"Schedule 10.7
"Metering installation requirements

cls 10.11, 10.20, 10.26, 10.38 and 10.42

"Metering installation general requirements

"1 Maintenance and repair of metering installations

"(1) A **metering equipment provider** must comply with subclause (2)—

"(a) for each **metering installation** for which it is responsible; and

"(b) for each **metering component** in a **metering installation** for which it is responsible.

"(2) A **metering equipment provider** must ensure that—

"(a) it carries out regular maintenance, including battery monitoring and replacement, in accordance with the applicable requirements in the **metering records**; and

"(b) it carries out all necessary repairs; and

"(c) if it is not possible to repair a **metering installation** or **metering component** so that it complies with the applicable requirements in this Part, it is—

"(i) replaced with a **metering installation** or **metering component** that complies with the applicable requirements in this Part; or

"(ii) in the case of a **metering installation**, **decommissioned**; and

"(d) it documents in the **metering records** all maintenance, repairs, or replacements it carries out at the time it carries out the maintenance, repairs, or replacement.

"Metering installation design reports

"2 Design reports for metering installations

"(1) A **metering equipment provider** must obtain a design report under this clause for—

"(a) a proposed new **metering installation** for which it will be responsible, before it installs the **metering installation**; and

"(b) a modification to an existing **metering installation** for which it is responsible before the modification commences.

"(2) The **metering equipment provider** must ensure that a design report is prepared by a person with an appropriate level of skill, expertise, experience, and qualification.

"(3) The **metering equipment provider** must ensure that a

design report includes—

"(a) a schematic drawing of the **metering installation** for use by an **ATH**; and

"(b) details of the configuration scheme that programmable **metering components** are to include; and

"(c) confirmation that the configuration scheme has been approved by an **approved test laboratory**; and

"(d) the maximum **interrogation** cycle specified in clause 36(4); and

"(e) any **compensation factor** arrangements; and

"(f) the method of **certification** required under this Part to be used for the **metering installation**; and

"(g) the name and signature of the person who prepared the design report and the date on which it was signed.

"(4) The **metering equipment provider** must provide the design report to the **certifying ATH** before the **ATH** installs or modifies—

"(a) the **metering installation**; or

"(b) a **metering component** in the **metering installation**.

"3 ATH design report obligations

"(1) A **certifying ATH** must, before it **certifies** a new or modified **metering installation**, check and approve, in writing, the design report provided under clause 2 (including the configuration scheme and the schematic drawing), to ensure that the proposed new or modified **metering installation**—

"(a) will function correctly; and

"(b) will provide the required accuracy and **raw meter data**; and

"(c) complies with this Part.

"(2) The **certifying ATH** must, within 10 **business days** of the date on which it **certifies** the **metering installation**—

"(a) update the design report with any changes to the **metering installation** design; and

"(b) provide a copy of the updated design report to the **metering equipment provider** responsible for the **metering installation**.

"4 Metering equipment provider obligations

"(1) A **metering equipment provider** must, for each **metering installation** for which it is responsible,—

"(a) ensure that the sum of the measured error and **uncertainty** does not exceed the maximum permitted error set out in Table 1 of Schedule 10.1 for the category of the **metering installation**; and

"(b) ensure that the design of the **metering installation**, including its **data storage device** and **interrogation** system, will ensure that the sum of the measured error and the smallest possible increment of the energy value of the **raw meter data** obtained from the **metering installation** does not exceed the maximum permitted error set out in Table 1 of Schedule 10.1 for the category of the **metering installation**; and

"(c) comply with the requirements applying to the **metering equipment provider** in the design report provided under clause 2; and

"(d) ensure that the **metering installation** complies with—

"(i) the design report provided under clause 2; and

"(ii) this Part.

"(2) A **metering equipment provider** must ensure that, for each **metering installation** for which it is responsible for an **ICP** that is not also an **NSP**,—

"(a) the **metering installation** configuration does not use subtraction to determine **submission information** used for the purposes of Part 15; and

"(b) which is a category 3 or higher **metering installation**, is a **half-hour metering installation**.

