Electricity Industry Participation Code 2010

Part 10
Metering

Contents

10.1 Contents of this Part

Subpart 1—Preliminary provisions

10.2 Authority’s discretion and powers
10.3 Use of contractors
10.4 Participant obligations
10.5 References to timing
10.6 Participant to provide accurate information
10.7 Access to premises in which metering installation located
10.8 Requirements for information to be recorded, given, produced, or received
10.9 Demarcation of responsibility between metering equipment provider and reconciliation participant
10.10 Standards used

Metering installations

10.11 Categories of metering installation
10.12 Interference with metering installation
10.13 Electricity conveyed

Unmetered load

10.14 Unmetered load

Metering data

10.15 Security of metering data
10.16 Metering data exchange timing and formats

Audits

[Revoked]

10.17A Metering equipment providers and ATHs to arrange for regular audits
10.17B Authority and participant requested audits

Subpart 2—Ongoing obligations

Metering equipment providers

10.18 Category 1 metering installations and higher categories of metering installations must have metering equipment provider
10.19 Metering equipment provider
10.20 Obligations of metering equipment provider
10.21 When metering equipment provider’s obligations come into effect
10.22 Change of metering equipment provider
10.23 Termination of metering equipment provider responsibility
10.23A Decommissioning of metering installation at ICP

Responsibility for ensuring there are metering installations

10.24 Responsibility for ensuring there is metering installation for ICP that is not also NSP
10.25 Responsibility for ensuring there is metering installation for NSP that is not point of connection to grid
10.26 Responsibility for ensuring there is metering installation for point of connection to grid
10.27 Change in responsibility for ensuring metering installation for point of connection to grid

Connecting and electrically connecting points of connection

10.28 [Revoked]
10.29 When grid owner may connect point of connection to grid
10.29A When grid owner may temporarily electrically connect point of connection to grid
10.30 When distributor or embedded network owner may connect NSP that is not point of connection to grid
10.30A When distributor may temporarily electrically connect NSP that is not point of connection to grid
10.31 When distributor may connect ICP that is not NSP
10.31A When distributor may temporarily electrically connect ICP that is not NSP
10.32 Reconciliation participant requesting connection of point of connection
10.33 When reconciliation participant may temporarily electrically connect point of connection
10.33A When reconciliation participant may electrically connect point of connection

General metering installation requirements

10.34 Installation and modification of metering installations
10.35 Physical location of metering installations
10.36 Reconciliation participant to have arrangement with metering equipment provider

Active and reactive energy metering

10.37 Active and reactive measuring and recording requirements

Certification of metering installations

10.38 Certification of metering installations

Metering infrastructure

10.39 Responsibility for metering infrastructure integration

Approved test houses and ATHs

10.40 General requirements for approval as ATH
10.41 Requirements applying to ATHs
10.42 ATH’s functions and ongoing obligations

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
10.44 Metering installations that are inaccurate, defective, or not fit for purpose to be tested
10.45 Investigation and testing costs
10.46 Statement of situation
10.47 Correction of defects and inaccuracies in metering installation
10.48 Correction of defects and inaccuracies in raw meter data

NSP table

10.49 NSP table

Dispute resolution

10.50 Dispute resolution
Transitional provisions

10.51 Transitional provisions

Schedule 10.1 Tables

Schedule 10.2 [Revoked]

Schedule 10.3 ATHs – approval, expiry, cancellation, and renewal of approval

Schedule 10.4 ATH ongoing functions and obligations

Requirements for calibration of metering components

Schedule 10.5 [Revoked]

Schedule 10.6 Metering equipment provider ongoing obligations and functions

Schedule 10.7 Metering installation requirements

Metering installation general requirements

Metering installation design reports

Determination of metering installation categories

Certification of metering installation

Statistical sampling recertification

Certification validity periods

Accuracy and error calculation

Installation of metering components in metering installations

Certification of metering components

Inspection requirements

Sealing

Schedule 10.8 Metering component requirements

Meters

Measuring transformers

Control devices

Data storage devices

Wiring

Fuses and circuit breakers

Certification stickers

Onsite calibration and certification
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.


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.


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:
Electricity Industry Participation Code 2010
Part 10

(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).


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.


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.

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.

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.

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

Audits

10.17 [Revoked]

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.

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.


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**.


### 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
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).


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
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.

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.

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).

10.28 [Revoked]

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.

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
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.


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.
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).

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.


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.

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.

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.

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

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]

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(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)(b) and (c): revoked, on 1 November 2018, by clause 28(2) 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.

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.


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
Electricity Industry Participation Code 2010
Part 10

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.


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(1A) and (1B): inserted, on 1 February 2016, by clause 29(2) 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.

Approved test houses and ATHs

10.40 General requirements for approval as ATH
10.40 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.
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.


