

# Decision on the Proposed Metrology Procedure for Rottnest Island Pursuant to the Electricity Industry Metering Code 2012

20 November 2017

**Economic Regulation Authority**

WESTERN AUSTRALIA

## Economic Regulation Authority

4<sup>th</sup> Floor Albert Facey House  
469 Wellington Street, Perth

**Mail to:**

Perth BC, PO Box 8469  
PERTH WA 6849

**T:** 08 6557 7900

**F:** 08 6557 7999

**E:** [records@erawa.com.au](mailto:records@erawa.com.au)

**W:** [www.erawa.com.au](http://www.erawa.com.au)

National Relay Service TTY: 13 36 77  
(to assist people with hearing and voice impairment)

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## DECISION

1. Pursuant to clause 6.13(1)(a) of the *Electricity Industry (Metering) Code 2012*, the Economic Regulation Authority (**ERA**) has decided to approve the Rottnest Island Authority's (**RIA**) proposed metrology procedure for Rottnest Island.
2. Subject to some administrative amendments, the ERA is satisfied that:
  - the RIA has complied with the consultation requirements of the Code; and
  - the proposed metrology procedure meets the approval criteria of the Code.

## REASONS

### Background

3. The Code requires a network operator to establish metering documents and have these documents approved by the ERA.
4. Although required by the Code, the RIA does not have a current approved metrology procedure for Rottnest Island. This non-compliance was identified and reported in the RIA's performance audits of its licence compliance for the period 1 April 2013 to 31 March 2015.
5. To address this non-compliance, the RIA submitted a proposed metrology procedure to the ERA for approval in August 2017. The metrology procedure provides guidance on the provision, installation and maintenance of metering equipment connected to the electricity network on Rottnest Island.

### Metering Code Requirements

6. The establishment and approval procedure for metering documents, including a metrology procedure, is outlined in Part 6 of the Code.
7. Pursuant to clause 6.11(4) of the Code, the ERA must not approve a proposed metering document unless it is satisfied that the network operator has complied with clauses 6.11(2) and 6.11(3). These clauses detail the consultation requirements that a network operator must meet before submitting a proposed metering document to the ERA for approval.

#### **6.11 Consultation with Code participants**

- (1) This clause 6.11 does not apply in respect of a proposed registration process or proposed mandatory link criteria.
- (2) Before submitting a proposed document to the Authority<sup>1</sup> under clause 6.2 or publishing proposed communication rules under clause 6.19A, a network operator must:

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<sup>1</sup> Reference to the *Authority* within the Code is a reference to the Economic Regulation Authority (ERA).

- (a) give Code participants a reasonable opportunity to make submissions to the network operator concerning the proposed document; and
  - (b) take into account any submissions received from Code participants in developing the proposed document.
- (3) Before submitting a proposed document to the Authority under clause 6.2 or publishing proposed communication rules under clause 6.19A, a network operator must provide a report to the Authority that:
- (a) identifies the process through which the proposed document was developed, including details of consultation with Code participants under this clause 6.11; and
  - (b) describes how the proposed document complies with the criteria set out in clauses 6.5 to 6.9 (as applicable); and
  - (c) describes how the network operator took into account any submissions received from Code participants; and
  - (d) includes copies of submissions received by the network operator from Code participants.
- (3A) The network operator must publish the report it provides to the Authority under clause 6.11(3).
- (4) The Authority must not approve a proposed document under clause 6.2 unless the Authority is satisfied that the network operator has complied with clauses 6.11(2) and 6.11(3).
8. Further to meeting consultation requirements, the ERA must not approve a proposed metering document unless it is satisfied that the document meets the criteria set out clauses 6.5 to 6.9 (as applicable) of the Code.
9. Clauses 6.5 and 6.8 of the Code are applicable to the approval of a metrology procedure.

### **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.

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### **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>2</sup> and VTs<sup>3</sup>; and
  - (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>4</sup> data for the purposes of A2.6(2)(b).}*

<sup>2</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>3</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".

<sup>4</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".