"(3) A **metering equipment provider** must ensure that, for each **metering installation** for which it is responsible for an **NSP** that is not a **point of connection** to the **grid**,—

"(a) the **metering installation** configuration does not use subtraction to determine **submission information** used for the purposes of Part 15; and

"(b) it is a **half-hour metering installation**.

"(4) A **metering equipment provider** must, for each **metering installation** for which it is responsible, ensure that it is appropriate having regard to the physical and electrical characteristics of the **point of connection**.

"*Determination of metering installation categories*

"**5 Determination of metering installation category**

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

"(a) subject to clause 6, if the **metering installation** incorporates a current transformer, its category must be determined according to the primary current rating of the current transformer and the connected voltage set out in Table 1 of Schedule 10.1:

"(b) if the **metering installation** does not incorporate a

current transformer and the quantity of **electricity** conveyed is measured by a **meter**, it must be category 1.

"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** is currently **certified**; 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 **ATH** 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),—

"(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; and

"(iii) if the **metering equipment provider** does not

receive the report in any month, or the report identifies that the **electricity** conveyed through the **point of connection** exceeded 0.5 GWh during the previous 12 month period, the **certification** for the **metering installation** is automatically cancelled from the date on which the **metering equipment provider** should have received the report, or the date on which the **metering equipment provider** received the report.

"(3) The **ATH** must, before it determines a **metering installation** to be a lower category under this clause, visit the site of the **metering installation** to ensure that the installation is suitable for the **metering installation** to be determined to be a lower category.

"(4) If an **ATH** determines a **metering installation** to be a lower category under this clause the **metering installation certification report** must include all information required to demonstrate, as at the **certification** date, compliance with this clause.

"*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** to quantify the **electricity** conveyed.

"(4) An **ATH** must, when preparing a **metering installation certification report**, record the category of the **metering installation**.

"**9 Certification tests**

"(1) An **ATH**, when required under Tables 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 comparing a known load change to the increment of the sum of the **meter** registers:

"(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.

"(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.

"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 each of the following **metering components** in the **metering installation** has been **calibrated** in accordance with Schedule 10.8:

"(i) **data storage device**:

"(ii) **meter**:

"(iii) **measuring transformer.**

"(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 record 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—

"(a) is category 3 or higher; and

"(b) has a voltage in excess of 1kV.

"(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 calendar month during the period of **certification** to determine if load during the month is sufficient for a prevailing load test to be completed.

"(4) Despite subclause (1), the **metering equipment provider** must, if **raw meter data** obtained under subclause (3) demonstrates, at any time, that there is sufficient **electricity** conveyed through the **point of connection** for a prevailing load test to be completed, ensure that the **certifying ATH** makes a subsequent visit to the **metering installation** as soon as practicable, but no later than 20 **business days** after the **metering equipment provider** has obtained the **raw meter data**, to carry out and complete the tests set out in Table 4 of Schedule 10.1.

"(5) The **certifying ATH** must, if the tests referred to in subclause (4) demonstrate that the **metering installation** performs within the relevant maximum permitted error set out in Table 1 of Schedule 10.1,—

"(a) update the **metering installation certification report**, within 5 **business days** of completing the tests, to include the results of the tests carried out; and

"(b) leave the original **metering installation certification** expiry date unchanged.

"(6) If the tests referred to in subclause (4) demonstrate that the **metering installation** does not perform within the relevant maximum permitted error set out in Table 1 of Schedule 10.1—

"(a) the **metering installation certification** is automatically cancelled from the date of the tests; and

"(b) the **certifying ATH** must advise the **metering equipment provider** of the cancellation within 1 **business day** of carrying out the tests; and

"(c) the **metering equipment provider** must follow the procedure set out in clauses 10.43 to 10.48.

"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 a **de-energised metering installation** for an **ICP**.

"Statistical sampling recertification

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

"(1) A **metering equipment provider** may arrange for an **ATH** to **recertify** a group of **category 1 metering installations** for which the **metering equipment provider** is responsible using a statistical sampling process set out in subclause (2).

