business day** of becoming aware of such change.
- (3) The **Authority** must update the **NSP** table within 2 **business days** of being advised by the **reconciliation manager** under subclause (2).

Clause 10.49(1): replaced, on 5 October 2017, by clause 179(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 10.49(2) and (3): amended, on 5 October 2017, by clause 179(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

#### *Dispute resolution*

### 10.50 Dispute resolution

- (1) A **participant** must, in good faith, use its best endeavours to resolve any dispute with any other person about a matter dealt with in this Part.
- (2) A **participant** may refer any dispute or failure to reach agreement within the required timeframe in this Part to the **Authority** for determination.
- (3) A complaint may, if it is not resolved under subclause (1), or by determination of the **Authority** under subclause (2), be referred to the **Rulings Panel** in accordance with subpart 4 of Part 2 of the **Act** and the **regulations**, by the **Authority** or a **participant**.
- (4) When determining a dispute, or failure to reach agreement, under subclause (2), the **Authority** must do so in a way that—
  - (a) is consultative with the parties involved; and
  - (b) encourages the parties, where possible, to work together on matters that are agreed; and
  - (c) takes into account the costs to be borne by, and the benefits that would accrue to, the **participants** involved; and
  - (d) maximises the use of informal means to resolve the dispute or conclude an agreement.
- (5) The existence of a dispute or failure to reach agreement does not excuse a **participant** from complying with this Code.
- (6) A **participant's** obligations in this clause are subject to the **Act** and the **regulations**.

#### *Transitional provisions*

### 10.51 Transitional provisions

- (1) In this clause—
  - (a) Part 10 means Part 10 of the Code that was effective prior to 29 August 2013; and
  - (b) reference to a COP means a **code of practice** under Part 10.
- (2) The intent of this clause is—
  - (a) as far as practicable, to preserve the effect of Part 10, prior to 29 August 2013; and
  - (b) to clarify that a breach of Part 10 will subsist as a breach of the Code, despite the coming into force of this Part; and
  - (c) to clarify that disputes and complaints about breaches under Part 10 must be resolved under this Part, and to provide the procedure to ensure that will happen; and
  - (d) to clarify that certain exemptions, authorisations, and **code of practice** 10.5 variations under Part 10 will remain in force in accordance with their terms, as if they had been made under this Part; and
  - (e) to clarify the effect of certain contractual arrangements after this Part comes into force; and
  - (f) to clarify the effect of a **participant** being in compliance with certain of the provisions in Part 10, after this Part comes into force.
- (3) A **certification**, as at 28 August 2013, of—
  - (a) a **metering installation**—

- (i) as a **category 1 metering installation** that had interim **certification** under Part 10, continues under this Part until 1 April 2015; and
    - (ii) as a category 6 **metering installation**, continues as a category 5 **metering installation** and otherwise in accordance with the terms of the **certification**; and
    - (iii) as any other category, continues under this Part in accordance with the terms of the **certification**; and
  - (b) a **metering component** continues under this Part in accordance with the terms of the **certification**.
- (4) An **audit** that was carried out under the Code by an **auditor**, that was completed, immediately prior to 29 August 2013, continues to have the effect and status of an **audit** under this Part.
- (5) The following persons **certified** and approved by the Electricity Commission or the **Authority**, under the Code, immediately prior to 29 August 2013, remain, for all purposes of this Part, **certified** and approved by the **Authority**, in accordance with the terms and scope of the relevant **certification** and approval as if such **certification** and approval had been issued under this Part:
- (a) an **auditor**; and
  - (b) an **approved test house**, which will be approved as an **ATH** under this Part.
- (6) The following continue in effect despite anything else in, or the coming into force of, this Part, to the extent that they relate to or concern the same, or similar, obligations under this Part, and will apply to a **participant's** obligations under or compliance with, the relevant obligation under this Part:
- (a) an approval for an alternative quality management system previously issued under clauses 4(4) and 6(12) of COP 10.2;
  - (b) an approval for an alternative standard previously issued under clause 3(4) of COP 10.2 and clause 2 of COP 10.2 and 10.3;
  - (c) a variation under clause 3(15) or 4(7) to 4(9) of COP 10.3;
  - (d) a temporary **certification** under clause 9(17) of COP 10.3;
  - (e) an alternative standard that an **approved test house** has used in the **certification** of a **metering installation** under clause 2 of COP 10.3 and clause 2 of COP 10.4;
  - (f) a variation approved by the market administrator under COP 10.5;
  - (g) a statistical sampling process under clause 5(18) of COP 10.3;
  - (h) an exemption under section 11 of the **Act**.
- (7) An **ATH** must, if it has **certified** a **metering installation** using an alternative standard referred to in subclause (6)(e), in accordance with Part 10, advise the **Authority** of that alternative standard within 3 **business days** of 29 August 2013.
- (8) The following continue in effect, despite anything else in, or the coming into force of, this Part, to the extent that they relate to or concern the same, or similar, obligations under this Part, and apply to a **participant's** obligations under or compliance with, the relevant obligation under this Part:
- (a) **calibration** intervals referred to in clause 6(1) of COP 10.2; and
  - (b) the maximum intervals between inspections referred to in clause 9(2) of COP 10.3, provided that if the date by which the next inspection would, under this Part,

- be later, then such later date will apply.
- (9) Despite anything else in, or the coming into force of, this Part—
- (a) clause 10.4 and clauses 10.12 to 10.15 of Part 10 continue to apply insofar as they relate to all **raw meter data interrogated** and processed under Part 10, on which **submission information** is based that is still subject to the reconciliation process under Part 15, until the reconciliation process for the **submission information** has been concluded in accordance with Part 15; and
  - (b) clauses 10.7(b) and (c) of Part 10 continue to apply in relation to all **raw meter data** recorded before 29 August 2013; and
  - (c) an **approved test house's** obligations under clauses 5(16) and 5(17) of COP 10.2 and clause 4(12) of COP 10.3 will continue in accordance with their terms in relation to all records created before 29 August 2013.
- (10) If a **participant** is a party to an arrangement, assignment, or contract (including an agency agreement) previously entered into under clauses 10.2, 10.3, or 10.6 of Part 10 in relation to a **participant's** responsibilities under Part 10 and a provision in that arrangement, assignment, or contract is inconsistent with this Part, the provision ceases to be effective from 29 August 2013, but this is without prejudice to any existing disputes under such arrangements, assignments, or contracts, that must be resolved between the relevant persons concerned in accordance with the arrangement, assignment, or contract as if it remained effective.
- (11) Despite anything else in, or the coming into force of, this Part—
- (a) any dispute concerning a **metering installation, metering data, raw meter data,** and all related matters that were in existence immediately before 29 August 2013,—
    - (i) remain in existence; and
    - (ii) may be resolved under clause 10.50; and
  - (b) any breaches or alleged breaches of Part 10, and investigations of rule breaches or alleged rule breaches under Part 10, are unaffected and must be concluded as if the relevant provisions alleged to have been breached, under Part 10, and the relevant Part 10 definitions remain in force; and
  - (c) any rule breaches or alleged rule breaches described in paragraph (b) will be dealt with by the **Authority** and the **Rulings Panel** under clause 10.50 and the **Act**.
- (12) Despite anything else in, or the coming into force of, this Part, subclause (13) applies to a **participant** who was immediately prior to 29 August 2013 responsible under Part 10 for—
- (a) measuring the quantity of **electricity** at any **metering installation**; or
  - (b) estimating the quantity of **unmetered load**.
- (13) A **participant** described in subclause (12), who is responsible for **volume information** which has not, at 29 August 2013, been submitted to the **reconciliation manager** in accordance with Part 15 must complete the submission of the **volume information** to the **reconciliation manager** in accordance with Part 10, as if that Part remained effective.
- (14) Despite anything else in, or the coming into force of, this Part, a **participant** who is responsible for a **metering installation** under Part 10, immediately prior to 29 August

- 2013 must remain in compliance with—
- (a) clauses 10.7(b) and 10.7(c) of Part 10, in respect of **raw meter data** kept before 29 August 2013, and does not breach any of the corresponding obligations in this Part, provided that the **participant** keeps the **raw meter data** in compliance with clauses 10.7(b) and 10.7(c) of Part 10; and
  - (b) clause 10 of COP 10.3, in respect of records kept before 29 August 2013, and does not breach any of the corresponding obligations in this Part, provided that the **participant** keeps the records in compliance with rule 10 of COP 10.3.
- (15) The following procedures commenced before, but not completed by, 29 August 2013 are not valid unless they are completed in compliance with this Part:
- (a) **metering installation** tests; and
  - (b) **audits** of an **approved test house** under Part 10 (which must be completed as an **audit** of an **ATH** under this Part).
- (16) The obligations of a **metering equipment provider** expressed in this Part as applying in relation to arranging **certification** of a **metering installation** or a **metering component** after 29 August 2013 do not apply to—
- (a) a **metering installation** referred to in subclause (3)(a):
  - (b) a **metering component** referred to in subclause 3(b).

Clause 10.51: amended, on 29 August 2013, by clause 25 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 10.51(6)(f): amended, on 5 October 2017, by clause 180 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

**Schedule 10.1  
Tables**

cls 10.37 and 10.43

**Table 1: Metering installation characteristics and associated requirements**

Defining Characteristics				Associated Requirements of active energy metering							
Metering installation category	Primary voltage (V)	Primary current (I)	Measuring transformers	Metering installation certification type	Accuracy tolerances		Selected component metering installation minimum IEC class (more accurate components may be used)		Metering installation certification and inspection		
					Maximum permitted error	Maximum site uncertainty	Meter	Current Transformer	Maximum metering installation certification validity period	Maximum sample inspection and recertification period	Inspection period
1	V < 1kV	I ≤ 160A	None	NHH or HHR	± 2.5%	0.6%	2	N/A	180 months	84 months	120 months ± 6 months
2	V < 1kV	I ≤ 500A	CT	NHH or HHR	± 2.5%	0.6%	2	1	120 months	N/A	120 months ± 6 months
3	V < 1kV	500A < I ≤ 1200A	CT	HHR only	± 1.25%	0.3%	1	0.5	120 months	N/A	60 months ± 3 months
	1kV ≤ V ≤ 11kV	I ≤ 100A	VT & CT				N/A	N/A			
	11kV < V ≤ 22kV	I ≤ 50A					N/A	N/A			
4	V < 1kV	I > 1200A	CT	HHR only	± 1.25%	0.3%	N/A	N/A	60 months	N/A	30 months ± 3 months
	1kV ≤ V ≤ 6.6kV	100A < I ≤ 400A	VT & CT								
	6.6kV < V ≤ 11kV	100A < I ≤ 200A									
	11kV < V ≤ 22kV	50A < I ≤ 100A									
5	1kV ≤ V ≤ 6.6kV	I > 400A	VT & CT	HHR only	± 0.75%	0.2%	N/A	N/A	36 months	N/A	18 months ± 1 month
	6.6kV < V ≤ 11kV	I > 200A									
	V > 11kV	I > 100A									
	V > 22kV	Any current									

**Table 2: Maximum certification validity periods for the purposes of clause 1(2) of Schedule 10.8**

<b>Metering installation category</b>	<b>Class 0.2 meter (months)</b>	<b>Class 0.5 meter (months)</b>	<b>Class 1.0 meter (months)</b>	<b>Class 2.0 meter (months)</b>
1	180	180	180	180
2	120	120	120	120
3 where $V < 1\text{kV}$	120	120	120	N/A
3 where $V \geq 1\text{kV}$	120	120	N/A	N/A
4	60	60	N/A	N/A
5	36	N/A	N/A	N/A

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**Table 3: Selected component certification and comparative recertification minimum test requirements**

Event		Design	Measuring transformer	Meter	Primary injection to meter	Prevailing load	Data storage device	Software security and communication equipment	Control device	Wiring check	Component certification check	Review of compensation factors	Raw meter data output	Supply polarity	Register advance	Installation or component configuration
Metering installation	Initial certification category 1	M						M		M	M	M	M	M	M	M
	Initial certification categories 2 and 3	M				M		M		M	M	M	M	M	M	M
	Recertification of category 1 if the meter is not replaced and recertification of categories 2 and 3	M				M		M		M	M	M	M	M	M	M
	Recertification category 1 where meter is replaced with a certified meter	M						M		M	M	M	M	M	M	M
Component change or recertification	Meter change including internal data storage devices	M		M		M	M	M		M		M	M	M	M	M
	Metrology change either onsite or remote	M		M			M	M				M	M		M	M
	External data storage device change	M					M	M		M		M	M		M	M
	Measuring transformer change or ratio change	M	M			M				M		M	M	M	M	
	Control device change	M					MI		M	M			M			M

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<b>Additional equipment (eg wiring)</b>	M				M				M			M	M	M	
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**Key:** **M** = mandatory, **MI** = mandatory if the control device is integral with the meter.

Table 3: rows 6 and 8 amended, on 15 May 2014, by clause 14 of the Electricity Industry Participation (Minor Code Amendments) Code Amendment 2014.

Table 3: row 3 amended, on 19 December 2014, by clause 21 of the Electricity Industry Participation Code Amendment (Minor Code Amendments) (No 3) 2014.

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Schedule 10.1

**Table 4: Fully calibrated certification minimum test requirements**

Event		Design	Measuring transformer	Meter	Primary injection to meter	Prevailing load	Data storage device	Software security and communication equipment	Control device	Wiring check	Component certification check	Review of compensation factors	Raw meter data output	Supply polarity	Register advance	Installation or component configuration
Metering installation	Initial certification	M	M	M	T	M	M	M	M	M	M	M	M	M	M	M
	Recertification	M		M		M	M	M	M	M	M	M	M	M	M	M
	Meter change including internal data storage	M		M		M	M	M		M		M	M	M	M	M
	Metrology change either onsite or remote	M		M			M	M				M	M		M	M
Component change or recertification	External data storage device change	M					M	M		M		M	M		M	M
	Measuring transformer change or ratio change	M	M		T	M				M		M	M	M	M	
	Control device change	M					MI		M	M			M			M
	Additional equipment (eg wiring)	M			T	M				M			M	M	M	
	Initial certification	M	M	M	T	M	M	M	M	M	M	M	M	M	M	M
	Recertification	M		M		M	M	M	M	M	M	M	M	M	M	M

**Key:** M = mandatory, T = mandatory if test method and test equipment permit, MI = mandatory if the control device is integral with the meter.

**Table 5: Standards for metering components**

<b>Meter and data storage device standards</b>	<b>Standards</b>
Electricity metering equipment (AC) – Part 1: General requirements, tests and test conditions (classes 0.5, 1 and 2)	EN 50470-1
Electricity metering equipment (AC) – Part 2: Particular requirements – Electromechanical meters for active energy (classes 1 and 2)	EN 50470-2
Electricity metering equipment (AC) – Part 3: Particular requirements – Static meters for active energy (classes 0.5, 1 and 2)	EN 50470-3
Electricity metering equipment (AC) – Particular requirements – Part 11: Electromechanical meters for active energy (classes 0.5, 1 and 2)	IEC 62053-11
Electricity metering equipment (AC) – Particular requirements – Part 21: Static meters for active energy (classes 1 and 2)	IEC 62053-21
Electricity metering equipment (AC) – Particular requirements – Part 22: Static meters for active energy (classes 0.2 S and 0.5 S)	IEC 62053-22
Electricity metering equipment (AC) – Particular requirements – Part 23: Static meters for reactive energy (classes 2 and 3)	IEC 62053-23
Electricity metering equipment (AC) – Particular requirements – Part 61: Power consumption and voltage requirements	IEC 62053-61
Electricity metering equipment (AC) – General requirements, tests and test conditions – Part 11: Metering equipment	IEC 62052-11
Measuring transformer standards	
Instrument transformers – Part 1: Current transformers	IEC 60044-1
Instrument transformers – Part 2: Inductive voltage transformers	IEC 60044-2
Instrument transformers – Part 3: Combined transformers	IEC 60044-3
Instrument transformers – Part 5: Capacitor voltage transformers	IEC 60044-5
Coupling capacitors and capacitor dividers	IEC 60358
Instrument transformers – Part 7: Electronic voltage transformers	IEC 60044-7
Instrument transformers – Part 8: Electronic current transformers	IEC 60044-8
Other standards	
Electricity metering equipment (AC) – Tariff and load control – Part 11: Particular requirements for electronic ripple control receivers	IEC 62054-11
Electricity metering equipment (AC) – Tariff and load control – Part 21: Particular requirements for time switches	IEC 62054-21

Table 5: row 1 amended, on 15 May 2014, by clause 15 of the Electricity Industry Participation (Minor Code Amendments) Code Amendment 2014.

**Table 6: Standards of accuracy and overall uncertainty for active and reactive meter calibration and testing**

Value of Current %	Power Factor	Maximum Overall Uncertainty %	Percentage Error Limits of Meter, Including Uncertainty
<b>Class of meter 2.0 and 2.0S</b>			
5 to 120	1	±0.4	±1.9
10 to 120	0.5 lagging	±0.6	±1.9
10 to 120	0.8 leading	±0.6	±1.9
<b>Class of meter 1.0 and 1.0S</b>			
5 to 120	1	±0.2	±0.9
10 to 120	0.5 lagging	±0.25	±0.9
10 to 120	0.8 leading	±0.25	±0.9
<b>Class of meter 0.5 and 0.5S</b>			
5 to 120	1	±0.1	±0.5
10 to 120	0.5 lagging	±0.12	±0.6
10 to 120	0.8 leading	±0.12	±0.6
<b>Class of meter 0.2S</b>			
5 to 120	1	±0.06	±0.2
10 to 120	0.5 lagging	±0.09	±0.3
10 to 120	0.8 leading	±0.09	±0.3
<b>Class of meter 3.0 reactive</b>			
20 to 120	Zero	±1.0	±3.0
20 to 120	0.8 leading	±1.5	±3.5
20 to 120	0.8 lagging	±1.5	±3.5
<b>Class of meter 2.0 reactive</b>			
20 to 120	Zero	±0.5	±2.0
20 to 120	0.8 leading	±1.0	±2.5
20 to 120	0.8 lagging	±1.0	±2.5

**Table 7: Voltage, current, and phase displacement parameters for polyphase meters**

Polyphase meters	Class of meter			
	0.2 and 0.5	1.0	2.0	3.0
Each of the voltages between line and neutral or between any 2 <b>lines</b> will not differ from the average corresponding voltage by more than:	±0.1%	±1.0%	±1.0%	±1.0%
Each of the currents in the conductors will not differ from the average current by more than:	±1.0%	±2.0%	±2.0%	±2.0%
The phase displacements of each of these currents from the corresponding line-to-neutral voltage, irrespective of the power factor, will not differ from each other by more than:	2°	2°	2°	2°

Schedule 10.1, Table 7: amended, on 1 February 2016, by clause 30 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

**Table 8: Required minimum sample size for category 1 metering installation inspections required under clause 45(2)(c) of Schedule 10.7**

<b>Number of metering installations identified</b>	<b>Minimum sample size</b>
1	1
2-8	2
9-15	3
16-25	5
26-50	8
51-90	13
91-150	20
151-280	32
281-500	50
501-1200	80
1201-3200	125
3201-10,000	200
10,001-35,000	315
35,001-150,000	500
150,001+	800

**Schedule 10.2**  
*[Revoked]*

cl 10.17

Schedule 10.2: revoked, on 1 June 2017, by clause 10 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

## Schedule 10.3

cl 10.40

### ATHs – approval, expiry, cancellation, and renewal of approval

#### 1 Applications for approval and renewal of approval

- (1) A person wishing to be approved as an **ATH**, or an **ATH** wishing to renew its approval, must apply, in the **prescribed form**, to the **Authority** at least 2 months before the intended effective date of the approval or renewal.
- (2) An applicant must—
  - (a) include in its application—
    - (i) the final **audit** report obtained under Part 16A, together with its responses to the report; and
    - (ii) a copy of any quality management certificates it holds; and
    - (iii) a copy of its most recent quality management audit report; and
    - (iv) the class of **ATH** for which it is seeking approval; and
    - (v) the functions under clauses 3(2) and 4(2) for which it is seeking approval; and
    - (vi) the **calibration** expiry date of each of its **working standards** and **reference standards**; and
  - (b) provide promptly any other information or documentation the **Authority** may reasonably request.
- (3) The **Authority** must, within 2 months of receiving an application, advise the applicant of—
  - (a) the approval of the application, if the applicant satisfies the **Authority** that it has met the requirements set out in clause 10.40; or
  - (b) the declination of the application, providing reasons, if the **Authority** considers that—
    - (i) the information supplied by the applicant is incomplete or unsatisfactory; or
    - (ii) the applicant otherwise fails to demonstrate that it would be, and would remain for the period and functions for which the application is made, compliant with the requirements set out in clause 10.40.
- (4) If an application is approved, the **Authority** must issue a certificate of approval specifying the—
  - (a) period of the term of approval, which must not exceed 12 months from the date of approval; and
  - (b) functions that the applicant has been approved to carry out; and
  - (c) *[Revoked]*
  - (d) date of approval.

