Appendix E

Reference Services

Amended proposed access arrangement

16 November 2018



Appendix E - Reference Services

1 July 2019



An appropriate citation for this paper is:

Appendix E - Reference Services

Western Power

363 Wellington Street Perth WA 6000 GPO Box L921 Perth WA 6842

T: 13 10 87 | Fax: 08 9225 2660 TTY 1800 13 13 51 | TIS 13 14 50

Electricity Networks Corporation ABN 18 540 492 861

enquiry@westernpower.com.au westernpower.com.au

Enquiries about this report should be directed to:

AA4 Project Team

Email: AA4@westernpower.com.au

Contents

| 1. | Introd | troduction1 | | |
|--|--|--|---|----|
| | 1.1 | Definition | ns | 1 |
| | 1.2 Interpretation | | | 3 |
| | 1.3 | Relationship to the metering instruments | | |
| | | 1.3.1 | From the AA4 effective date to 30 June 2020, standard metering services | 4 |
| | | 1.3.2 | From 1 July 2020, reference service (metering) | 4 |
| | 1.4 | Eligibility | criteria | 5 |
| | | 1.4.1 | From the AA4 effective date to 30 June 2020 | 5 |
| | | 1.4.2 | From 1 July 2020 | 5 |
| | 1.5 | Provision | of reference services | 6 |
| | 1.6 | Transition | nal | 6 |
| 2. | Refere | erence Services (Exit Services)7 | | 7 |
| 3. | Refere | ference Services (Entry Services)24 | | |
| 4. | Reference Services (Bi-directional Services)27 | | | 27 |
| 5. | Reference Services (ancillary)4 | | | 42 |
| Annexure 1: Standard Metering Services Guide (pre-1 July 2020)59 | | | | 59 |
| Annexure 2: Reference services (metering)63 | | | 63 | |

1. Introduction

This document describes Western Power's reference services.

1.1 Definitions

In this Appendix (including the Annexures), where a word or phrase is *italicised* it has the definition given to the word or phrase below, in the *access arrangement* or in section 1.3 of the *Code*, unless the context otherwise requires.

"AA4 effective date" means the date in section 1.3.1 of the access arrangement.

"accumulated energy data" has the meaning given to it in the Metering Code.

"accumulation meter" has the meaning given to it in the Metering Code.

"accumulation meter (bi-directional)" means an accumulation meter capable of measuring the transfer of electricity into and out of the Western Power Network.

"accumulation meter (uni-directional)" means an accumulation meter capable of measuring the transfer of electricity into, or out of, the Western Power Network but not both.

"bi-directional point" has the meaning given to it in the applications and queuing policy.

"bi-directional service" means a covered service provided by Western Power at a bi-directional point under which the user may transfer electricity into and out of the Western Power Network at the bi-directional point.

"communications network" means a metrology telecommunications link provided by way of telecommunication network and other devices and processes supported by Western Power with the capability activated to communicate between the meter and Western Power for the upload of energy data from a remote locality.

"connection service" has the meaning given to it in the Code and also includes a right to connect facilities and equipment at a bi-directional point.

"electricity transfer application" has the meaning given to it in the applications and queuing policy.

"energy data" has the meaning given to it in the Metering Code.

"interval energy data" has the meaning given to it in the Metering Code.

"interval meter" has the meaning given to it in the Metering Code.

"interval meter (bi-directional)" means an interval meter capable of measuring the transfer of electricity into and out of the Western Power Network.

"interval meter (uni-directional)" means an interval meter capable of measuring the transfer of electricity into, or out of, the Western Power Network but not both.

"intra day period" means a period of no greater than twenty four consecutive hours ending at midnight (WST).

"manual read" means the derivation of energy data from a meter other than via a communications network by Western Power or by the customer as a customer meter read and includes energy data estimation or substitution in accordance with the metering instruments.



"market operator" means the entity conferred the functions in respect of the 'Wholesale Electricity Market' under the Wholesale Electricity Market Rules which, as at the AA4 effective date, is the Australian Energy Market Operator Limited.

"meter" has the meaning given to it in the Metering Code.

"Metering Code" means the Electricity Industry (Metering) Code 2012.

"metering installation" has the meaning given to it in the Metering Code.

"metering instruments" means the Metering Code and the documents made under Part 6 of the Metering Code.

"metering point" means for a connection point without a meter, the connection point and, for a connection point with a meter, the point at which that meter measures electricity production or consumption for the connection point.

"metering service" has the meaning given to it in the Metering Code.

"minimum meter" means:

- a. if throughput at the connection point is less than 50MWh per annum, an accumulation meter; or
- b. if throughput at the *connection point* is equal to or greater than 50MWh per annum an *interval meter*.

"MSLA" means the current model service level agreement approved by the Authority under the Metering Code (which as at the AA4 effective date is the version dated March 2006).

"non-residential premises" means premises that are not residential premises.

"permissible reference service (metering)" means a metering service that is available for a user to select as a component of the reference service (exit service, entry service or bi-directional service) on and after 1 July 2020 from the options set out in clause E.1.1 of Annexure 2.

"reference service (metering)" means the metering service selected from the permissible reference service (metering) options by the user as a component of the reference service (exit service, entry service or bidirectional service) on and after 1 July 2020.

"residential premises" means:

- a. premises where the electricity supply is solely for residential purposes;
- b. where the electricity supply is to premises used for both residential and other purposes, that part of the premises used solely for residential purposes if that part is independently supplied and separately metered; or
- c. premises used for both residential and other purposes where the circuit wiring is not separate provided that Western Power determines, as a *reasonable and prudent person*, that the consumption at the premises is, or will be, less than 20MWh per annum.

"service level agreement" has the meaning given to it in the Metering Code.

"small use customer" has the meaning given to 'customer' in the Code of Conduct For The Supply Of Electricity To Small Use Customers 2018.

"standard metering service" has the meaning given to it in the MSLA and is the metering service relevant to a reference service on and before 30 June 2020.



"standing data" has the meaning given to it in the Metering Code.

"system management" means the entity conferred the functions in respect of 'System Management' under the Wholesale Electricity Marker Rules which, as at AA4 effective date, is the Australian Energy Market Operator Limited.

"transformer" has the meaning given to it in the Metering Code.

"voluntary/charitable organisation" means a consumer who is, or is to be, a small use customer and:

- a. who meets all of the following conditions:
 - (i) is a direct small use customer of the user;
 - (ii) is a voluntary, non-profit making organisation;
 - (iii) is endorsed as exempt from income tax under the Income *Tax Assessment Act 1997* (Commonwealth) Subdivision 50-B;
 - (iv) provides a public service, which is available to any member of the public without discrimination;
 - (v) is not a Commonwealth, State or local government department, instrumentality or agency; and
 - (vi) does not receive the major part of its funding from any organisation mentioned in subparagraph (v); or
- b. is a charitable or benevolent organisation providing residential accommodation other than for commercial gain.

"WA Electrical Requirements" has the meaning given to it in the Electricity (Licensing) Regulations 1991.

1.2 Interpretation

Unless the contrary intention is apparent:

- 1.1 a rule of interpretation in the Code; and
- 1.2 the Interpretation Act 1984,

apply to the interpretation of this Appendix (including the Annexures).

For the avoidance of doubt, a reference to each of the instruments referred to in the definitions and to an applicable price list includes any amendment or replacement of it that is for the time being in force, and includes all instruments made under it from time to time.

1.3 Relationship to the *metering instruments*

The written laws that regulate the measurement of electricity and the provision of metering services are the metering instruments, including the MSLA.

In accordance with section 5.28 of the *Code* and section 9.3 of the *access arrangement* (of which this Appendix forms a part), *metering services* will be provided in accordance with the *metering instruments*.



1.3.1 From the AA4 effective date to 30 June 2020, standard metering services

From the AA4 effective date to 30 June 2020, most reference services (exit services A1 to A8 and A11 to A17, entry services B1 and B2 and bi-directional services C1 to C14) in this Appendix are described as including a standard metering service. The MSLA is the written law which regulates standard metering services.

However, to assist understanding this Appendix Annexure 1 has been included as a guide to the *standard metering services* relevant to a *reference service*. The guide is not an exhaustive description *standard metering services*; relevant information for a *standard metering service* in addition to the guide (for example the *service standard*) is in the *MSLA*.

It is anticipated that the 2006 version of the *MSLA* will be replaced. If a new MSLA is approved, *the standard metering services* relevant to the *reference service* will be as set out in that MSLA (to the exclusion of Annexure 1). After that time, no reliance should be placed on Annexure 1.

To the extent of any inconsistency between Annexure 1 and the *metering instruments*, the *metering instruments* will prevail.

There is no additional charge to *users* for *standard metering services* in addition to the applicable metering component of the *reference tariff* for the relevant *reference service*. For any other *metering service* an additional charge is payable in accordance with the *metering instruments*.

The terms and conditions under which *standard metering services* are provided are set out in a service level agreement between the *user* and Western Power.

1.3.2 From 1 July 2020, reference service (metering)

From and including 1 July 2020, most *reference services* (*exit services* A1 to A17, *entry services* B1 and B2 and *bi-directional services* C1 to C14) in this Appendix are described as including a *reference service* (*metering*).

The standard metering services framework described in clause 1.3.1 will no longer apply.

Reference services (metering) are described in clause E.1.1 of Annexure 2.

There is an applicable reference service (metering) reference tariff payable by users as a component of the applicable reference tariff for each reference service (exit service, entry service or bi-directional service). The reference tariffs (including the reference service (metering) reference tariffs) are published in the applicable Price List in Appendix F of the access arrangement. A charge is payable by users to Western Power for services received under access contracts based on applying these reference tariffs.

The non-price terms and conditions under which *reference services (metering)* are provided are set out in a service level agreement between the *user* and Western Power.

There is no charge to *users* in addition to the *reference service (metering) reference tariff* for the following *metering services* for so long as that is consistent with the *MSLA*:

a. upgrade of the *meter* to align with the requirements of the *metering instruments* as a result of throughput at the *connection point* changing;

{Note: if the *user* elects to upgrade the *meter* this is a "meter change" as defined in the *MSLA* and if the *user* elects to reconfigure the *meter* this is a "meter reconfigure" as defined in the *MSLA*. Charges in addition to the *reference service* (*metering*) reference tariff are payable for a "meter change" and a "meter reconfiguration" in accordance with the *metering instruments*.}



- b. customer meter reading (including a card read meter reading);
- c. historical *interval energy data* from *interval meters* for a period of up to 12 months in accordance with the requirements of clause A4.2 of the *Electricity Industry (Customer Transfer) Code 2016*; and
- d. the provision of *standing data* in accordance with the *Metering Code*.