## Proposed Metrology Procedure Submission

10. The RIA's proposed metrology procedure submission consists of:
  - the metrology procedure;<sup>5</sup> and
  - an independent consultant report.<sup>6</sup>
11. The consultant report (herein referred to as the “**Qualeng report**”) has been prepared pursuant to clause 6.11(3) of the Code, which requires the RIA to provide a report to the ERA that demonstrates compliance with the Code. The Qualeng report is published on the RIA's website.<sup>7</sup>

## ERA's Considerations

### *Consultation process and report*

12. Pursuant to clause 6.11(4) of the Code, the ERA must not approve a proposed metrology procedure unless it is satisfied that the RIA has complied with clauses 6.11(2) and 6.11(3). These clauses require the RIA to do the following.
  - Provide code participants with an opportunity to make submissions on the proposed metrology procedure; and where submissions are made the RIA must take these submissions into account.
  - Provide a report to the ERA that:
    - identifies the process through which the proposed metrology procedure was developed, including the consultation undertaken;
    - describes how the proposed metrology procedure complies with the approval criteria set out in the Code;
    - describes how the RIA took into account any submissions made to it; and
    - includes copies of any submissions received.
13. The Qualeng report details the consultation process through which the RIA's metrology procedure was developed. In summary, the process was designed to identify and involve relevant stakeholders. The stakeholders identified were the Rottneest Island business community, represented by the Rottneest Island Chamber of Commerce (**RICC**). Through its commercial property managers (McGees Property), the RIA wrote to members of the RICC seeking comments on a draft metrology procedure. Copies of the correspondence, including a response from the Chairman of the RICC (and related replies) are provided at appendix A of the Qualeng report.
14. The consultation process outlined in the Qualeng report indicates the consultation approach was targeted. That is, only members of the RICC were approached to provide comments.

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<sup>5</sup> Rottneest Island Authority, *Rottneest Island Metrology Procedure – May 2017*.

<sup>6</sup> Qualeng, *Rottneest Island Metrology Procedure Report on Development and Consultation Process – August 2017*.

<sup>7</sup> See: <http://www.ria.wa.gov.au/policy-and-reports/utility-reports/electrical-reports> (accessed 14/11/2017).

15. The Code requires the RIA to give “*code participants*” a reasonable opportunity to make submissions on a proposed metrology procedure. The Code defines *code participants* to include a network operator, retailer, generator, metering data agent, user, the Independent Market Operator and the ERA. This group of participants is broader than members of the RICC and for this reason the ERA provided a further opportunity for public consultation on 12 September 2017.<sup>8</sup> No further submissions were made to the ERA.
16. The consultation requirements of clause 6.11(2) of the Code have been satisfied. That is:
  - taking into account the ERA’s further opportunity for public consultation, code participants have had a reasonable opportunity to make submissions on the RIA’s proposed metrology procedure; and
  - the RIA took into account the response from the RICC by providing clarification as requested.
17. The Qualeng report satisfies the reporting requirements of clause 6.11(3) of the Code. Specifically, the report identifies the process through which the proposed metrology procedure was developed, including the details of the consultation undertaken. The report also:
  - describes how the proposed metrology procedure complies with the requirements of the Code;
  - describes how the RIA dealt with the submissions made to it; and
  - includes copies of the consultation documents sent and received.

### *Metrology procedure approval criteria*

18. Further to meeting consultation and reporting requirements, the Code states that the ERA must not approve a proposed metrology procedure unless it is satisfied that the procedure meets the criteria set out in clauses 6.5 to 6.9 (as applicable) of the Code.
19. Clauses 6.5 and 6.8 are applicable to a proposed metrology procedure.
20. The Qualeng report states that Horizon Power’s approved (2006) metrology procedure for the Horizon Power Network “*was used as the model for the Rottnest Island [metrology procedure] document*”. The RIA reviewed Horizon Power’s metrology procedure and, where applicable, amended it to reflect the operations on Rottnest Island. The proposed metrology procedure for Rottnest Island “*reflects the type of equipment and systems that [the] RIA have in place at present, or plan to install in [the] future, based on available information*”.<sup>9</sup> It is assumed that because the proposed metrology procedure for Rottnest Island is based on a previously approved metrology procedure, the proposal complies with the Code.
21. The assumption that the proposed metrology procedure complies with the Code because it is based on a previously approved metrology procedure is not always valid. Metering documents approved under the Code are approved at a point in time. Changes to the Code and its requirements can, and have, occurred since the approval

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<sup>8</sup> Economic Regulation Authority, *Notice – Proposed Metrology Procedure submitted by the Rottnest Island Authority*, 12 September 2017.