Clause 1(2)(a)(i): amended, on 1 June 2017, by clause 11(1) of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

Clause 1(4)(a): amended, on 5 October 2017, by clause 181 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 1(4)(c): revoked, on 1 June 2017, by clause 11(2) of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

**2** *[Revoked]*

Clause 2: revoked, on 1 June 2017, by clause 12 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

**3 Approval of class A ATHs**

- (1) An applicant applying for approval, or renewal of approval, as a **class A ATH** must, as part of its application, confirm that—
- (a) it holds and complies with AS/NZS ISO 17025 accreditation, for at least the requested term of the approval; and
  - (b) the scope of its AS/NZS ISO 17025 accreditation covers the activities that it undertakes, or proposes to undertake; and
  - (c) it complies, and will be likely to continue to comply during the requested term of the approval, with any requirements of its ISO accreditation; and
  - (d) if it proposes to carry out field work—
    - (i) it is certified to the relevant AS/NZS ISO 9001:2008 or AS/NZS ISO 9001:2016 and will remain certified during the requested term of the approval; and
    - (ii) the scope of its AS/NZS ISO 17025 accreditation has been extended to cover the carrying out of the field work.
- (2) The **Authority** may approve an applicant to be, or renew an applicant's approval as, a **class A ATH** to carry out 1 or more of the following functions:
- (a) **calibration** of—
    - (i) **working standards**;
    - (ii) **metering components** (other than a **calibration** referred to in paragraph (c));
    - (iii) **metering installations**;
  - (b) issuing **calibration reports**;
  - (c) **calibration** of **metering components** onsite;
  - (d) installation and modification of **metering installations**;
  - (e) installation and modification of **metering components**;
  - (f) **certification** of all categories of **metering installations** under this Code, and issuing of **certification reports**;
  - (g) testing of **metering installations** under clause 10.44 and production of statements of situation under clause 10.46;
  - (h) inspection of **metering installations**.
- (3) A **class A ATH** may only carry out 1 or more of the functions listed in subclause (2), subject to—
- (a) the current scope of its approval under subclause (2); and
  - (b) any limitations that may be specified in the **class A ATH's** AS/NZS ISO 17025 accreditation or the relevant AS/NZS ISO 9001:2008 or AS/NZS ISO 9001:2016 certification.
- (4) The **Authority** may decline an application for approval as a **class A ATH** even if the applicant—
- (a) has obtained the necessary ISO accreditation or certification; or

(b) has obtained or satisfied any other pre-requisite to approval.

Clause 3(1)(b): amended, on 29 August 2013, by clause 26 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 3(1)(d)(i) and 3(3)(b) amended, on 1 June 2017, by clause 13 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

#### 4 Approval of class B ATHs

- (1) An applicant applying for approval, or renewal of approval, as a **class B ATH** must, as part of its application to the **Authority**, confirm that—
  - (a) it holds and complies with AS/NZS ISO 9001:2008 or AS/NZS ISO 9001:2016 certification for at least the requested term of the approval; and
  - (b) the scope of its AS/NZS ISO 9001:2008 or AS/NZS ISO 9001:2016 certification covers the activities that it undertakes, or proposes to undertake; and
  - (c) it will develop and at all times during the requested term of the approval maintain a conflict of interest policy in compliance with AS/NZS ISO 17025.
- (2) The **Authority** may approve an applicant to be, or renew an applicant's approval as, a **class B ATH** to carry out 1 or more of the following functions:
  - (a) **calibration** of class 0.5 **meters**, class 1 **meters** and class 2 **meters**, and class 0.5 current transformers and class 1.0 current transformers, provided that the **calibrations** are carried out under their approved quality certification and in accordance with this Part, and included within the **ATH audit** for approval:
  - (b) installation and modification of **metering installations**:
  - (c) installation and modification of **metering components**:
  - (d) **calibration** of **metering components** onsite:
  - (e) **certification**, using the **selected component certification** method, of—
    - (i) **category 1 metering installations**:
    - (ii) **category 2 metering installations**:
    - (iii) category 3 **metering installations** with a primary voltage of less than 1kV:
  - (f) **certification**, using the **fully calibrated certification** method, of—
    - (i) **category 1 metering installations**:
    - (ii) **category 2 metering installations**:
    - (iii) category 3 **metering installations** with a primary voltage of less than 1kV:
  - (g) **certification**, using the **comparative recertification** method, of **category 2 metering installations**:
  - (h) issuing of **certification reports** in respect of **certifications** of **metering installations** under paragraphs (e) to (g):
  - (i) inspection of—
    - (i) **category 1 metering installations**:
    - (ii) **category 2 metering installations**:
    - (iii) category 3 **metering installations** with a primary voltage of less than 1kV.
- (3) A **class B ATH** may only carry out 1 or more of the functions listed in subclause (2), subject to—
  - (a) the current scope of its approval under subclause (2); and
  - (b) any limitations that may be specified in the relevant AS/NZS ISO 9001:2008 or AS/NZS ISO 9001:2016 certification.

(4) The **Authority** may decline an application for approval as a **class B ATH** even if the applicant—

- (a) has obtained the necessary ISO certification; or
- (b) has obtained or satisfied any other pre-requisite to approval.

Clause 4(1)(a) and (b) amended, on 1 June 2017, by clause 14 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

Clause 4(1)(b): amended, on 29 August 2013, by clause 27 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 4(3)(b) amended, on 1 June 2017, by clause 14 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

#### **4A Incorporation of AS/NZS ISO 9001:2008 and AS/NZS ISO 9001:2016 by reference**

(1) The New Zealand Standards AS/NZS ISO 9001:2008 and AS/NZS ISO 9001:2016 are incorporated by reference in this Code in accordance with section 32 of the **Act**.

(2) Subclause (1) is subject to Schedule 1 of the **Act**, which includes a requirement that the **Authority** must give notice in the *Gazette* before an amended AS/NZS ISO 9001:2008 or AS/NZS ISO 9001:2016 becomes incorporated by reference in this Code.

(3) Clause 10.10 does not apply in relation to the incorporation by reference of AS/NZS ISO 9001:2008 or AS/NZS ISO 9001:2016.

Clause 4A inserted, on 1 June 2017, by clause 15 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

#### **5 Expiry and cancellation of approval**

(1) If the **Authority** believes that an **ATH** is or was in breach of this Part the **Authority** may cancel the approval of the **ATH** with immediate effect by advising the **ATH**.

(2) An **ATH** must not, at any time after the expiry or cancellation of its approval, display or use its certificate of approval.

#### **6 Changes that affect approval**

(1) If an **ATH** intends to make a material change to any of its facilities, processes, or procedures, or the scope of the **ATH's** ISO accreditation is reduced during the term of its approval, the **ATH** must, at least **5 business days** before the change is to take place or reduction in scope is effected,—

- (a) advise the **Authority** of all relevant details of the change or reduction in scope; and
- (b) in the case of a material change, submit to the **Authority** an **audit** report confirming that, after the change has come into effect, the **ATH** will continue to meet the requirements under clause 10.40(2)(a).

(2) An **ATH's** approval is automatically cancelled from the date of the change or reduction in scope under subclause (1), if the **ATH** fails to advise the **Authority** under subclause (1)(a).

(3) The **Authority** may, if it is advised by an **ATH** under subclause (1), either—

- (a) cancel an **ATH's** approval from the date that the **Authority** advises the **ATH** that the **Authority** is not satisfied that the **ATH** will continue to meet the requirements under clause 10.40(2)(a) after the change or reduction in scope has come into effect; or

- (b) revise the scope of the **ATH's** approval.

#### **7 Notice of cancellation, expiry, or revision of scope of ATH approval**

- (1) The **Authority** must give written notice to all **metering equipment providers** if—
  - (a) an **ATH's** approval expires and the **Authority** does not renew it;
  - (b) the **Authority** cancels an **ATH's** approval under clause 5;
  - (c) an **ATH's** approval is cancelled under clause 6(2) or 6(3)(a);
  - (d) the scope of an **ATH's** approval has been revised under clause 6(3)(b).
- (2) The **Authority** must include with the notice under subclause (1) the date on which the approval expired or was cancelled, or the scope of the approval was revised.
- (3) A **metering equipment provider** given notice under subclause (1) must treat all **metering installations certified** by the **ATH** during the period during which it was not validly approved, or was performing activities outside its scope of approval, as being defective from the date of which the **Authority** gave notice under subclause (2) and follow the procedures set out in clauses 10.43 to 10.48.
- (4) Despite subclause (3), the **Authority** may give a **metering equipment provider** written notice that the **metering equipment provider** must treat a **metering installation certified** by the **ATH** as being defective and follow the procedures set out in clauses 10.43 to 10.48.

Clause 7 Heading: amended, on 1 November 2018, by clause 29 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

Clause 7: amended, on 5 October 2017, by clause 182 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

#### **8 Register of ATHs**

- (1) The **Authority** must, keep, maintain, and **publish** a register of approved **ATHs**.
- (2) The **Authority** must remove an **ATH's** details from the register if the **ATH's** approval—
  - (a) expires and the **Authority** does not renew it; or
  - (b) is cancelled.

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## Schedule 10.4

### ATH ongoing functions and obligations

cl 10.42

#### 1 Accommodation and environment

An **ATH** must, for each **approved test house** that it operates,—

- (a) maintain a list of personnel who are authorised to access and use its laboratory and storage facilities; and
- (b) restrict access to its laboratory and storage facilities to—
  - (i) the personnel specified under paragraph (a); and
  - (ii) the **Authority**; and
  - (iii) an **auditor** conducting an **audit**; and
  - (iv) any other person who is, at all times, directly supervised by a member of personnel specified under paragraph (a); and
- (c) restrict access to its **metering records** to—
  - (i) the relevant **metering equipment provider**;
  - (ii) the **Authority**;
  - (iii) an **auditor** conducting an **audit**;
  - (iv) the relevant **metering component** owner; and
- (d) ensure that the environment in which its activities are undertaken does not, or could not reasonably be expected to, invalidate test results or adversely affect the required accuracy of measurement; and
- (e) monitor and record the environmental conditions within its **approved test house's** laboratory and storage facilities; and
- (f) comply with the specific requirements of the applicable standard listed in Table 5 of Schedule 10.1 for the **calibrations** or tests being carried out.

Clause 1(c)(iv): amended, on 29 August 2013, by clause 28 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

#### 2 Equipment

- (1) An **ATH** must, at all times, ensure that—
  - (a) it has access to all items of equipment required for the performance of the **calibrations** and tests it is approved to undertake under this Part; and
  - (b) each item of equipment it uses is maintained in accordance with the manufacturer's recommendations and this Code (but if there is any inconsistency or contradiction between the manufacturer's recommendations and this Code, this Code takes precedence); and
  - (c) it maintains records about each item of its equipment, including—
    - (i) details of—
      - (A) maintenance history; and
      - (B) the **ATH's** maintenance programme; and
    - (ii) **calibration reports**, including before and after **adjustment** results; and
    - (iii) in-service checks; and
    - (iv) a history of any damage, malfunction, modification, or repair.

- (2) A **class B ATH** must have and maintain procedures for the purchase of test equipment and associated consumables.

**3 Reference standards and working standards**

- (1) An **ATH** must not use a **reference standard** or **working standard** for any activity regulated under this Part unless—
- (a) in the case of—
    - (i) a **reference standard**, the **reference standard** has been **calibrated** by an **approved calibration laboratory**; or
    - (ii) a **working standard**, the **working standard** has been **calibrated** by an **approved calibration laboratory** or a **class A ATH**; and
  - (b) the current **calibration report** for the **reference standard** or **working standard** confirms that it—
    - (i) performs within the manufacturer’s accuracy specifications; and
    - (ii) has been **calibrated** under subclause (2) at an interval not exceeding the **calibration** intervals set out in the following table.

**Table 1: Calibration intervals**

<b>Standard</b>		<b>Initial calibration interval (months beginning from the date of the first calibration)</b>	<b>Maximum calibration interval (months beginning from the date of the current calibration report)</b>
<b>Reference standard or working standard (other than a working standard used for on-site calibration)</b>	Measuring transformers	36	60
	Comparator bridges	36	60
	Meters	12	24
	Power factor, voltage and current meters	12	24
<b>Working standard used for on-site calibration</b>	All	2	12

- (2) An **ATH** must ensure that a **reference standard** or **working standard** is **calibrated**—
- (a) for the first time, within the applicable initial **calibration** interval set out in Table 1 of subclause (1); and
  - (b) for each subsequent **calibration**, within the applicable maximum **calibration** interval set out in Table 1 of subclause (1).

- (3) A **class A ATH** must ensure that—
- (a) in all cases of **calibration** of its **reference standards**, the **uncertainties** given in the **reference standard calibration report** are sufficiently small so that the overall **uncertainty** in the measurements used to test a **metering installation** does not exceed one third of the maximum permitted error set out in Table 1 of Schedule 10.1 for the category of **metering installation** that the **reference standard** will be used to **calibrate**; and
  - (b) it does not use a **working standard** on a system operating at a voltage of 33kV or above between active conductors, unless the **working standard** has been **calibrated** by an **approved calibration laboratory**; and
  - (c) it does not use a **reference standard**, other than a standard **measuring transformer**, unless it is maintained at the appropriate reference conditions set out in the **reference standard's current calibration report**.
- (4) If appropriate reference conditions under subclause (3)(c) cannot be achieved, the **class A ATH** must calculate and apply adjustments in accordance with the processes and procedures under subclause (5) so that the **reference standard** achieves the errors and uncertainties set out in the **reference standard's current calibration report**.
- (5) An **ATH** must develop and maintain processes and procedures for calculating and applying adjustments to a **reference standard's** errors and uncertainties to compensate for deviations from the reference conditions contained in the **reference standard's current calibration report**.
- (6) An **ATH** must retain a copy of the current **calibration report** for each of its **reference standards** and **working standards**.

#### 4 Metering component testing systems

An **ATH** may use a complete **calibrated metering component** testing system (also known as a test bench) as an alternative to a separately **calibrated working standard** only if—

- (a) the **ATH calibrates** the complete **calibrated metering component** testing system under clause 3 as if it was a **working standard**; and
- (b) before completing the **calibration report**, the **ATH** carries out a testing system accuracy test, using approved **reference standards**.

#### 5 Calibration errors

- (1) For the purposes of this clause, a **reference standard** or **working standard** has a **calibration error** if it is performing outside of the manufacturer's accuracy specifications.
- (2) An **ATH** must not use a **reference standard** or **working standard** for **calibration**, if it believes, or should reasonably be expected in the circumstances to believe, that the **reference standard** or **working standard** has a **calibration error**.
- (3) An **ATH** must, as soon as reasonably practicable, but no more than 3 months after becoming aware of a **calibration error**—
  - (a) investigate the error; and

- (b) ensure the cause of the error is recorded in a **calibration report**; and
  - (c) if the investigation indicates that the **reference standard** or **working standard** performs outside the manufacturer's accuracy specifications, advise each **ATH** that has used any equipment that was **calibrated** using the **reference standard** or **working standard** since the previous **calibration**, of the error.
- (4) An **ATH** must, if a **reference standard** or a **working standard** has a **calibration** error,—
- (a) treat each **metering installation** that it has **calibrated** using the **reference standard** or **working standard** as outside the applicable accuracy tolerances set out in Table 1 of Schedule 10.1; and
  - (b) comply with clause 10.43.
- (5) For the purposes of this clause, a **working standard** includes a complete **calibrated metering component** testing system referred to in clause 4.

## 6 Measurement traceability

An **ATH** must document, maintain, and comply with, a system that ensures, whenever it undertakes a **calibration** test or measurement,—

- (a) it keeps sufficient records to enable the **ATH** to replicate the test or measurement in every respect should the need arise; and
- (b) the results of the measurements are **traceable**.