As at the AA4 Effective Date it is expected that on and after 1 July 2020 metering services other than reference service (metering) will be provided by Western Power to users. These other metering services will be "extended metering services" (within the meaning of the MSLA) and "additional metering services" requested by a user that are additional to reference service (metering) and extended metering services. These extended metering services and additional metering services will be provided under a service level agreement between the user and Western Power and an additional charge will be payable in accordance with the metering instruments.

To the extent of any inconsistency between this Appendix E (including Annexure 2, but not Annexure 1) and the *metering instruments*, Appendix E (including Annexure 2) will prevail.

1.4 Eligibility criteria

For each *reference service*, eligibility criteria are stated. These are the conditions which must be satisfied in order to receive and continue to receive the *reference service*. They are not, and should not be read as, conditions a *user* is entitled to from Western Power.

1.4.1 From the AA4 effective date to 30 June 2020

From the AA4 effective date to 30 June 2020, for most reference services (exit services A1 to A17, entry services B1 and B2 and bi-directional services C1 to C14), the eligibility criteria include that a minimum meter is installed at the metering point.

1.4.2 From 1 July 2020

From and including 1 July 2020, for most reference services (exit services A1 to A17, entry services B1 and B2 and bi-directional services C1 to C14), the eligibility criteria include that a reference service (metering) is provided at the metering point in respect to the connection point.

A permissible reference service (metering) is a metering service that is available to be selected by the user from the options set out in clause E.1.2 of Annexure 2 as a component of the reference service (exit service, entry service or bi-directional service) and of the service it receives under its access contract on and after 1 July 2020. Once selected and being provided, the metering service is then called the reference service (metering).

Annexure 2 includes a designation of a permissible reference service (metering) for each reference service existing prior to the AA4 effective date as "transition". These "transition" reference services (metering) are denoted with an asterisk (*) in clause E.1.2 of Annexure 2. To give effect to the framework that will apply on and after 1 July 2020, Western Power will regard the designated "transition" reference service (metering) as having been selected by the user as a component of the corresponding reference service (exit service, entry service or bi-directional service) in Annexure 2 and of the service it receives under its access contract on 1 July 2020. In this way the eligibility criterion that a reference service (metering) is provided at a metering point is satisfied for each relevant metering point existing on that date.



For the avoidance of doubt, a *permissible reference service (metering)* marked as "transition" as denoted with an asterisk (*) in clause E.1.2 of Annexure 2 is available for selection for a new *metering point* after 1 July 2020.

1.5 Provision of reference services

The *access arrangement* and this Appendix E have been approved for the purposes of the *Code* and do not represent on obligation to provide *reference services* without a related contract between Western Power and a *user*.

1.6 Transitional

The reference number for a *reference service* is the number and letter used to describe that *reference service* (being A1 to A17, B1 to B3, C1 to C15, D1 to D9 and M1 to M16).

Reference services (A1 to A11, B1 to B2 and C1 to C4) described in parts 2, 3 and 4 of this Appendix E — Reference Services are materially the same (as that term is used in clause 7.1(c) of Standard Access Contract (termed the Electricity Transfer Access Contract)) as the reference services (A1 to A11, B1 to B2 and C1 to C4) described in parts 2, 3 and 4 of Appendix E of the previous access arrangement which has the same reference number as that AA4 reference service.



2. Reference Services (Exit Services)

Western Power offers 17 exit services as reference services.

| Reference Service Name: | Reference Service A1 – Anytime Energy (Residential) Exit Service |
|---|--|
| Reference Service Description: | An exit service combined with a connection service at an exit point on the low voltage (415 volts or less) distribution system. This exit service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at residential premises or premises occupied by a voluntary/charitable organisation; and At the metering point: |
| Applicable Reference Tariff: | "RT1" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A2 – Anytime Energy (Business) Exit Service |
|--|--|
| Reference Service Description: | An exit service combined with a connection service at an exit point on the low voltage (415 volts or less) distribution system. This exit service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at non-residential premises; and The maximum demand at the exit point is: |
| Applicable Reference Tariff: | "RT2" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A3 – Time of Use Energy (Residential) Exit Service |
|---|--|
| Reference Service Description: | An <i>exit service</i> combined with a <i>connection service</i> at an <i>exit</i> point on the low voltage (415 volts or less) <i>distribution system</i> . This <i>exit service</i> includes: 1. on and before 30 June 2020, a <i>standard metering service</i> ; and 2. on and after 1 July 2020, a <i>reference service</i> (<i>metering</i>). |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at residential premises or premises occupied by a voluntary/charitable organisation; and At the metering point: |
| Applicable Reference Tariff: | "RT3" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A4 – Time of Use Energy (Business) Exit Service |
|---|---|
| Reference Service Description: | An exit service combined with a connection service at an exit point on the low voltage (415 volts or less) distribution system. This exit service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at non-residential premises; and The maximum demand at the exit point is: less than 1,500 kVA based on historic metering data; or Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; and |
| | 3. At the metering point: a. on and before 30 June 2020, a minimum meter is installed; and b. on and after 1 July 2020, a reference service (metering) is provided to the same user; and |
| | 4. The <i>meter</i> is configured to measure the transfer of electricity out of the <i>Western Power Network</i> , and if it is an <i>accumulation meter</i> , it is configured for the time bands set out in the <i>price list</i> for RT4; and |
| | 5. This A4 – Time of Use Energy (Business) Exit Service: a. was provided at the connection point as at the AA4 effective date; and b. has continued to be provided at the connection point from the AA4 effective date; and |
| | 6. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 7. Each of the following does not apply under an agreement with Western Power: a. The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or b. The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service. |
| Applicable Reference Tariff: | "RT4" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A5 – High Voltage Metered Demand Exit Service |
|---|--|
| Reference Service Description: | An exit service combined with a connection service at an exit point on the high voltage (6.6 kV or higher) distribution system. This exit service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at non-residential premises; and The maximum demand at the exit point is: |
| Applicable Reference Tariff: | "RT5" in the <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A6 – Low Voltage Metered Demand Exit Service |
|---|--|
| Reference Service Description: | An exit service combined with a connection service at an exit point on the low voltage (415 volts or less) distribution system. This exit service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at non-residential premises; and The maximum demand at the exit point is: |
| Applicable Reference Tariff: | "RT6" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A7 – High Voltage Contract Maximum Demand Exit Service |
|---|--|
| Reference Service Description: | An <i>exit service</i> combined with a <i>connection service</i> at an <i>exit point</i> on the high voltage (6.6 kV or higher) <i>distribution system</i> . This <i>exit service</i> includes: 1. on and before 30 June 2020, a <i>standard metering service</i> ; and 2. on and after 1 July 2020, a <i>reference service</i> (<i>metering</i>). |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at non-residential premises; and The contracted maximum demand at the exit point is greater than 1,000 kVA; and At the metering point: on and before 30 June 2020, an interval meter (uni-directional) is installed; and on and after 1 July 2020, a reference service (metering) is provided to the same user; and The meter is configured to measure the transfer of electricity out of the Western Power Network; and The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and Each of the following does not apply under an agreement with Western Power: The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service. |
| Applicable Reference Tariff: | "RT7" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A8 – Low Voltage Contract Maximum Demand Exit Service |
|---|--|
| Reference Service Description: | An <i>exit service</i> combined with a <i>connection service</i> at an <i>exit point</i> on the low voltage (415 volts or less) <i>distribution system</i> . This <i>exit service</i> includes: 1. on and before 30 June 2020, a <i>standard metering service</i> ; and 2. on and after 1 July 2020, a <i>reference service (metering)</i> . |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at non-residential premises; and The contracted maximum demand at the exit point is greater than 1,000 kVA; and At the metering point: on and before 30 June 2020, an interval meter (uni-directional) is installed; and on and after 1 July 2020, a reference service (metering) is provided to the same user; and The meter is configured to measure the transfer of electricity out of the Western Power Network; and The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and Each of the following does not apply under an agreement with Western Power: The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service. |
| Applicable Reference Tariff: | "RT8" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A9 – Streetlighting Exit Service |
|--|--|
| Reference Service Description: | An <i>exit service</i> combined with a <i>connection service</i> at an <i>exit point</i> on the low voltage (415 volts or less) <i>distribution system</i> for the purpose of public street lighting, plus the service of the provision and maintenance of the streetlight. This <i>exit service</i> includes: |
| | 1. on and before 30 June 2020, the provision of the <i>metering services</i> set out in the <i>Metering Code</i> for a type 7 connection point; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| | {Note: The streetlighting exit service is provided using a variety of different streetlighting assets owned by Western Power. These assets are designed for the environment they will operate in with input from the user's customer of this service. The streetlighting design occurs in accordance with the applicable streetlighting design standards (including AS/NZS 1158 and AS/NZS 60598) and regulatory requirements at the time of installation which cover: |
| | streetlight light level technical parameters (lumens); |
| | glare, impact and spilled light levels; |
| | height, reach, tilt and other configuration of the streetlight; |
| | location (set back from roads) and spacing from other streetlight assets; |
| | materials, equipment and lighting components including the type of lamp used; |
| | inclusion of any safety features such as provision of fuses; |
| | attachment to existing assets or as a standalone asset. |
| | Western Power's current streetlight asset design catalogue is available to users and consumers on Western Power's website - https://westernpower.com.au/media/2973/distribution-design-catalogue-streetlights-20180820.pdf . |
| | In order to continue to provide the streetlighting <i>exit service</i> to design levels Western Power undertakes a broad range of streetlight inspection, maintenance and replacement activities including: |
| | • time based routine inspections of streetlight poles to assess their structural and electrical integrity; |
| | repair of streetlight infrastructure including where damage occurs by third parties; |
| | emergency response to incidents involving streetlights; |
| | replacement of streetlight lamps, luminaires, control equipment and supply wiring; |
| | replacement and repair of underground streetlight supply cables and overhead conductors; |
| | call centre and online activities to receive streetlight fault information; and |
| | replacement and reinforcement of streetlight poles.} |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The streetlight is a Western Power streetlight; and |
| | 2. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT9" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in sections 4.2 and 4.4 of the access arrangement. |