<sup>9</sup> Qualeng, *Rottnest Island Metrology Procedure Report on Development and Consultation Process – August 2017*, section 5.1, p. 9.



of Horizon Power's metrology procedure in 2006. Horizon Power's metrology procedure is currently under review. In June 2017, Horizon Power submitted an updated (2017) metrology procedure to the ERA for approval. Horizon Power's proposed updates have been considered by the ERA.<sup>10</sup>

### Requirements for all documents

22. 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 including code participant views.
23. Metrology procedures for electricity networks that are operated by different network operators should be consistent where practicable. This consistency should not, however, be used to assume automatic compliance. 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>11</sup>
24. The RIA's proposed metrology procedure is broadly consistent with the content of Horizon Power's current (2006) and proposed updated (2017) metrology procedure. It is also broadly consistent with the content of Western Power's current (2015) metrology procedure. The consistency with other metrology procedures assists in demonstrating compliance against the Code's requirements for all documents, and in particular being consistent with good electricity practice and being reasonable.
25. No submissions from code participants were made to the ERA during its further opportunity for consultation. Such submissions would have assisted in the assessment of the RIA's proposed metrology procedure against the requirements of the Code. In the absence of submissions, it is assumed that code participants generally accept the proposed metrology procedure as being reasonable and consistent with applicable codes and industry practice.

### Requirements for a metrology procedure

26. The RIA's proposed metrology procedure must also comply with clause 6.8 of the Code, which sets out specific requirements for a metrology procedure. Section 5.3 of the Qualeng report<sup>12</sup> sets out the Code requirements for a metrology procedure and details the applicable sections of the proposed metrology procedure that address the requirements.
27. A review of the individual detailed sections of the proposed metrology procedure confirms that the sections identified in the Qualeng report address the requirements of the Code for approval.

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<sup>10</sup> The ERA is required to publish draft and final findings that set out reasons for approving or not approving Horizon Power's proposed updates to its metrology procedure. A draft findings report was published on 14 November 2017 and is available on the ERA's website. A final findings report is expected to be published by December 2017.

<sup>11</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.

<sup>12</sup> Qualeng, *Rottneest Island Metrology Procedure Report on Development and Consultation Process – August 2017*, section 5.3, pp. 10-11.

28. The Qualeng report does not, however, set out the requirement of clause 6.8(ca) of the Code, which requires a metrology procedure to “*provide for the sampling and testing of meters for the purposes of and in accordance with clause 3.11A(1)*”. Clause 3.11A(1) of the Code states:

A network operator must ensure that the meters on its network are systematically sampled and tested for accuracy in accordance with AS1284.13.

29. While not listed in the Qualeng report, clause 3.6.1 of the proposed metrology procedure addresses the requirement of sampling and testing in accordance with the Australian standard. The proposed clause states that “*the network operator will ensure that meters on its network are sampled and tested in accordance with Schedules 1, 2 or 3 and AS1284.13, In-service compliance testing*”. The schedules detail the purchase and testing requirements of metering equipment for type 1 to 6 metering installations.

### *Administrative amendments*

30. Several clause headings within the proposed metrology procedure make reference to a corresponding clause within Horizon Power’s 2006 metrology procedure.<sup>13</sup> Additionally, the proposed metrology procedure identifies some clauses as “not used”.<sup>14</sup>
31. As mentioned above (refer to paragraph 21), Horizon Power’s metrology procedure is expected to change, meaning the references to clauses within Horizon Power’s metrology procedure will become redundant. For this reason, these references should be deleted from the headings within the RIA’s proposal. Furthermore, because a metrology procedure is established by a network operator for a specific electricity network, there is no reason for the procedures to contain references to other network operators’ procedures.
32. Clauses that are “not used” within the proposed metrology procedure should be removed where possible. The practice of “not used” clauses generally occurs when documents that contain many clauses and cross-references to other clauses are amended. The practice enables amendments to be made to the document without needing to renumber clauses and amend cross-references when clauses are deleted and/or inserted.
33. Given the RIA’s proposed metrology procedure is its first proposal (that is, the RIA does not currently have an approved metrology procedure for Rottnest Island), there should be no need for the use of “not used” clauses. Each clause should be sequentially numbered throughout the document with cross-references to other clauses included where necessary.
34. Amendments to headings to delete references to Horizon Power’s 2006 metrology procedure are administrative in nature – the amendments do not materially change the RIA’s proposed metrology procedure for Rottnest Island. The removal of “not used” clauses is also administrative in nature. For these reasons it is determined that the proposed metrology procedure, amended to take account of these suggested administrative amendments, meets the requirements of the Code for approval.

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<sup>13</sup> See clauses 3.2; 3.3; 3.4; 3.5; 3.6 and schedules 1 to 6 (table column 2).

<sup>14</sup> See clauses 1.3.2(a); 3.2.5; 3.2.6; 3.2.7; 3.6.2 to 3.6.11; 4.3.8; 4.7.3; 4.9.4 and schedule 12.