### *Requirements for calibration of metering components*

## 7 Calibration methods

- (1) An **ATH** must, before it **certifies** a **metering installation** or **metering component**, ensure that 1 of the following persons has **calibrated** the **metering components** under this Part:
- (a) an **approved calibration laboratory**; or
  - (b) an **ATH** with the appropriate approval under Schedule 10.3.
- (2) An **ATH** must, before it **certifies** a **metering component**, ensure that the **metering component** is **calibrated** or **adjusted** under—
- (a) the appropriate physical and electrical reference conditions detailed in the standard listed in Table 5 of Schedule 10.1; or
  - (b) conditions which permit the **ATH** to calculate the results and their **uncertainty** at the reference conditions detailed in the standard listed in Table 5 of Schedule 10.1.
- (3) A **class B ATH** must, when **calibrating** a **metering component**,—
- (a) follow all relevant requirements of NZ/AS ISO 17025 for **calibration**; and
  - (b) only use the relevant methodologies that have been **audited** in the **class B ATH's** most recent **audit** for approval.
- (4) If an **ATH** **calibrates** a **metering component**, it must ensure that the individual test points that it uses are—
- (a) no less than the minimum set out in the standards listed in Table 5 of Schedule 10.1; or

- (b) sufficient and appropriate in the circumstances to ensure that the **calibration** allows calculation of the **metering installation** error as set out in clause 22 of Schedule 10.7.
- (5) An **ATH** must, when **calibrating a metering component**,—
  - (a) if necessary, **adjust** and document the **error compensation**; and
  - (b) ensure that any **adjustment** carried out under paragraph (a) is appropriate to achieve an error as close as practicable to zero; and
  - (c) ensure that the **uncertainty** of measurement during the **calibration** of the **metering component** does not exceed one third of the maximum permitted error in the relevant standard listed in Table 5 of Schedule 10.1; and
  - (d) if the **metering component** is intended for a **metering installation** which is to be **certified** using the **selected component certification** method, ensure that the **ATH** records the errors of a current transformer from 5% to 120% of rated primary current.
- (6) An **ATH** must ensure that—
  - (a) it has documented instructions on the use and operation of all relevant equipment it uses for **calibration**; and
  - (b) it has documented **calibration** procedures that it must make available to, and ensure are followed by, its staff carrying out the **calibration**; and
  - (c) its **calibration** procedures are aligned with the standards listed in Table 5 of Schedule 10.1.
- (7) An **ATH**—
  - (a) may select a test point other than those specified in the relevant standard listed in Table 5 of Schedule 10.1, or at a lower burden than specified in the standard; but
  - (b) must, if it does this, document its reasons for the selection of these test points in the **calibration report**.

## 8 Compensation factors

An **ATH** must, if it is approved to **certify metering installations**, have a documented process for determining **compensation factors**.

## 9 Seals

An **ATH** must have a documented system for applying seals to a **metering installation**, that—

- (a) meets the requirements of clause 47 of Schedule 10.7; and
- (b) is appropriate in the circumstances to ensure—
  - (i) the **ATH's** ability to monitor the **metering installation's** continued integrity; and
  - (ii) the relevant **metering equipment provider** is alerted as soon as practicable to any unauthorised access to the **metering installation**.

## 10 Services access interface

An **ATH** must, when preparing a **metering installation certification report**,

determine, and record in the **certification report**, the **services access interface**.

#### **11 Certification and calibration reports**

- (1) An **ATH** must, for each **metering installation** that it **certifies**, produce a **certification report** in accordance with Schedule 10.7.
- (2) An **ATH** must, for each **metering component**—
  - (a) that it **calibrates**, produce a **calibration report** in accordance with Schedule 10.8; and
  - (b) that it **certifies**, produce a **certification report** in accordance with Schedule 10.8.

#### **12 ATH record keeping and documentation**

- (1) An **ATH** must ensure it documents and maintains a record system for all records, certificates, and reports for any activity regulated under this Part.
- (2) An **ATH** must ensure that—
  - (a) all its records, certificates, and reports are stored securely; and
  - (b) each of its test records for a **metering installation** is identified by a unique identifier; and
  - (c) all of its records, certificates, and reports are sufficiently detailed to enable verification of all aspects of all tests it carries out, including the following:
    - (i) test conditions; and
    - (ii) specific test equipment used; and
    - (iii) personnel carrying out the tests.

#### **13 Retention of ATH records**

An **ATH** must, for each activity regulated under this Part in relation to a **metering installation** and **metering component** that it **certifies** and a **metering component** that it **calibrates**, retain, for at least 48 months after the date of **decommissioning** the **metering installation** or **removal** of a **metering component**,—

- (a) all of its records, certificates, and reports; and
- (b) all **certification reports** produced by the **ATH**.

#### **14 Making available of ATH records**

An **ATH** must, within 5 **business days** of creating a record, certificate, or report for a **metering installation** that it **certifies**,—

- (a) send, in electronic form or such other form as may be agreed between the parties, a copy of the record, certificate, or report to the **metering equipment provider** responsible for the **metering installation**; and
- (b) ensure that the **metering equipment provider** receives the record, certificate, or report.

#### **15 ATH organisation and management**

- (1) An **ATH** must ensure that—
  - (a) it has managerial staff who, unless otherwise permitted in the relevant approval,

- all have the authority and resources needed to discharge their duties; and
- (b) the responsibilities, authority, and functional relationships of all its personnel are fully and accurately specified and recorded in the **ATH's** records.
- (2) An **ATH** must appoint—
- (a) a technical manager (however named) with overall responsibility for technical operations, who must have appropriate engineering qualifications and experience in the operation of an **approved test house**; and
  - (b) a quality manager (however named), with responsibility for the quality management certification and the implementation of the quality management system.
- (3) An **ATH** must ensure that all staff who perform or supervise work or activities regulated under this Part are technically competent, experienced, qualified, and trained for the functions they perform.

#### **16 Quality management system**

An **ATH** must establish, document, implement, maintain, and comply with a quality management system which records its processes and procedures to ensure compliance with this Part.

#### **17 Field work**

A **class A ATH** must, if it arranges for another person to carry out field work, ensure that person is certified to the relevant AS/NZS ISO 9001:2008 or AS/NZS ISO 9001:2016 at all times while the person carries out the work.

Clause 17 amended, on 1 June 2017, by clause 16 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

**Schedule 10.5**

cl 10.20

*[Revoked]*

Schedule 10.5: revoked, on 1 June 2017, by clause 17 of the Electricity Industry Participation Code Amendment (Requirements and Processes for Audits) 2016.

## Schedule 10.6

cl 10.20

### Metering equipment provider ongoing obligations and functions

#### 1 Metering equipment provider must provide access to raw meter data

- (1) A **metering equipment provider** must, within 10 **business days** of receiving a request from a **trader** with whom it has an arrangement to access **raw meter data** from a **metering installation** for which the **metering equipment provider** is responsible, give remote or onsite access at the **services access interface** to the **trader** to collect, obtain, and use **raw meter data** from the **metering installation**.
- (2) A **metering equipment provider** may, if it receives a request from a person with whom it has an arrangement, other than a **trader** under subclause (1), to access **raw meter data** from a **metering installation** for which the **metering equipment provider** is responsible, give remote or onsite access at the **services access interface** to the person to collect, obtain, and use **raw meter data** from the **metering installation**.
- (3) A **metering equipment provider** must only give access to a **trader** under subclause (1), or a person under subclause (2), if the **trader** or person has entered into a contract to collect, obtain, and use the **raw meter data**, with the **consumer** whose **electricity** is measured or estimated, or whose load is controlled at the **metering installation**.
- (4) A **metering equipment provider** must, within 10 **business days** of receiving a request from 1 of the following parties, give the party access to **raw meter data** from a **metering installation** for which it is responsible:
  - (a) a relevant **reconciliation participant** with whom it has an arrangement, other than a **trader**;
  - (b) the **Authority**;
  - (c) an **ATH**;
  - (d) an **auditor**.
- (5) A party listed in subclause (4) may only request access to **raw meter data** for the purposes of exercising the party's rights and performing the party's obligations under this Code or any relevant **regulations** in relation to 1 or more of the following:
  - (a) the party's **audit** functions;
  - (b) the party's administration functions;
  - (c) the party's testing functions;
  - (d) the provision of **submission information** to the **reconciliation manager**.
- (6) The **metering equipment provider** must provide a **trader** under subclause (1) or a party under subclause (4) with—
  - (a) the **raw meter data**; or
  - (b) any necessary facilities, codes, keys, or other means to enable the **trader** or party to access the **raw meter data** by the most practicable means.
- (7) The **metering equipment provider** must, when complying with subclause (6), or when providing access to a person under subclause (2), use appropriate procedures to ensure that—
  - (a) the **raw meter data** is received only by—
    - (i) the **trader**, person, or party; or

- (ii) a contractor to a **trader**, person, or party; and
- (b) the security of the **raw meter data** and the **metering installation** is maintained; and
- (c) access to **raw meter data** under subclauses (1) to (6) is limited to only the specific **raw meter data**—
  - (i) authorised by a contract described in subclause (3), in the case of a **trader** under subclause (1) or a person under subclause (2); or
  - (ii) required for the purposes of exercising the party's rights and performing the party's obligations under this Code, any relevant **regulations**, or the **Act** in relation to the party's **audit**, administration, and testing functions, in the case of a party referred to in subclause (4).
- (8) Nothing in this Part affects proprietary interests in **metering data**.  
Clause 1(5) and (7)(c)(ii): amended, on 5 October 2017, by clause 183 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

## 2 Restrictions on use of raw meter data

- (1) A **metering equipment provider** must not give a **trader** under clause 1(1), a person under clause 1(2), or a party under clause 1(3), access to **raw meter data** from a **metering installation** for which it is responsible, if to do so would, or would reasonably be expected to,—
  - (a) breach any regulatory or legal requirement; or
  - (b) prejudice the maintenance and monitoring of this Code, including the prevention, investigation, and detection of Code breaches and the right to a fair hearing before the **Authority** or the **Rulings Panel**; or
  - (c) result in the **metering equipment provider** breaching an obligation of confidentiality; or
  - (d) interfere with the privacy of a natural person; or
  - (e) create an improper gain or improper advantage for any **participant** or person; or
  - (f) commercially disadvantage the **metering equipment provider** or any other **participant** or person, in a material manner; or
  - (g) prejudice the future supply of **raw meter data** that is required by a **market operation service provider** to perform an obligation under this Code.
- (2) A **metering equipment provider** must not limit or restrict a person's or party's right to access information from a **metering installation** for which the **metering equipment provider** is responsible, if the right of access is provided for in this Part.

## 3 Metering equipment provider must provide access to metering installation

- (1) A **metering equipment provider** must, within 10 **business days** of receiving a request from 1 of the following parties, arrange physical access to each **metering component** in a **metering installation** for which it is responsible:
  - (a) a relevant **reconciliation participant** with whom it has an arrangement, other than a **trader**;
  - (b) the **Authority**;
  - (c) an **ATH**;
  - (d) an **auditor**;

- (e) a **gaining metering equipment provider**.
- (2) A party listed in subclause (1) may only request physical access to a **metering component** in the **metering installation** for the purposes of exercising the party's rights and performing the party's obligations under this Code or any relevant **regulations** in relation to 1 or more of the following:
- (a) the party's **audit** functions;
  - (b) the party's administration functions;
  - (c) the party's testing functions;
  - (d) the provision of **metering components**.
- (3) The **metering equipment provider** must arrange for a party under subclause (1) to be provided with any necessary facilities, codes, keys, or other means to enable the party to obtain physical access to all **metering components** in the **metering installation** by the most practicable means.
- (4) In complying with subclause (3), the **metering equipment provider** must use appropriate procedures to ensure that—
- (a) the security of the **metering installation** is maintained; and
  - (b) physical access to the **metering installation** under subclause (1) is limited to only the physical access required for the purposes of exercising the party's rights and performing the party's obligations under this Code or any relevant **regulations** in relation to the party's **audit**, administration, and testing functions.
- (5) If a party referred to in subclause (1) requires urgent physical access to a **metering installation**, it must advise the relevant **metering equipment provider**, giving all relevant particulars of the physical access required and the reason for the urgency, and the **metering equipment provider** must use its best endeavours to arrange physical access in accordance with the requested urgency.

Clause 3(2) and (4)(b): amended, on 5 October 2017, by clause 184 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

#### **4 Metering equipment provider record keeping and documentation**

- (1) A **metering equipment provider** must—
- (a) for each **metering installation** for which it is responsible, keep accurate and complete records as specified in Table 1 of Schedule 11.4; and
  - (b) for each **metering installation** for which it is responsible other than an **interim certified metering installation**, keep accurate and complete records of—
    - (i) the **certification** expiry date of each **metering component** in the **metering installation**; and
    - (ii) all equipment used in relation to the **metering installation**, including serial numbers and details of the equipment's manufacturer; and
    - (iii) the manufacturer's, or if different the most recent, test certificate for each **metering component** in the **metering installation**; and
    - (iv) the **metering installation** category for the **metering installation**; and
    - (v) all **certification reports** and **calibration reports** showing dates tested, tests carried out, and test results for all **metering components** in the **metering installation**; and
    - (vi) the contractor who installed each **metering component** in the **metering**

- installation; and**
- (vii) the **certification sticker**, or equivalent details, for each **metering component** that is **certified** under Schedule 10.8 in the **metering installation; and**
  - (viii) seal identification information under clause 47 of Schedule 10.7 relating to the **metering installation; and**
  - (ix) any applicable **compensation factors; and**
  - (x) the owner of each **metering component** within the **metering installation; and**
  - (xi) any applications installed within each **metering component** within the **metering installation; and**
  - (xii) the signed inspection report under clause 44 of Schedule 10.7, confirming that the **metering installation** continues to comply with the requirements of this Part.
- (2) A **metering equipment provider** must, within 10 **business days** of receiving a request from a **participant** for a signed inspection report prepared under clause 44 of Schedule 10.7, make a copy of the report available to the **participant**.
- (3) A **metering equipment provider** must retain **metering records** relating to—
- (a) a **metering component** in a **metering installation** for which it is or was responsible, for at least 48 months after the **metering component** is removed from the **metering installation**, even if—
    - (i) the **metering installation** is subsequently **decommissioned; or**
    - (ii) the **metering equipment provider** ceases to be responsible for the **metering installation; and**
  - (b) a **metering installation** for which it is responsible, for at least 48 months after the date on which—
    - (i) the **metering installation** is **decommissioned; or**
    - (ii) the **metering equipment provider** ceases to be responsible for the **metering installation.**

Clause 4(3): substituted, on 1 February 2016, by clause 31 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

## **5 Metering equipment provider to provide access to metering records**

- (1) A **gaining metering equipment provider** may request that a **losing metering equipment provider** provide it with access to **metering records** required for the **gaining metering equipment provider** to exercise its rights and perform its obligations under this Code or any relevant **regulations** in relation to its respective **auditing, administration, and testing functions.**
- (2) The **losing metering equipment provider** must, within 10 **business days** of receiving a request under subclause (1), provide the **gaining metering equipment provider** with—
- (a) the **metering records; or**
  - (b) any necessary facilities, codes, keys, or other means to enable the **gaining metering equipment provider** to obtain access to the **metering records** by the most practicable means.
- (3) In complying with subclause (2), the **losing metering equipment provider** must use

appropriate procedures to ensure that—

- (a) the **metering records** are received only by the **gaining metering equipment provider** or its contractor; and
- (b) the security of the **metering records** is maintained; and
- (c) it only provides access to the specific **metering records** required for the purposes of the **gaining metering equipment provider** exercising its rights and performing its obligations under this Code or any relevant **regulations** in relation to its **auditing**, administration, and testing functions.

Clause 5(1) and (3)(c): amended, on 5 October 2017, by clause 185 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

## **6 Provision of metering records when ATH recertifying metering installation**

- (1) This clause applies if—
  - (a) a **metering equipment provider** contracts with an **ATH** to **recertify a metering installation** for which the **metering equipment provider** is responsible; and
  - (b) the **ATH** did not perform the previous **certification** of the **metering installation**.
- (2) If this clause applies, the **metering equipment provider** must, no later than 10 **business days** after the effective date of the contract, provide the **ATH** with a copy of all relevant **metering records**.

## **7 Metering equipment provider must use participant identifier**

- (1) A **metering equipment provider** must—
  - (a) ensure that it has a unique **participant identifier** for its activities as **metering equipment provider** under this Code; and
  - (b) use its **participant identifier**, if required under this Code, to correctly identify its information.
- (2) A **metering equipment provider** must apply to the **Authority** in the **prescribed form** for a **participant identifier** at least 5 **business days** before the **metering equipment provider** requires the **participant identifier**.
- (3) The **Authority** may change a **metering equipment provider's participant identifier**.
- (4) If the **Authority** changes a **metering equipment provider's participant identifier**—
  - (a) it must advise the **metering equipment provider** of the date on which the change takes effect at least 3 months before the date; and
  - (b) the new **participant identifier** becomes effective from the date advised under paragraph (a).

## **8 Electronic interrogation of metering installation**

- (1) This clause applies when **raw meter data** can only be obtained from a **metering equipment provider's back office**.
- (2) A **metering equipment provider** must—
  - (a) ensure that the **interrogation cycle** for each **metering installation** that it electronically **interrogates** does not exceed the maximum **interrogation cycle** in the **registry**; and
  - (b) **interrogate a metering installation** for which it is responsible at least once in each maximum **interrogation cycle** in the **registry**; and

- (c) when electronically **interrogating a metering installation**, ensure that the **interrogation** and processing system electronically monitors and corrects its internal clocks against a time source with a verifiable standard, at a frequency sufficient, and no longer than 1 week, to ensure the internal clock is accurate, when carrying out an **interrogation**, to within  $\pm 5$  seconds of—
- (i) **New Zealand standard time**; or
  - (ii) **New Zealand daylight time**.
- (3) A **metering equipment provider** must, for each **metering installation** for which it is responsible, record in the **interrogation** and processing system logs, the time, the date, and the extent of any change in the internal clock setting in the **metering installation**.
- (4) A **metering equipment provider** must ensure that a **data storage device** in a **metering installation** for which it is responsible for **interrogating** does not exceed the maximum time error set out in Table 1 of subclause (5).
- (5) A **metering equipment provider** must, when **interrogating a metering installation**,—
- (a) compare the time on the internal clock of the **data storage device** with the time on the **interrogation** and processing system clock; and
  - (b) calculate the time error for the **data storage device**; and
  - (c) if the time error calculated under paragraph (b) is equal to or less than the applicable time error set out in Table 1, correct the clock of the **data storage device**; and
  - (d) if the time error calculated under paragraph (b) is greater than the applicable time error set out in Table 1,—
    - (i) correct the clock of the **data storage device**; and
    - (ii) compare the time of the clock with the time of the **interrogation** and processing system clock; and
    - (iii) advise the affected **reconciliation participant** for the **point of connection**, within **5 business days** of correcting the clock, of any affected **raw meter data**; and
    - (iv) comply with the requirements of clause 10.43; and
  - (e) download the **event log**; and
  - (f) check the **event log** for evidence of malfunctioning or tampering and if this is detected, carry out the appropriate requirements of this Part.