| Reference Service Name: | Reference Service A10 -Unmetered Supplies Exit Service |
|---|---|
| Reference Service Description: | An <i>exit service</i> combined with a <i>connection service</i> at an <i>exit point</i> on the low voltage (415 volts or less) <i>distribution system</i> . This <i>exit service</i> includes: |
| | 1. on and before 30 June 2020, the provision of the <i>metering services</i> set out in the <i>Metering Code</i> for a type 7 connection point; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The exit point is located on public land; and |
| | 2. The maximum <i>load</i> at the <i>exit point</i> is not subject to <i>user</i> or <i>consumer</i> controlled variations in duration of usage; and |
| | 3. Western Power, as a reasonable and prudent person, forecasts the maximum load at the exit point to be less than 1 kW single-phase except for streetlights, traffic lights, rail crossings, and pedestrian lighting where the consumer is a road or local government authority, then the maximum load at the exit point is less than 4.8 kW single phase; and |
| | 4. The installation of a <i>meter</i> is not practicable due to the nature or location of the <i>exit point</i> and/or <i>consumer's facilities and equipment</i> ; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT10" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A11 – Transmission Exit Service |
|---|--|
| Reference Service Description: | An exit service combined with a connection service at an exit point on the transmission system. This exit service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: At the metering point: |
| Applicable Reference Tariff: | "TRT1" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.3 of the access arrangement. |



| Reference Service Name: | Reference Service A12 – 3 Part Time of Use Energy (Residential) Exit Service |
|---|---|
| Reference Service Description: | An <i>exit service</i> combined with a <i>connection service</i> at an <i>exit point</i> on the low voltage (415 volts or less) <i>distribution system</i> . This <i>exit service</i> includes: 1. on and before 30 June 2020, a <i>standard metering service</i> ; and 2. on and after 1 July 2020, a <i>reference service (metering)</i> . |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at the residential premises or premises occupied by a voluntary/charitable organisation; and At the metering point: on and before 30 June 2020, an interval meter (uni-directional) is installed; and on and after 1 July 2020, a reference service (metering) is provided to the same user; and The meter is configured to measure the transfer of electricity out of the Western Power Network; and The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and Each of the following does not apply under an agreement with Western Power: |
| Applicable Reference Tariff: | "RT17" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Defended to the N | |
|---|---|
| Reference Service Name: | Reference Service A13 – 3 Part Time of Use Energy (Business) Exit Service |
| Reference Service Description: | An exit service combined with a connection service at an exit point on the low voltage (415 volts or less) distribution system. This exit service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at non-residential; and The maximum demand at the exit point is: less than 1,500 kVA based on historic metering data; or Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; and At the metering point: on and before 30 June 2020, an interval meter (uni-directional) is installed; and on and after 1 July 2020, a reference service (metering) is provided to the same user; and The meter is configured to measure the transfer of electricity out of the Western Power Network; and The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and Each of the following does not apply under an agreement with Western Power: |
| Applicable Reference Tariff: | "RT18" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A14 – 3 Part Time of Use Demand (Residential) Exit Service |
|---|---|
| Reference Service Description: | An exit service combined with a connection service at an exit point on the low voltage (415 volts or less) distribution system. This exit service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at the residential premises or premises occupied by a voluntary/charitable organisation; and At the metering point: on and before 30 June 2020, an interval meter (uni-directional) is installed; and on and after 1 July 2020, a reference service (metering) is provided to the same user; and The meter is configured to measure the transfer of electricity out of the Western Power Network; and The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and Each of the following does not apply under an agreement with Western Power: |
| Applicable Reference Tariff: | "RT19" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A15 – 3 Part Time of Use Demand (Business) Exit Service |
|---|--|
| Reference Service Description: | An exit service combined with a connection service at an exit point on the low voltage (415 volts or less) distribution system. This exit service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: The exit point is located at non-residential premises; and The maximum demand at the exit point is: less than 1,500 kVA based on historic metering data; or Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; and At the metering point: on and before 30 June 2020, an interval meter (uni-directional) is installed; and on and after 1 July 2020, a reference service (metering) is provided to the same user; and The meter is configured to measure the transfer of electricity out of the Western Power Network; and The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and Each of the following does not apply under an agreement with Western Power: |
| Applicable Reference Tariff: | "RT20" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A16 – Multi Part Time of Use Energy (Residential) Exit Service |
|---|---|
| Reference Service Description: | An <i>exit service</i> combined with a <i>connection service</i> at an <i>exit point</i> on the low voltage (415 volts or less) <i>distribution system</i> . This <i>exit service</i> includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The exit point is located at the residential premises or premises occupied by a voluntary/charitable organisation; and |
| | 2. At the metering point: |
| | a. on and before 30 June 2020, an interval meter (uni-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 3. The <i>meter</i> is configured to measure the transfer of electricity out of the <i>Western Power Network</i> ; and |
| | 4. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 5. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT21" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service A17 – Multi Part Time of Use Energy (Business) Exit Service |
|---|---|
| Reference Service Description: | An <i>exit service</i> combined with a <i>connection service</i> at an <i>exit point</i> on the low voltage (415 volts or less) <i>distribution system</i> . This <i>exit service</i> includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | 1. Users are eligible to use this service if: |
| | 2. The exit point is located at non-residential premises; and |
| | 3. The maximum demand at the <i>exit point</i> is: |
| | a. less than 1,500 kVA based on historic metering data; or |
| | b. Western Power determines, as a <i>reasonable and prudent person</i> , that the <i>user's</i> forecast maximum demand will be less than 1,500 kVA; and |
| | 4. At the metering point: |
| | a. on and before 30 June 2020, an interval meter (uni-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 5. The <i>meter</i> is configured to measure the transfer of electricity out of the <i>Western Power Network</i> ; and |
| | 6. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 7. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT22" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



3. Reference Services (Entry Services)

Western Power offers 3 *entry services* as *reference services*.

| Reference Service Name: | Reference Service B1 – Distribution Entry Service |
|---|---|
| Reference Service Description: | An entry service combined with a connection service on the distribution system. This entry service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: At the metering point: |
| Applicable Reference Tariff: | "RT11" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service B2 – Transmission Entry Service |
|---|---|
| Reference Service Description: | An entry service combined with a connection service at an entry point on the transmission system. This entry service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. At the metering point: |
| | a. on and before 30 June 2020, an interval meter (uni-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 2. The <i>meter</i> is configured to measure the transfer of electricity into the <i>Western Power Network</i> ; and |
| | 3. The generator's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 4. Each of the following does not apply under an agreement with Western Power: |
| | The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "TRT2" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in Section 4.3 of the access arrangement. |



| Reference Service Name: | Reference Service B3 – Entry Service Facilitating a Distributed Generation or Other Non-Network Solution |
|---|--|
| Reference Service Description: | An <i>entry service</i> provided on the same basis as <i>entry service</i> B1 in circumstances where this <i>service</i> provides for <i>facilities and equipment</i> connected behind a <i>connection point</i> (including distributed <i>generating plant</i> and other non-network solutions) to provide benefits to the <i>Western Power Network</i> that defer Western Power's <i>capital</i> and <i>non-capital costs</i> . {Note: a 'thin connection' that involves the export of electricity onto the <i>Western Power Network</i> or the provision of another network support service may be eligible for this reference service.} |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. All of the <i>eligibility criteria</i> for <i>entry service</i> B1 are met; and |
| | 2. The connection point was created or the facilities and equipment are installed after the AA4 effective date; |
| | 3. The <i>connection point</i> is not subject to a capacity sharing arrangement; and |
| | 4. A network support services contract setting out the terms upon which the distributed <i>generating plant</i> or other non-network solution at the <i>connection point</i> will provide benefits to the <i>Western Power Network</i> that defers Western Power's new facilities investment and non-capital costs is in force; and |
| | 5. The <i>user</i> has made an <i>electricity transfer application</i> in accordance with the <i>Applications and Queuing Policy</i> for this <i>service</i> and has been assessed for a discount to the <i>reference tariff</i> applicable to reference service B1 in accordance with the discount mechanism set out in the <i>price list</i> for reference tariff RT23. |
| Applicable Reference Tariff: | "RT23" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in Section 4.3 of the access arrangement. |



4. Reference Services (Bi-directional Services)

Western Power offers 15 bi-directional services as reference services.