"(2) To **recertify** a group of **category 1 metering installations**, an **ATH** must—

"(a) select a sample from the group, using a statistical sampling process—

"(i) detailed in AS1284; or

"(ii) that is approved and **published** by the **Authority**:

"(b) **recertify** the group by **recertifying** each **metering installation** in the sample using the **fully calibrated certification** method:

"(c) advise the **metering equipment provider** as soon as reasonably practicable, if the sample—

"(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.

"*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 5 June 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**.

"(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**.

"(4) Despite subclause (2)(e), the **certification** of a **metering installation** continues if—

"(a) there is a minor repositioning of 1 of the following in a **category 1 metering installation** which does not involve disconnection of wiring:

"(i) the **meter** in the existing **metering installation** enclosure; or

"(ii) the existing **metering installation** enclosure; or

"(b) the relocation does not cause, directly or indirectly, the **metering installation** to be—

"(i) outside the applicable accuracy tolerances set out in Table 1 of Schedule 10.1; or

"(ii) defective; or

"(iii) not fit for purpose.

"(5) If a **metering component** that must be **certified** under this Part and which is in an **interim certified metering installation** is modified, or replaced with a **metering component** that is not **certified** under Schedule 10.8, the **interim certified metering installation's certification** is automatically cancelled from the date of the modification or replacement.

"(6) Despite subclause (5), if an **ATH** modifies an **interim certified metering installation** by replacing a **metering component** that must be **certified** under this Part with an equivalent **certified metering component**, the **interim certified metering installation's certification** is not cancelled.

"(7) A replacement **metering component** under subclauses (5) or (6) must comply with this Code.

"**20 Cancellation of certification of metering installations**

"(1) The **certification** of a **metering installation** is automatically cancelled on the date on which 1 of the following events takes place:

"(a) the **metering installation** is modified otherwise than under subclause 19(3) 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**.

"(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, advise the **registry** of the **compensation factor** 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, before it **certifies** a **metering installation** incorporating a **meter**, if the **meter** had previously been used in another **metering installation**, ensure that the **meter** has been **recalibrated** since it was removed from the previous **metering installation**, by—

"(a) an **approved calibration laboratory**; or

"(b) an **ATH**.

"(3) The **ATH** must, before it **certifies** a **metering installation** incorporating a **meter**, document in the **metering records**—

"(a) any regular maintenance required for the **meter** in accordance with the manufacturer's recommendations; and

"(b) any maintenance that has been carried out on the **meter** (for example battery monitoring and replacement).

"(4) An **ATH** must, before it **certifies** a **metering installation** incorporating a **meter**, record in the **metering installation certification report**, the maximum **interrogation** cycle for the **metering installation**.

"(5) The maximum **interrogation** cycle for a **metering installation** referred to in subclause (4) is the period of memory availability given the **meter** configuration.

"(6) Subclause (4) does not apply to a **metering installation** incorporating—

"(a) a **meter**; and

"(b) a **data storage device**.

"**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, and 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 fitted with a **test facility** and provision for isolation, which must be installed as physically close to the **meter** as practical 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 **de-energisation** restrictions; 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.

"(3) The wiring referred to in subclause (2)(b)(iii) forms part of the **metering installation**.

"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 a burden is lower than a test point specified in a standard set out in Table 5 of Schedule 10.1, install burdening resistors to increase the burden to be equal to or greater than the lowest test point specified in the standard.

"**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 advised the **registry** of the **certification** under this clause.

"(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 **market administrator** 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 **market administrator** 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 **market administrator** 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**

"(1) A **metering equipment provider** must ensure that a **control device** is **certified** under this Part by an **ATH** before the **metering equipment provider** uses it, if—

"(a) the **control device** is contained in a **metering installation** for which the **metering equipment provider** is responsible; and

"(b) the **metering installation** is dependent on control signals for its operation; and

"(c) the **metering equipment provider** uses the **control device** to do either or both of the following:

"(i) control a load:

"(ii) switch **meter** registers.

"(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 **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** all **metering components** in the **metering installation** except 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**, record in the **metering installation certification report**, the maximum **interrogation** cycle for the **metering installation**.