**Table 1: Maximum permitted time errors**

<b>Metering installation category</b>	<b>Half-hour metering installations (seconds)</b>	<b>Non half-hour metering installations (seconds)</b>
1	$\pm 30$	$\pm 60$
2	$\pm 10$	$\pm 60$
3	$\pm 10$	NA
4	$\pm 10$	NA
5	$\pm 5$	NA

- (6) The **metering equipment provider** must, when **interrogating** a **metering installation**, ensure that all **raw meter data** downloaded as part of the **interrogation**, and used for submitting information for the purposes of Part 15, is archived—
- (a) for no less than 48 months after the **interrogation** date; and
  - (b) in a form that cannot be modified without an audit trail being created; and
  - (c) in a form that is secure and prevents access by any unauthorised person; and
  - (d) in a form that is accessible to authorised personnel.
- (7) A **metering equipment provider** must, when **interrogating** a **metering installation**,—
- (a) ensure that for all **metering information**, an **interrogation** log is generated by the **interrogation software** to record details of each **interrogation**; and
  - (b) review the **event log** either manually or by an automated **software** function which flags exceptions and—
    - (i) take appropriate action where problems are apparent; and
    - (ii) pass relevant **event log** entries to the **reconciliation participant** for the **metering installation**; and
  - (c) ensure that the **interrogation** log forms part of the **interrogation** audit trail and contains the following as a minimum:
    - (i) the date of **interrogation**; and
    - (ii) the time of commencement of **interrogation**; and
    - (iii) the operator of the **interrogation** system identification (where available); and
    - (iv) the unique identifier of the **data storage device** being **interrogated**; and
    - (v) any clock errors outside the range specified in Table 1 of subclause (5); and
    - (vi) the method of **interrogation**; and
    - (vii) the identifier of the reading device used for **interrogation** (if applicable).
- (8) Subclause (9) applies when—
- (a) a **metering equipment provider** **interrogates** a **half-hour metering installation** which is a **category 1 metering installation** or a **category 2 metering installation**; and
  - (b) the **certifying ATH** confirmed, as a part of the **metering installation's** most recent **certification**, that the **metering equipment provider's back office** processes include, for each **interrogation** cycle, a comparison of the difference in the increment of the **meter** registers to the **half-hour metering raw meter data**.
- (9) When this subclause applies, the **metering equipment provider** must ensure that each electronic **interrogation** of the **metering installation** that retrieves **half hour metering information** compares that information against the increment of the **metering installation's** accumulating **meter** registers.

Clause 8(6)(b): amended, on 1 November 2018, by clause 30(a) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

Clause 8(7)(c): amended, on 1 November 2018, by clause 30(b) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

## 9 Contracting with ATH

A **metering equipment provider** must, when contracting with an **ATH** in relation to the required activities for the **certification** of a **metering installation** for which it is responsible, ensure that an **ATH** contracted to perform work under this Part has the

appropriate scope of approval for such work.

## Schedule 10.7 cls 10.11, 10.20, 10.26, 10.38 and 10.42

### Metering installation requirements

#### *Metering installation general requirements*

#### **1 Maintenance and repair of metering installations**

- (1) A **metering equipment provider** must comply with subclause (2)—
  - (a) for each **metering installation** for which it is responsible; and
  - (b) for each **metering component** in a **metering installation** for which it is responsible.
- (2) A **metering equipment provider** must ensure that—
  - (a) it carries out regular maintenance, including battery monitoring and replacement, in accordance with the applicable requirements in the **metering records**; and
  - (b) it carries out all necessary repairs; and
  - (c) if it is not possible to repair a **metering installation** or **metering component** so that it complies with the applicable requirements in this Part, it is—
    - (i) replaced with a **metering installation** or **metering component** that complies with the applicable requirements in this Part; or
    - (ii) in the case of a **metering installation**, **decommissioned**; and
  - (d) it documents in the **metering records** all maintenance, repairs, or replacements it carries out at the time it carries out the maintenance, repairs, or replacement.

#### *Metering installation design reports*

#### **2 Design reports for metering installations**

- (1) A **metering equipment provider** must obtain a design report under this clause for—
  - (a) a proposed new **metering installation** for which it will be responsible, before it installs the **metering installation**; and
  - (b) a modification to an existing **metering installation** for which it is responsible before the modification commences.
- (2) The **metering equipment provider** must ensure that a design report is prepared by a person with an appropriate level of skill, expertise, experience, and qualification.
- (3) The **metering equipment provider** must ensure that a design report includes—
  - (a) a schematic drawing of the **metering installation** for use by an **ATH**; and
  - (b) details of the configuration scheme that programmable **metering components** are to include; and
  - (c) confirmation that the configuration scheme has been approved by an **approved test laboratory**; and
  - (d) the maximum **interrogation** cycle specified in clause 36(4); and
  - (e) any **compensation factor** arrangements; and
  - (f) the method of **certification** required under this Part to be used for the **metering installation**; and
  - (g) the name and signature of the person who prepared the design report and the date

on which it was signed.

- (4) The **metering equipment provider** must provide the design report to the **certifying ATH** before the **ATH** installs or modifies—
- (a) the **metering installation**; or
  - (b) a **metering component** in the **metering installation**.

### 3 ATH design report obligations

- (1) A **certifying ATH** must, before it **certifies** a new or modified **metering installation**, check and approve, in writing, the design report provided under clause 2 (including the configuration scheme and the schematic drawing), to ensure that the proposed new or modified **metering installation**—
- (a) will function correctly; and
  - (b) will provide the required accuracy and **raw meter data**; and
  - (c) complies with this Part.
- (2) The **certifying ATH** must, within 10 **business days** of the date on which it **certifies** the **metering installation**—
- (a) update the design report with any changes to the **metering installation** design; and
  - (b) provide a copy of the updated design report to the **metering equipment provider** responsible for the **metering installation**.

### 4 Metering equipment provider obligations

- (1) A **metering equipment provider** must, for each **metering installation** for which it is responsible,—
- (a) ensure that the sum of the measured error and **uncertainty** does not exceed the maximum permitted error set out in Table 1 of Schedule 10.1 for the category of the **metering installation**; and
  - (b) ensure that the design of the **metering installation**, including its **data storage device** and **interrogation** system, will ensure that the sum of the measured error and the smallest possible increment of the energy value of the **raw meter data** obtained from the **metering installation** does not exceed the maximum permitted error set out in Table 1 of Schedule 10.1 for the category of the **metering installation**; and
  - (c) comply with the requirements applying to the **metering equipment provider** in the design report provided under clause 2; and
  - (d) ensure that the **metering installation** complies with—
    - (i) the design report provided under clause 2; and
    - (ii) this Part.
- (2) A **metering equipment provider** must ensure that, for each **metering installation** for which it is responsible for an **ICP** that is not also an **NSP**,—
- (a) the **metering installation** configuration does not use subtraction to determine **submission information** used for the purposes of Part 15; and
  - (b) which is a category 3 or higher **metering installation**, is a **half-hour metering installation**.

- (3) A **metering equipment provider** must ensure that, for each **metering installation** for which it is responsible for an **NSP** that is not a **point of connection** to the **grid**,—
- (a) the **metering installation** configuration does not use subtraction to determine **submission information** used for the purposes of Part 15; and
  - (b) it is a **half-hour metering installation**.
- (4) A **metering equipment provider** must, for each **metering installation** for which it is responsible, ensure that it is appropriate having regard to the physical and electrical characteristics of the **point of connection**.

*Determination of metering installation categories*

**5 Determination of metering installation category**

An **ATH** must, before it **certifies** a **metering installation**, determine the category of the **metering installation** in accordance with the following:

- (a) subject to clause 6, if the **metering installation** incorporates a current transformer, its category must be determined according to the primary current rating of the current transformer and the connected voltage set out in Table 1 of Schedule 10.1:
- (b) if the **metering installation** does not incorporate a current transformer and the quantity of **electricity** conveyed is measured by a **meter**, it must be category 1.

Clause 5(a): amended, on 23 February 2015, by clause 75 of the Electricity Industry Participation Code Amendment (Distributed Generation) 2014.

Clause 5(a): amended, on 5 October 2017, by clause 186 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

**6 Determination of metering installation incorporating current transformer to be lower category**

- (1) An **ATH** may, when determining the category of a **metering installation** under clause 5(a), determine under subclause (2) that the category is lower than would otherwise be the case under clause 5(a), only in 1 of the following circumstances:
- (a) if a protection device, including a fuse or a **circuit breaker**, is installed that limits the maximum current of the **metering installation**; or
  - (b) if the **metering equipment provider**, acting reasonably on the basis of historical **metering data**, believes that the maximum current to be conveyed through the **point of connection** will, at all times during the intended **certification** period, be lower than the current setting of the protection device for the category for which the **metering installation**—
    - (i) is **certified**; or
    - (ii) is required to be **certified** by this Code; or
  - (c) if the **metering installation** uses less than 0.5 GWh in any 12 month period; or
  - (d) if the **metering equipment provider**, acting reasonably on the basis of historical **metering data**, believes that the **metering installation** (including, for example, a **metering installation** for an emergency fire pump or flood pump) will use less than 0.5 GWh in any 12 month period.
- (2) If an **ATH** determines the category of a **metering installation** under—
- (a) subclause (1)(a), the **ATH** must, when **certifying** the **metering installation**,

- determine the category of the **metering installation** by reference to the maximum current setting of the protection device. The **ATH** must, when doing so—
- (i) confirm the suitability and operational condition of the protection device; and
  - (ii) record, in the **metering records**, the rating and setting of the protection device; and
  - (iii) seal the protection device under clause 47; and
  - (iv) apply, if practicable, a warning tag to the seal under clause 47(6):
- (b) subclause (1)(b), the **ATH** may, only if it considers it appropriate in the circumstances, at the request of the **metering equipment provider**, determine the **metering installation** category according to the **metering installation's** expected maximum current. If the **ATH** determines the category of a **metering installation** under this clause, then—
- (i) the **metering equipment provider** responsible for the **metering installation** must, each month, obtain a report from the **participant interrogating** the **metering installation**, detailing the maximum current conveyed through the **point of connection** for the prior month. For the purposes of this subparagraph, the **metering equipment provider** must determine the maximum current from **raw meter data** from the **metering installation** by either calculation from the kVA by **trading period** if available, or from a maximum current indicator if fitted in the **metering installation**; and
  - (ii) if the **metering equipment provider** does not receive the report in any month, or the report demonstrates that the maximum current conveyed through the **point of connection**, at any time during the previous month, exceeded the maximum permitted current for the **metering installation** category as **certified, certification** for the **metering installation** is automatically cancelled from the date on which the **metering equipment provider** should have received the report, or the date on which the **metering equipment provider** received the report:
- (c) subclause (1)(c) or subclause (1)(d),—
- (i) if the primary voltage is—
    - (A) less than 1kV, the **ATH** must determine the **metering installation** as category 2; or
    - (B) greater than or equal to 1kV, the **ATH** must determine the **metering installation** as category 3; and
  - (ii) the **metering equipment provider** responsible for the **metering installation** must, each month during the **certification** period, obtain a report from the **participant interrogating** the **metering installation** detailing the total kWh consumption of the **metering installation** for the prior 12 months:
- (d) subclause (1)(d), if the **metering equipment provider** does not receive the report in any month, or the report identifies that the **electricity** conveyed through the **point of connection** exceeded 0.5 GWh during the previous 12 month period, the

**certification** for the **metering installation** is automatically cancelled from the date on which the **metering equipment provider** should have received the report, or the date on which the **metering equipment provider** received the report.

- (3) The **ATH** must, before it determines a **metering installation** to be a lower category under this clause, visit the site of the **metering installation** to ensure that the installation is suitable for the **metering installation** to be determined to be a lower category.
- (4) If an **ATH** determines a **metering installation** to be a lower category under this clause the **metering installation certification report** must include all information required to demonstrate, as at the **certification** date, compliance with this clause.

Clause 6(1)(b): amended, on 29 August 2013, by clause 30(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 6(2)(b)(i): amended, on 29 August 2013, by clause 30(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 6(2)(c): amended, on 29 August 2013, by clause 30(3) and (4) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 6(2)(c)(iii): amended, on 29 August 2013, by clause 30(5) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

### *Certification of metering installation*

#### **7 Method of certification**

- (1) An **ATH** must, when **certifying a metering installation**, only use—
  - (a) the **selected component certification** method under clause 11, if the **metering installation** is a **category 1 metering installation**, a **category 2 metering installation** or a **category 3 metering installation**; or
  - (b) the **fully calibrated certification** method under clause 13.
- (2) Despite subclause (1), an **ATH** may **recertify**—
  - (a) a **category 1 metering installation** using statistical sampling under clause 16; or
  - (b) a **category 2 metering installation** using the approved **comparative recertification** method under clause 12.
- (3) If an **ATH** uses statistical sampling under subclause (2)(a), it must use the applicable method described in subclause (1)(a) and (1)(b) to **certify** each **metering installation** in the sample.

#### **8 Metering installation certification requirements**

- (1) An **ATH** must not **certify a metering installation** unless the **metering installation** complies with this Part.
- (2) An **ATH** must, when **certifying a metering installation**,—
  - (a) prepare a **certification report** for the **metering installation**; and
  - (b) specify in the **certification report** whether the **metering installation** is either—
    - (i) **half hour**; or
    - (ii) **non half hour**; and
  - (c) determine the **services access interface** for the **metering installation** under clause 10 of Schedule 10.4 and record it in the **metering installation certification report**; and

- (d) ensure that each **metering component** in the **metering installation** functions correctly.
- (3) An **ATH** may only **certify** a **metering installation** as category 3 or higher if the **metering installation** incorporates a **half hour meter** or **half hour data storage device** to quantify the **electricity** conveyed.
- (4) An **ATH** must, when preparing a **metering installation certification report**, record the category of the **metering installation**.

Clause 8(3): amended, on 29 August 2013, by clause 31 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

### 8A **ATH amends certification reports**

- (1) Subject to subclause (2), an **ATH** may amend a **certification report** for a **metering installation** prepared under this Schedule, or a **certification report** for a **metering component** prepared under Schedule 10.8, if—
  - (a) the **ATH** prepared the **certification report**; and
  - (b) the **ATH**—
    - (i) receives, or becomes aware of, new information relevant to the **certification**; or
    - (ii) becomes aware of a change to the **metering installation** or **metering component**, other than a change that affects the accuracy of the **metering installation** or **metering component**; and
  - (c) the new information or change would have caused the **ATH** to reach a different conclusion in its **certification report**.
- (2) An amendment under subclause (1) must not—
  - (a) change the **category** of the **metering installation**;
  - (b) extend the **expiry date** in the **certification report**;
  - (c) change a **calibration report** in the **certification report**.
- (3) If an **ATH** amends a **certification report** under subclause (1)—
  - (a) the **ATH** must advise the relevant **metering equipment provider** of the changes to the **certification report**; and
  - (b) the **metering equipment provider** must, upon being advised under paragraph (a), update the **registry** in accordance with Part 11.
- (4) Despite anything else in this Part, if an **ATH** amends a **certification report** under this clause, the **certification** of the **metering installation** or **metering component** remains valid to the extent of the amendment.

Clause 8A: inserted, on 12 January 2018, by clause 4 of the Electricity Industry Participation Code Amendment (Amendments to Certification Reports) 2017 and expired on 12 October 2018.

Clause 8A: inserted, on 13 October 2018, by clause 4 of the Electricity Industry Participation Code Amendment (Amendments to Certification Reports) 2018.

## 9 **Certification tests**

- (1) An **ATH**, when carrying out a test set out in Table 3 or 4 of Schedule 10.1,—
  - (a) to carry out a prevailing load test on a **metering installation** or **metering component**, must do so by using a **working standard** connected to the **metering installation**;
  - (b) to carry out an installation or component configuration test on a **metering installation** or **metering component**, must ensure that the actual configuration scheme is the same as the scheme for the **metering installation** or **metering**

- component** recorded in the design report:
- (c) to carry out a **raw meter data** output test for a **category 1 metering installation** or **category 2 metering installation**, must do so by applying a measured increase in load and measuring—
    - (i) the increment of the sum of the **meter** registers; or
    - (ii) the accumulation of pulses resulting from the increase in load:
  - (d) to carry out a **raw meter data** output test for a **half-hour metering installation** which is a **category 1 metering installation** or for a **half-hour metering installation** which is a **category 2 metering installation**, must either—
    - (i) compare the output from a **working standard** to the **raw meter data** from the **metering installation** for a minimum of 1 **trading period**; or
    - (ii) confirm that the **metering equipment provider's back office** processes include a comparison of the difference in the increment of the **meter** registers to the **half-hour metering raw meter data**, if the **raw meter data** is to be used for the purposes of Part 15:
  - (e) to carry out a **raw meter data** output test for a category 3 or higher **half-hour metering installation**, must compare the output of a **working standard** to the **raw meter data** from the **metering installation** for a minimum of 1 **trading period**:
  - (f) to carry out a **raw meter data** output test for a **non half-hour metering installation** which is a **category 2 metering installation**, must do so by comparing the output of a **working standard** to the increment of the sum of the **meter** registers.
- (1A) If an **ATH** performs a **raw meter data** output test under subclause (1)(c) or subclause (1)(d), for a **metering installation** that will be **certified** for remote **meter** reading, the **ATH** must—
- (a) obtain the **raw meter data** from the **back office** system where the **raw meter data** is held; or
  - (b) ensure that the **metering equipment provider** responsible for the **metering installation** has a process to validate a **meter** reading taken at the time of the **metering installation certification** with a **meter** reading from the **metering equipment provider's back office** system.
- (2) If an **ATH** performs a test under subclause (1) that requires a comparison between 2 quantities, the **ATH** must not **certify** the **metering installation** unless the **metering installation** passes the test.
- (3) For the purposes of subclause (2), a **metering installation** passes if the test demonstrates that the difference between the 2 quantities is within the applicable accuracy tolerances set out in Table 1 of Schedule 10.1.

Clause 9(1): amended, on 29 August 2013, by clause 32(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 9(1)(c)(i) and (ii): inserted, on 29 August 2013, by clause 32(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 9(1A): inserted, on 29 August 2013, by clause 32(3) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

## 10 Test results

- (1) An **ATH** must, before it **certifies a metering installation** or any of a **metering installation's metering components**, review the relevant test results for each of the **metering installation's metering components** to ensure that—
  - (a) the **metering component** passed all the tests; and
  - (b) the **metering installation** meets the requirements for **certification**.
- (2) If the **ATH** considers that the test results show that the requirements in this Part for **certification** of the **metering installation** are not met, it must—
  - (a) within 5 **business days** of reviewing the tests, advise the relevant **metering equipment provider** providing detailed reasons; and
  - (b) not **certify** the **metering installation**.