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.


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(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 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).

### Schedule 10.1

Table 1: Metering installation characteristics and associated requirements

<table>
<thead>
<tr>
<th>Defining Characteristics</th>
<th>Associated Requirements of active energy metering</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Metering installation certification type</td>
</tr>
<tr>
<td></td>
<td>Accuracy tolerances</td>
</tr>
<tr>
<td></td>
<td>Selected component</td>
</tr>
<tr>
<td></td>
<td>Measuring installation certification and inspection</td>
</tr>
<tr>
<td>Metering installation category</td>
<td>Primary voltage (V)</td>
</tr>
<tr>
<td>1 V &lt; 1kV</td>
<td>I ≤ 160A</td>
</tr>
<tr>
<td>2 V &lt; 1kV</td>
<td>I ≤ 500A</td>
</tr>
<tr>
<td>3 V &lt; 1kV</td>
<td>500A ≤ I ≤ 1200A</td>
</tr>
<tr>
<td>4 V &lt; 1kV</td>
<td>1 &gt; 1200A</td>
</tr>
<tr>
<td>5 1kV ≤ V ≤ 6.6kV</td>
<td>I &gt; 400A</td>
</tr>
</tbody>
</table>
Table 2: Maximum certification validity periods for the purposes of clause 1(2) of Schedule 10.8

<table>
<thead>
<tr>
<th>Metering installation category</th>
<th>Class 0.2 meter (months)</th>
<th>Class 0.5 meter (months)</th>
<th>Class 1.0 meter (months)</th>
<th>Class 2.0 meter (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>180</td>
<td>180</td>
<td>180</td>
<td>180</td>
</tr>
<tr>
<td>2</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>3 where V&lt;1kV</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>N/A</td>
</tr>
<tr>
<td>3 where V≥1kV</td>
<td>120</td>
<td>120</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>60</td>
<td>60</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>36</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### Table 3: Selected component certification and comparative recertification minimum test requirements

<table>
<thead>
<tr>
<th>Event</th>
<th>Design</th>
<th>Measuring transformer</th>
<th>Meter</th>
<th>Primary injection to meter</th>
<th>Prevailing load</th>
<th>Data storage device</th>
<th>Software security and communication equipment</th>
<th>Control device</th>
<th>Wiring check</th>
<th>Component certification check</th>
<th>Review of compensation factors</th>
<th>Raw meter data output</th>
<th>Supply polarity</th>
<th>Register advance</th>
<th>Installation or component configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial certification category 1</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Initial certification categories 2 and 3</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Recertification of category 1 if the meter is not replaced and recertification of categories 2 and 3</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Recertification category 1 where meter is replaced with a certified meter</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Meter change including internal data storage devices</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Metrology change either onsite or remote</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>External data storage device change</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Measuring transformer change or ratio change</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Control device change</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Additional equipment (eg wiring)</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key:** M = mandatory, MI = mandatory if the control device is integral with the meter.


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.
Table 4: Fully calibrated certification minimum test requirements

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

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

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

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

<table>
<thead>
<tr>
<th>Value of Current %</th>
<th>Power Factor</th>
<th>Maximum Overall Uncertainty %</th>
<th>Percentage Error Limits of Meter, Including Uncertainty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class of meter 2.0 and 2.0S</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 to 120</td>
<td>1</td>
<td>±0.4</td>
<td>±1.9</td>
</tr>
<tr>
<td>10 to 120</td>
<td>0.5 lagging</td>
<td>±0.6</td>
<td>±1.9</td>
</tr>
<tr>
<td>10 to 120</td>
<td>0.8 leading</td>
<td>±0.6</td>
<td>±1.9</td>
</tr>
<tr>
<td><strong>Class of meter 1.0 and 1.0S</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 to 120</td>
<td>1</td>
<td>±0.2</td>
<td>±0.9</td>
</tr>
<tr>
<td>10 to 120</td>
<td>0.5 lagging</td>
<td>±0.25</td>
<td>±0.9</td>
</tr>
<tr>
<td>10 to 120</td>
<td>0.8 leading</td>
<td>±0.25</td>
<td>±0.9</td>
</tr>
<tr>
<td><strong>Class of meter 0.5 and 0.5S</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 to 120</td>
<td>1</td>
<td>±0.1</td>
<td>±0.5</td>
</tr>
<tr>
<td>10 to 120</td>
<td>0.5 lagging</td>
<td>±0.12</td>
<td>±0.6</td>
</tr>
<tr>
<td>10 to 120</td>
<td>0.8 leading</td>
<td>±0.12</td>
<td>±0.6</td>
</tr>
<tr>
<td><strong>Class of meter 0.2S</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 to 120</td>
<td>1</td>
<td>±0.06</td>
<td>±0.2</td>
</tr>
<tr>
<td>10 to 120</td>
<td>0.5 lagging</td>
<td>±0.09</td>
<td>±0.3</td>
</tr>
<tr>
<td>10 to 120</td>
<td>0.8 leading</td>
<td>±0.09</td>
<td>±0.3</td>
</tr>
<tr>
<td><strong>Class of meter 3.0 reactive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 to 120</td>
<td>Zero</td>
<td>±1.0</td>
<td>±3.0</td>
</tr>
<tr>
<td>20 to 120</td>
<td>0.8 leading</td>
<td>±1.5</td>
<td>±3.5</td>
</tr>
<tr>
<td>20 to 120</td>
<td>0.8 lagging</td>
<td>±1.5</td>
<td>±3.5</td>
</tr>
<tr>
<td><strong>Class of meter 2.0 reactive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 to 120</td>
<td>Zero</td>
<td>±0.5</td>
<td>±2.0</td>
</tr>
<tr>
<td>20 to 120</td>
<td>0.8 leading</td>
<td>±1.0</td>
<td>±2.5</td>
</tr>
<tr>
<td>20 to 120</td>
<td>0.8 lagging</td>
<td>±1.0</td>
<td>±2.5</td>
</tr>
</tbody>
</table>
### Table 7: Voltage, current, and phase displacement parameters for polyphase meters