"(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 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 on site **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 all of its outputs and inputs appropriately electrically isolated and 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 storage device** would be unaffected by the proposed change; and

"(b) documents the methodology and conditions necessary to implement the proposed change; and

"(c) advises the **ATH** that **certified** the **metering installation** of any change that would, or would be likely to, affect the accuracy of the **data storage device**.

"(2) A **metering equipment provider** must, when implementing a proposed change described in subclause (1),—

"(a) carry out the change in accordance with the documented methodology and conditions referred to in subclause (1)(b); and

"(b) keep a list of **data storage devices** to which the change was made; and

"(c) update the **metering records** for each **metering installation** referred to in subclause (1) with details of

the change and the methodology referred to in subclause (1)(b).

"**40 Communication equipment requirements**

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

"**41 Certification stickers**

"(1) An **ATH** must, except as provided for in clause 16(6) and subclause (4), if it has **certified** a **metering installation** under this Part, confirm the **certification** by attaching a **metering installation certification sticker** as physically close as practicable to (including, if practicable, on) the **meter** while maintaining reasonable visibility of the **certification sticker** and the **meter**.

"(2) An **ATH** attaching a **metering installation certification sticker** must ensure that it shows—

"(a) the name of the **ATH** who **certified** the **metering installation**; and

"(b) the most recent **certification date** of the **metering installation**; and

"(c) the **metering installation** category for which the **metering installation** has been **certified**; and

"(d) the **ICP identifier** for the **metering installation**; and

"(e) the **certification** number for the **metering installation**; and

"(f) any other information that the **Authority** may, from time to time, **notify** 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), an **ATH** may **certify** a **category 1 metering installation** that contains a **meter** which has been **certified** and subsequently installed in, and removed from, another **category 1 metering installation**, in which case, the **ATH** must—

"(a) be satisfied that external factors have not affected the accuracy of the **meter**; and

"(b) check and confirm in the **certification report** for the **metering installation** that the date on which the **meter** was previously installed in the other **metering installation** is less than 12 months before the **commissioning** date of the **metering installation** that the **ATH** is **certifying**.

"*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) advise the **registry** of 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 paragraph (a); and

"(d) randomly selecting a sample, of the size required under paragraph (c), from the list produced under 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 tests 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**; 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 the tests the **ATH** has performed to confirm compliance under subparagraph (i) and the results of those tests; and

"(iii) confirms that the **meter** has passed the tests; and

"(iv) records any recommendations on **error compensation**; and

"(v) includes any manufacturer's **calibration** test reports; and

"(d) it produces a **meter certification report** that includes—

"(i) the date on which it **certified** the **meter**; and

"(ii) the **certification** validity period for the **meter** for each category of **metering installation** that the **meter** may be used in; and

"(iii) the maintenance requirements for the **meter**;

and

"(iv) the **meter calibration report**; and

"(v) whether the **certification** was based on batch test certificates; and

"(vi) if the **certification** was based on batch test certificates, confirmation that the manufacturer's batch testing facility is, in the **ATH's** opinion, of an acceptable standard; and

"(e) the percentage values of current set out in Table 6 or Table 7 of Schedule 10.1, as applicable, are relative to the **meter's** base or rated current (I_b or I_n) as appropriate, and this current is selected at a level appropriate for the **metering installation** in which the **meter** is to be installed.

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

"*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) obtain confirmation of accuracies from the **measuring transformer's** manufacturer if the rated burden is lower than a test point specified in a standard listed in Table 5 of Schedule 10.1; and

"(d) determine the **measuring transformer certification** validity period under clause 3(c)(ii).

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

"**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; 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 the 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**

An **ATH** must, before it **certifies** a **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) confirms that the **control device** is fit for purpose; and

"(c) includes the details and results of any test that the **ATH** has carried out to confirm compliance under

paragraph (a); and

"(d) confirms that the **control device** has passed such tests; and

"(e) confirms the **control device certification** validity period that the **ATH** considers appropriate, which must be no more than 180 months.

"*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.