| Reference Service Name: | Reference Service C1 – Anytime Energy (Residential) Bi-directional Service |
|---|--|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: The bi-directional point is located at a residential premises or premises occupied by a voluntary/charitable organisation with an inverter system rated up to 10 kVA for single phase connections and 30 kVA for three phase connections; and At the metering point: |
| Applicable Reference Tariff: | "RT13" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in Section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C2 – Anytime Energy (Business) Bi-directional Service |
|---|--|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: 1. on and before 30 June 2020, a standard metering service; and 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: The bi-directional point is located at non-residential premises with an inverter system rated up to a total of 1 MVA for single or three-phase connections; and At the metering point: on and before 30 June 2020, a minimum meter is installed; and on and after 1 July 2020, a reference service (metering) is provided to the same user; and The meter is configured to measure the transfer of electricity into and out of the Western Power Network; and The consumer's inverter system complies with the requirements of AS 4777 and the technical rules, and satisfies a technical assessment by Western Power for installations larger than 30kVA; and The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and Each of the following does not apply under an agreement with Western Power: The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service. |
| Applicable Reference Tariff: | "RT14" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C3 – Time of Use Energy (Residential) Bi-directional Service |
|---|---|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | The bi-directional point is located at a residential premises or premises occupied by a voluntary/charitable organisation with an inverter system rated up to 10 kVA for single phase connections and 30 kVA for three phase connections; and At the metering point: |
| | a. on and before 30 June 2020, a <i>minimum meter</i> is installed; and |
| | b. on and after 1 July 2020, a reference service (metering) is provided to the same user; and |
| | 3. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> for the time bands set out in the <i>price list</i> for RT15; and |
| | 4. This C3 – Time of Use Energy (Residential) – Bi-Directional Service: |
| | a. was provided at the connection point as at the AA4 effective date; and |
| | b. has continued to be provided at the <i>connection point</i> from the <i>AA4 effective</i> date; and |
| | 5. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> ; and |
| | 6. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 7. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT15" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C4 – Time of Use Energy (Business) Bi-directional Service |
|---|--|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The <i>bi-directional point</i> is located at <i>non-residential premises</i> with an inverter system rated up to a total of 1 MVA for single or three-phase connections; and |
| | 2. At the <i>metering point</i> : |
| | a. on and before 30 June 2020, a <i>minimum meter</i> is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 3. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> for the time bands set out in the <i>price list</i> for RT16; and |
| | 4. This C4 – Time of Use Energy (Business) – Bi-directional Service: |
| | a. was provided at the connection point as at the AA4 effective date; and |
| | b. has continued to be provided at the <i>connection point</i> from the <i>AA4 effective</i> date; and |
| | 5. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> , and satisfies a technical assessment by Western Power for installations larger than 30kVA; and |
| | 6. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 7. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT16" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Comice Name | Beforence Service CE High Voltage Matered Demand Di directional Service |
|---|--|
| Reference Service Name: | Reference Service C5 – High Voltage Metered Demand Bi-directional Service |
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the high voltage (6.6 kV or higher) distribution system. This bi-directional service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The bi-directional point is located at non-residential premises; and |
| | 2. The maximum demand at the <i>bi-directional point</i> is: |
| | a. less than 1,500 kVA based on historic metering data; or |
| | b. Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; and |
| | 3. At the <i>metering point</i> : |
| | a. on and before 30 June 2020, an interval meter (bi-directional) is installed; and |
| | b. on and after 1 July 2020, a reference service (metering) is provided to the same user; and |
| | 4. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. The premises have an inverter system rated up to a total of 1 MVA for single or three-phase connections; and |
| | 7. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> , and satisfies a technical assessment by Western Power for installations larger than 30kVA; and |
| | 8. Each of the following does not apply under an agreement with Western Power: |
| | The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or |
| | The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service. |
| Applicable Reference Tariff: | "RT5" in the Price List published in Appendix F of the access arrangement. |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| 5 C C C N | |
|---|--|
| Reference Service Name: | Reference Service C6 – Low Voltage Metered Demand Bi-directional Service |
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The bi-directional point is located at non-residential premises; and |
| | 2. The maximum demand at the bi-directional point is: |
| | a. less than 1,500 kVA based on historic metering data; or |
| | b. Western Power determines, as a <i>reasonable and prudent person</i> , that the <i>user's</i> forecast maximum demand will be less than 1,500 kVA; and |
| | 3. At the metering point: |
| | a. on and before 30 June 2020, an interval meter (bi-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 4. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. The premises have an inverter system rated up to a total of 1 MVA for single or three-phase connections; and |
| | 7. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> , and satisfies a technical assessment by Western Power for installations larger that 30kVA; and |
| | 8. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT6" in the applicable Price List published in Appendix F of the access arrangement. |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C7 – High Voltage Contract Maximum Demand Bi-directional Service |
|---|--|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the high voltage (6.6 kV or higher) distribution system. This bi-directional service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The bi-directional point is located at non-residential premises; and |
| | 2. The contracted maximum demand at the <i>bi-directional point</i> is greater than 1,000 kVA; and |
| | 3. At the <i>metering point</i> : |
| | a. on and before 30 June 2020, an <i>interval meter (bi-directional)</i> is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 4. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. The premises have an inverter system rated up to a total of 1 MVA for single or three-phase connections; and |
| | 7. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> , and satisfies a technical assessment by Western Power for installations larger than 30kVA; and |
| | 8. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT7" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C8 – Low Voltage Contract Maximum Demand Bi-directional Service |
|---|---|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The bi-directional point is located at non-residential premises; and |
| | 2. The contracted maximum demand at the <i>bi-directional point</i> is greater than 1,000 kVA; and |
| | 3. At the <i>metering point</i> : |
| | a. on and before 30 June 2020, an interval meter (bi-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 4. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. The premises have an inverter system rated up to a total of 1 MVA for single or three-phase connections; and |
| | 7. The consumer's inverter system complies with the requirements of AS 4777 and the technical rules, and satisfies a technical assessment by Western Power for installations larger than 30kVA; and |
| | 8. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT8" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C9 – 3 Part Time of Use Energy (Residential) Bi-directional Service |
|---|---|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The <i>bi-directional point</i> is located at a <i>residential premises</i> or premises occupied by a <i>voluntary/charitable organisation</i> with an inverter system rated up to 10 kVA for single phase connections and 30 kVA for three phase connections; and |
| | 2. At the metering point: |
| | a. on and before 30 June 2020, an interval meter (bi-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 3. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and |
| | 4. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> ; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT17" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C10 – 3 Part Time of Use Energy (Business) Bi-directional Service |
|---|--|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The <i>bi-directional point</i> is located at <i>non-residential premises</i> with an inverter system rated up to a total of 1 MVA for single or three-phase connections; and |
| | 2. At the metering point: |
| | a. on and before 30 June 2020, an interval meter (bi-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 3. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and |
| | 4. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> , and satisfies a technical assessment by Western Power for installations larger than 30kVA; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this service; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT18" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C11 – 3 Part Time of Use Demand (Residential) Bi-directional Service |
|---|--|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The bi-directional point is located at a residential premises or premises occupied by a voluntary/charitable organisation with an inverter system rated up to 10 kVA for single phase connections and 30 kVA for three phase connections; and |
| | 2. At the metering point: |
| | a. on and before 30 June 2020, an interval meter (bi-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 3. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and |
| | 4. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> ; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT19" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C12 – 3 Part Time of Use Demand (Business) Bi-directional Service |
|---|--|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The <i>bi-directional point</i> is located at <i>non-residential premises</i> with an inverter system rated up to a total of 1 MVA for single or three-phase connections; and |
| | 2. At the metering point: |
| | a. on and before 30 June 2020, an interval meter (bi-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 3. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and |
| | 4. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> , and satisfies a technical assessment by Western Power for installations larger than 30kVA; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this service; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT20" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C13 – Multi Part Time of Use Demand (Residential) Bi-directional Service |
|---|--|
| Reference Service Description: | A bi-directional service combined with a connection service at a bi-directional point on the low voltage (415 volts or less) distribution system. This bi-directional service includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The bi-directional point is located at a residential premises or premises occupied by a voluntary/charitable organisation with an inverter system rated up to 10 kVA for single phase connections and 30 kVA for three phase connections; and |
| | 2. At the metering point: |
| | a. on and before 30 June 2020, an interval meter (bi-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 3. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and |
| | 4. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> ; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. Each of the following does not apply under an agreement with Western Power: |
| | a. The <i>tariff</i> that determines the <i>charge</i> is different to the Applicable Reference Tariff for this <i>service</i> ; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT21" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C14 – Multi Part Time of Use Demand (Business) Bi-directional Service |
|---|---|
| Reference Service Description: | A <i>bi-directional service</i> combined with a <i>connection service</i> at a <i>bi-directional point</i> on the low voltage (415 volts or less) <i>distribution system</i> . This <i>bi-directional service</i> includes: |
| | 1. on and before 30 June 2020, a standard metering service; and |
| | 2. on and after 1 July 2020, a reference service (metering). |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The <i>bi-directional point</i> is located at <i>non-residential premises</i> with an inverter system rated up to a total of 1 MVA for single or three-phase connections; and |
| | 2. At the <i>metering point</i> : |
| | a. on and before 30 June 2020, an interval meter (bi-directional) is installed; and |
| | b. on and after 1 July 2020, a <i>reference service (metering)</i> is provided to the same <i>user</i> ; and |
| | 3. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and |
| | 4. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>technical rules</i> , and satisfies a technical assessment by Western Power for installations larger than 30kVA; and |
| | 5. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000; and |
| | 6. Each of the following does not apply under an agreement with Western Power: |
| | The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or |
| | b. The <i>user</i> is to receive delivered electricity at a <i>service standard</i> different to the Applicable Service Standard Benchmarks for this <i>service</i> . |
| Applicable Reference Tariff: | "RT22" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service C15 – Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution |
|---|---|
| Reference Service Description: | A bi-directional service provided on the same basis as bi-directional services C1 to C14 (selected by the user) in circumstances where this service provides for facilities and equipment connected behind a connection point (including distributed generating plant and other non-network solutions) to provide benefits to the Western Power Network that defer Western Power's capital and non-capital costs. {Note: a 'thin connection' that involves the export of electricity onto the Western Power Network or the provision of another network support service may be eligible for this reference service.} |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | All of the <i>eligibility criteria</i> for <i>bi-directional services</i> C1 or C14 (as applicable) are met; and |
| | 2. The connection point was created or the facilities and equipment are installed after the AA4 effective date; and |
| | 3. The <i>connection point</i> is not subject to a capacity sharing arrangement; and |
| | 4. A network support services contract setting out the terms upon which the distributed <i>generating plant</i> or other non-network solution at the <i>connection point</i> will provide benefits to the <i>Western Power Network</i> that defers Western Power's <i>new facilities investment</i> and <i>non-capital costs</i> is in force; and |
| | 5. The user has made an electricity transfer application in accordance with the Applications and Queuing Policy for this service and has been assessed for a discount to the reference tariff applicable to reference services C1 to C14 (as applicable) in accordance with the discount mechanism set out in the price list for reference tariff RT24. |
| Applicable Reference Tariff: | "RT24" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | As set out in Section 4.2 of the access arrangement. |



5. Reference Services (ancillary)

Western Power offers 9 services at a connection point as a reference service (ancillary).

| Reference Service Name: | Reference Service D1 – Supply Abolishment (whole current metering) Service |
|---|--|
| Reference Service Description: | A service ancillary to an exit service, entry service or bi-directional service to permanently disconnect electricity supply, remove the meter and abolish the connection point. |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The <i>user</i> has submitted an <i>electricity transfer application</i> to abolish an existing <i>connection point</i> in accordance with the <i>Applications and Queuing Policy</i> and in accordance with the provisions of its <i>access contract</i> ; and |
| | 2. The user has an exit service, entry service or bi-directional service at the connection point; and |
| | 3. The <i>user</i> has an <i>access contract</i> that provides for supply abolishment services; and |
| | 4. The request includes all information that Western Power, as a <i>reasonable and</i> prudent person, requires to perform the <i>service</i> ; and |
| | 5. The <i>user</i> has provided access to Western Power to the <i>connection point</i> and associated <i>metering point</i> ; and |
| | 6. A whole current <i>meter</i> (being a <i>meter</i> that does not have a <i>transformer</i>) is installed at the <i>metering point</i> ; and |
| | 7. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000. |
| Applicable Reference Tariff: | "RT25" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | As set out in section 4.2 of the access arrangement. |



