

**ECONOMIC REGULATION AUTHORITY**

**Review of Western Power's Metrology Procedure**

**October 2014**

## Executive Summary

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**Matter** Western Power's current metrology procedure was approved in September 2006. Following the introduction of the Electricity Industry Metering Code 2012 (**Code**), Western Power has proposed amendments to its metrology procedure.

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**Context** Western Power is required to seek approval from the Economic Regulation Authority (**Authority**) for any proposed amendments to its metrology procedure. The Authority is a code participant and prior to giving its approval must undertake a review of the proposed amendments to the metrology procedure.

On the 27 October 2014 the Authority published a notice seeking comments from code participants and other interested parties in relation to the metrology procedure developed under the Code and Western Power's proposed amendments.

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**Scope** It is a licence condition that all retailers and Western Power must comply with the metrology procedure.

The metrology procedure is also fundamental to giving effect to the code objectives, commercial transaction and ensures that retailers can fulfil their billing obligations under the Code of Conduct. Further to this the Code also requires that the metrology procedure must:

- comply with the Code; and
  - not impose inappropriate barriers to entry to a market; and
  - be consistent with good electricity industry practice; and
  - be reasonable; and
  - be consistent with the Code objectives; and
  - be consistent with the market rules; and
  - unless the Code requires otherwise, be consistent with other enactments.
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**Key issues** The metrology procedure is a document developed under the Code that all retailers and the network operator must comply with. Therefore, Synergy has commented and made recommendations on three industry issues associated with:

- Type 7 Connection Points
  - Bi-Directional Flows
  - Publishing Energy Data
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## INTRODUCTION<sup>1</sup>

Synergy appreciates this opportunity to provide the following comments on the Authority's review of Western Power's proposed amendments to the *metrology procedure*.

The *metrology procedure* is fundamental to giving effect to the *code objectives*, commercial transaction and ensures that *retailers* can fulfil their billing obligations under the *Code of Conduct*.

Further, the *metrology procedure* is a *document* developed under the Code that all *retailers* and the network operator must comply with. Consequently, it is important that the *metrology procedure* is not contrary to the Code or seek to deal with contractual matters that should, more appropriately, be dealt with under the *Model Service Level Agreement*.

In order to provide this delineation clause 6.8 of the Code defines the scope and purpose of the *metrology procedure*. The *metrology procedure*, relevantly in order to give effect to the *code objectives*, must:

- “(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* and *VTs*; 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);...”

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<sup>1</sup> Unless otherwise specified, words in italics in this submission have the same meaning as in the Code.

Further to this the Code, under clause 6.5 also requires that the *metrology procedure* must:

- comply with the Code; and
- not impose inappropriate barriers to entry to a market; and
- be consistent with *good electricity industry practice*; and
- be reasonable; and
- be consistent with the *code objectives*; and
- be consistent with the *market rules*; and
- unless the Code requires otherwise, be consistent with other enactments.

Therefore, the two key elements of the *metrology procedure* that are fundamentally important to retailers and affect the cost of serving customers include the methods and procedures for:

1. measuring and determining energy data used to bill customers.
2. estimating, substituting and validating energy data used to bill customers.

In addition, to this retailers also, relevantly, require the methods and procedures used by the network operator to be;

- Reasonable.
- Consistent with the *code objectives*.
- Consistent with *good electricity industry practice*.

## KEY ISSUES

### 1. Type 7 Connection Points

#### 1.1 Transitional Arrangements For Calculating Energy Data

Item 3.5 of the current *metrology procedure* specifies that *energy data* for Type 7 connection points will be determined in accordance with the agreement in place between retailers and the network operator as of June 2006.

##### "3.5 Calculation of Energy Data For Type 7 Metering Installations

3.5.1 The *Retailers* and the *Network Operator* have agreed that type 7 consumption calculations will continue to be made by the methods and systems in place as of June 2006 for the foreseeable future. The method of substitution under this agreement is thus treated as type 74 under the *Metering Code* and this *Metrology Procedure*.

3.5.2 The *metering installation* and *metering database* associated with each type 7 meter are therefore the systems in use as of June 2006, or as agreed between those *Retailers* with customers at type 7 metering installations and the *Network Operator*..."

In addition, clause 4.6(1)(c) under the *Code of Conduct* requires that a retailer must base a customer's bill, for a Type 7 connection point, on the procedure set out in the *metrology procedure* or Code. However, the proposed amendment to the *metrology procedure* does not give regard to this existing agreement and appears to, in effect, terminate these arrangements. This change will very likely have significant cost and compliance implications for all *retailers* who are currently operating on these agreements.

Synergy believes that proposed *metrology procedure* must give regard to this existing agreement and grandfather these existing arrangements. Alternatively, Synergy requests the Authority consider specifying a transitional period to allow *retailers* to budget costs and make the necessary system changes to meet the proposed changes in the *metrology procedure*.

#### 1.2 Method of Calculating Energy Data

Clause 6.8(a)(i) of the Code requires that the metrology procedure must at least contain information to determine, by means other than a *device*, *electricity* produced and consumed at a Type 7 *connection point*.