"**9 On site calibration and certification**

"(1) A **certifying ATH** may only **calibrate** a **metering component** on site—

"(a) in the **metering component's** normal working environment; and

"(b) by—

"(i) measuring the influence of all on site variables and including their estimated effects in the **uncertainty** calculation; and

"(ii) ensuring that—

"(A) the effects of any departures from the **reference conditions** specified in the relevant standards listed in Table 5 of Schedule 10.1 can accurately and reliably be calculated; and

"(B) the **metering installation**, in which the **metering component** is incorporated, is within the applicable accuracy tolerances set out in Table 1 of Schedule 10.1 after taking into account all known influences including temperature and temperature co-efficient measurements.

"(2) If an **ATH calibrates** a **metering component** on site 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** on site 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 on site **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.

Schedule 2
New Schedule 11.4 inserted

cl 22

"Schedule 11.4 cls 11.8A and 11.15A
"Metering equipment provider switching and registry metering records

"**1 Metering equipment provider receives notification for ICP identifier**

"(1) A **gaining metering equipment provider** must, within 10 **business days** of being advised by the **registry** under clause 11.18A,—

"(a) if it intends to accept responsibility for each **metering installation** for the **ICP**—

"(i) enter into an arrangement with the **trader**; and

"(ii) advise the **registry** in the **prescribed form** that it accepts responsibility for each **metering installation** for the **ICP** and of the proposed date on which the **metering equipment provider** will assume responsibility for each **metering installation** for the **ICP**; or

"(b) advise the **registry** in the **prescribed form** that it declines to accept responsibility for each **metering installation** for the **ICP**.

"(2) The **registry** must, within 1 **business day** of a **metering equipment provider** advising under subclause (1)(b) that it declines to accept responsibility for each **metering installation** for the **ICP**, advise the **trader** of the declinature.

"(3) The **registry** must, within 1 **business day** of a **gaining metering equipment provider** advising of acceptance under subclause (1)(a), advise the following **participants** for the **ICP** of the acceptance and proposed date on which the **gaining metering equipment provider** will assume responsibility for each **metering installation** for the **ICP**:

"(a) the **trader**; and

"(b) the **distributor**; and

"(c) if relevant, the **losing metering equipment provider**.

"**2 Gaining metering equipment provider to advise registry of registry metering records**

If the **metering equipment provider** who is responsible for a **metering installation** for an **ICP** changes, the **metering equipment provider** must, within 15 **business days** of becoming the **metering equipment provider** for the

metering installation, advise the **registry** of the **registry metering records** for the **metering installation**.

"3 **Metering equipment provider to advise registry of changes to registry metering records**

A **metering equipment provider** must advise the **registry** of the **registry metering records**, or any change to the **registry metering records**, for a **metering installation** for which it is responsible, no later than 10 **business days** following:

"(a) the **livening** of an **ICP** that is not also an **NSP**:

"(b) any subsequent change in any matter covered by the **metering records**.

"4 **Registry requirement to advise**

The **registry** must, within 1 **business day** of being advised—

"(a) under clauses 2 or 3, advise the **trader** and **distributor** of the **registry metering records**:

"(b) under clauses 3 or 6, advise—

"(i) the **trader** and **distributor** of the details of the change to the **registry metering records**; and

"(ii) the **losing metering equipment provider** of the date of change of the **metering equipment provider** for the **ICP identifier**.

"5 **Changes to metering registry records for ICP identifier**

The **registry** must, within 1 **business day** of being advised of 1 or more of the following changes relating to an **ICP identifier** record, advise the **metering equipment provider** of the change:

"(a) the **trader participant identifier**:

"(b) the **distributor participant identifier**:

"(c) the settlement type:

"(d) the status of the **ICP**.

"6 **Correction of errors in registry**

"(1) A **metering equipment provider** must, by 0900 hours on the 13th **business day** of each **reconciliation period**, obtain the following information from the **registry**:

"(a) a list of the **ICP identifiers** for the **ICPs** for the **metering installations** for which the **metering equipment provider** is recorded in the **registry** as being responsible; and

"(b) the **registry metering records** for each **ICP identifier** obtained under paragraph (a).