| Reference Service Name: | Reference Service D2 –Capacity Allocation Swap (Nominator) (Business) Service |
|---|---|
| Reference Service Description: | A service ancillary to: exit services A5, A6, A7, A8 and A11; entry services B1 and B2; and bi-directional services C5, C6, C7 and C8, under which a user applies to Western Power to decrease contracted capacity at one connection point under its access contract and nominates a corresponding increase in contracted capacity at another connection point under its access contract or at a connection point under another user's access contract for an intra day period nominated by the user following which the contracted capacity under the user's access contract is reinstated. |
| Eligibility Criteria: | Users are eligible to use this service if: The user has submitted an electricity transfer application to decrease its contracted capacity at one connection point and that application is approved; and Western Power receives a corresponding electricity transfer application to increase contracted capacity at another connection point pursuant to reference service D3 and that application is approved; and All of the eligibility criteria for the reference services at the connection points are met; and The increase and decrease of contracted capacity relates to either contracted maximum demand (CMD) or declared sent out capacity (DSOC) (not both); and The user has an access contract that provides for capacity allocation services at multiple connection points as per the "Electricity Transfer Access Contract" published in Appendix A of the access arrangement; and The Western Power Network has the technical capability to give effect to the decrease of contracted capacity; and The service is not associated with any material modification of the facilities and equipment connected at an existing connection point; and No augmentation of the Western Power Network is required to facilitate the capacity allocation arrangements; and An operating document setting out the practical, technical and other operational details of the capacity allocation (swap) arrangements applies between the user(s), the consumer(s) at each of the two connection points, system management and Western Power; and The provision of the service is approved by system management and the market operator. (Note: In addition to lodging an 'electricity transfer application' under the Applications and Queuing Policy to transfer to this service a user may also be required to lodge a 'connection application' as described in clause 10.2(e) the Applications and Queuing Policy.) |
| Applicable Reference Tariff: | Any applicable lodgement fees payable in accordance with the Applications and Queuing Policy. |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |



| Reference Service Name: | Reference Service D2 –Capacity Allocation Swap (Nominator) (Business) Service |
|---|---|
| Applicable Service Standard Benchmarks: | The service standard benchmarks (set out in Section 4.2 of the <i>access arrangement</i>) that apply to: |
| | 1. exit services A5, A6, A7, A8 and A11; |
| | 2. entry services B1 and B2; and |
| | 3. bi-directional services C5, C6, C7 and C8 |
| | (as applicable). |



| Reference Service Name: | Reference Service D3 –Capacity Allocation Swap (Nominee) (Business) Service |
|---|--|
| Reference Service Description: | A service ancillary to: exit services A5, A6, A7, A8 and A11; entry services B1 and B2; and bi-directional services C5, C6, C7 and C8, under which a user applies to Western Power to increase contracted capacity at one connection point under its access contract and nominates a corresponding decrease in contracted capacity at another connection point under its access contract or at a connection point under another user's access contract for an intra day period nominated by the user following which the contracted capacity under the user's access contract is reinstated. |
| Eligibility Criteria: | Users are eligible to use this service if: The user has submitted an electricity transfer application to increase its contracted capacity at one connection point and that application is approved; and Western Power receives a corresponding electricity transfer application to decrease contracted capacity at another connection point pursuant to reference service D2 and that application is approved; and All of the eligibility criteria for the reference services at the connection points are met; and The increase and decrease of contracted capacity relates to either CMD or DSOC (not both); and The user has an access contract that provides for capacity allocation services at multiple connection points as per the "Electricity Transfer Access Contract" published in Appendix A of the access arrangement; and The Western Power Network has the technical capability to give effect to the increase of contracted capacity; and The service is not associated with any material modification of the facilities and equipment connected at an existing connection point; and No augmentation of the Western Power Network is required to facilitate the capacity allocation arrangements; and An operating document setting out the practical, technical and other operational details of the capacity allocation (swap) arrangements applies between the user(s), the consumer(s) at each of the two connection points, system management and Western Power; and The provision of the service is approved by system management and the market operator. (Note: In addition to lodging an 'electricity transfer application' under the Applications and Queuing Policy to transfer to this service a user may also be required to lodge a 'connection application' as described in clause 10.2(e) the Applications and Queuing Policy.) |
| Applicable Reference Tariff: | Any applicable lodgement fees payable in accordance with the <i>Applications and Queuing Policy</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |



| Reference Service Name: | Reference Service D3 –Capacity Allocation Swap (Nominee) (Business) Service |
|---|---|
| Applicable Service Standard Benchmarks: | The service standard benchmarks (set out in Section 4.2 of the <i>access arrangement</i>) that apply to: |
| | 1. exit services A5, A6, A7, A8 and A11; |
| | 2. entry services B1 and B2; and |
| | 3. bi-directional services C5, C6, C7 and C8, |
| | (as applicable). |



| Reference Service Name: | Reference Service D4 –Capacity Allocation Same Connection Point (Nominator) (Business) Service |
|-----------------------------------|---|
| Reference Service Description: | A service ancillary to: exit services A7, A8 and A11; entry services B1 and B2; and bi-directional services C7 and C8, under which a user applies to Western Power to decrease contracted capacity at a connection point under its access contract (expressed as a percentage of that contracted capacity (DSOC or CMD)) for a clearly specified period of time and nominates a corresponding increase in contracted capacity to another user at the same connection point under its access contract. The allocated capacity is not further transferable or otherwise delegable. At the end of the specified period the contracted capacity under the user's access contract is reinstated. |



| Reference Service Name: | Reference Service D4 –Capacity Allocation Same Connection Point (Nominator) (Business) Service |
|---|--|
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The <i>user</i> has submitted an <i>electricity transfer application</i> to decrease its contracted capacity at one <i>connection point</i> for a clearly specified period and that application is approved; and |
| | 2. Western Power receives a corresponding <i>electricity transfer application</i> to increase contracted capacity at the same <i>connection point</i> pursuant to <i>reference service</i> D5 and the application is approved; and |
| | 3. All of the <i>eligibility criteria</i> for the <i>reference service</i> at the <i>connection point</i> are met; and |
| | 4. The increase and decrease of contracted capacity relates to either CMD or DSOC (not both); and |
| | 5. The same <i>reference service</i> is provided at the <i>connection point</i> to each <i>user</i> ; and |
| | 6. The <i>user</i> has an <i>access contract</i> that provides for capacity allocation services at one <i>connection point</i> as per the "Electricity Transfer Access Contract" published in Appendix A of the <i>access arrangement</i> ; and |
| | 7. The Western Power Network has the technical capability to give effect to the decrease of contracted capacity; and |
| | 8. The service is not associated with any material modification of the <i>facilities and</i> equipment connected at an existing <i>connection point</i> ; and |
| | 9. No augmentation of the <i>Western Power Network</i> is required to facilitate the capacity allocation arrangements; and |
| | 10. An operating document setting out the practical, technical and other operational details of the capacity allocation arrangements applies between the <i>user</i> , the <i>consumer(s)</i> at the <i>connection point</i> , <i>system management</i> and Western Power; and |
| | 11. The provision of the <i>service</i> is approved by <i>system management</i> and the <i>market operator</i> ; and |
| | 12. Each <i>user</i> at the <i>connection point</i> has agreed with Western Power for Western Power to freely provide <i>energy data</i> to each <i>user</i> (and to the <i>market operator</i>) to give effect to the capacity allocation arrangements; and |
| | 13. Each user at the <i>connection point</i> enters into a deed with the benefit to Western Power covenanting that they are jointly and severally liable for each other's contractual and other regulatory obligations in respect to the <i>connection point</i> . {Note: In addition to lodging an 'electricity transfer application' under the <i>Applications and Queuing Policy</i> to transfer to this service a <i>user</i> may also be required to lodge a 'connection application' as described in clause 10.2(e) the <i>Applications and Queuing Policy</i> .} |
| Applicable Reference Tariff: | Any applicable lodgement fees payable in accordance with the <i>Applications and Queuing Policy</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the access arrangement. |
| Applicable Service Standard Benchmarks: | The service standard benchmarks (set out in Section 4.2 of the <i>access arrangement</i>) that apply to: |
| | 1. exit services A7, A8 and A11; |
| | 2. entry services B1 and B2; and |
| | 3. bi-directional services C5, C6, C7 and C8, |
| | (as applicable). |



Reference Service D5 – Capacity Allocation Same Connection Point (Nominee) Reference Service Name: (Business) Service Reference Service A service ancillary to: Description: exit services A7, A8 and A11; entry services B1 and B2; and bi-directional services C7 and C8, under which a user applies to Western Power to increase contracted capacity at a connection point under its access contract (expressed as the percentage of contracted capacity (DSOC or CMD) nominated pursuant to reference service D4) for a clearly specified period of time and nominates the corresponding decrease in contracted capacity to the nominator user at the same connection point under its access contract. The allocated contracted capacity is not further transferable or otherwise delegable. At the end of the specified period the contracted capacity under the user's access contract is reinstated. Eligibility Criteria: Users are eligible to use this service if: 1. The user has submitted an electricity transfer application to increase its contracted capacity at one connection point for a clearly specified period and that application is approved; and 2. Western Power receives a corresponding electricity transfer application to decrease contracted capacity at the same connection point pursuant to reference service D4 and that application is approved; and 3. All of the *eligibility criteria* for the *reference service* at the *connection point* are met; and 4. The increase and decrease of contracted capacity relates to either CMD or DSOC (not both); and 5. The same reference service is provided at the connection point to each user; and 6. The user has an access contract that provides for capacity allocation services at one connection point as per the "Electricity Transfer Access Contract" published in Appendix A of the access arrangement; and 7. The Western Power Network has the technical capability to give effect to the increase of contracted capacity; and 8. The service is not associated with any material modification of the facilities and equipment connected at an existing connection point; and 9. No augmentation of the Western Power Network is required to facilitate the capacity allocation arrangements; and 10. An operating document setting out the practical, technical and other operational details of the capacity allocation arrangements applies between the user(s), the consumer(s) at the connection point, system management and Western Power; 11. The provision of the *service* is approved by *system management* and the *market* operator; and 12. Each user at the *connection point* has agreed with Western Power for Western Power to freely provide energy data to each user (and to the market operator) to give effect to the capacity allocation arrangements; and 13. Each user at the *connection point* enters into a deed to the benefit of Western Power covenanting that they are jointly and severally liable for each other's contractual and other regulatory obligations in respect to the connection point. {Note: In addition to lodging an 'electricity transfer application' under the Applications and Queuing Policy to transfer to this service a user may also be required to lodge a 'connection application' as described in clause 10.2(e) the Applications and Queuing Policy.}



| Reference Service Name: | Reference Service D5 –Capacity Allocation Same Connection Point (Nominee) (Business) Service |
|--|---|
| Applicable Reference Tariff: | Any applicable lodgement fees payable in accordance with the <i>Applications and Queuing Policy</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |
| Applicable Service Standard Benchmarks: | The service standard benchmarks (set out in Section 4.2 of the access arrangement) that apply to: 1. exit services A7, A8 and A11; 2. entry services B1 and B2; and 3. bi-directional services C5, C6, C7 and C8, (as applicable). |