However, the method for determining the energy data for Type 7 connection points is not detailed in the proposed *metrology procedure*. Instead the proposed *metrology procedure* contemplates that the methods for calculation may be contained in:

1. Streetlights and UMS Data File Specification (**Specification**); or
2. Communication Rules.

Synergy understands the Communication Rules does not contain the method for determining the *energy data* for Type 7 *connection points*. Further, it would be contrary to the Code for these methods to be detailed in the *communication rules*. Clause 6.7 of the Code specifically requires the *communication rules* to detail the technical specifications, file formats, protocols and timeframes as to how *data* communication is to be implemented.

Therefore, Synergy assumes that the Specification, in accordance with clause 6.8(a)(i) contains the method for determining and calculating *energy data* for Type 7 *connection points*. It is important to note this data forms the basis for commercial transactions between retailers and customers under clauses 2.1(b), 2.1(c) and 5.17 of the Code. Therefore, it is reasonable that this information, on the method used by Western Power to calculate the *energy data*, is made transparent to all *retailers* and customers.

In addition, clause 4.6(1)(c) under the *Code of Conduct* requires that a retailer must base a customer's bill, for a Type 7 connection point, on the procedure set out in the *metrology procedure* or Code.

Therefore, in Synergy's view it is reasonable and consistent with *good electricity industry practice* for the proposed *metrology procedure* to detail, in an appendix, the Specification and method for calculating the energy data.

## 2. Bi-Directional Flows

### 2.1 Estimating Energy Data For Bi-Directional Flows

A key objective of the Code, under clause 2.1(1)(b), is to promote the accurate metering of *electricity* production and consumption. Further, clause 3.3C of the Code requires the separate measurement and recording of bi-directional *electricity* flows at the *metering point*. The proposed *metrology procedure*, under item 1.2.1(a) and 2.3.3.5, contemplates this requirement under the Code to separately measure and determine *energy data* in relation to bi-directional flows.

The proposed metrology procedure also defines "energy data" as the production or consumption of *electricity* at a *metering point*. However, the proposed *metrology procedure* does not make it clear the methods that will be used to estimate or substitute the production of *energy data* in relation to bi-directional flows for *connection points* which are not classed as a *generator*.

Clause 5.22(1)(b) of the Code requires that the *network operator*, must, where necessary, *substitute* and *estimate energy data* by applying, as a minimum, the rules and procedures set out in appendix 3. In Synergy's view the proposed *metrology procedure* cannot be inconsistent with the Code and the operation of the *Code of Conduct*<sup>2</sup>.

Therefore, Synergy assumes that the substitution or estimation methods detailed in items 7 and 8 of the proposed *metrology procedure* must also apply to bi-directional flows.

If this is not the case Synergy recommends, consistent with *good electricity industry practice*, that the *metrology procedure* describes the alternative methods for substitution and estimation that must be applied to bi-directional flows, including how these alternative methods comply with the Code and is consistent with the *Code of Conduct*.

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<sup>2</sup> Under clause 2.1(1)(c) of the Code.

### 3. Publishing Energy Data

#### 3.1 Frequency of Providing Energy Data

The Code contemplates that *energy data* will be obtained from the *meter* on a agreed scheduled date determined in accordance with a *service level agreement*. Consequently, the timelines, under clauses 5.3 and 5.6 of the Code, for providing validated *energy data* to retailers is based on the scheduled reading of the meter.

The Code also contemplates that a special reading of a *meter* may be conducted however, this reading is conducted in accordance with a *retailer's* request under the *service level agreement*.

The principle of scheduled meter readings is fundamental to giving effect to the *code objectives*, facilitating the operation of the *Code of Conduct* and ensuring retailers can meet their billing obligations under the *Code of Conduct*. This is why the design of a *retailer's* billing system is underpinned by the operation of scheduled reads under the Code.

The proposed amendment in item 3.2.3 of the *metrology procedure* suggests that Western Power may, contrary to any *service level agreement* or the Code, publish *energy data*<sup>3</sup> to retailer billing systems at a frequency or schedule of their choosing. In Synergy's view, depending on the design of the retailer's billing system, such a practice may cause a retailer to breach its billing obligations under the *Code of Conduct*.

Synergy appreciates there may be circumstances where Western Power, consistent with *good electricity industry practice*, is required to provide a *retailer*<sup>4</sup> with data more frequently than the meter read schedule. However, this practice should be the exception rather than the norm and cannot be a decision that is made without consultation with the affected *code participants*.

In Synergy's view the operation of the proposed amendment in item 3.2.3 needs to be, consistent with the *code objectives*, subject to consultation with the affected *retailer* and should not be contrary to services contemplated under clauses 5.1(1) and (3) of the Code<sup>5</sup>.

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<sup>3</sup> For types 1-5 connection points.

<sup>4</sup> Or *code participant*.

<sup>5</sup> That is, the services provided under a *service level agreement* or a covered service provided under an access contract.