"(2) A **metering equipment provider** must, as soon as reasonably practicable but not later than 5 **business days** after it obtains the information under subclause (1), compare the information obtained with its own records.

"(3) If the **metering equipment provider** finds a discrepancy between the information obtained under subclause (1) and its own records, the **metering equipment provider** must, within 5 **business days** of becoming aware of the discrepancy,—

"(a) correct its records that are in error; and

"(b) advise the **registry** of any necessary changes to the **registry metering records**.

"7 **Metering equipment provider to provide registry metering records to registry**

"(1) A **metering equipment provider** must, if required under this Part, provide to the **registry** the information indicated in Table 1 as being "Required", in the **prescribed form**, for each **metering installation** for which it is responsible.

"(2) Despite anything to the contrary in this Code the **metering equipment provider** must—

"(a) provide the information set out in Table 1 indicated as being required for **interim certified metering installations** to the **registry** for all **category 1 metering installations** for which it is responsible; and

"(b) ensure that the **registry metering records** provided in accordance with this clause are, for not less than 50% of the **category 1 metering installations** for which it is responsible, complete, accurate, not misleading or deceptive, and not likely to mislead or deceive, by no later than 1 October 2014; and

"(c) ensure that the **registry metering records** provided in accordance with this clause are, for each **category 1 metering installation** for which it is responsible, complete, accurate, not misleading or deceptive, and not likely to mislead or deceive, by no later than 1 April 2015.

"(3) The **metering equipment provider** must derive the information provided under subclause (2)(a) from—

"(a) the **metering equipment provider's metering records**; or

"(b) the **metering records** contained within the current **trader's** system.

"**Table 1: Registry metering records**

The following table sets out the **registry metering records**:

No	Registry term	Description	Fully certified metering installation	Interim certified metering installation
For each **ICP identifier**				
1	the **metering equipment provider participant identifier**	**participant identifier**	Required	Required
For each **metering installation** for an **ICP**				
2	**metering installation** number	a sequential number that is unique to the **ICP's identifier**, to identify the **metering installation**	Required	Required
3	highest **metering** category	the category recorded in the **metering installation certification report**	Required	Required
4	**metering installation** location code	a code from the list of codes in the **registry**, that identifies the location of the **metering installation** on a premises	Required	Required
5	the **ATH participant identifier**	the **participant identifier** of the **ATH** who **certified** the **metering installation**	Required	Optional
6	**metering installation** type	the **certification** type of the **metering installation**, which may be either **half hour** or non **half hour** identified in the **metering installation certification report**	Required	Required
7	**metering installation certification** date	the effective **certification** date identified in the **metering**	Required	Optional

		installation certification report		
8	the **metering installation certification** expiry date	the **metering installation certification** expiry date, identified in the **metering installation certification report**, or the date that the **metering installation certification** is cancelled	Required	Required
9	**control device certification**	confirmation that the **control device** used in the **metering installation** is included in the **metering installation certification report**	Required	Optional
10	**certification** variations	(a) Does an exemption under the **Act** for the **metering installation** apply? (b) Has the alternate **measuring transformer certification** process been used?	Required	Optional
11	**certification** variations expiry date	the earlier of the expiry date of any **certification** variation under item 10	Required	Optional
12	**certification** number	the **certification** number assigned to a **metering installation's certification**	Required	Optional
13	maximum	the maximum	Required	Required

	interrogation cycle	**interrogation** cycle for the **metering installation** included in its **certification report**		
14	price code	if the **metering equipment provider** considers it relevant, an identifier that may be used to indicate the price that would apply to a lease for the use of the **metering installation**	Optional	Optional
The following details for each **metering component** in the **metering installation** for each **ICP**				
15	**metering component** type	an identifier used to identify the type of **metering component** in the **metering installation** selected from the list of codes in the **registry**	Required	Required
16	**metering component** serial number	the manufacturer's serial number visible on the outside of the **metering component**	Required	Required for **meter**. Optional for all other **metering components**.
17	**meter** or **data storage device** type	an identifier used to identify the type of **meter** or **data storage device** in the **metering installation**, which may be **half hour**, non **half hour**, or prepay selected from the list of codes in the **registry**	Required for **meter** or **data storage device**.	Required for **meter** or **data storage device**.
18	AMI type	an identifier to identify if the **metering**	Required for **meter** or **data storage device**.	Required for **meter** or **data storage device**.