## 11 Selected component certification of metering installation

- (1) This clause applies only when an **ATH** uses the **selected component certification** method.
- (2) An **ATH** may use the **selected component certification** method to **certify a metering installation** only for the categories of **metering installation** for which the stated requirements are set out in Table 1 of Schedule 10.1.
- (3) An **ATH** must only use the **selected component certification** method to **certify a metering installation**—
  - (a) by carrying out the tests set out in Table 3 of Schedule 10.1; and
  - (b) if an **ATH** or an **approved test laboratory** or an **approved calibration laboratory** has **calibrated** each of the following **metering components** in the **metering installation** in accordance with clause 1(1)(a)(ii) or 1(1)(b) of Schedule 10.8:
    - (i) **meter**;
    - (ii) **measuring transformer**; and
  - (c) if each **data storage device** in the **metering installation** has been **certified** in accordance with clause 5 of Schedule 10.8.
- (4) An **ATH** must, before it uses the **selected component certification** method,—
  - (a) check the design report of the **metering installation** to—
    - (i) confirm the **metering installation** functions in accordance with the design report; and
    - (ii) ensure the **metering installation** complies with this Part; and
  - (b) ensure that each **metering component** in the **metering installation** is used only in a permitted combination as set out in Table 1 of Schedule 10.1; and
  - (c) check and confirm that the **metering installation** is correctly wired in accordance with all applicable requirements and enactments; and
  - (d) ensure that each **metering component** in the **metering installation** is fit for purpose.
- (5) An **ATH** must, when it **certifies a metering installation** under this clause, ensure that the **metering installation certification report** includes confirmation that the **ATH** has—
  - (a) checked the design report of the **metering installation** to—

- (i) confirm the **metering installation** functions in accordance with the design report; and
  - (ii) ensure the **metering installation** complies with this Part; and
  - (b) ensured that each **metering component** in the **metering installation** has been **calibrated** and **certified** as required in this Part; and
  - (c) ensured that the **metering installation** has passed the relevant tests and checks set out in Table 3 of Schedule 10.1; and
  - (d) checked and confirmed that the **metering installation** is correctly wired in accordance with all applicable requirements and enactments; and
  - (e) carried out any tests and checks required to confirm the integrity of the **metering installation** and recorded these and their results in the **metering installation certification report**.
- (6) An **ATH** must, when it **certifies** a **metering installation** under this clause, include in the **metering installation certification report**—
- (a) any **compensation factors** that must be applied; and
  - (b) how the **compensation factors** must be applied under clause 2 of Schedule 15.3.
- Clause 11(3)(b): substituted, on 29 August 2013, by clause 33(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).  
Clause 11(3)(b): amended, on 15 May 2014, by clause 18 of the Electricity Industry Participation (Minor Code Amendments) Code Amendment 2014.  
Clause 11(3)(c): inserted, on 29 August 2013, by clause 33(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).  
Clause 11(5)(e): amended, on 29 August 2013, by clause 33(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

## 12 Comparative recertification

- (1) This clause only applies when an **ATH** uses the **comparative recertification** method.
- (2) An **ATH** may only use the **comparative recertification** method to **recertify** a **category 2 metering installation** in accordance with this Part if—
  - (a) the **certification** of the current transformers in the **metering installation** expires before the **meter certification** expiry date; and
  - (b) each of the following **metering components** in the **metering installation** has been **certified** in accordance with Schedule 10.8:
    - (i) **data storage device**;
    - (ii) **meter**.
- (3) An **ATH** must, when **recertifying** a **category 2 metering installation** under this clause, ensure that—
  - (a) the **metering installation** has passed the tests set out in Table 3 of Schedule 10.1, using a **working standard** connected to the **metering installation**; and
  - (b) the current measurement sensor connected around the cables or bus-bars adjacent to the **metering installation** is sufficiently accurate so that the sum of the measured **metering installation** accuracy, the **uncertainty** of the **metering installation**, and the **uncertainty** of the current measurement sensor does not exceed the maximum permitted error set out in Table 1 of Schedule 10.1 for the category of the **metering installation**; and
  - (c) the overall **metering installation** accuracy meets the requirements of Table 1 of

Schedule 10.1.

- (4) An **ATH** must, before it uses the **comparative recertification** method—
  - (a) check the design report of the **metering installation** to—
    - (i) confirm the **metering installation** functions in accordance with the design report; and
    - (ii) ensure the **metering installation** complies with this Part; and
  - (b) check and confirm that the **metering installation** is correctly wired in accordance with all applicable requirements and enactments; and
  - (c) carry out any tests and checks required to confirm the integrity of the **metering installation** and record these and their results in the **metering installation certification report**.
- (5) An **ATH** must, for each **metering installation** it **certifies** under this clause,—
  - (a) prepare a **certification report**; and
  - (b) ensure that each **metering component** in the **metering installation** is fit for purpose.

### **13 Fully calibrated metering installation certification**

- (1) This clause only applies when an **ATH** uses the **fully calibrated certification** method.
- (2) An **ATH** may only use the **fully calibrated certification** method to **certify** a **category 1 metering installation**, or higher category of **metering installation**.
- (3) An **ATH** must use the **fully calibrated certification** method to **certify** a **metering installation**—
  - (a) by carrying out the tests set out in Table 4 of Schedule 10.1; and
  - (b) only if each of the following **metering components** in the **metering installation** has been **certified** in accordance with Schedule 10.8:
    - (i) **data storage device**;
    - (ii) **meter**;
    - (iii) **measuring transformer**.
- (4) An **ATH** must ensure that each **metering component** in a **metering installation** which is **certified** under this clause has a current **certification report** that—
  - (a) complies with the requirements of this Part; and
  - (b) if the **metering component** is a **calibrated metering component**, includes a **calibration report** that—
    - (i) confirms that the **metering component** complies with the requirements of its accuracy class set out in Table 1 of Schedule 10.1; and
    - (ii) includes the **certification** date of the **metering component**.
- (5) An **ATH** must, when preparing a **metering installation certification report** under this clause, include confirmation that the **ATH** has—
  - (a) checked the design report of the **metering installation** to—
    - (i) confirm the **metering installation** functions in accordance with the design report; and
    - (ii) ensure the **metering installation** complies with this Part; and
  - (b) ensured that each **metering component** in the **metering installation** has been **calibrated** and **certified** as required in this Part; and

- (c) ensured that the relevant tests and checks set out in Table 4 of Schedule 10.1 have been passed; and
  - (d) checked and confirmed that the **metering installation** is correctly wired in accordance with all applicable requirements and enactments; and
  - (e) carried out any tests and checks required to confirm the integrity of the **metering installation**.
- (6) An **ATH** must, when it **certifies** a **metering installation** under this clause, include in the **metering installation certification report**—
- (a) any **compensation factors** that must be applied; and
  - (b) how the **compensation factors** must be applied under clause 2 of Schedule 15.3.
- (7) An **ATH** must, before it **certifies** a **metering installation** under this clause, ensure that the **ATH** uses the manufacturer's **meter** class accuracy, and not the **meter's** actual tested accuracy, to determine whether the **metering installation** is within the relevant maximum permitted error set out in Table 1 of Schedule 10.1.

#### 14 Insufficient load for metering installation certification tests

- (1) This clause only applies if there is insufficient **electricity** conveyed through a **point of connection** to allow an **ATH** to complete a prevailing load test for a **metering installation** that is being **certified** as a **half-hour metering installation**.
- (2) When this clause applies, the **ATH** must, when **certifying** the **metering installation**, ensure that—
- (a) it performs an additional integrity check of the **metering installation** wiring, and records the results of this check in the **certification report**; and
  - (b) it records in the **certification report** that the **metering installation** is **certified** under this clause.
- (3) A **metering equipment provider** must, for each **metering installation** for which it is responsible, and that is **certified** under this clause, obtain and monitor **raw meter data** from the **metering installation** at least once each month during the period of **certification** to determine if load during the month is sufficient for a prevailing load test to be completed.
- (4) Despite subclause (1), the **metering equipment provider** must, if **raw meter data** obtained under subclause (3) demonstrates, at any time, that there is sufficient **electricity** conveyed through the **point of connection** for a prevailing load test to be completed, ensure that the **certifying ATH** makes a subsequent visit to the **metering installation** as soon as practicable, but no later than 20 **business days** after the **metering equipment provider** has obtained the **raw meter data**, to carry out and complete the tests set out in Table 4 of Schedule 10.1.
- (5) The **certifying ATH** must, if the tests referred to in subclause (4) demonstrate that the **metering installation** performs within the relevant maximum permitted error set out in Table 1 of Schedule 10.1,—
- (a) update the **metering installation certification report**, within 5 **business days** of completing the tests, to include the results of the tests carried out; and
  - (b) leave the original **metering installation certification** expiry date unchanged.
- (6) If the tests referred to in subclause (4) demonstrate that the **metering installation** does

not perform within the relevant maximum permitted error set out in Table 1 of Schedule 10.1—

- (a) the **metering installation certification** is automatically cancelled from the date of the tests; and
- (b) the **certifying ATH** must advise the **metering equipment provider** of the cancellation within 1 **business day** of carrying out the tests; and
- (c) the **metering equipment provider** must follow the procedure set out in clauses 10.43 to 10.48.

Clause 14(1): amended, on 29 August 2013, by clause 34 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 14(3): amended, on 5 October 2017, by clause 187 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

## 15 Recertification programme

- (1) A **metering equipment provider** must have a **recertification** programme for all **metering installations** for which it is responsible to ensure that each **metering installation** is **recertified** prior to the expiry date of its then current **certification** if the **metering installation** is not **decommissioned**.
- (2) Subclause (1) does not apply to an **electrically disconnected metering installation** for an **ICP**.

Clause 15(2): amended, on 5 October 2017, by clause 188 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### *Statistical sampling recertification*

## 16 Recertification of group of category 1 metering installations by statistical sampling

- (1) A **metering equipment provider** may arrange for an **ATH** to **recertify** a group of **category 1 metering installations** for which the **metering equipment provider** is responsible using a statistical sampling process set out in subclause (2).
- (2) To **recertify** a group of **category 1 metering installations**, an **ATH** must—
  - (a) select a sample from the group, using a statistical sampling process—
    - (i) prescribed in AS/NZS 1284; or
    - (ii) that is approved and **published** by the **Authority**; and
  - (aa) use the pass/fail criteria in AS/NZS 1284 to evaluate whether the group meets the **recertification** requirements of this Part; and
  - (b) **recertify** each **metering component** in the **metering installation** in the sample using—
    - (i) the **fully calibrated certification** method; or
    - (ii) the **selected component certification** method; and
  - (c) advise the **metering equipment provider** as soon as reasonably practicable, if the group—
    - (i) meets the **recertification** requirements of this Part; or
    - (ii) fails to meet the **recertification** requirements of this Part.
- (3) An **ATH** must, when selecting a sample from the group under subclause (2)(a),—
  - (a) document the process it follows and any assumptions it makes; and
  - (b) keep records in accordance with clause 13 of Schedule 10.4, of—

- (i) each step in the process; and
  - (ii) each **metering installation** in the sample; and
  - (iii) each **metering installation** in the group that is **recertified** using this process.
- (4) The **recertification** of a **metering installation** in the group—
- (a) commences from the date of the advice referred to in subclause (2)(c)(i) if the sample meets the **recertification** requirements of this Part;
  - (b) is automatically cancelled from the date of the advice referred to in subclause (2)(c)(ii) if the sample fails to meet the **recertification** requirements of this Part.
- (5) The **metering equipment provider** must, upon being advised under subclause (2)(c), update the **registry** in accordance with Part 11.
- (6) Despite clause 41(1), an **ATH** who **recertifies** a group of **metering installations** using a statistical sampling process is not required to apply a **certification sticker** to a **metering installation** in the group that was not part of the sample.
- Clause 16(2)(a)(i): amended, on 29 August 2013, by clause 35(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).  
Clause 16(2)(aa): inserted, on 29 August 2013, by clause 35(3) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).  
Clause 16(2)(b): substituted, on 29 August 2013, by clause 35(4) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).  
Clause 16(2)(c): amended, on 29 August 2013, by clause 35(5) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

#### *Certification validity periods*

### **17 Determination of expiry dates for certification of metering components and metering installations**

- (1) An **ATH** must, when **certifying a metering installation**,—
- (a) determine, in accordance with this clause, the date on which the **metering installation's certification** will expire; and
  - (b) record the expiry date in the **metering installation certification report**.
- (2) The expiry date for a **metering installation's certification** is the earliest of—
- (a) the date falling after the date of its **commissioning** by the number of months equivalent to the maximum **metering installation certification** validity period for the relevant category of **metering installation**, as set out in Table 1 of Schedule 10.1; and
  - (b) the earliest **certification** expiry date of a **metering component** in the **metering installation**; and
  - (c) a date determined by the **ATH** taking into account—
    - (i) the condition of each **metering component** in the **metering installation**; and
    - (ii) all relevant circumstances relating to the **metering installation**.
- (3) Despite subclause (2), the expiry date for each **metering installation** in a group of **metering installations recertified** under clause 16, that does not form a part of the sample, is the earliest expiry date of the **metering installations** in the sample.

### **18 Interim certified metering installations**

A **metering equipment provider** must ensure that each **interim certified metering installation** on 28 August 2013 is **certified** under this Part by no later than 1 April 2015.

Clause 18: amended, on 29 August 2013, by clause 36 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

## 19 Modification of metering installations

- (1) If a **metering installation** is modified, the **certification** of the **metering installation** is automatically cancelled with effect from—
  - (a) the date the modification began; or
  - (b) if the **metering equipment provider** responsible for the **metering installation** does not know the date in subclause (a), the date on which the **metering equipment provider** became aware of, or would reasonably have been expected to have become aware of, the modification.
- (2) For the purposes of this clause, a modification of a **metering installation** includes, any 1 or more of the following:
  - (a) any change to the **software**, ROM, or firmware in the **metering installation** that may affect the operation of the **metrology layer** unless the change is made under subclause (3);
  - (b) installation, removal, repair, or modification, of a **metering component** in the **metering installation**, other than the temporary connection of testing or monitoring equipment by using a **test facility**;
  - (c) any change to the burdening of a **measuring transformer** in the **metering installation**, unless changed under clause 31(6);
  - (d) reconfiguration of any wiring (but not straight replacement of wiring in a **category 1 metering installation**);
  - (e) relocation of a **metering component** in the **metering installation** or the **metering installation** enclosure;
  - (f) any interference with the **metering installation** that affects the accuracy of the **metering installation**.
- (2A) For the purposes of subclause (1), and despite subclause (2), a modification of a **metering installation** does not include the replacement of a modem in the **metering installation** by the **ATH** that is responsible for **certifying** the **metering installation**.
- (3) Despite subclauses (1) and (2)(a), the **certification** of a **metering installation** is not cancelled if—
  - (a) an **approved test laboratory** has tested and confirmed under clause 39 that the integrity of the measurement and logging of a **data storage device** in the **metering installation** would be unaffected by the change; and
  - (b) the change does not, or would not be considered by the **ATH** who most recently **certified** the **metering installation** to, affect—
    - (i) the accuracy of the **raw meter data** obtained from the **metering installation**; or
    - (ii) the accuracy of the **metrology layer** of the **metering installation**; or
    - (iii) a **compensation factor** programmed into any **metering component** in the **metering installation**; and

- (c) the **ATH** who most recently **certified** the **metering installation** approves, in advance, the process of changing the **software**, ROM, or firmware in the **metering installation**; and
  - (d) the change is carried out in accordance with a documented methodology that has been **audited** under this Part; and
  - (e) the **metering equipment provider** responsible for the **metering installation** records in the **metering records** the details of the change, including the time and date; and
  - (f) any change of the **metering installation's** parameters does not affect the **metrology layer**; and
  - (g) *[Revoked]*
  - (h) clause 8A(1) applies.
- (3A) Despite subclauses (1) and (2)(b), the **certification** of a **metering installation** is not cancelled if—
- (aa) a **control device** that does not switch **meter** registers has malfunctioned and been replaced with a **certified control device**; and
  - (a) the replacement **control device** has the same characteristics as the **control device** it replaces and—
    - (i) is **certified** in accordance with this Part; and
    - (ii) will not adversely affect the operation of any other **metering components** or connections to those **metering components**; and
    - (iii) is likely to receive control signals, as required by clause 34; and
    - (iv) is correctly connected and programmed; and
  - (b) the **metering equipment provider** responsible for the **metering installation** has in place—
    - (i) an appropriate agreement with the **approved test house** that is responsible for the **certification** of the **metering installation**, to record the replacement in its **metering installation certification** records; and
    - (ii) appropriate procedures for ensuring that replacements are carried out only by persons authorised by the **metering equipment provider**; and
  - (c) the **metering equipment provider** updates—
    - (i) the **metering records** with the details of the replacement, including the date; and
    - (ii) the **registry metering records**.
- (3B) In setting a procedure under subclause (3A)(b)(ii), a **metering equipment provider** must ensure that, within 10 **business days** of the replacement occurring, the person carrying out the replacement provides the notice and **metering records** for the replaced **control device** and the replacement **control device** to—
- (a) the **metering equipment provider**; and
  - (b) the **approved test house** that is responsible for the **certification** of the **metering installation**.
- (4) Despite subclause (2)(e), the **certification** of a **metering installation** continues if—
- (a) there is a minor repositioning of 1 of the following in a **category 1 metering installation** which does not involve disconnection of wiring:

- (i) the **meter** in the existing **metering installation** enclosure; or
  - (ii) the existing **metering installation** enclosure; or
- (b) the relocation does not cause, directly or indirectly, the **metering installation** to be—
  - (i) outside the applicable accuracy tolerances set out in Table 1 of Schedule 10.1; or
  - (ii) defective; or
  - (iii) not fit for purpose.
- (5) If a **metering component** that must be **certified** under this Part and which is in an **interim certified metering installation** is modified, or replaced with a **metering component** that is not **certified** under Schedule 10.8, the **interim certified metering installation's certification** is automatically cancelled from the date of the modification or replacement.
- (6) Despite subclause (5), if an **ATH** modifies an **interim certified metering installation** by replacing a **metering component** that must be **certified** under this Part with an equivalent **certified metering component**, the **interim certified metering installation's certification** is not cancelled.
- (7) A replacement **metering component** under subclauses (5) or (6) must comply with this Code.

Clause 19(2A): inserted, on 29 August 2013, by clause 37(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 19(3)(f): amended, on 29 August 2013, by clause 37(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 19(3)(f): amended, on 1 February 2016, by clause 32(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 19(3)(f): amended, on 13 October 2018, by clause 5(1) of the Electricity Industry Participation Code Amendment (Amendments to Certification Reports) 2018.

Clause 19(3)(g): revoked, on 1 February 2016, by clause 32(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 19(3)(g): inserted, on 29 August 2013, by clause 37(3) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 19(3)(h): inserted, on 13 October 2018, by clause 5(2) of the Electricity Industry Participation Code Amendment (Amendments to Certification Reports) 2018.

Clause 19(3A): amended, on 1 February 2016, by clause 32(3)(a) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 19(3A)(aa): inserted, on 1 February 2016, by clause 32(3)(b) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 19(3A) and 19(3B): inserted, on 29 August 2013, by clause 37(3) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 19(3B): amended, on 1 November 2018, by clause 31(a), (b) and (c) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

## 20 Cancellation of certification of metering installations

- (1) The **certification** of a **metering installation** is automatically cancelled on the date on which any 1 of the following events takes place:
  - (a) the **metering installation** is modified otherwise than under clause 19(3), 19(3A), or 19(6):
  - (b) the **metering installation** is classed as outside the applicable accuracy tolerances set out in Table 1 of Schedule 10.1, defective, or not fit for purpose under—
    - (i) this Part; or
    - (ii) any **audit**:

- (c) an **ATH** advises the **metering equipment provider** responsible for the **metering installation** of—
    - (i) a **reference standard** or **working standard** used to **certify** the **metering installation** not being compliant with this Part when it was used to **certify** the **metering installation**; or
    - (ii) the failure of a group of **meters** in the statistical sampling **recertification** process for the **metering installation**; or
    - (iii) the failure of a **certification** test for the **metering installation**:
  - (d) the manufacturer of a **metering component** in the **metering installation** determines that the **metering component** does not comply with the standards to which the **metering component** was tested:
  - (e) an inspection of the **metering installation**, that is required under this Part, is not carried out in accordance with the relevant clauses of this Part:
  - (f) if the **metering installation** has been determined to be a lower category under clause 6 and the maximum current conveyed through the **metering installation** at any time exceeds the current rating of its **metering installation** category as set out in Table 1 of Schedule 10.1:
  - (g) the **metering installation**—
    - (i) is **certified** under clause 14 and sufficient load is available for full **certification** testing; and
    - (ii) has not been retested under clause 14(4):
  - (h) a **control device** in the **metering installation certification** is, and remains for a period of at least 10 **business days**, bridged out under clause 35(1):
  - (i) the **metering equipment provider** responsible for the **metering installation** is advised by an **ATH** under clause 48(6)(b) that a seal has been removed or broken and the accuracy and continued integrity of the **metering installation** has been affected.
- (2) A **metering equipment provider** must, within 10 **business days** of becoming aware that 1 of the events in subclause (1) has occurred in relation to a **metering installation** for which it is responsible, update the **metering installation's certification** expiry date in the **registry**.

