

# Draft Findings on the Review of Horizon Power's Metrology Procedure

14 November 2017

**Economic Regulation Authority**

WESTERN AUSTRALIA

## Economic Regulation Authority

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## DRAFT FINDINGS

The Economic Regulation Authority (ERA) finds that Horizon Power's amended metrology procedure meets the approval criteria of the *Electricity Industry (Metering) Code 2012* for the reasons set out in this document.

The ERA is required by the Code to notify Horizon Power of these draft findings. Interested parties then have a period of at least 20 business days to make submissions on the draft findings. The ERA will consider any submissions received before publishing its final findings.

## Invitation to make submissions

Interested parties are invited to make submissions on the ERA's draft findings by **4:00 PM (WST) Tuesday, 12 December 2017** via:

Email address: [publicsubmissions@erawa.com.au](mailto:publicsubmissions@erawa.com.au)  
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## CONFIDENTIALITY

Submissions from interested parties will be treated as being in the public domain and will be published on the ERA's website. Where an interested party wishes to make a submission in confidence, it should clearly indicate the parts of the submission for which confidentiality is claimed, and specify in reasonable detail the basis for the claim. Any claim of confidentiality will be considered in accordance with the provisions of *Economic Regulation Authority Act 2003*.

The publication of a submission on the ERA's website shall not be taken as indicating that the ERA has knowledge either actual or constructive of the contents of a particular submission and, in particular, whether the submission in whole or part contains information of a confidential nature and no duty of confidence will arise for the ERA.

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# REASONS

## Background

1. On 24 July 2017, the Economic Regulation Authority (**ERA**) initiated a review of Horizon Power's metrology procedure. The procedure provides guidance on the provision, installation and maintenance of metering installations connected to the Horizon Power network.
2. Horizon Power's metrology procedure was first approved in September 2006 under the requirements of the *Electricity Industry (Metering) Code 2005*.<sup>1</sup> This code was repealed in December 2012 and replaced with the *Electricity Industry (Metering) Code 2012*.
3. Horizon Power has updated its metrology procedure to align it with the requirements of the updated Code.
4. Division 6.2 of the Code specifies the approval procedure for documents that are required under the Code, including a metrology procedure. Clause 6.20 sets out the specific requirements for the review and amendment of these documents.
5. The Code requires the ERA to initiate a review before it can allow (or require) amendments to a metrology procedure. Once initiated, the ERA must proceed with the review in accordance with clause 6.20(3). In summary:
  - Within 50 business days after initiating a review, the ERA must publish its draft findings, notify the network operator and allow a period of at least 20 business days for interested parties to make submissions in relation to the draft findings.
  - Within 10 business days after the close of submissions on the draft findings, the ERA must publish final findings and notify the network operator. The findings must detail any amendments to the document submitted by a network operator and any submissions received.
  - The ERA can extend the time limits (outlined above) on more than one occasion by publishing a notice that gives reasons for its decision to extend the time limit.<sup>2</sup>
6. Under clause 6.12 of the Code, the ERA may establish a Metering Advisory Committee to advise it on matters relating to metering, including the review of specific documents. The ERA may seek, and have regard to, the advice provided by the committee when performing its (review and amendment) functions under clause 6.20. The ERA did not establish a committee for this review.

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<sup>1</sup> Horizon Power's approved 2006 metrology procedure was identical to Western Power's approved 2006 metrology procedure because it was prepared by Western Power in consultation with Horizon Power – at the time Horizon Power had a service level agreement for Western Power to act as its metering data agent.

<sup>2</sup> The ERA extended the time limit for publishing its draft findings for this review in a notice dated 4 September 2017. This notice is available on the ERA's website.

## Metering Code Requirements

7. Part 6 of the Code contains provisions for the creation, approval and review of documents, including a metrology procedure. More specifically, clause 6.20 of the Code details the process that the ERA must follow in reviewing and amending a network operator's document.