| Reference Service Name: | Reference Service D6 – Remote Direct Load Control Service |
|---|--|
| Reference Service Description: | A service ancillary to: |
| | • exit services A1 to A8 and A12 to A17; and |
| | • bi-directional services C1 to C15, |
| | to send a command to an activated device for the control of a load at a <i>connection point</i> from a remote locality. The <i>service</i> does not include any site visits by Western Power. |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The <i>user</i> has submitted a service order for a remote direct load control service in accordance with Western Power's requirements; and |
| | 2. The user complies with all of its obligations under the Code of Conduct for the Supply of Electricity to Small Use Customers 2018 relevant to this service; and |
| | 3. The <i>user</i> is receiving an <i>exit service</i> or <i>bi-directional service</i> at the <i>connection point</i> ; and |
| | 4. The <i>user</i> has an <i>access contract</i> that provides for direct load control services as per the "Electricity Transfer Access Contract" published in Appendix A of the <i>access arrangement</i> ; and |
| | 5. The remote direct load control service service order includes all information required by Western Power acting as a <i>reasonable and prudent person</i> , to perform the <i>service</i> ; and |
| | 6. A reference service (metering) M5, M6, M7, M12, M13, or M14 is being provided at the connection point; and |
| | 7. Western Power and the <i>user</i> agree a liability regime regarding Western Power's involvement in remotely controlling the load of the <i>user's</i> customer (the <i>consumer</i>); and |
| | 8. A telecommunications network supported by Western Power can facilitate transmitting commands to and messages from the <i>meter</i> ; and |
| | 9. Western Power's advanced metering infrastructure project is implemented; and |
| | 10. There is a supply voltage present at the <i>meter</i> ; and |
| | 11. Supporting IT infrastructure and processes capable of receiving and actioning user requests for this service have been established; and |
| | 12. An operating document setting out the practical, technical and other operational details of the load control service arrangements applies between the <i>user</i> and Western Power; and |
| | 13. The <i>user</i> has the <i>consumer's</i> authority to control the load at the <i>connection point;</i> and |
| | 14. A whole current <i>meter</i> (being a <i>meter</i> that does not have a <i>transformer</i>) is installed at the <i>metering point</i> ; and |
| | 15. The <i>meter</i> relating to the <i>connection point</i> is configured to receive and provide commands for this <i>service</i> from a remote locality; and |
| | 16. The consumer's facilities and equipment are technically capable of receiving the service and comply with the technical rules, the WA Electrical Requirements and AS 3000. |
| Applicable Reference Tariff: | "RT26" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |



| Reference Service Name: | Reference Service D6 – Remote Direct Load Control Service |
|---|---|
| Applicable Service Standard Benchmarks: | The service standard benchmarks (set out in Section 4.2 of the <i>access arrangement</i>) that apply to: |
| | 1. exit services A1 to A8 and A12 to A17; and |
| | 2. bi-directional services C1 to C15, |
| | (as applicable). |



| Reference Service Name: | Reference Service D7 – Remote Load Limitation Service |
|---|---|
| Reference Service Description: | A service ancillary to: |
| | • exit services A1 to A8 and A12 to A17; and |
| | • bi-directional services C1 to C15, |
| | to remotely limit the load at a <i>connection point</i> through a Western Power <i>meter</i> . The <i>service</i> does not include any site visits by Western Power. |
| Eligibility Criteria: | Users are eligible to use this service if: |
| | 1. The <i>user</i> has submitted a service order for a remote load limitation service in accordance with Western Power's requirements; and |
| | 2. The <i>user</i> complies with all of its obligations under the <i>Code of Conduct for the Supply of Electricity to Small Use Customers 2018</i> relevant to this <i>service</i> ; and |
| | 3. The <i>user</i> is receiving an <i>exit service</i> or <i>bi-directional service</i> at the <i>connection point</i> ; and |
| | 4. The <i>user</i> has an <i>access contract</i> that provides for remote load limitation services as per the "Electricity Transfer Access Contract" published in Appendix A of the <i>access arrangement</i> ; and |
| | 5. The remote load limitation service service order includes all information required by Western Power acting as a <i>reasonable and prudent person</i> , to perform the <i>service</i> ; and |
| | 6. A reference service (metering) M5, M6, M7, M12, M13, or M14 is being provided at the connection point; and |
| | 7. Western Power and the <i>user</i> agree a liability regime regarding Western Power's involvement in remotely limiting the load of the <i>user's</i> customer (the <i>consumer</i>); and |
| | 8. A telecommunications network supported by Western Power can facilitate transmitting commands to and messages from the <i>meter</i> ; and |
| | 9. Western Power's advanced metering infrastructure project is implemented; and |
| | 10. There is a supply voltage present at the <i>meter</i> ; and |
| | 11. Supporting IT infrastructure and processes capable of receiving and actioning user requests for this service have been established; and |
| | 12. An operating document setting out the practical, technical and other operational details of the remote load limitation service arrangements applies between the <i>user</i> and Western Power; and |
| | 13. The <i>user</i> has the <i>consumer's</i> authority to limit the load at the <i>connection point;</i> and |
| | 14. A whole current <i>meter</i> (being a <i>meter</i> that does not have a <i>transformer</i>) is installed at the <i>metering point</i> ; and |
| | 15. The <i>meter</i> relating to the <i>connection point</i> is configured to receive and provide commands for this <i>service</i> from a remote locality; and |
| | 16. The consumer's facilities and equipment are technically capable of receiving the service and comply with the technical rules, the WA Electrical Requirements and AS 3000. |
| Applicable Reference Tariff: | "RT27" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |



| Reference Service Name: | Reference Service D7 – Remote Load Limitation Service |
|---|---|
| Applicable Service Standard Benchmarks: | The service standard benchmarks (set out in Section 4.2 of the <i>access arrangement</i>) that apply to: |
| | 1. exit services A1 to A8 and A12 to A17; and |
| | 2. bi-directional services C1 to C15, |
| | (as applicable). |



| Reference Service Name: | Reference Service D8 – Remote De-energise Service |
|---|--|
| Reference Service Description: | A service ancillary to: exit services A1 to A8 and A12 to A17; entry service B1; and bi-directional services C1 to C15, to de-energise a meter by removing supply voltage from all outgoing circuits on a non-permanent basis by a command sent to a meter from a remote locality. The service |
| Eligibility Criteria: | does not include any site visits by Western Power. Users are eligible to use this service if: |
| Ligibility Criteria. | 1. The <i>user</i> has submitted a service order for a remote de-energise service in accordance with Western Power's requirements; and |
| | The user complies with all of its obligations under the Code of Conduct for the Supply of Electricity to Small Use Customers 2018 relevant to this service; and The user is receiving an exit service, entry service or bi-directional service at the |
| | connection point; and The user has an access contract that provides for remote de-energise services as per the "Electricity Transfer Access Contract" published in Appendix A of the access arrangement; and |
| | 5. The remote de-energise service order includes all information required by Western Power acting as a <i>reasonable and prudent person</i> , to perform the <i>service</i> ; and |
| | 6. A reference service (metering) M5, M6, M7, M12, M13 or M14 is being provided at the connection point; and |
| | 7. Western Power and the <i>user</i> agree a liability regime regarding Western Power's involvement in remotely de-energising the electricity supply voltage of the <i>user's</i> customer (the <i>consumer</i>); and |
| | 8. Western Power's advanced metering infrastructure project is implemented; and |
| | 9. A telecommunications network supported by Western Power can facilitate transmitting commands to and messages from the <i>meter</i> ; and |
| | 10. There is a supply voltage present at the <i>meter</i> ; and |
| | 11. Supporting IT infrastructure and processes capable of receiving and actioning user requests for this service have been established; and |
| | 12. A whole current <i>meter</i> (being a <i>meter</i> that does not have a <i>transformer</i>) is installed at the <i>metering point</i> ; and |
| | 13. The <i>meter</i> is configured to receive and provide commands for this <i>service</i> from a remote locality; and |
| | 14. The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000. |
| Applicable Reference Tariff: | "RT28" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |



| Reference Service Name: | Reference Service D8 – Remote De-energise Service |
|---|---|
| Applicable Service Standard Benchmarks: | The service standard benchmarks (set out in Section 4.2 of the <i>access arrangement</i>) that apply to: |
| | 1. exit services A1 to A8 and A12 to A17; |
| | 2. entry service B1;and |
| | 3. bi-directional services C1 to C15, |
| | (as applicable). |



| Reference Service Name: | Reference Service D9 – Remote Re-energise Service |
|---|--|
| Reference Service Description: | A service ancillary to: exit services A1 to A8 and A12 to A17; entry service B1; and bi-directional services C1 to C15, to re-arm a previously de-energised meter by a command sent to a meter from a remote locality. The service does not include any site visits by Western Power. |
| Eligibility Criteria: | Users are eligible to use this service if: The user has submitted a service order for a remote re-energise request in accordance with Western Power's requirements; and The meter is de-energised following the completion of a remote de-energise service D8; and The user complies with all of its obligations under the Code of Conduct for the Supply of Electricity to Small Use Customers 2018 relevant to this service; and The user is receiving an exit service, entry service or bi-directional service at the connection point; and The user has an access contract that provides for remote re-energise services as per the "Electricity Transfer Access Contract" published in Appendix A of the access arrangement; and The remote re-energise service order includes all information required by Western Power acting as a reasonable and prudent person, to perform the service; and A reference service (metering) M5, M6, M7, M12, M13 or M14 is being provided at the connection point; and Western Power and the user agree a liability regime regarding Western Power's involvement in remotely facilitating re-energising the electricity supply voltage of the user's customer (the consumer) by re-arming the meter; and de-energising the electricity supply voltage of the user's customer (the consumer); and Western Power's advanced metering infrastructure project is implemented; and A telecommunications network supported by Western Power can facilitate transmitting commands to and messages from the meter; and There is a supply voltage present at the meter; and There is a supply voltage present at the meter; and There is a supply voltage present at the meter; and There is a supply voltage present at the meter; and The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000. |
| Applicable Reference Tariff: | "RT29" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> . |
| Applicable Standard Access Contract: | "Electricity Transfer Access Contract" published in Appendix A of the <i>access</i> arrangement. |



| Reference Service Name: | Reference Service D9 – Remote Re-energise Service |
|---|---|
| Applicable Service Standard Benchmarks: | The service standard benchmarks (set out in Section 4.2 of the <i>access arrangement</i>) that apply to: |
| | 1. exit services A1 to A8 and A12 to A17; and |
| | 2. entry services B1; and |
| | 3. bi-directional services C1 to C15, |
| | (as applicable). |



Annexure 1: Standard Metering Services Guide (to 30 June 2020)

Words or phrases *italicised* in this Annexure have the definitions given in clause 1.1 of Appendix E, in the *access arrangement* or in section 1.3 of the *Code*.