Clause 20(1): amended, on 1 February 2016, by clause 33(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 20(1)(a): amended, on 1 February 2016, by clause 33(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

### *Accuracy and error calculation*

## **21 Metering installation accuracy**

An **ATH** must not **certify** a **metering installation** if the **metering installation** exceeds the maximum permitted error for the relevant **metering installation** category set out in Table 1 of Schedule 10.1, after the application of any external **compensation factors**.

## **22 Error Calculation**

- (1) An **ATH** must, before it **certifies** a **metering installation** under clauses 12 or 13, calculate the error of the **metering installation** in accordance with the following:

- (a) the **ATH** must calculate the percentage error of the **metering installation** using appropriate mathematical methods, taking account of—
    - (i) all sources of measurement error; and
    - (ii) the estimated total quantity of **electricity** to be conveyed through the **metering installation** over the next 12 months; and
  - (b) the error calculation must include **uncertainty** in measurement; and
  - (c) for the purposes of paragraph (b), the **ATH** must calculate **uncertainty** at a 95% level of confidence and in compliance with JCGM 100:2008.
- (2) The **ATH** must not **certify** the **metering installation** if—
- (a) the **uncertainty** for the **metering installation** is greater than the relevant maximum site **uncertainty** set out in Table 1 of Schedule 10.1; and
  - (b) the sum of the measured error and the **uncertainty** of the **metering installation** is greater than the relevant maximum permitted error set out in Table 1 of Schedule 10.1.
- (3) The **ATH** must record the calculation under subclause (1)(a) in the **metering installation certification report**.

### 23 Time keeping requirements

A **metering equipment provider** must, if a time keeping device that is not remotely monitored and corrected controls the switching of a **meter** register in a **metering installation** for which it is responsible, ensure that the time keeping device—

- (a) has a time keeping error of not greater than an average of 2 seconds per day over a period of 12 months; and
- (b) is monitored and corrected at least once every 12 months.

### 24 Compensation factors

(1) An **ATH** must, before it **certifies** a **metering installation** that requires a **compensation factor** to adjust **raw meter data**—

- (a) advise the **metering equipment provider** responsible for the **metering installation** of the **compensation factor**; and
- (b) ensure that the **compensation factor** to be applied to **raw meter data** external to the **metering installation** can only be applied as follows:
  - (i) for **ratio compensation**, on a **category 1 metering installation**, or higher category of **metering installation**; or
  - (ii) for **error compensation**, on a **metering installation** that quantifies **electricity** conveyed through a **point of connection** to the **grid**; or
  - (iii) for **loss compensation**, only on a category 3 or higher **metering installation**.

(2) An **ATH** must, when it prepares a **certification report** for a **metering installation** that requires a **compensation factor**, record the methodology, assumptions, measurements, calculation, and details of—

- (a) each **compensation factor** that is included within the internal configuration of the **metering installation**; and
- (b) each **compensation factor** that must be applied to the **raw meter data**.

- (3) A **metering equipment provider** must, for a **metering installation** in relation to which a **compensation factor** must be applied,—
- (a) if the **metering installation** is for a **point of connection** that is an **NSP**, advise the **reconciliation participant** responsible for the **metering installation** of the **compensation factor** within 10 **business days** of the date on which the **metering installation** is **certified**; or
  - (b) in all other cases, update the **compensation factor** recorded in the **registry** in accordance with Part 11.

Clause 24(3)(b): amended, on 5 October 2017, by clause 189 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

*Installation of metering components in metering installations*

**25 Installation of metering components**

- (1) An **ATH** must, before it **certifies** a **metering installation**, ensure that installation of—
- (a) **measuring transformers**, and associated burden if required, **test facilities**, potential fuses, and switchboard wiring, was carried out by—
    - (i) a suitably qualified person (for example by a switchboard manufacturer); or
    - (ii) an **ATH**; and
  - (b) each **metering component** in the **metering installation**, other than a **metering component** referred to in paragraph (a), is carried out by an **ATH**.
- (2) An **ATH** must, before it **certifies** a **metering installation**, ensure that each **metering component** in the **metering installation** has been installed in accordance with the design report under clause 2.

**26 Requirements for metering installation incorporating meter**

- (1) A **metering equipment provider** must ensure that each **meter** in a **metering installation** for which it is responsible is **certified** in accordance with this Part.
- (2) An **ATH** must, unless clause 43(2) applies, before it **certifies** a **metering installation** incorporating a **meter**, if the **meter** had previously been used in another **metering installation**, ensure that the **meter** has been **recalibrated** since it was removed from the previous **metering installation**, by—
- (a) an **approved calibration laboratory**; or
  - (b) an **ATH**.
- (3) The **ATH** must, before it **certifies** a **metering installation** incorporating a **meter**, document in the **metering records**—
- (a) any regular maintenance required for the **meter** in accordance with the manufacturer's recommendations; and
  - (b) any maintenance that has been carried out on the **meter** (for example battery monitoring and replacement).
- (4) An **ATH** must, before it **certifies** a **metering installation** incorporating a **meter**, record in the **metering installation certification report**, the maximum **interrogation** cycle for the **metering installation**.
- (5) The maximum **interrogation** cycle for a **metering installation** referred to in subclause (4) is the period of memory availability given the **meter** configuration.

- (6) Subclause (4) does not apply to a **metering installation** incorporating both a **meter** and a **data storage device** (see clause 36 of Schedule 10.7).

Clause 26(2): amended, on 1 February 2016, by clause 34(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 26(6): substituted, on 1 February 2016, by clause 34(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

## 27 Meter certification expiry date

- (1) An **ATH** must, before it **certifies** a **metering installation** incorporating a **meter**, determine the **meter certification** expiry date for each **meter** in the **metering installation** in accordance with this clause.
- (2) The **meter certification** expiry date must be the earliest end date of the following periods, calculated from the date of **commissioning** of the **metering installation**:
- (a) the maximum **metering installation certification** validity period set out in Table 1 of Schedule 10.1 for the relevant category of **metering installation**; or
  - (b) the maximum **meter certification** validity period set out in Table 2 of Schedule 10.1 for the relevant class of **meter** for the **metering installation**; or
  - (c) the **certification** period specified in the **meter certification report**.
- (3) Despite subclause (2), the **meter certification** expiry date for a **meter** that has been **certified** and subsequently installed in, but then removed from, a **category 1 metering installation**, remains the **meter certification** expiry date determined for that **meter** when it was installed in the **category 1 metering installation**.
- (4) Despite subclauses (2) and (3), if an electromechanical **meter** is not installed in a **metering installation** within 24 months of the date of the **meter's certification report**, the **meter** must be **recertified** before it is installed.
- (5) The **ATH** must record the **certification** expiry date for each **meter** in a **metering installation** in—
- (a) the **metering installation certification report**; and
  - (b) the **meter certification report**.

Clause 27(3): amended, on 29 August 2013, by clause 38 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

## 28 Requirements for metering installation incorporating measuring transformer

- (1) A **metering equipment provider** must ensure that each **measuring transformer** in a **metering installation** for which it is responsible is **certified** in accordance with this Part.
- (2) An **ATH** must, before it **certifies** a **metering installation** which includes a **measuring transformer** that had previously been used in another **metering installation**, ensure that the **measuring transformer** has been **recalibrated**, since it was removed from the previous **metering installation**, by—
- (a) an **approved calibration laboratory**; or
  - (b) an **ATH**.
- (3) The **ATH** must, before it **certifies** a **metering installation** incorporating a **measuring transformer**, document in the **metering records**—
- (a) any regular maintenance required for the **measuring transformer** in accordance with the manufacturer's recommendations; and

- (b) any maintenance that has been carried out on the **measuring transformer**.
- (4) An **ATH** must, before it **certifies a metering installation** incorporating a **measuring transformer**,—
- (a) ensure that—
    - (i) the **measuring transformer** is connected to a **meter** through a **test facility** that has provision for isolation; and
    - (ia) the **test facility** and the provision for isolation are installed as physically close to the **meter** as practicable in the circumstances; and
    - (ii) the **test facility** has a transparent cover that is not obscured; and
  - (b) using the **fully calibrated certification** method, ensure that the **ATH** uses the **measuring transformer's** actual accuracy (rather than class accuracy) when calculating the maximum permitted error for the relevant **metering installation** category set out in Table 1 of Schedule 10.1; and
  - (c) carry out primary injection tests on the **measuring transformer** if it considers it is appropriate in the circumstances; and
  - (d) ensure that the **measuring transformer** is—
    - (i) mounted securely; and
    - (ii) if practicable, in an enclosure that is sealed in accordance with clause 47 against unauthorised access; and
  - (e) ensure that any voltage supply from a voltage transformer to a **meter**, or other equipment in the **metering installation**, is protected by appropriately rated fuses or **circuit breakers** dedicated to the supply; and
  - (f) ensure that all fuses and **circuit breakers** are sealed or located in sealed enclosures under clause 47; and
  - (g) ensure that, if an enclosure also contains fuses or **circuit breakers** supplying other circuits, those supplying **metering** circuits are individually sealed; and
  - (h) ensure that if the **measuring transformer's** secondary circuit in the **metering installation** is earthed, it is earthed at no more than 1 point; and
  - (i) ensure that the total burden (magnitude and phase angle, where appropriate) on the **measuring transformer** does not exceed—
    - (i) its name plate rating; or
    - (ii) an alternative rating lower than the name plate rating, if specified in the **metering installation** design report.
- (5) Despite subclause (4)(d)(ii), if access to the enclosure is required by a person other than an employee or subcontractor of an **ATH**, the **ATH** may use alternative sealing arrangements (for example, terminal studs drilled so that sealing wire can be passed through the holes to secure the connections, or the use of sealing paint applied to terminal screws).

Clause 28(4)(a): substituted, on 29 August 2013, by clause 39 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

## **29 Measuring transformer certification expiry date**

- (1) An **ATH** must, before it **certifies a metering installation** incorporating a **measuring transformer**, determine the **measuring transformer certification** expiry date for each **measuring transformer** in the **metering installation** in accordance with this clause.

- (2) The **measuring transformer certification** expiry date must be no later than the last day of the **measuring transformer certification** validity period specified in the **measuring transformer certification report**, after the date of **commissioning**.
- (3) The **ATH** must record the **measuring transformer certification** expiry date for each **measuring transformer** in a **metering installation** in—
  - (a) the **certification report** for the **metering installation**; and
  - (b) the **certification report** for the **measuring transformer**.

### **30 Other equipment using measuring transformer**

- (1) A **metering equipment provider** must not permit a **measuring transformer**, in a **metering installation** for which it is responsible, to be connected to equipment used at any time for a purpose other than **metering**, unless it is not practical for the equipment to have a separate **measuring transformer**.
- (2) An **ATH** must, before it **certifies** a **metering installation** incorporating a **measuring transformer** used by—
  - (a) another **metering installation**, ensure, where voltage transformers are connected to more than 1 **meter**, that—
    - (i) the **meters** are included in the **metering installation** being **certified**; and
    - (ii) appropriate fuses or **circuit breakers** are provided to protect the **metering** circuit from short circuits or overloads affecting the other **meter**:
  - (b) equipment referred to in subclause (1), ensure that—
    - (i) the accuracy of the **metering installation** remains within the maximum permitted error for the relevant **metering installation** category set out in Table 1 of Schedule 10.1; and
    - (ii) the **metering installation certification report** confirms that the accuracy of the **metering installation** remains within the maximum permitted error for the relevant **metering installation** set out in Table 1 of Schedule 10.1; and
    - (iii) any wiring between the equipment and any part of the **metering installation** has no intermediate joints; and
    - (iv) the equipment referred to in subclause (1) is labelled appropriately, including with any restrictions regarding being **electrically disconnected**; and
    - (v) the connection details of the equipment referred to in subclause (1) are recorded in the **metering installation** design report; and
    - (vi) appropriate fuses or **circuit breakers** are provided to protect the voltage transformer and **metering** circuit from short circuits or overloads affecting the other equipment; and
    - (vii) the wiring referred to in subparagraph (iii) is **certified** as part of the **metering installation**.

### (3) *[Revoked]*

Clause 30(2)(b)(iv): amended, on 5 October 2017, by clause 190 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

Clause 30(2)(b)(vi): amended, on 29 August 2013, by clause 40(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 30(2)(b)(vii): inserted, on 29 August 2013, by clause 40(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 30(3): revoked, on 29 August 2013, by clause 40(3) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

### **31 Measuring transformer burden and compensation requirements**

- (1) An **ATH** may **certify** a **metering installation** for a **point of connection** to the **grid** that includes **error compensation** factors as an alternative to the use of burden resistors, only if the **ATH** is satisfied the **error compensation** factors will provide a more accurate result than the use of burden resistors.
- (2) A **metering equipment provider** must ensure that a change to, or addition of, a **measuring transformer** burden or **compensation factor** related to a **measuring transformer**, in a **metering installation** for which it is responsible, is only carried out by:
  - (a) the **ATH** who most recently **certified** the **metering installation**; or
  - (b) if the **metering installation** is for a **point of connection** to the **grid**, a suitably qualified person approved by both—
    - (i) the **metering equipment provider** responsible for the **metering installation**; and
    - (ii) the **ATH** who most recently **certified** the **metering installation**.
- (3) An **ATH** must, before it may add or change any burden or **compensation factor** detailed in the design report referred to in clause 2,—
  - (a) obtain the approval of the **metering equipment provider** responsible for the **metering installation**, which may be withheld in the **metering equipment provider's** absolute discretion; and
  - (b) if it obtains the approval referred to in paragraph (a), record in the **metering records** the reason for the proposed addition or change.
- (4) A **metering equipment provider** must, before it may approve the addition of, or change to, the burden or **compensation factor** of a **measuring transformer** in a **metering installation** for which it is responsible, consult with the **ATH** who carried out the most recent **certification** of the **metering installation**.
- (5) If the **metering equipment provider** approves the addition of, or change to, the burden or **compensation factor** under subclause (4), it must ensure that the **metering installation**, other than a **metering installation** for a **point of connection** to the **grid**, is **recertified** by an **ATH** for the addition of or change to the burden or **compensation factor** before the addition or change becomes effective.
- (6) Despite subclause (3)(a), an **ATH** may change the burden on a voltage transformer, without obtaining the approval of the **metering equipment provider**, if the **ATH** confirms in the **certification report** that the difference between the new burden and the burden at the time of the most recent **metering installation certification** is—
  - (a) less than or equal to one thirtieth of the rating, in VA, of the voltage transformer if the voltage transformer is rated at less than 30 VA; or
  - (b) no greater than 1 VA, if the voltage transformer is rated at equal to or greater than 30 VA.
- (7) An **ATH** must, before it **certifies** a **measuring transformer**, if the in-service burden is less than the lowest burden test point specified in a standard set out in Table 5 of Schedule 10.1,—

- (a) install burdening resistors to increase the in-service burden to be equal to or greater than the lowest test point specified in the standard; or
- (b) confirm that—
  - (i) a **class A ATH** has confirmed by **calibration** that the accuracy of the **measuring transformer** will not be adversely affected by the in-service burden being less than the lowest burden test point specified in the standard; or
  - (ii) the **measuring transformer's** manufacturer has confirmed that the accuracy of the **metering transformer** will not be adversely affected by the in-service burden being less than the lowest burden test point specified in the standard.

Clause 31(7): substituted, on 29 August 2013, by clause 41 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 31(7)(b): amended, on 15 May 2014, by clause 19 of the Electricity Industry Participation (Minor Code Amendments) Code Amendment 2014.

Clause 31(7)(b): substituted, on 19 December 2014, by clause 22 of the Electricity Industry Participation Code Amendment (Minor Code Amendments) (No 3) 2014.

### **32 Alternative certification requirements for metering installation incorporating measuring transformer**

- (1) An **ATH** may, if it cannot comply with the requirements of clause 2 of Schedule 10.8 due solely to its inability to obtain physical access to test an installed **measuring transformer** in a **metering installation**, **certify the metering installation** for a period not exceeding 24 months, if—
  - (a) the **measuring transformer** has not previously been **certified** under this clause; and
  - (b) the **ATH** is satisfied, having made due enquiry, that the **metering installation** will comply with the applicable accuracy requirements as set out in Table 1 of Schedule 10.1; and
  - (c) the **ATH** has advised the **metering equipment provider** responsible for the **metering installation** that this clause applies; and
  - (d) the **metering equipment provider** has updated the **metering installation's certification** in the **registry**.
- (2) The **metering equipment provider** must, if a **metering installation** for which it is responsible has been **certified** under subclause (1),—
  - (a) by no later than 10 **business days** after the date of **certification** of the **metering installation**, advise the **Authority** in the **prescribed form** of—
    - (i) all relevant details of the **metering installation**; and
    - (ii) the reason or reasons why the **ATH** could not obtain physical access to the **measuring transformer**; and
    - (iii) the reason or reasons why the accuracy of the **metering installation** cannot be outside of the applicable accuracy requirements set out in Table 1 of Schedule 10.1; and
    - (iv) the **metering installation certification** expiry date; and
  - (b) respond, within 5 **business days**, to any requests from the **Authority** for additional information; and

- (c) ensure that all of the details are recorded in the **metering installation certification report**.
- (3) If an **ATH certifies a metering installation** under subclause (1), the **metering equipment provider** responsible for the **metering installation** must take all steps to ensure that the **metering installation is certified**, before the **metering installation certification** expiry date referred to in subclause (2)(a)(iv), in accordance with all other applicable requirements of this Part.
- (4) If the **Authority** subsequently determines that the **ATH** could have obtained physical access to test an installed **measuring transformer** in the **metering installation**, the **metering installation** is deemed to be defective and the **metering equipment provider** responsible for the **metering installation** must comply with clauses 10.43 to 10.48.
- Clause 32(1)(d), (2) and (4): amended, on 5 October 2017, by clause 191 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

### 33 Requirements for metering installation incorporating control device

- (1A) A **reconciliation participant** that is responsible for a **point of connection** must advise the **metering equipment provider** responsible for the **metering installation** at the **point of connection** if a **control device** in the **metering installation** is to be used by the **reconciliation participant** for any purpose under Part 15 to do either of the following:
- (a) control a load;
- (b) switch **meter** registers.
- (1) A **reconciliation participant** must ensure that a **control device** is **certified** under this Part by an **ATH** before the **reconciliation participant** uses any **raw meter data** that depends on the operation of the **control device**, for any purpose under Part 15.
- (2) An **ATH** must, before it **certifies a metering installation** incorporating a **control device** that must be **certified** under subclause (1),—
- (a) determine the **control device certification** expiry date for each **control device** contained in the **metering installation** as being the same as the **metering installation certification** expiry date; and
- (b) record the expiry date, for each **control device**, in the **metering installation certification report**; and
- (c) if the **metering installation** contains a **control device** that had previously been used in another **metering installation**, ensure that the **control device** has been **certified** in accordance with Schedule 10.8 after it was removed from the other **metering installation**; and
- (d) ensure that the **metering installation certification report** includes confirmation that—
- (i) the **control device** complies with any applicable standards listed in Table 5 of Schedule 10.1; and
- (ii) the **control device** is fit for purpose; and
- (e) check that the **control device** is—
- (i) likely to receive control signals, as required under clause 34; and
- (ii) correctly connected; and
- (iii) correctly programmed.