### **6.20 Review and amendment of network operator's documents (other than communication rules)**

- (1A) This clause 6.20 does not apply in respect of communication rules.
- (1) The Authority may in its absolute discretion:
- (a) of its own initiative; or
  - (b) upon request by a Code participant, require or permit a network operator to amend a document provided that the document as amended must comply with this Code.
- (2) Before requiring or permitting an amendment to a document under this clause 6.20, the Authority must initiate a review of the document under clause 6.20(3), which review may be of the whole document or only that part of the document for which the amendment is proposed.
- (3) The Authority must, if it undertakes a review under this clause 6.20:
- (a) within 50 business days after initiating the review:
    - (i) publish its draft findings in relation to the review; and
    - (ii) notify the network operator of its draft findings; and
  - (b) allow a period of at least 20 business days after publication of the draft findings for persons to make submissions in relation to the draft findings; and
  - (c) within 10 business days after the end of the period in 6.20(3)(b):
    - (i) publish its final findings in relation to the review (which must detail any amendments required to the document) together with any submissions made under clause 6.20(3)(b) in relation to the review; and
    - (ii) notify the network operator of its final findings.
- (3A) The Authority may on one or more occasions extend the time limits specified in clauses 6.20(3)(a) and 6.20(3)(c) for a period determined by the Authority.
- (3B) The Authority must not exercise the power in clause 6.20(3A) to extend the time limits specified in clauses 6.20(3)(a) and 6.20(3)(c) unless, before the day on which the time would otherwise have expired, it publishes notice of, and reasons for, its decision to extend the time limit.
- (4) The network operator must amend any document in accordance with the Authority's final findings.
- (5) The network operator must publish any document that has been amended under clause 6.20(4).
- (6) If a network operator fails to amend a document as required under clause 6.20(4), the Authority may publish the amendment, and the document has effect as amended by the published amendment, from the time of publication or such other time as is stated in the publication.

8. Pursuant to clause 6.14, the ERA must not approve a document unless it is satisfied that the document meets the criteria set out in clauses 6.5 to 6.9 (as applicable<sup>3</sup>) of the Code.
9. Clauses 6.5 and 6.8 of the Code are applicable to the approval of metrology procedures.

#### **6.5 Requirements for all documents**

A document must:

- (a) comply with this Code; and
- (b) not impose inappropriate barriers to entry to a market; and
- (c) be consistent with good electricity industry practice; and
- (d) be reasonable; and
- (e) be consistent with the Code objectives; and
- (f) be consistent with the market rules; and
- (g) unless this Code requires otherwise, be consistent with other enactments.

...

#### **6.8 Requirements for a metrology procedure**

A metrology procedure must at least:

- (a) as a minimum, contain information on the devices and methods that are used by the network operator to:
  - (i) measure, or determine by means other than a device, electricity produced and consumed at a metering point; and
  - (ii) convey the measured or determined information to other devices using communications links; and
  - (iii) prepare the information using devices or methods to form energy data; and
  - (iv) provide access to the energy data from a telecommunications network; and
- (b) specify the minimum requirements for meters and metering installations, including:
  - (i) accumulation meters; and
  - (ii) interfaces that allow interval energy data to be downloaded; and
  - (iii) direct connected meters for Type 4 to Type 6 metering installations; and
  - (iv) CTs<sup>4</sup> and VTs<sup>5</sup>; and

<sup>3</sup> Clause 6.5 – Requirements for all documents; clause 6.6 – Requirements for model service level agreement; clause 6.7 – Requirements for communications rules; clause 6.8 – Requirements for a metrology procedure; and clause 6.9 – Network operator may establish a registration process.

<sup>4</sup> The Code defines *CT* to mean “a transformer for use with meters and protection devices in which the electric current in the secondary winding is, within prescribed error limits, proportional to and in phase with the electric current in the primary winding”.

<sup>5</sup> The Code defines *VT* to mean “a transformer for use with meters and protection devices in which the voltage across the secondary terminals is, within prescribed error limits, proportional to and in phase with the voltage across the primary terminals”.

- (v) programmable settings under clause 3.10.
- (c) specify the procedures for estimating, substituting and validating energy data under this Code; and
- (ca) provide for the sampling and testing of meters for the purposes of and in accordance with clause 3.11A(1); and
- (d) [not used]
- (e) specify the date from which the metrology procedure takes effect which must be no less than 3 months after it is published.