E.1.1 Nature and currency of this Annexure

This Annexure applies from the AA4 effective date up to and including 30 June 2020.

The written laws that regulate the measurement of electricity and the provision of metering services are the metering instruments. These include the MSLA, which regulates standard metering services.

This Annexure is a guide to *standard metering services* relevant to a *reference service*. This guide is not an exhaustive description of *standard metering services*; relevant information for a *standard metering service* in addition to this guide (for example the service standard) is in the *MSLA*.

It is anticipated that the 2006 version of the *MSLA* will be replaced. If a new model service level agreement is approved, the *standard metering services* relevant to the *reference ser*vice will be as set out in that model service level agreement (to the exclusion of this guide). After that time, no reliance should be placed on this guide.

To the extent of any inconsistency between this Annexure and the *metering instruments*, the *metering instruments* will prevail.

E.1.2 Status and configuration of *metering installation* in Table E.1

In Table E.1 below:

- a. an existing *metering installation* is one at an existing *metering point* immediately before the *AA4 effective date* and continues as an existing *metering installation* until such time as the *meter* forming part of the *metering installation* is upgraded, replaced, changed or reconfigured;
- b. a new *metering installation* is one established at a new *metering point* after the *AA4 effective date*;
- c. an upgraded or replaced *metering installation* is one where the *meter* forming part of the *metering installation* is upgraded or replaced after the *AA4 effective date* but does not include a *metering installation* where the *meter* is changed or reconfigured at the request of the *user*.

For:

- a. an *exit service* or *entry service* the *meter* will be configured to measure the transfer of electricity out of or into (respectively) the *Western Power Network*, but not both; and
- b. a *bi-directional service* the *meter* will be configured to measure the transfer of electricity into and out of the *Western Power Network*.

An accumulation meter includes a meter with interval energy data storage capability which is declared to be an accumulation meter under clause 3.2(2) of the Metering Code.



E.1.3 Availability of *Reference Services*

Exit services A3 and A4 and bi-directional services C3 and C4 are not available for new metering installations.

There are no existing *metering installations* for *exit services* A12 to A17, *entry service* B3 and *bi-directional services* C9 to C15.

E.1.4 Standard metering services

For the *reference services* set out in column one of Table E.1 and for the *metering installations* set out in column two, the *standard metering services* are the provision of the *meter* described in the column marked 'Meter' and the provision of the energy data described in the column marked 'Data Service'.

Table E.1: Standard Metering Services

| Reference Service | Status of metering installation | Meter | Data Service |
|---|---|--|---|
| A1, A2 C1, C2 | Existing, new, upgraded or replaced* | If throughput at the connection point is less than 50MWh/a, an accumulation meter | Bi-monthly provision of accumulated energy data |
| | | If throughput at the connection point is equal to or greater than 50MWh/a, an interval meter | Monthly provision of <i>interval energy</i> data. |
| A3, A4 C3, C4 | Existing, upgraded or replaced* | If throughput at the connection point is less than 50MWh/a, an accumulation meter | Bi-monthly provision of accumulated energy data |
| | | If throughput at the connection point is equal to or greater than 50MWh/a, an interval meter | Monthly provision of <i>interval energy</i> data. |
| A5, A6, A7, A8, A12, A13, A14, A15, A16, A17 B1, B2 C5, C6, C7, C8, C9, C10, C11, C12, C13, C14 | Existing, new, upgraded and replaced* | Interval meter | Monthly provision of <i>interval energy</i> data |
| A9, A10 | Existing, new, upgraded and replaced* | The installation of a <i>meter</i> is not practicable due to the nature or location of the <i>exit point</i> and/or <i>consumer's facilities and equipment</i> | Provision of the <i>metering services</i> set out in the <i>Metering Code</i> for a type 7 connection point |

^{*} Where a *user* requests a *meter* change or *meter* reconfiguration, the *meter* provision service is an extended metering service (within the meaning of the *MSLA*) and, as Table E.1 only describes *standard metering services*, it is not included. However, the *meter* provided will be the same as a new, upgraded or replaced *meter* set out in Table E.1 for the relevant *reference service*. The provision of the *energy data* described in the column marked 'Data Service' alongside the *meter* provided is then part of the *standard metering services* for that *reference service*.



{Note: The standard metering service for reference services B3 and C15 will be the standard metering service for the reference service upon which reference services B3 and C15 are based.}



E.1.5 *Metering Services* other than *standard metering services*

Table E.1 details *standard metering services*. There is no additional *charge* to *users* for *standard metering services* additional to the applicable metering component of the *reference tariff* for the relevant *reference service*. For any other *metering service* an additional *charge* is payable.

Standard metering services do not include the provision of services classified as extended metering services (within the meaning of the MSLA). Those extended metering services are provided and paid for under a service level agreement.

The user may request the provision of metering services that are additional to standard metering services and extended metering services ("additional metering services"). For example, the user may request:

- 1. more (or less) frequent energy data provision; or
- 2. the provision of an alternative *energy data* type (for example, *interval energy data* as an alternative to *accumulated energy data*).

In these examples, the *metering service* will be provided as an *additional metering service*.

Additional metering services are provided and paid for under a service level agreement between the user and Western Power, subject to the additional metering services meeting the minimum requirements of the Metering Code. Fees payable for the additional metering service will recover the costs that are incremental to the related standard metering service.



Annexure 2: Reference services (metering)

Words or phrases *italicised* in this Annexure have the definitions given in clause 1.1 of Appendix E, in the *access arrangement* or in section 1.3 of the *Code*.

E.1.1 Service descriptions

On and from 1 July 2020, the *reference service (metering)* numbered M1 to M16 set out in Table E.1.1 are provided.

Table E.1.1: Reference services (metering)

| Reference number | Service name | Service description |
|---------------------|--|--|
| M1 | Unidirectional, accumulation, bi-monthly, manual | Provision of accumulated energy data from an accumulation meter (uni-directional) derived by way of a manual read on a bi-monthly basis. |
| M2 | Unidirectional, accumulation (TOU), bi- monthly, manual | Provision of accumulated energy data for the time bands of the reference tariff for the underlying exit service from an accumulation meter (uni-directional) derived by way of a manual read on a bi-monthly basis. |
| M3 | Unidirectional, interval, bi-monthly, manual | Provision of <i>interval energy data</i> from an <i>interval meter</i> (<i>uni-directional</i>) derived by way of a <i>manual read</i> on a bi-monthly basis. |
| M4 | Unidirectional, interval, monthly, manual | Provision of <i>interval energy data</i> from an <i>interval meter</i> (unidirectional) derived by way of a manual read on a monthly basis. |
| M5 | Unidirectional, interval, bi-monthly, remote | Provision of <i>interval energy data</i> from an <i>interval meter (uni-directional)</i> derived via a <i>communications network</i> on a bimonthly basis. |
| M6 | Unidirectional, interval, monthly, remote | Provision of interval energy data from an interval meter (uni- directional) derived following the collection of the interval energy data via a communications network on a monthly basis. |
| M7 | Unidirectional, interval, daily, remote | Provision of interval energy data from an interval meter (uni- directional) derived following the collection of the interval energy data via a communications network on a daily basis. |
| M8 | Bidirectional, accumulation, bi-monthly, manual | Provision of accumulated energy data from an accumulation meter (bi-directional) derived by way of a manual read on a bi-monthly basis. |
| M9 | Bidirectional, accumulation (TOU), bi- monthly, manual | Provision of accumulated energy data for the time bands of the reference tariff for the underlying bi-directional service from an accumulation meter (bi-directional) derived by way of a manual read on a bi-monthly basis. |
| M10 | Bidirectional, interval, bi-monthly, manual | Provision of <i>interval energy data</i> from an <i>interval meter (bi-directional)</i> derived by way of a <i>manual read</i> on a bi-monthly basis. |
| M11 | Bidirectional, interval, monthly, manual | Provision of <i>interval energy data</i> from an <i>interval meter (bi-directional)</i> derived by way of a <i>manual read</i> on a monthly basis. |



| Reference number | Service name | Service description |
|---------------------|--|---|
| M12 | Bidirectional interval, bi-monthly, remote | Provision of interval energy data from an interval meter (bi-directional) derived following the collection of the interval energy data via a communications network on a bi-monthly basis. |
| M13 | Bidirectional, interval, monthly, remote | Provision of interval energy data from an interval meter (bi- directional) derived following the collection of the interval energy data via a communications network on a monthly basis. |
| M14 | Bidirectional, interval, daily, remote | Provision of interval energy data from an interval meter (bi- directional) derived following the collection of the interval energy data via a communications network on a daily basis. |
| M15 | Unmetered supply, accumulation, bi- monthly, manual | Provision of the <i>metering services</i> set out in the <i>Metering Code</i> for a type 7 connection point. |
| M16 | One off manual interval read | Provision upon request of <i>interval energy data</i> collected <i>as a manual read</i> from an <i>accumulation meter</i> . |

Metering services M1 to M14 include the following *metering services* for so long as that is consistent with the *MSLA*:

a. upgrade or replacement of the *meter* to align with the requirements of the *metering instruments* as a result of throughput at the *connection point* changing;

{Note: if the *user* elects to upgrade the *meter* this is a "meter change" and if the *user* elects to reconfigure the *meter* this is a "meter reconfigure". Additional charges are payable for a "meter change" and a "meter reconfiguration"}

- b. customer meter reading (including card read meter reading); and
- c. the provision of *standing data* in accordance with the *Metering Code*.

E.1.2 Permissible reference services (metering)

On and from 1 July 2020, the *permissible reference services (metering)* that are available for each *reference service* A1 to A17, B1 and B2, and C1 to C14 are identified as ticked (<) columns in Table E.1.2 below.

{Note: The permissible reference services (metering) for reference services B3 and C15 will be the permissible reference services (metering) for the underlying entry service or bi-directional service (as applicable) upon which reference services B3 and C15 are based.}

The cells in table E.2.1 below with an asterisk (*) in addition to a tick (✓) indicate the "transition" reference service (metering) that is provided in respect to reference services A1 to A17, B1 and B2, and C1 to C14 on 1 July 2020.