		component is an advanced metering infrastructure device	Optional for all other **metering components**.	Optional for all other **metering components**.
19	**compensation factor**	the **compensation factor** for the **metering installation**, which in the case of a complex **compensation factor**, must be obtained from the **metering equipment provider**	Required	Required
20	owner of a **metering component**	a free text field to identify the owner of a **metering component**, which may be a **participant identifier** if the owner is a **participant**	Optional	Optional
21	removal date of a **meter** or **data storage device**	a date that a **meter** or **data storage device** is— (a) removed; or (b) modified; or (c) replaced	Required for **meter** or **data storage device**	Optional for **meter** or **data storage device**
The following details for each **metering component** identified in rows 15 to 21 above				
22	**metering component** type	the **metering component** type identifier selected from the list of codes in the **registry**	Required	Required
23	register number	a sequential number that identifies each data channel which is present in the **metering component**	Required for **meter** or **data storage device** or **control device**. Optional for all other **metering components**.	Required for **meter** or **data storage device** or **control device**. Optional for all other **metering components**.
24	number of	the number of dials	Required for	Required for

	dials	or digits that relate to the data channel	**meter.** Optional for all other **metering components.**	**meter.** Optional for all other **metering components.**
25	register content code	an identifier for the contents of a channel or a data channel, selected from a list in the **registry**	Required for **meter** or **data storage device.** Optional for all other **metering components.**	Required for **meter** or **data storage device.** Optional for all other **metering components.**
26	period of availability	an identifier for the period of availability for which a **control device** is configured, selected from a list in the **registry**	Required for **meter** or **data storage device.** Optional for all other **metering components.**	Required for **meter** or **data storage device.** Optional for all other **metering components.**
27	unit of measurement	an identifier for the units recorded in a data channel, selected from a list in the **registry**	Required for **meter** or **data storage device.** Optional for all other **metering components.**	Required for **meter** or **data storage device.** Optional for all other **metering components.**
28	energy flow direction	an identifier for the import or export recording in the data channel, selected from a list in the **registry**	Required for **meter** or **data storage device.** Optional for all other **metering components.**	Required for **meter** or **data storage device.** Optional for all other **metering components.**
29	accumulator type	an identifier for either absolute or cumulative recording in the data channel, selected from a list in the **registry**	Required for **meter** or **data storage device.** Optional for all other **metering components.**	Required for **meter** or **data storage device.** Optional for all other **metering components.**
30	settlement indicator	an identifier that indicates that the data channel must be included in the **trader's submission**	Required	Required

		information, selected from a list in the **registry**		
31	event reading	the event **meter** read of a **meter** or **data storage device**	Optional	Optional

Explanatory Note

This note is not part of the Code amendment, but is intended to indicate its general effect.

This amendment to the Electricity Industry Participation Code 2010 (**Code**) comes into force on 6 June 2013. It replaces the current Part 10 of the Code with a new Part 10, and makes parallel and consequential amendments to Parts 1, 11, and 15.

The new Part 10 addresses material inconsistencies within the previous Part 10 and updates the Code to better accommodate technological developments (both existing and future) such as in regard to smart meters. To achieve this, the new Part 10 regulates how metering installations are used to accurately measure and record electricity conveyed, to ensure the accuracy of the clearing and settlement of electricity trading and allocates responsibility for ensuring metering installations are in place and compliant. It also sets out processes and procedures that apply to:

(a) testing, calibrating, and certifying metering installations;
(b) auditing approved test houses (**ATHs**) and metering equipment providers;
(c) approving ATHs; and
(d) submitting information to the registry and for the purposes of Part 15 of the Code.

The new Part 10 also regulates the data use, handling, storage, and transmission processes associated with metering installations and metering data, and addresses other related matters, processes, and procedures.

Date of notification in the *Gazette*: 12 January 2012.