*{Note: Without limiting clause 6.8, a network operator's metrology procedure must, at least:*

- (a) *specify the technical parameters for the provision, installation, operation and maintenance of metering installations under clause 3.5(1) which are consistent with this Code; and*
- (b) *specify the methods for determining the accuracy of estimated energy data under clause 5.25(a); and*
- (c) *specify test and audit procedures under clause 5.21; and*
- (d) *[not used]*
- (e) *specify the devices and methods to ensure the accuracy of data relating to each metering point by the application of appropriate CT or VT ratios and pulses in accordance with clause 5.25(b); and*
- (f) *specify what the network operator must do to comply with clause 5.20(4); and*
- (g) *specify the methods for comparing market generator interval energy data against SCADA<sup>6</sup> data for the purposes of A2.6(2)(b).}*

## Horizon Power's Updated Metrology Procedure

10. Horizon Power's metrology procedure was first approved in September 2006, under the requirements of the previous Code.<sup>7</sup> The metrology procedure has been updated to align it with the requirements of the current Code. It follows the completion of a meter exchange project where advanced metering technology was installed across Horizon Power's entire customer base.
11. Horizon Power details the changes made to its metrology procedure in a report: "*Horizon Power Report on Amendments to the Metrology Procedure*". The updated procedure substantially reflects the original metrology procedure, which was approved and published by the ERA in 2006. Changes have been made to improve readability, remove duplication and simplify the document.

<sup>6</sup> The Code defines SCADA data to mean "energy data the accuracy and quality of which is not required to be determined and which is obtained via a Supervisory Control and Data Acquisition system used to control and operate a network and the generating plant connected to a network".

<sup>7</sup> The *Electricity Industry (Metering) Code 2005*. This code was repealed in December 2012 and replaced with the *Electricity Industry (Metering) Code 2012*.

12. In summary, the changes to Horizon Power's metrology procedure include:
  - changes of an administrative nature to change formatting and amend typographical and/or grammatical drafting errors throughout the document;
  - changes to the defined terms used within the document to amend existing, insert new and/or delete definitions that are not used; and
  - changes to the drafting of some clauses, including the amalgamation, addition or deletion of clauses.

## Public Consultation

13. The ERA initiated the review and invited interested parties to make submissions on Horizon Power's updated metrology procedure on 24 July 2017. No submissions were received.
14. Horizon Power was given the opportunity to submit an amended metrology procedure to take into account any submissions made by interested parties and/or any other matters identified during the consultation period. Horizon Power submitted an amended metrology procedure to the ERA on 4 September 2017. The amended metrology procedure is materially the same as the procedure originally submitted to the ERA for review.<sup>8</sup>

## ERA's Considerations

15. The ERA has considered Horizon Power's amended metrology procedure against the approval criteria set out in clauses 6.5 and 6.8 of the Code.

### *Requirements for all documents*

16. The requirements of clause 6.5 of the Code apply to all metering documents that are required to be established under the Code, hence the requirements are broad in nature. To make an assessment against these broad requirements, consideration has been given to other metrology procedures established under the Code and code participant views.
17. Metrology procedures for electricity networks that are operated by different network operators should be consistent where practicable. For example, industry standards that cover the provision and operation of general metering installations should apply regardless of electricity network or operator. The Code recognises this by requiring compliance with certain Australian standards where they exist.<sup>9</sup>
18. Horizon Power's amended metrology procedure is broadly consistent with Western Power's 2015 metrology procedure. This consistency assists in demonstrating compliance against the Code's requirements for all documents, and in particular being consistent with good electricity practice and reasonable.

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<sup>8</sup> Some minor changes were made to correct formatting errors. The metrology procedure that is the subject of these draft findings is Horizon Power's *amended metrology procedure*, submitted to the Authority on 4 September 2017.

<sup>9</sup> For example, clause 6.8(ca) of the Code requires a metrology procedure to provide for the sampling and testing of meters for accuracy in accordance with AS1284.13.

19. Submissions from code participants would also assist in the assessment of Horizon Power's amended metrology procedure against the broad requirements of the Code. However, no submissions from code participants were made in response to the ERA's invitation for submissions on Horizon Power's proposed updates. In the absence of any submissions, it is assumed that code participants generally accept Horizon Power's proposed updates as reasonable and consistent with applicable codes and industry practice.