<table>
<thead>
<tr>
<th>Polyphase meters</th>
<th>Class of meter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.2 and 0.5</td>
</tr>
<tr>
<td>Each of the voltages between line and neutral or between any 2 lines will not differ from the average corresponding voltage by more than:</td>
<td>±0.1%</td>
</tr>
<tr>
<td>Each of the currents in the conductors will not differ from the average current by more than:</td>
<td>±1.0%</td>
</tr>
<tr>
<td>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:</td>
<td>2°</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Number of metering installations identified</th>
<th>Minimum sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2-8</td>
<td>2</td>
</tr>
<tr>
<td>9-15</td>
<td>3</td>
</tr>
<tr>
<td>16-25</td>
<td>5</td>
</tr>
<tr>
<td>26-50</td>
<td>8</td>
</tr>
<tr>
<td>51-90</td>
<td>13</td>
</tr>
<tr>
<td>91-150</td>
<td>20</td>
</tr>
<tr>
<td>151-280</td>
<td>32</td>
</tr>
<tr>
<td>281-500</td>
<td>50</td>
</tr>
<tr>
<td>501-1200</td>
<td>80</td>
</tr>
<tr>
<td>1201-3200</td>
<td>125</td>
</tr>
<tr>
<td>3201-10,000</td>
<td>200</td>
</tr>
<tr>
<td>10,001-35,000</td>
<td>315</td>
</tr>
<tr>
<td>35,001-150,000</td>
<td>500</td>
</tr>
<tr>
<td>150,001+</td>
<td>800</td>
</tr>
</tbody>
</table>
Schedule 10.2

[Revoked]

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

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


(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.


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.


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.
Schedule 10.4

ATH ongoing functions and obligations

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.


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

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

(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,
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

[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

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
Electricity Industry Participation Code 2010
Schedule 10.6

(62) 1 November 2018

(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).


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:
(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.


### 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**.
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.


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.


6 Provision of metering records when ATH recertifying metering installation

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**.

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

This clause applies if—
(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.

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**.

The **Authority** may change a **metering equipment provider’s participant identifier**.

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

This clause applies when **raw meter data** can only be obtained from a **metering equipment provider’s back office**.

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 ±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>
<thead>
<tr>
<th>Metering installation category</th>
<th>Half-hour metering installations (seconds)</th>
<th>Non half-hour metering installations (seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>±30</td>
<td>±60</td>
</tr>
<tr>
<td>2</td>
<td>±10</td>
<td>±60</td>
</tr>
<tr>
<td>3</td>
<td>±10</td>
<td>NA</td>
</tr>
<tr>
<td>4</td>
<td>±10</td>
<td>NA</td>
</tr>
<tr>
<td>5</td>
<td>±5</td>
<td>NA</td>
</tr>
</tbody>
</table>
67

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.

**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).

**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**.

**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**.


**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.

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.


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
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(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).


---

**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.


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.


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)(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.


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 a 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.


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.


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)(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).

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.


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)(c), 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:
(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)(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(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.


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**.
Electricity Industry Participation Code 2010
Schedule 10.7

(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.


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.
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.

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

(ii) 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).


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]


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).

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.


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.
34 Control device reliability requirements

(1) An \textit{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.


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.


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).


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
(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).


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.


**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.


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).

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.
Schedule 10.8  
cl 10.20, 10.38 and 10.42

Metering component requirements

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
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;

(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.

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.


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).

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
(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.