HORIZON POWER MANDATORY LINK CRITERIA

For all Metering installations connected to the Horizon Power Networks

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About this document

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Review and approval

Name	Role	Signature	Date
Greg Will (Review)	Metering Services Manager		28/12/2017
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Contents

1. PRELIMINARY

1.1 Commencement

1.1.1 This document is provided in accordance with part 6 of the Electricity Industry Metering Code 2012 ("Metering Code").

1.1.2 These criteria come into operation at the same time as the Horizon Power Metrology Procedure.

1.2 Application

1.2.1 These criteria apply to Code participants.

1.3 Definitions

Unless defined otherwise below, terms in italics have the same meaning as in the Metering Code.

Definitions to be applied to these criteria are:

"***communication link***" means all communications equipment, processes and arrangements that facilitate the collection of energy data from a data logger or a measurement element so as to enable a remote interface to be established that lie:

a) if the data logger is internal to the device containing the measurement elements - between the data logger and the telecommunications network; and

b) if the data logger is external to the device containing the measurement elements but is located at the same site — between the meter and the data logger and between data logger and the telecommunications network; and

c) if the data logger is not located at the same site as the device containing the measurement elements — between the meter and the telecommunications network.

"***economically feasible***" means the annual cost to manually read a site is greater than the annual cost of installing and maintaining a *communication link*.

"***GSM***" means the acronym for **G**lobal **S**ystem for **M**obile Communications, and is a standard for digital mobile phone networks using radio frequency.

"***Interval meter***" means a meter that measures interval energy data and records it in a data logger.

"***Modem***" means a device that converts data into a signal that is compatible with a telephone or radio network and back again.

"Satellite" means a satellite communications platform for areas where GSM is not available

2. OBJECTIVE

2.1.1 The objective of this document is to establish, under clause 3.6 of the Metering Code, the mandatory requirements by which the Network Operator may require the installation of a *communication link* as part of the metering installation.

3. COMMUNICATION LINK CRITERIA

3.1.1 Clause 3.16(2) of the Metering Code mandates that the Network Operator must ensure a type 1 to type 4 metering installation includes a communication link to enable a meter of a metering point to be read from a remote location. The Network Operator may also require the installation of a communication link for types other than types 1 to 4.

3.1.2 The installation of a communication link may be required where:

(a) the geographical remoteness of a metering installation makes the manual collection of interval energy data (type 5) or accumulated energy data not *economically feasible*.

(b) access to the meters is restricted by a security system or process; or

(c) multiple master or distributed master meters are located on more than 3 levels, including below, on or above ground level.

4. COMMUNICATION LINK PROVISIONS

4.1 Link Requirements

If a metering installation is required to include a communications link, then the communications link must, where necessary, include a *modem* and isolation device approved under the relevant telecommunications regulations, to allow accumulation and interval energy data to be downloaded to the metering database via a telecommunications network.

4.1.1 Where a *communication link* has been installed, the metering installation must include facilities for the on-site storage of energy data that comply with the requirements of the Metrology Procedure.

4.2 Ownership of communication links

The Network Operator owns the communications link in accordance with Clause 3.4 of the Metering Code.

(Clause 3.4 states: "A network operator owns each meter on its network and all communications links associated with the meter despite any purported agreement to the contrary.")

4.3 Payment for communications links

4.3.1 Where a *communications link* is required due to access restrictions that are a consequence of the owner or tenant of the premises or facility being metered, the retailer shall be liable for the costs associated with the link.

(e.g. if the link is required because there is a fierce dog or the meter is kept locked or otherwise inaccessible).

4.3.2 Where the communications link is installed for the convenience of the Network Operator or because a manual read is not *economically feasible*, the Network Operator shall be liable for the costs associated with the link.

(e.g. if the link is required because the site is remote or has a very high cost of reading due to another reason.)

4.4 Access to data

4.4.1 Access to data associated with or originating through the link is in accordance with the provisions laid out in Clause 4.8 of the Metering Code.

(Clause 4.8 of the code details ownership, security and rights of access to data. Clause 4.8(3) states, in relation to a metering installation with a communication link:

"Network operator must allow a user who supplies, purchases or generates electricity to have local and (where a suitable communications link is installed) remote access to the energy data for metering points at its associated connection points, using a 'read only' password provided by the network operator."

Furthermore, clause 4.8(4) states:

"A network operator must have devices and methods in place that ensure that energy data held in its metering installation is secured from unauthorised local access or remote access, by electronic password and electronic security controls which are sufficient to the standard of good electricity industry practice")

5. COMPLIANCE WITH THE METERING CODE

The following table cross-references the provisions within this document to the relevant requirement within the Metering Code.

Metering equipment component	Equipment characteristics	Requirement	Metering Code Clause
Communication link	Location	The electronic connection between the data logger and the telecommunications network boundary is classified as a communications link.	1.3 3.6 3.7
	Equipment	A *communications link* may consist of a radio mesh network connecting to the telecommunications network and require isolation equipment, access point or *modem* and associated connections	3.3(3) 3.6 3.7
	Equipment	A communications link may include a radio communications system, a microwave communications system, a GSM communication system or a satellite communications system or a combination of systems	3.3(3) 3.7
	Equipment	A *communications link* may include a *metering database.*	3.3(3) 3.7
	Security	The *communication link* is to be secure and associated links, circuits and information storage and processing systems are to be secured by means of seals or other devices.	3.8
	Access to data	To be provided on a device and to display as a minimum the accumulated Total Active Energy measured by that metering installation.	4.8
	Access to data	The data held in the metering installation is to be protected from direct or remote electronic access by suitable password and security controls.	4.8(3), 4.8(4)(a)
	Performance	Metering data is required for all trading intervals at a level of availability of at least 95% per annum from the communications link.	3.11(1)(b)
	Outages	If an outage or malfunction occurs to a communications link, repairs must be made in accordance the applicable service level agreement.	3.11(2)