### *Requirements for a metrology procedure*

20. Clause 6.8 of the Code sets out the requirements for a metrology procedure. To assess compliance against these requirements, the ERA has compared Horizon Power's amended metrology procedure against Western Power's 2015 metrology procedure.
21. Western Power's 2015 metrology procedure was the last metrology procedure to be reviewed by the ERA.<sup>10</sup> As part of the review process, code participants were invited to make submissions on Western Power's proposed metrology procedure updates. Detailed submissions were received from Synergy and Community Electricity. The matters raised by these parties were addressed by Western Power and amendments were made to its metrology procedure where necessary. These amendments were subsequently found to meet the requirements for approval by the ERA.
22. Horizon Power's amended metrology procedure is broadly consistent with Western Power's 2015 metrology procedure, meaning that the matters previously raised by code participants during Western Power's metrology procedure review are implicitly addressed within Horizon Power's updated metrology procedure.
23. While broadly consistent with Western Power's 2015 metrology procedure, some clauses in Horizon Power's amended metrology procedure either do not exist in Western Power's metrology procedure (i.e. there is no corresponding clause), or are different in drafting. These clauses are listed and considered in turn below.
- Clause 3.5 – Estimation and Substitution of Energy Data
  - Clause 3.6 – Calculation of Energy Data for Type 7 Metering Installations
  - Clause 3.7 – Access to Energy Data
  - Clause 6.2 – Validation of Energy Data from Types 1-5 Metering Installations with Check Metering
  - Clause 6.3 – Validation of Energy Data from Types 1-5 Metering Installations with Partial Check Metering
  - Clause 7.3 – Network Operator Obligations<sup>11</sup>
  - Clause 9 – Substitution and Estimation for De-energised or Inactive Meters
  - Clause 10 – Metering Installation Type 7 – Energy Calculation
  - Clause 11 – Metering Installation Type 7 – Validation and Substitution

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<sup>10</sup> The review process and related documents and findings are available from the ERA website at: <https://www.erawa.com.au/electricity/electricity-access/metering-services/metrology-procedure-mandatory-link-criteria/western-powers-approved-metrology-procedure-and-mandatory-link-criteria> (accessed 30 October 2017).

<sup>11</sup> For "metering installation types 1-5 – accumulation, substitution and estimation" (clause 7 of the metrology procedure).

### Clause 3.5

24. Clause 3.5 of the metrology procedure details provisions for the estimation and substitution of energy data for the various types (types 1 to 7) of metering installations.<sup>12</sup> The provisions require Horizon Power to estimate or substitute energy data in accordance with clause 7, 8 or 11 (as applicable<sup>13</sup>) of the metrology procedure.
25. Proposed clause 3.5.2(e) requires Horizon Power to estimate or substitute energy data from type 6 metering installations, in accordance with clause 8, where the customer has agreed to an estimated or substituted scheduled meter reading. It is considered reasonable, where there is agreement between the customer and Horizon Power, for Horizon Power to estimate or substitute energy data in this circumstance.
26. Proposed clause 3.5.3 requires Horizon Power, for type 7 metering installations, to ensure that energy data is substituted or estimated in accordance with clause 11 in circumstances where an audit of the information and algorithms used to calculate energy data shows that a calculation error exists. While some drafting changes have been made for readability, the drafting of this clause is materially the same as clause 3.4.10 of Horizon Power's 2006 metrology procedure. The drafting is also consistent with the provisions set out in clause 3.6 (considered below), which detail how energy data for type 7 metering installations is calculated.
27. The Code requires a metrology procedure to contain information on the devices and methods used to measure electricity produced and consumed at a metering point; and to specify the procedures for estimating, substituting and validating energy data. Clause 3.5 of Horizon Power's amended metrology procedure meets these requirements of the Code.

### Clause 3.6

28. Clause 3.6 of the metrology procedure outlines provisions for the calculation of energy data for type 7 (unmetered loads) metering installations. In summary, Horizon Power must ensure:
  - that energy data is calculated in accordance with clause 9 of the metrology procedure;
  - that energy data is validated in accordance with clause 11 of the metrology procedure;
  - where the calculated energy data fails the validation test, the energy data is substituted in accordance with substitution method 74; and
  - where energy data is substituted, affected code participants are advised that substituted data will be used for settlement purposes.

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<sup>12</sup> There are seven types of metering installations under the Code. Types 1 to 5 metering installations require, as a minimum, an interval meter with the annual energy throughput at the connection point meeting specified limits (for example, throughput at the connection point for a type 2 installation is to be 100GWh to, but not including, 1000GWh). Type 6 metering installations require, as a minimum, an accumulation meter with the annual energy throughput at the connection point being less than 50MWh. Type 7 metering installations are used for un-metered loads (such as street lighting).

<sup>13</sup> Section 7 – Metering Installation Types 1-5 – Accumulation, Substitution and Estimation;  
Section 8 – Metering Installation Type 6 – Validation, Substitution and Estimation; and  
Section 11 - Metering Installation Type 7 – Validation and Substitution.