Clause 33(1A): inserted, on 29 August 2013, by clause 42(1) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 33(1): substituted, on 29 August 2013, by clause 42(2) of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

### **34 Control device reliability requirements**

- (1) An **ATH** must, before it **certifies a metering installation** incorporating a **control device** that is required to be **certified** under clause 33, determine, in consultation with the relevant **distributor** if appropriate, if the likelihood of the **control device** not receiving control signals would affect the accuracy or completeness of the information for the purposes of Part 15.
- (2) A control signal provider, if it is a **participant**, must respond in a timely manner to any requests from the **ATH** referred to in subclause (1).
- (3) The **ATH** must, if it determines under subclause (1) that the likelihood of the **control device** not receiving control signals would affect the accuracy or completeness of the information for the purposes of Part 15, advise the **metering equipment provider** responsible for the **metering installation** of its determination, including all relevant details, within 3 **business days** of making its determination.
- (4) If subclause (3) applies—
  - (a) the **ATH** may **certify the metering installation** excluding the **control device**; and
  - (b) the **ATH** must not **certify the control device**.
- (5) The **metering equipment provider** must, as soon as reasonably practicable, and at least within 3 **business days** after being advised under subclause (3), advise the following parties of the **ATH's** determination, including all relevant details:
  - (a) the **reconciliation participant** for the **point of connection** for the **metering installation**; and
  - (b) the control signal provider.

Clause 34(4)(a): substituted, on 29 August 2013, by clause 43 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

### **35 Control device bridged out**

- (1) A **participant** must, within 10 **business days** of bridging out a **control device**, or becoming aware of a **control device** being bridged out, advise the following persons:
  - (a) the **reconciliation participant** for the **point of connection** for the **metering installation**; and
  - (b) the **metering equipment provider** responsible for the **metering installation** incorporating the **control device**.
- (2) A **metering installation** incorporating a **control device** referred to in subclause (1) is defective for the purposes of clause 10.43 if it is used for the purposes of providing information for the purposes of Part 15.

### **36 Requirements for metering installation incorporating data storage device**

- (1) A **metering equipment provider** must ensure that each **data storage device** incorporated in a **metering installation** for which it is responsible, is **certified** in accordance with this Part.

- (2) An **ATH** must, before it **certifies a metering installation** incorporating a **data storage device** that had previously been used in another **metering installation**, ensure that the **data storage device** has been **recalibrated** since it was removed from the previous **metering installation**, by—
  - (a) an **approved calibration laboratory**; or
  - (b) an **approved test laboratory**; or
  - (c) an **ATH**.
- (3) An **ATH** must, before it **certifies a metering installation** incorporating a **data storage device** (including a **metering installation** incorporating both a **meter** and a **data storage device**), record in the **metering installation certification report**, the maximum **interrogation** cycle for the **data storage device**.
- (4) The maximum **interrogation** cycle for a **metering installation** incorporating a **data storage device** is the shortest of the following periods:
  - (a) the period of inherent data loss protection for the **metering installation**; and
  - (b) the period of memory availability given the **data storage device** configuration; and
  - (c) the longest period in which the accumulated drift of a **data storage device** clock is expected to remain in compliance with the maximum time error set out in Table 1 of clause 2 of Schedule 15.2 for the category of the **metering installation**.

Clause 36(3): amended, on 29 August 2013, by clause 44 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 36(3): amended, on 1 February 2016, by clause 35 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

### **37 Data storage device certification expiry date**

- (1) An **ATH** must, before it **certifies a metering installation** incorporating a **data storage device**—
  - (a) determine, in accordance with this clause, the **data storage device certification expiry date** for each **data storage device** contained in the **metering installation**; and
  - (b) record the expiry date in the **metering installation certification report**.
- (2) The **data storage device certification expiry date** must—
  - (a) for a **data storage device** that is integral to a **meter**, be no later than the **meter certification expiry date**; or
  - (b) for a **data storage device** that is not integral to a **meter**, be no later than the earlier of—
    - (i) the date falling the number of days equivalent to the **data storage device certification** validity period specified in the **data storage device certification report**, after the **commissioning** date; and
    - (ii) the **meter certification** expiry date.
- (3) The **ATH** must record the **data storage device certification** expiry date for a **data storage device** in a **metering installation** in—
  - (a) the **certification report** for the **metering installation**; and
  - (b) the **certification report** for the **data storage device**.

**38 Requirements for certification of metering installation incorporating data storage device**

- (1) An **ATH** must, before it **certifies a metering installation**, ensure that each **data storage device** in the **metering installation**—
  - (a) is installed so that onsite **interrogation** is possible without the need to interfere with seals; and
  - (b) has a dedicated power supply unless the **data storage device** is integrated with another **metering component**.
- (2) An **ATH** must, before it **certifies a metering installation**,—
  - (a) ensure that each **data storage device** in the **metering installation**—
    - (i) is compatible with each other **metering component** of the **metering installation**; and
    - (ii) is suitable for the electrical and environmental site conditions in which it is installed; and
    - (iii) has been **certified** under Schedule 10.8; and
    - (iv) has appropriate electrical separation between all of its outputs and inputs, and all of its outputs and inputs are rated for purpose; and (v) has no outputs that will interfere with the operation of the **metering installation**; and
    - (vi) records periods of data identifiable or deducible by both date and time on **interrogation**; and
  - (b) check and confirm in the **metering installation certification report** that each **data storage device** in the **metering installation**—
    - (i) has memory capacity and functionality that is suitable for the proposed functions of the **data storage device** specified in the design report for the **metering installation**; and
    - (ii) has availability of memory for a period that is suitable for the proposed functions as set out in the design report for the **metering installation**, and for a minimum continuous period of 15 days.
- (3) An **ATH** must, before it **certifies a metering installation** incorporating a **data storage device**, document in the **metering records**—
  - (a) any regular maintenance required for the **data storage device** in accordance with the manufacturer's recommendations; and
  - (b) any maintenance that has been carried out on the **data storage device** (for example battery monitoring and replacement).

Heading: amended, on 1 February 2016, by clause 36 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 38(2)(a)(iv): replaced, on 5 October 2017, by clause 192 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

**39 Changes to data storage device software, ROM, or firmware**

- (1) A **metering equipment provider** must, if it proposes to change the **software**, ROM, or firmware of a **data storage device** installed in a **metering installation** for which it is responsible, ensure that, before the change is carried out, an **approved test laboratory**—
  - (a) tests and confirms that the integrity of the measurement and logging of the **data**

- storage device** would be unaffected by the proposed change; and
  - (b) documents the methodology and conditions necessary to implement the proposed change; and
  - (c) advises the **ATH** that **certified** the **metering installation** of any change that would, or would be likely to, affect the accuracy of the **data storage device**.
- (2) A **metering equipment provider** must, when implementing a proposed change described in subclause (1),—
- (a) carry out the change in accordance with the documented methodology and conditions referred to in subclause (1)(b); and
  - (b) keep a list of **data storage devices** to which the change was made; and
  - (c) update the **metering records** for each **metering installation** referred to in subclause (1) with details of the change and the methodology referred to in subclause (1)(b).

#### 40 Communication equipment requirements

A **metering equipment provider** must ensure that the use of its **communication equipment** complies with the compatibility and connection requirements of any communication network operator to whose communication network the **metering equipment provider** has **communication equipment** connected.

#### 41 Certification stickers

- (1) An **ATH** must, except as provided for in clause 16(6) and subclause (4), if it has **certified** a **metering installation** under this Part, confirm the **certification** by attaching a **metering installation certification sticker** as physically close as practicable to (including, if practicable, on) the **meter** while maintaining reasonable visibility of the **certification sticker** and the **meter**.
- (2) An **ATH** attaching a **metering installation certification sticker** must ensure that it shows—
- (a) the name of the **ATH** who **certified** the **metering installation**; and
  - (b) the most recent **certification date** of the **metering installation**; and
  - (c) the **metering installation** category for which the **metering installation** has been **certified**; and
  - (d) the **ICP identifier** for the **metering installation**; and
  - (e) the **certification** number for the **metering installation**; and
  - (f) any other information that the **Authority** may, from time to time, specify by giving reasonable notice.
- (3) An **ATH** must, when **certifying** a **metering installation** that includes a **metering component** that does not have a **certification sticker** attached—
- (a) obtain the **metering component certification sticker** required under clause 8 of Schedule 10.8; and
  - (b) attach it next to the **metering installation certification sticker**.
- (4) Despite subclauses (1) and (3)(b), the **ATH** must, if attaching a **metering installation certification sticker** as required under subclause (1) is not practicable,—
- (a) devise and use an alternative means of documenting, providing, and maintaining

information in a manner at least equivalent in its effect to that required under subclause (1); and

- (b) keep any **metering component certification sticker** with the information referred to in paragraph (a).

Clause 41(2)(f): amended, on 1 November 2018, by clause 32 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2018.

## 42 Enclosures

An **ATH** must, before it **certifies a metering installation**, ensure that, if a **metering component** in the **metering installation** is housed in a separate enclosure from the **meter** enclosure, the enclosure is—

- (a) appropriate to the environment in which it is located; and  
(b) has a warning label attached stating that the enclosure houses a **metering component**.

### *Certification of metering components*

## 43 Metering components must be certified

- (1) An **ATH** must, before it **certifies a metering installation**, ensure that each **metering component** that is required to be **certified** under this Part and which is in the **metering installation**—

- (a) is **certified** by an **ATH** in accordance with this Part; and  
(b) since **certification**, has been appropriately stored and not used.

- (2) Despite subclause (1) and clause 26(2), an **ATH** may **certify a category 1 metering installation** that contains a **meter** which has been removed from another **category 1 metering installation** (the "previous **metering installation**") if the **ATH**—

- (a) is satisfied that external factors have not affected the accuracy of the **meter**; and  
(b) has confirmed that it has been no more than 12 months since the **meter** was installed in the previous **metering installation**; and  
(c) has confirmed that the **meter** was **calibrated** or **recalibrated** before being installed in the previous **metering installation** and after being removed from any other **metering installation** in which the **meter** was previously installed.

Clause 43(1): amended, on 1 February 2016, by clause 37(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

Clause 43(2): substituted, on 1 February 2016, by clause 37(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.

### *Inspection requirements*

## 44 General inspection requirements

- (1) An **ATH** must, when carrying out an inspection of a **metering installation**,—  
(a) check and confirm that the **data storage device** in the **metering installation** operates in accordance with the requirements of this Part; and

- (b) check and confirm that the expected remaining lifetime of each battery in the **metering installation** will be reasonably likely to meet or exceed the **metering installation certification** expiry date; and
  - (c) ensure that no modifications under clause 19 have been made to the **metering installation** without the change having been documented and **certification** requirements satisfied; and
  - (d) visually inspect all seals, enclosures, **metering components**, and wiring of the **metering installation** for evidence of damage, deterioration, or tampering; and
  - (e) ensure that the **metering installation** and its **metering components** carry appropriate **certification stickers** in accordance with clause 41; and
  - (f) in the case of a **category 1 metering installation** incorporating a **data storage device**, check and confirm there is no difference between the volume of **electricity** recorded by the master accumulation register of a **data storage device**, and the sum of the **meter** registers.
- (2) An **ATH** must, for each inspection of a **metering installation** that it carries out, prepare an inspection report that details—
- (a) the checks that were carried out; and
  - (b) the results of the checks; and
  - (c) the **metering installation certification** expiry date; and
  - (d) the serial numbers of each **metering component** in the **metering installation**; and
  - (e) any instances of non-compliance with this Part, and the actions taken to remedy such a breach; and
  - (f) the name and signature of the person who carried out the inspection and the date on which it was signed.
- (3) The **ATH** must, within 10 **business days** of carrying out the inspection, provide the inspection report to the **metering equipment provider** who is responsible for the **metering installation**.
- (4) If an **ATH** has not performed an inspection of a **metering installation**, other than an **interim certified metering installation**, within the specified timeframe under clauses 45(1) or 46(1), the **certification** of the **metering installation** is automatically cancelled on the date by which the **metering installation** was required to have been inspected.
- (5) A **metering equipment provider** must, within 20 **business days** of receiving the inspection report,—
- (a) undertake a comparison of—
    - (i) the information recorded under subclauses (2)(c) and (d); and
    - (ii) the information in its own records; and
  - (b) investigate and correct any discrepancies found under paragraph (a); and
  - (c) update the **registry** with the relevant changes.

Clause 44(5)(c): amended, on 5 October 2017, by clause 193 of the Electricity Industry Participation Code Amendment (Code Review Programme) 2017.

#### **45 Category 1 metering installation inspection requirements**

- (1) A **metering equipment provider** must ensure that—
- (a) each **category 1 metering installation** for which it is responsible, other than an

- interim certified metering installation**, has been inspected by an **ATH** within the period set out in Table 1 of Schedule 10.1 starting from the date of the **metering installation's** most recent **certification**; or
- (b) for each 12 month period commencing 1 January and ending 31 December, a sample, selected under subclause (2), of the **category 1 metering installations** for which it is responsible has been inspected by an **ATH** within the period set out in Table 1 of Schedule 10.1 starting from the date of the earliest **certification** date of a **metering installation** in the group.
- (2) A **metering equipment provider** must, for the purposes of subclause (1)(b), select a sample by—
- (a) producing a list of all **ICP identifiers** of each **category 1 metering installation** for which it is responsible, other than **interim certified metering installations**; and
- (b) removing from the list of **ICP identifiers**, any **ICP identifier** for a **metering installation** that has been **certified** or inspected in the 84 months prior to the date on which the list was produced; and
- (c) identifying the applicable required minimum sample size set out in Table 8 of Schedule 10.1, based on the number of **metering installations** identified in the list of **ICP identifiers** in produced in accordance with paragraphs (a) and (b); and
- (d) randomly selecting a sample, of the size required under paragraph (c), from the list produced in accordance with paragraphs (a) and (b).
- (3) A **metering equipment provider** must, before it carries out inspections under subclause (1)(b),—
- (a) submit a documented process for randomly selecting a sample to the **Authority** at least 2 months before the first date on which it proposes to carry out the inspections; and
- (b) provide promptly any other information or documentation the **Authority** may reasonably request.
- (4) The **Authority** must, within 2 months of receiving the documented process under subclause (3), advise the **metering equipment provider** that the documented process—
- (a) has been approved; or
- (b) has not been approved, providing reasons.
- (5) A **metering equipment provider** must not inspect a sample under this clause unless the **Authority** has approved the documented process.
- (6) A **metering equipment provider** must, for each inspection of a **category 1 metering installation** conducted under subclause (1)(b), keep records that detail—
- (a) any defects identified that have affected the accuracy or integrity of the **raw meter data** recorded by the **metering installation**; and
- (b) any discrepancies identified under clause 44(5)(b); and
- (c) relevant characteristics, sufficient to enable reporting that identifies any correlations or relationships between inaccuracy and characteristics (for example the **meter** make, model, and **network** area, for each **metering installation**); and
- (d) the procedure used, and the lists generated, to select a sample under subclause (2).
- (7) A **metering equipment provider** must, if it believes that a **metering installation** that

- an **ATH** has inspected under this clause is or could be outside the applicable accuracy tolerances set out in Table 1 of Schedule 10.1, defective, or not fit for purpose,—
- (a) comply with clause 10.43;
  - (b) arrange for an **ATH** to **recertify** the **metering installation** under this Schedule, if the **metering installation** is found to be—
    - (i) outside the applicable accuracy tolerances set out in Table 1 of Schedule 10.1; or
    - (ii) defective; or
    - (iii) not fit for purpose.
- (8) A **metering equipment provider** must, by 1 April in each year, provide to the **Authority** a report in the **prescribed form** that states whether the **metering equipment provider** has, for the previous 1 January to 31 December period, arranged for an **ATH** to inspect each **category 1 metering installation** for which it is responsible—
- (a) under subclause (1)(a), in which case the report must also include, for the period—
    - (i) a list showing the **ICP identifier** for each **ICP** which has a **metering installation** that was due for inspection, the dates by which the **metering installation** was due for inspection, and the date on which it was inspected; and
    - (ii) a summary of the instances of non-compliance of each **category 1 metering installation** inspected; and
    - (iii) the detailed records required under subclauses (6)(a) and (6)(b); or
  - (b) under subclause (1)(b), in which case the report must also include, for the period—
    - (i) the number of **metering installations** identified under subclause (2)(a) to (2)(c); and
    - (ii) a summary of the instances of non-compliance of each **category 1 metering installation** inspected; and
    - (iii) the detailed records required under subclauses (6)(a) and (6)(b).
- (9) The **Authority** may, if it considers that the report provided under subclause (8) indicates that there is a statistically significant number of **metering installations** in the sample which are outside the applicable accuracy tolerances set out in Table 1 of Schedule 10.1, defective, or not fit for purpose, despite subclause (1)(b), advise the **metering equipment provider** that it must select another sample in accordance with subclause (2) and comply with the applicable requirements of this clause in respect of the sample.
- (10) The **metering equipment provider** must select the additional sample under subclause (9), carry out the required inspections and report to the **Authority** under subclause (8), within 40 **business days** of being advised by the **Authority** under subclause (9).
- Clause 45(2)(b): amended, on 1 February 2016, by clause 38(1) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.
- Clause 45(2)(c): amended, on 1 February 2016, by clause 38(2) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.
- Clause 45(2)(d): amended, on 1 February 2016, by clause 38(3) of the Electricity Industry Participation Code Amendment (Code Review Programme) 2015.
- Clause 45(10): amended, on 29 August 2013, by clause 45 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

**46 Category 2 metering installation or higher category of metering installation inspection requirements**

- (1) A **metering equipment provider** must ensure that each **category 2 metering installation**, or higher category of **metering installation**, for which it is responsible is inspected by an **ATH** at least once within the applicable period set out in Table 1 of Schedule 10.1 starting from the date of the **metering installation's** most recent **certification**.
- (2) An **ATH** must, when conducting an inspection of a **category 2 metering installation**, or higher category of **metering installation**, and in addition to complying with clause 44, conduct the following checks:
  - (a) a visual inspection of each **metering component** in the **metering installation** for damage, tampering, or defect; and
  - (b) if the current transformer can be safely accessed, check the position of the current transformer tap to ensure it is still appropriate for the expected maximum current for the **metering installation**; and
  - (c) check for the presence of appropriate voltages at the **metering installation**; and
  - (d) check the voltage circuit alarms and fault indicators.