Table E.1.2: Compatibility of permissible reference services (metering) with reference service A1 to A17, B1 and B2, and C1 to C14

| | M1 | M2 | М3 | M4 | M5 | М6 | M7 | M8 | М9 | M10 | M11 | M12 | M13 | M14 | M15 | M16 |
|---------------------------------|------------|----|----|------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|
| Exit Services | | | | | | | | | | | | | | | | |
| A1 - Anytime Energy (Resi) Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | √ * | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | ✓ |
| Throughput >50MWh | Ì | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A2 - Anytime Energy (Busi) Exit | | | | | | | | | | | | | | | | |



| | M1 | M2 | M3 | M4 | M5 | М6 | M7 | M8 | M9 | M10 | M11 | M12 | M13 | M14 | M15 | M16 |
|--|------------|------------|----------|------------|----------|------------|------------|----|----|-----|-----|-----|-----|-----|------------|-----|
| Throughput <50MWh | √ * | | √ | ✓ | √ | ✓ | ✓ | | | | | | | | | ✓ |
| Throughput >50MWh | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A3 - TOU Energy (Resi) Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | √ * | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | ✓ |
| Throughput >50MWh | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A4 - TOU Energy (Busi) Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | √ * | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | ✓ |
| Throughput >50MWh | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A5 - HV Demand Exit | | | | | | √ * | ✓ | | | | | | | | | |
| A6 - LV Demand Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | √ * | ✓ | ✓ | ✓ | | | | | | | | | |
| Throughput >50MWh | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A7 - HV CMD Exit | | | | | | √ * | ✓ | | | | | | | | | |
| A8 - LV CMD Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | √ * | ✓ | ✓ | ✓ | | | | | | | | | |
| Throughput >50MWh | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A9 – Unmetered | | | | | | | | | | | | | | | √ * | |
| A10 – Streetlight | | | | | | | | | | | | | | | √ * | |
| A11 - Transmission Exit | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A12 - 3 Part TOU (Resi) Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | ✓ | √ * | ✓ | ✓ | ✓ | | | | | | | | | |
| Throughput >50MWh | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A13 - 3 Part TOU (Busi) Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | ✓ | √ * | ✓ | ✓ | ✓ | | | | | | | | | |
| Throughput >50MWh | | | | √ * | | ✓ | √ * | | | | | | | | | |
| A14 - 3 Part TOU Demand (Resi) Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | ✓ | √ * | ✓ | ✓ | ✓ | | | | | | | | | |
| Throughput >50MWh | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A15 - 3 Part TOU Demand (Busi) Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | ✓ | √ * | ✓ | ✓ | ✓ | | | | | | | | | |
| Throughput >50MWh | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A16 – Multi Part TOU (Resi) Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | ✓ | √ * | ✓ | ✓ | ✓ | | | | | | | | | |
| Throughput >50MWh | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| A17 – Multi Part TOU (Busi) Exit | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | ✓ | √ * | ✓ | ✓ | ✓ | | | | | | | | | |
| Throughput >50MWh | | | | √ * | | ✓ | √ * | | | | | | | | | |
| Entry Services | | | | | | | | | | | | | | | | |



| | M1 | M2 | М3 | M4 | M5 | M6 | M7 | M8 | M9 | M10 | M11 | M12 | M13 | M14 | M15 | M16 |
|---|----|----|----------------|------------|--------|------------|-------|------------|------------|---------|------------|---------|---------------|----------|-------|-----|
| B1 - Distribution Entry | | | | √ * | | ✓ | ✓ | | | | | | | | | |
| B2 - Transmission Entry | | | | | | √ * | ✓ | | | | | | | | | |
| B3– Entry Service Facilitating a Distributed Generation or Other Non-Network Solution | | Se | ee <i>perr</i> | nissik | ole re | feren | ce se | rvices | s (me | tering, | for ur | iderlyi | ng <i>ent</i> | ry serv | vice. | l |
| Bi-Directional Services | | | | | | | | | | | | | | | | |
| C1 - Anytime Energy (Resi) Bi- Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | √ * | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C2 - Anytime Energy (Busi) Bi- Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | √ * | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C3 - TOU (Resi) Bi-Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | | √ * | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C4 - TOU (Busi) Bi-Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | | √ * | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C5 - HV Metered Demand Bi- Directional | | | | | | | | | | | | | √ * | √ | | |
| C6 - LV Metered Demand Bi- Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | | | ✓ | √ * | ✓ | ✓ | ✓ | | |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C7 - HV CMD Bi-Directional | | | | | | | | | | | ✓ | | √ * | ✓ | | |
| C8 - LV CMD Bi-Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | | | ✓ | √ * | ✓ | ✓ | ✓ | | |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C9 - 3 Part TOU (Resi) Bi- Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | | | ✓ | √ * | ✓ | ✓ | ✓ | | |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C10 - 3 Part TOU (Busi) Bi- Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | | | ✓ | √ * | ✓ | ✓ | ✓ | | |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C11 - 3 Part TOU Demand (Resi) Bi-Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | | | ✓ | √ * | ✓ | ✓ | ✓ | | |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |



| | M1 | M2 | МЗ | M4 | M5 | М6 | M7 | M8 | М9 | M10 | M11 | M12 | M13 | M14 | M15 | M16 |
|---|-----|---------------|---------|---------|-------|--------|--------|--------|--------|--------|------------|----------------|---------|----------|---------|-------|
| C12 - 3 Part TOU Demand (Busi) Bi-Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | | | ✓ | √ * | ✓ | ✓ | ✓ | | |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C13 – Multi Part TOU (Resi) Bi- Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | | | ✓ | √ * | ✓ | ✓ | ✓ | | |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C14 – Multi Part TOU (Busi) Bi- Directional | | | | | | | | | | | | | | | | |
| Throughput <50MWh | | | | | | | | | | ✓ | √ * | ✓ | ✓ | ✓ | | |
| Throughput >50MWh | | | | | | | | | | | √ * | | ✓ | ✓ | | |
| C15 – Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution | | See <i>pe</i> | ermiss | ible ro | efere | nce se | ervice | es (me | eterin | g) for | under | lying <i>b</i> | i-direc | tional | service | 2. |
| Reference service (ancillary) | | | | | | | | | | | | | | | | |
| D1 – Supply abolishment (whole current metering) | | | | | | | | | | | | | | , | | |
| D2 –Capacity Allocation Swap (Nominator) (Business) | | | | | | | | | | | | | | | | |
| D3 –Capacity Allocation Swap (Nominee) (Business) | | | | | | | | | | | | | | | | |
| D4 –Capacity Allocation Same Connection Point (Nominator) (Business) | See | e perm | issible | refei | rence | servi | | | | for un | | ng exit | service | e, entry | , servi | ce or |
| D5 –Capacity Allocation Same Connection Point (Nominee) (Business) | | | | | | | | | | | | | | | | |
| D6 – Remote Direct Load Control Service | | | | | | | | | | | | | | | | |
| D7 – Remote Load Limitation Service | | | | | | | | | | | | | | | | |
| D8 – Remote De-energise Service | | | | | | | | | | | | | | | | |
| D9 – Remote Re-energise Service | | | | | | | | | | | | | | | | |

E.1.3 Selection of reference service (metering) for *exit service, entry service and bi-directional service.*

The eligibility criteria for each *exit service* (A1 to A17), *entry service* (B1 and B2) and *bi-directional service* (C1 to C14) require from 1 July 2020 a *reference service* (*metering*) is provided to the *user* as selected by the *user* as a component of the same *user's exit service, entry service or bi-directional service* from the *permissible reference services* (*metering*) (M1 to M14).

Upon selection of the *reference service* (metering) to be included as a component of the *exit service*, *entry service* or *bi-directional service* the *exit service*, *entry service* or *bi-directional service* will be numbered as a



combination of the *exit service* (A1 to A17), *entry service* (B1 and B2) or *exit service* (C1 to C14) number and the *reference service* (metering) (M1 to M14) number.

For example a *user* on the A1 - Anytime Energy (Residential) *exit service* who selects the M1 Unidirectional, accumulation, bi-monthly, manual *reference service* (*metering*) will be selecting the 'A1M1' *exit service*.

E.1.4 Eligibility Criteria for Reference Service (metering)

The eligibility criteria for each *permissible reference service (metering)* is identified as the rows that are ticked (\checkmark) in Table E..2.1 below.

Each eligibility criterion that is ticked (<) needs to be met in order to be eligible for the *permissible* reference service (metering). In some circumstances, this may require the user to progress a "meter change" or "meter reconfigure" in accordance with the service level agreement between the user and Western Power.

Table E.2.1: Eligibility Criteria Services

| | M1 | M2 | МЗ | M4 | M5 | M6 | M7 | M8 | M9 | M10 | M11 | M12 | M13 | M14 | M15 | M16 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|-----|
| The <i>User</i> receives a compatible <i>Network</i> access service at the <i>connection point</i> . | √ | √ | ✓ | √ | √ | ✓ | ✓ | √ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| The consumer's facilities and equipment comply with the technical rules, the WA Electrical Requirements and AS 3000. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| An <i>accumulation meter</i> is installed at the <i>metering point</i> . | ✓ | ✓ | | | | | | ✓ | ✓ | | | | | | | |
| An <i>interval meter</i> is installed at the <i>metering point</i> . | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | √ | | |
| The meter is configured to measure and record accumulated energy data: - out of the network for an exit service; or - in to the network for an entry service; or - in to and out of the network for a bi-directional service. | √ | V | | | | | | √ | √ | | | | | | | |
| The meter is configured to measure and record interval energy data: - out of the network for an exit service; or - in to the network for an entry service; or - in to and out of the network for a bi-directional service. | | | • | • | √ | √ | √ | | | √ | √ | ✓ | ✓ | ✓ | | |
| Annual throughput at the connection point is, and is expected to remain, less than 50MWh. | ✓ | ✓ | ✓ | | √ | | | ✓ | √ | ✓ | | ✓ | | | | |
| The connection point is located on the low voltage (415V or less) distribution system. | ✓ | √ | ✓ | | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | | | |



| | M1 | M2 | МЗ | M4 | M5 | M6 | M7 | M8 | M9 | M10 | M11 | M12 | M13 | M14 | M15 | M16 |
|---|----|----------|----------|----------|----------|----------|----------|----|----------|----------|-----|-----|-----|-----|-----|-----|
| The meter is configured with registers to measure and record accumulated energy data for the time bands for the underlying Network access service. | | √ | | | | | | | √ | | | | | | | |
| The <i>meter</i> is configured with registers to measure and record <i>interval energy data</i> for the underlying <i>Network</i> access service (if applicable). | | | ✓ | ✓ | ✓ | ✓ | √ | | | √ | ✓ | ✓ | ✓ | ✓ | | |
| The <i>meter</i> is connected to a communications network supported by <i>Western Power</i> . | | | | | √ | √ | ✓ | | | | | ✓ | ✓ | ✓ | | |
| The <i>meter</i> is capable of storing <i>interval energy data</i> . | | | | | | | | | | | | | | | | ✓ |
| The user receives a reference service (metering) (M1 to M15) in respect to the connection point. | | | | | | | | | | | | | | | | ✓ |