29. While changes have been made to the drafting of this clause for readability, the proposed clause remains materially the same as clause 3.5 of Horizon Power's 2006 metrology procedure. The clause details how Horizon Power will calculate, validate and substitute energy data for type 7 metering installations by cross referencing to other clauses of the metrology procedure that provide greater detail.
30. The Code requires a metrology procedure to contain information on the devices and methods used to measure electricity produced and consumed at a metering point; and to specify the procedures for estimating, substituting and validating energy data. Clause 3.6 of Horizon Power's amended metrology procedure meets these requirements of the Code.

### **Clause 3.7**

31. Clause 3.7 of the metrology procedure outlines the provisions for access to energy data.
32. In accordance with the Code, clause 3.7.3 of the metrology procedure requires Horizon Power to ensure that access to a metering installation and the metering database is secured from unauthorised access. Access to energy data will be provided through an agreed reporting process or through a "user" or "customer" portal, and may also be provided through the signals output of the meter. Direct access to Horizon Power's telecommunications devices will not be granted.
33. Drafting changes have been made to clause 3.7.3 to remove requirements to provide energy data by a specific time (i.e. 5.00 PM) and day.
34. Under clause 3.7.3, energy data is to be provided through an agreed process, portal or via the meter itself. These methods do not appear to restrict the provision of energy data to specific times of the day or days of the week. Where there is a need to access energy data at a specific time, and/or on a specific day, an agreement can be made. For this reason, it is reasonable for Horizon Power to remove any specific timing requirements for the provision of energy data from clause 3.7.3 of the metrology procedure.
35. With the exception of drafting changes to remove timing requirements, the drafting of proposed clause 3.7 remains materially the same as clause 3.5 of Horizon Power's 2006 metrology procedure.
36. The Code requires a metrology procedure to contain information on the devices and methods used to provide access to energy data from a telecommunications network. Clause 3.7 of Horizon Power's amended metrology procedure meets this requirement of the Code.

### **Clause 6**

37. Clause 6 of the metrology procedure details provisions for the validation of energy data from type 1 to 5 metering installations with full, partial or no check metering. Check metering is required under the Code in certain circumstances.<sup>14</sup> Depending on the energy (GWh) used per metering point, a full or partial check metering installation may be required.

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<sup>14</sup> See clause 3.13 ("Requirements for check metering installations") of the Code.

38. Proposed clause 6.2 details the checks that Horizon Power will apply to energy data collected from all type 1 to 5 metering installations that have *full* check metering.
39. Proposed clause 6.3 details the checks that Horizon Power will apply to energy data collected from all type 1 to 5 metering installations that have *partial* check metering.
40. Proposed clause 6.4 details the checks that Horizon Power will apply to energy data collected from all type 1 to 5 metering installations that are *not required* to have check metering.
41. While the drafting of proposed clauses 6.2, 6.3 and 6.4 differ to the drafting of the equivalent clauses in Western Power's 2015 metrology procedure, the key calculations used for validation remain the same. Horizon Power's proposed drafting of clauses 6.2, 6.3 and 6.4 remain materially the same as clauses 11.2 (for full check metering), 11.3 (for partial check metering) and 11.4 (for no check metering) within its 2006 metrology procedure.
42. The Code requires a metrology procedure to specify the procedures for estimating, substituting and validating energy data. Clause 6 of Horizon Power's amended metrology procedure meets this requirement of the Code.

### Clause 7.3

43. Clause 7 of the metrology procedure details provisions for the accumulation, substitution and estimation of energy data for type 1 to 5 metering installations.
44. Clause 7.3 sets out Horizon Power's obligations when energy data is required to be substituted or estimated. Horizon Power may use:
  - "substitution types" 11, 12, 13, 14, 15, 16, 17, 18 and 68 for type 1 to 4 metering installations; and
  - "substitution types" 51, 52, 53, 54, 55, 56 and 68 for type 5 metering installations; and
  - all "substitution types" as defined in clause 7.5, 7.6 and 9 of the metrology procedure.
45. The substitution types that Horizon Power may use are the same "substitution methods" within the equivalent clauses of Western Power's 2015 metrology procedure and Appendix 3 of the Code.<sup>15</sup> The exception is for "substitution type 68" – this substitution type (or method) is proposed to be included by Horizon Power under a new clause 9 (considered below at paragraph 49).
46. To assist with clarity, the ERA considers Horizon Power should consider changing the term substitution *type* to substitution *method*. The term *method* would be consistent with the term used elsewhere within the metrology procedure (see for example, clauses 7.5.1, 7.5.2, 7.5.3, etc.) and Appendix 3 of the Code.
47. Similarly, and for consistency, the drafting of clauses elsewhere within the metrology procedure (such as clauses 8.3, 8.4 and 11.2) should be changed to replace the term substitution and/or estimation *type* with *method*.