*Sealing*

**47 Sealing requirements**

- (1) For the purposes of this clause and clause 48, a reference to something being sealed includes being contained in a sealed enclosure.
- (2) An **ATH** must, before it **certifies a metering installation**, ensure that each **metering component** in the **metering installation** that could reasonably be expected to affect the accuracy or reliability of the **metering installation**, is sealed.
- (3) An **ATH** must, before leaving a **metering installation** unattended, ensure that each part and connection of a **data storage device** that is contained in, or attached to, the **metering installation** is sealed.
- (4) Subclause (3) does not apply to a port for on-site reading that is not capable of carrying out any other function.
- (5) An **ATH** must, before it **certifies a metering installation**, ensure that the main switch cover is sealed if the main switch—
  - (a) is on the supply side of the **metering installation**; and
  - (b) has provision for sealing.
- (6) An **ATH** must, when applying a seal to a **metering component** in an enclosure, attach a label in a prominent position inside the enclosure, warning—
  - (a) of the presence of a sealed **metering component** in the enclosure; and
  - (b) that care must be taken not to disturb the connections to the **metering component**.
- (7) An **ATH** must use a sealing system that enables the following information to be determined:
  - (a) the **ATH** who affixed the seal; and

- (b) the person (or the sealing tool) who applied the seal; and
- (c) when the seal was applied.

**48 Removal or breakage of seals**

- (1) Despite clause 10.12, a **participant** who removes or breaks a seal without authorisation of the **metering equipment provider** responsible for the **metering installation** must, within 10 **business days** of removing or breaking the seal,—
  - (a) advise the **metering equipment provider** of—
    - (i) the removal or breakage; and
    - (ii) the reason for the removal or breakage; and
  - (b) reimburse the **metering equipment provider** for the cost of reinstating the seal and **recertification** if required by the **metering equipment provider**.
- (2) A **participant** who is required under subclause (1)(b) to reimburse the cost of reinstating and **recertifying** a seal, must do so within 10 **business days** of the **metering equipment provider** advising the **participant** of the cost.
- (3) A **participant** who becomes aware that another person has removed or broken a seal, must, within 3 **business days** of becoming aware, advise the **metering equipment provider** who is responsible for the **metering installation**.
- (4) A **metering equipment provider** must, if it is advised under subclauses (1) or (3)—
  - (a) use all reasonable endeavours to ascertain—
    - (i) who removed or broke the seal; and
    - (ii) the reason for the removal or breakage; and
  - (b) arrange for an **ATH** to carry out, as soon as practicable, an inspection of the removal or breakage, and to determine any work required to remedy the removal or breakage.
- (5) A **metering equipment provider** must make the arrangements required under subclause (4)(b) within—
  - (a) 3 **business days** of being advised under subclauses (1) or (3), if the **metering installation** is category 3 or higher; or
  - (b) 10 **business days** of being advised under subclauses (1) or (3), if the **metering installation** is a **category 2 metering installation**; or
  - (c) 20 **business days** of being advised under subclauses (1) or (3), if the **metering installation** is a **category 1 metering installation**.
- (6) An **ATH** must, when investigating an unauthorised removal or breakage under subclause (4)(b), assess the accuracy and continued integrity of the **metering installation** and—
  - (a) if, in its opinion, the accuracy and continued integrity is unaffected, replace the removed or broken seals; or
  - (b) if, in its opinion, the accuracy and continued integrity is affected, replace the removed or broken seal and advise the **metering equipment provider** under clause 10.43.
- (7) If subclause (6)(b) applies, the **certification** of the **metering installation** is automatically cancelled from the date on which a **participant** became aware, or should have become aware, of the removed or broken seal.

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## Schedule 10.8

### Metering component requirements

cl 10.20, 10.38 and 10.42

#### *Meters*

#### **1 Meter certification requirements**

- (1) An **ATH** must, before it **certifies** a **meter**, ensure that—
  - (a) an **approved test laboratory** has—
    - (i) conducted **type-testing** that the **ATH** considers appropriate for the model and version of **meter**; and
    - (ii) produced a **type-test** certificate that—
      - (A) confirms the **meter's** technical characteristics; and
      - (B) confirms the range of environmental conditions within which the **meter** has been proven accurate and reliable; and
      - (C) confirms that the **meter** performs the functions for which it was designed; and
      - (D) confirms that the **meter** complies with the requirements of this Part; and
      - (E) records the tests undertaken by the **approved test laboratory** and the reasons why the **ATH** considers that they are appropriate; and
  - (b) the **meter** has a current **calibration report** issued by an **approved calibration laboratory** or an **ATH** approved to carry out **calibration** under Schedule 10.3; and
  - (c) the **meter calibration report**—
    - (i) confirms that the **meter** complies with the standards listed in Table 5 of Schedule 10.1; and
    - (ii) records any tests the **ATH** has performed to confirm compliance under subparagraph (i) and the results of those tests; and
    - (iii) confirms that the **meter** has passed the tests; and
    - (iv) records any recommendations on **error compensation**; and
    - (v) includes any manufacturer's **calibration** test reports; and
  - (d) it produces a **meter certification report** that includes—
    - (i) the date on which it **certified** the **meter**; and
    - (ii) the **certification** validity period for the **meter** for each category of **metering installation** that the **meter** may be used in; and
    - (iii) the maintenance requirements for the **meter**; and
    - (iv) the **meter calibration report**; and
    - (v) whether the **certification** was based on batch test certificates; and
    - (vi) if the **certification** was based on batch test certificates, confirmation that the manufacturer's batch testing facility is, in the **ATH's** opinion, of an acceptable standard; and
  - (e) the percentage values of current set out in Table 6 or Table 7 of Schedule 10.1, as applicable, are relative to the **meter's** base or rated current ( $I_b$  or  $I_n$ ) as

appropriate, and this current is selected at a level appropriate for the **metering installation** in which the **meter** is to be installed.

- (2) The **certification** validity period referred to in subclause (1)(d)(ii) must not be greater than the maximum **certification** validity period set out in Table 2 of Schedule 10.1 for the relevant class of **meter**.

Clause 1(1)(b): amended, on 19 December 2014, by clause 23(1) of the Electricity Industry Participation Code Amendment (Minor Code Amendments) (No 3) 2014.

Clause 1(1)(c)(ii): amended, on 19 December 2014, by clause 23(2) of the Electricity Industry Participation Code Amendment (Minor Code Amendments) (No 3) 2014.

### *Measuring transformers*

## **2 Measuring transformer certification requirements**

- (1) An **ATH** must, before it **certifies** a **measuring transformer**,—

- (a) ensure, by testing, that a current **calibration report** sets out the **measuring transformer's** errors at a range of primary values at their rated burdens; and
- (b) that is a multi-tap current transformer, carry out the **calibration** tests and only **certify** the transformer for the ratios that have been **calibrated** if the test is passed; and
- (c) if the in-service burden is lower than a test point specified in a standard listed in Table 5 of Schedule 10.1, confirm the accuracy of the **measuring transformer** at the in-service burden by—
  - (i) obtaining confirmation of accuracies at the in-service burden from the **measuring transformer's** manufacturer; or
  - (ii) if the primary voltage of the **measuring transformer** is greater than 1kV, a **class A ATH** calibrating the **measuring transformer** at the in-service burden; and
- (d) determine the **measuring transformer certification** validity period under clause 3(c)(ii).

- (2) An **ATH** must, before it **certifies** an epoxy insulated current transformer, ensure that the **certification** tests allow for, and the **metering installation certification report** shows, the current transformer's age, temperature, and batch.

Clause 2(1)(c): amended, on 29 August 2013, by clause 46 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 2(1)(c): substituted, on 19 December 2014, by clause 24 of the Electricity Industry Participation Code Amendment (Minor Code Amendments) (No 3) 2014.

## **3 Measuring transformer certification report**

An **ATH** must, before it **certifies** a **measuring transformer**, ensure that—

- (a) the **measuring transformer** has a current **calibration report** issued by an **approved calibration laboratory** or an **ATH** approved to carry out **calibration** under Schedule 10.3; and
- (b) the **measuring transformer calibration report**—
  - (i) confirms that the **measuring transformer** complies with the standards listed in Table 5 of Schedule 10.1; and
  - (ii) records any tests the **ATH** has performed to confirm compliance under subparagraph (i) and the results of those tests; and

- (iii) confirms that the **measuring transformer** has passed the tests; and
- (iv) records any recommendations made by the **ATH** on **error compensation**; and
- (v) includes any manufacturer's **calibration** test reports; and
- (c) it produces a **measuring transformer certification report** that includes—
  - (i) the date on which it **certified** the **measuring transformer**; and
  - (ii) the **certification** validity period for the **measuring transformer** which must be no more than 120 months; and
  - (iii) the **measuring transformer calibration report**; and
  - (iv) whether the **certification** was based on batch test certificates; and
  - (v) if the **certification** was based on batch test certificates, confirmation that the manufacturer's batch testing facility is, in the **ATH's** opinion, of an acceptable standard; and
- (d) it confirms that it has inspected the manufacturer's test certificates, and carried out any additional tests it considers necessary, to satisfy itself that the **measuring transformer** meets the accuracy requirements of this Part.

Clause 3(a): amended, on 19 December 2014, by clause 25(1) of the Electricity Industry Participation Code Amendment (Minor Code Amendments) (No 3) 2014.

Clause 3(b)(ii): amended, on 19 December 2014, by clause 25(2) of the Electricity Industry Participation Code Amendment (Minor Code Amendments) (No 3) 2014.

#### *Control devices*

### **4 Control device certification report**

- (1) An **ATH** must, before it **certifies** a new **control device**, produce a **certification report** that—
  - (a) confirms that the **control device** complies with the applicable standards listed in Table 5 of Schedule 10.1; and
  - (b) includes the details and results of any test that the **ATH** has carried out to confirm compliance under paragraph (a); and
  - (c) confirms that the **control device** has passed such tests.
- (2) An **ATH** must, before it **certifies** an existing installed **control device**, produce a **certification report** that—
  - (a) confirms that the **control device** is fit for purpose; and
  - (b) confirms the **control device certification** validity period that the **ATH** considers appropriate, which must be no more than 180 months.

Clause 4: substituted, on 29 August 2013, by clause 47 of the Electricity Industry Participation (Metering Arrangements) Code Amendment 2011, Amendment 2013 (No 2).

Clause 4(1)(b): amended, on 15 May 2014, by clause 20 of the Electricity Industry Participation (Minor Code Amendments) Code Amendment 2014.

#### *Data storage devices*

### **5 Data storage device certification requirements**

- (1) An **ATH** must, before it **certifies** a **data storage device** used for storing information that is used for the purposes of Part 15, ensure that—
  - (a) an **approved test laboratory** has—

- (i) conducted **type-testing** that the **ATH** considers appropriate for the model and version of **data storage device**; and
- (ii) produced a **type-test** certificate that—
  - (A) confirms the **data storage device's** technical characteristics; and
  - (B) confirms the range of environmental conditions within which the **data storage device** has been proven accurate and reliable; and
  - (C) confirms that the **data storage device** performs the functions for which it was designed; and
  - (D) confirms that the **data storage device** complies with this Part; and
  - (E) records the tests undertaken by the **approved test laboratory** to confirm compliance under sub-subparagraph (D) and the reasons why the **ATH** considers that they are appropriate; and
- (b) it produces a **certification report** that—
  - (i) confirms the **data storage device** complies with the applicable standards listed in Table 5 of Schedule 10.1; and
  - (ii) records the tests the **ATH** has performed to confirm compliance with subparagraph (i) and the results of those tests; and
  - (iii) confirms that the **data storage device** has passed the tests; and
  - (iv) includes the date on which it **certified** the **data storage device**; and
  - (v) includes the **certification** validity period for the **data storage device** for each category of **metering installation** in which the **data storage device** may be used; and
  - (vi) records the maintenance requirements for the **data storage device**; and
  - (vii) confirms that each period of data is identifiable or deducible by both date and time on **interrogation**; and
  - (viii) confirms that the time and date of the following event conditions are recorded in an **event log**:
    - (A) a loss of the power supply to the **data storage device**; and
    - (B) critical internal alarms such as memory integrity checking, battery low, battery failed, and tampering; and
    - (C) phase failure to the **meter**, if the **data storage device** is integral to the **meter**; and
    - (D) any **software** configuration changes; and
    - (E) results of time setting comparisons and corrections; and
    - (F) the transition from, and to, **New Zealand daylight time**, if the **data storage device** operates in **New Zealand daylight time**; and
  - (ix) confirms that the **data storage device** has the available memory capacity required by the **type-test**; and
  - (x) confirms that the **data storage device** has the functionality—
    - (A) to validate instructions from an **interrogation** system; and
    - (B) for time comparisons and corrections, in response to a valid instruction; and
  - (xi) confirms that all information logged is referenced to **New Zealand Standard Time** or **New Zealand daylight time**; and

- (xii) confirms that the **data storage device** has data loss protection providing a continued clock and memory operation for a continuous period of at least 15 days when the power supply to the **data storage device** is lost.
- (2) The **data storage device certification** validity period referred to in subclause (1)(b)(v) must be—
  - (a) no more than 180 months, if the **data storage device** is a discrete **metering component**; or
  - (b) the same as the **meter certification** validity period, if the **data storage device** is integral to the **meter**.
- (3) Despite subclause (1)(b)(ix), the memory capacity of the **data storage device** must not be less than 15 days.
- (4) For the purposes of subclause (1), a new version of the **data storage device** includes any change to the specification, hardware, or metrology **software** of the **data storage device**.

### *Wiring*

## **6 Wiring**

- (1) An **ATH** must, before it **certifies a metering installation**, ensure that all wiring in the **metering installation** is—
  - (a) suitable for the environment in which the **metering installation** is located; and
  - (b) fit for purpose; and
  - (c) securely fastened; and
  - (d) compliant with all applicable requirements and enactments.
- (2) An **ATH** must, before it **certifies a metering installation**, ensure that the wiring between **metering components** in the **metering installation**—
  - (a) is run as directly as practicable; and
  - (b) is appropriately sized and protected; and
  - (c) does not, to the extent practicable, include intermediate joints for any **measuring transformer** circuits; and
  - (d) subject to subclause (4), includes conductors that are clearly and permanently identified, by the use of any 1 or more of the following:
    - (i) colour coding;
    - (ii) marker ferrules;
    - (iii) conductor numbering.
- (3) For the purposes of subclause (2)(c), if it is not practicable to exclude intermediate joints for any **measuring transformer** circuits, the **ATH** must ensure that the intermediate joints are—
  - (a) sealed or in a sealed enclosure; and
  - (b) located in a secure position; and
  - (c) recorded in the **metering installation certification report**.
- (4) The **ATH** must, if the wiring is in a **metering installation** and does not comply with subclause (2)(d)—
  - (a) ensure, by testing, that the wiring has been correctly installed; and

- (b) record the nature of the test or the tests, and the results of the test or tests, in the **metering installation certification report**.

*Fuses and circuit breakers*

**7 Fuses and circuit breakers**

An **ATH** must, before it **certifies** a **metering installation**, ensure that all fuses and **circuit breakers** that are part of the **metering installation** are—

- (a) appropriately rated for the electrical duty and discrimination required; and
- (b) clearly labelled and—
  - (i) sealed; or
  - (ii) located in sealed enclosures.

*Certification stickers*

**8 Metering component certification stickers**

- (1) An **ATH** must, when **certifying** a **metering component** under this Part, confirm the **certification** by attaching a **metering component certification sticker** to the **metering component** or, if not practicable, provide the sticker with the **metering component**.
- (2) An **ATH** referred to in subclause (1) must ensure that a **metering component certification sticker** shows—
  - (a) the name of the **metering component** owner (if available); and
  - (b) if the **metering component** is a **meter** or a **measuring transformer**, the name of the **ATH** or the **approved calibration laboratory** who **calibrated** the **metering component**; and
  - (c) the name of the **ATH** who **certified** the **metering component**; and
  - (d) the date on which the **metering component** was **certified**; and
  - (e) the initials or other unique identifier of the person who carried out the **certification** of the **metering component**.
- (3) An **ATH** must ensure that a **certification sticker** is—
  - (a) made of weather-proof material; and
  - (b) permanently attached; and
  - (c) filled out using permanent markings.

*Onsite calibration and certification*

**9 Onsite calibration and certification**

- (1) A **certifying ATH** may only **calibrate** a **metering component** onsite—
  - (a) in the **metering component's** normal working environment; and
  - (b) by—
    - (i) measuring the influence of all onsite variables and including their estimated effects in the **uncertainty** calculation; and
    - (ii) ensuring that—
      - (A) the effects of any departures from the **reference conditions** specified in the relevant standards listed in Table 5 of Schedule 10.1 can

- accurately and reliably be calculated; and
- (B) the **metering installation**, in which the **metering component** is incorporated, is within the applicable accuracy tolerances set out in Table 1 of Schedule 10.1 after taking into account all known influences including temperature and temperature co-efficient measurements.
- (2) If an **ATH** **calibrates** a **metering component** onsite using manual methods, computers, or automated equipment for the capture, processing, manipulation, recording, reporting, storage, or retrieval of **calibration** data, it must ensure that its computer **software**—
- (a) is documented in the **ATH's** procedures; and
  - (b) can manipulate the variables that affect the performance of the **metering component** in a manner that will produce results that would correctly indicate the level of compliance of the **metering component** with this Code.
- (3) An **ATH** who **certifies** a **metering component** onsite must include in the **metering component certification report** confirmation that—
- (a) it has calculated the **uncertainty** of measurement taking into account all environmental factors for both the **metering component** being **calibrated** and the **working standards**; and
  - (b) the calculation of the **uncertainty** referred to in paragraph (a) comprises all **uncertainties** in the chain of **calibration**; and
  - (c) the **ATH** has used a **calibration** procedure to **calibrate** the **metering component** that—
    - (i) was included in the **ATH's** most recent **audit**; and
    - (ii) is appropriate for onsite **calibration**; and
    - (iii) includes the methodologies, calculations, and assumptions used by the **ATH** in determining the **uncertainty**; and
  - (d) the **ATH** believes the methodologies, calculations, and assumptions are appropriate, including reasons for that belief.