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<sup>15</sup> Appendix 3 of the Metering Code sets out the rules for the network operator to carry out substitution and estimation of energy data during the process of collection and transfer to the metering database.

48. The Code requires a metrology procedure to specify the procedures for estimating, substituting and validating energy data. Clause 7.3 of Horizon Power’s amended metrology procedure meets this requirement of the Code.

### Clause 9

49. Horizon Power proposes to add a new clause 9 to the metrology procedure that details a substitution/estimation method<sup>16</sup> (*method 68*) for de-energised or inactive meters.

[Method] 68 – Zero

Where a connection point or meter is de-energised or where an inactive meter is known and where the consumption is known to be zero.

50. The proposed drafting for *method 68* is consistent with the drafting of sub-clause 7.5.5(a) of Western Power’s 2015 metrology procedure which states:

#### 7.5.5 Substitution Method 55

This substitution method covers the situation where an alternate method of substitution has been agreed with the code participant, the applicable user and Western Power. This may be a globally applied method or a site specific method where an adjusted profile is used to take into account local conditions which affect consumption (e.g. local holiday or customer shutdown), or where alternate data may be used for quality checks and minor adjustments of an estimated profile such as using meter register data.

##### a) Not Energised Metering Points

For metering points that are active but in the status of “Not Energised”, Western Power will apply a substitute reading of zero for any day(s) the metering point has [a] “Not Energised” status. Substitution method 55, in conjunction with the appropriate reason code will be provided by Western Power.

51. As with Western Power’s 2015 metrology procedure, it is reasonable to apply a (substitution) reading of zero for metering points that are known to be de-energised or inactive. The ERA considers Horizon Power should, however, consider changing the drafting of clause 9 to use the term *method*, instead of *type*, when referring to the substitution/estimation method used for de-energised or inactive meters (refer to the paragraph 46 above).
52. The Code requires a metrology procedure to specify the procedures for estimating, substituting and validating energy data. Clause 9 of Horizon Power’s amended metrology procedure meets this requirement of the Code.

### Clauses 10 and 11

53. Clauses 10 and 11 of the metrology procedure detail provisions relevant to type 7 metering installations. Clause 10 sets out provisions for the calculation of energy and clause 11 sets out provisions for the validation and substitution of energy data.
54. While the drafting of these clauses is different to the equivalent clauses in Western Power’s 2015 metrology procedure, the substitution methods, that are to be used where energy data calculations fail the validation tests, are the same.

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<sup>16</sup> Horizon Power uses the term “type” instead of “method”.

55. Horizon Power's proposed drafting of clauses 10 and 11 is substantially the same as clauses 14 and 15 within its 2006 metrology procedure. The clauses detail:
- how energy data from type 7 metering installations are collected and calculated (clause 10); and
  - the validation and substitution methods to be used to validate the calculations and substitute data where the calculations fail the validation tests (clause 11).
56. The Code requires a metrology procedure to contain information on the devices and methods used to measure electricity produced and consumed at a metering point; and to specify the procedures for estimating, substituting and validating energy data. Clauses 10 and 11 of Horizon Power's amended metrology procedure meets these requirements of the Code.

### Other changes

57. The ERA has also considered other proposed changes to Horizon Power's metrology procedure, including changes to the defined terms (clause 1.5) and the meter provision components of types 1 to 6 metering installations (clause 5). These changes aim to simplify the document and assist with readability. Overall these changes do not materially alter the metrology procedure – the changes are in the nature of general drafting and/or formatting changes.
58. Any changes that assist to simplify the metrology procedure, improve readability and/or assist a user's understanding, without materially altering the procedure, are prudent. Such changes are considered to fall within the broad requirements for all metering documents to be "reasonable" and "to be consistent with the Code objective" of promoting the provision of accurate metering. For these reasons, Horizon Power's other proposed changes are approved.

## ERA's Draft Findings

59. The ERA finds that Horizon Power's amended metrology procedure meets the approval criteria of the Code.
60. To assist with clarity, however, the ERA considers Horizon Power should make an administrative drafting change to its amended metrology procedure to change the term substitution/estimation *type* to substitution/estimation *method*. If made, this administrative drafting change does not materially alter Horizon Power's amended metrology procedure and does not alter the ERA's draft findings.