# Revised proposed revisions to the Access Arrangement for the Western Power Network

# **ELECTRICITY NETWORKS CORPORATION**

("WESTERN POWER")

ABN 18 540 492 861



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#### 1. Introduction

#### 1.1 Purpose of this document

- 1.1.1 These revised *proposed revisions* are lodged by Western Power on 15 November 2022 for *review* and approval by the *Authority* in accordance with the processes and criteria set out in the *Electricity Networks Access Code 2004*, herein referred to as the "Code". Henceforth this document is referred to as the "access arrangement".
- 1.1.2 This access arrangement is an arrangement for access to the Western Power Network from the date specified in section 1.3.1 of this access arrangement. The Western Power Network is a covered network under the Code.

#### 1.2 Definitions and interpretation

- 1.2.1 In sections 1 to 10 of this *access arrangement*, where a word or phrase is italicised it has the definition given to that word or phrase as described in this *access arrangement* or section 1.3 of the *Code*, unless the context requires otherwise.
- 1.2.2 In each of the appendices to this *access arrangement*, a separate glossary of terms is provided where appropriate, and the definitions contained in those separate glossaries apply to the relevant appendix, unless the context requires otherwise.
- 1.2.3 In this access arrangement:
  - "bi-directional service" means a covered service provided by Western Power at a connection point under which the user may transfer electricity into and out of the Western Power Network at the connection point.
  - "MSLA" means the model service level agreement approved by the *Authority* under the *Metering* Code (which as at this *access arrangement start date* is the version dated 30 September 2020).

#### 1.3 Proposed access arrangement revisions commencement date

1.3.1 Subject to section 5.6, this *access arrangement* (as revised) is effective from 1 July 2023 or a later date in accordance with section 4.26 of the *Code*.

#### 1.4 Revision's submission date and target revisions commencement date

- 1.4.1 Pursuant to section 5.31(a) of the *Code*, the *revisions submission date* for this *access arrangement* is 1 February 2026.
- 1.4.2 Pursuant to section 5.31(b) of the *Code*, the *target revisions commencement date* for this *access arrangement* is 1 July 2027.

#### 1.5 Composition of this access arrangement

- 1.5.1 This *access arrangement* comprises this document together with:
  - a) the *Standard Access Contract*, termed the Electricity Transfer Access Contract attached at Appendix A;



- b) the Applications and Queuing Policy attached at Appendix B;
- c) the Contributions Policy attached at Appendix C.1;
- d) the Distribution Low Voltage Connection Scheme Methodology attached at Appendix C.2;
- e) the Multi-function Asset Policy attached at Appendix D;
- f) the details of the reference services offered by Western Power attached at Appendix E;
- g) the Tariff Structure Statement Overview attached at Appendix F.1;
- h) the Tariff Structure Statement Technical Summary attached at Appendix F.2;
- i) the *price lists* attached at Appendix F, which are a schedule of *reference tariffs* in effect for this *access arrangement*.

# 1.6 Relationship to technical rules

1.6.1 The *technical rules* do not form part of this *access arrangement*, although the *technical rules* are relevant in determining Western Power's *target revenue*.



# 2. Reference services

# 2.1 Purpose

2.1.1 Pursuant to sections 5.1(a) and 5.2 of the *Code*, this section of the *access arrangement* describes the *reference services* offered by Western Power.

# 2.2 Reference services

- 2.2.1 Reference services are provided to users that meet and continue to meet the eligibility criteria applicable to the reference service provided, on the terms and conditions of the Electricity Transfer Access Contract, at the related service standard benchmarks and at the related reference tariff.
- 2.2.2 Western Power specifies 23 *reference services* at *exit points*:

Table 1: Reference services at exit points

Reference service	Short name
Anytime Energy (Residential) Exit Service	A1
Anytime Energy (Business) Exit Service	A2
Time of Use Energy (Residential) Exit Service	А3
Time of Use Energy (Business) Exit Service	A4
High Voltage Metered Demand Exit Service	A5
Low Voltage Metered Demand Exit Service	A6
High Voltage Contract Maximum Demand Exit Service	A7
Low Voltage Contract Maximum Demand Exit Service	A8
Streetlighting Exit Service (including streetlight maintenance)	A9
Unmetered Supplies Exit Service	A10
Transmission Exit Service	A11
3 Part Time of Use Energy (Residential) Exit Service	A12
3 Part Time of Use Energy (Business) Exit Service	A13
3 Part Time of Use Demand (Residential) Exit Service	A14
3 Part Time of Use Demand (Business) Exit Service	A15
Multi Part Time of Use Energy (Residential) Exit Service	A16
Multi Part Time of Use Energy (Business) Exit Service	A17
Super Off-peak Energy (Residential) Exit Service	A18
Super Off-peak Energy (Business) Exit Service	A19
Super Off-peak Demand (Residential) Exit Service	A20
Super Off-peak Demand (Business) Exit Service	A21



Reference service	Short name
Low Voltage Electric Vehicle Charging Exit Service	A22
High Voltage Electric Vehicle Charging Exit Service	A23

# 2.2.3 Western Power specifies three *reference services* at *entry points*:

Table 2: Reference services at entry points

Reference service	Short name
Distribution Entry Service	B1
Transmission Entry Service	B2
Entry Service Facilitating a Distributed Generation or Other Non-Network Solution	В3

# 2.2.4 Western Power specifies 24 *bi-directional services* as *reference services* at connection points:

 Table 3:
 Reference services at bi-directional points

Reference service name	Short name
Anytime Energy (Residential) Bi-directional Service	C1
Anytime Energy (Business) Bi-directional Service	C2
Time of Use Energy (Residential) Bi-directional Service	C3
Time of Use Energy (Business) Bi-directional Service	C4
High Voltage Metered Demand Bi-directional Service	C5
Low Voltage Metered Demand Bi-directional Service	C6
High Voltage Contract Maximum Demand Bi-directional Service	C7
Low Voltage Contract Maximum Demand Bi-directional Service	C8
3 Part Time of Use Energy (Residential) Bi-directional Service	С9
3 Part Time of Use Energy (Business) Bi-directional Service	C10
3 Part Time of Use Demand (Residential) Bi-directional Service	C11
3 Part Time of Use Demand (Business) Bi-directional Service	C12
Multi Part Time of Use Energy (Residential) Bi-directional Service	C13
Multi Part Time of Use Energy (Business) Bi-directional Service	C14
Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution	C15
Super Off-peak Energy (Residential) Bi-directional Service	C16
Super Off-peak Energy (Business) Bi-directional Service	C17



Reference service name	Short name
Super Off-peak Demand (Residential) Bi-directional Service	C18
Super Off-peak Demand (Business) Bi-directional Service	C19
Low Voltage EV Charging Demand Bi-directional CMD Service	C20
High Voltage EV Charging Demand Bi-directional CMD Service	C21
Transmission Connected Storage Bi-directional Service	C22
Low Voltage Distribution Storage Bi-directional Service	C23
High Voltage Distribution Storage Bi-directional Service	C24

2.2.5 Western Power specifies nine *services* at a *connection point* as a *reference service* (ancillary).

Table 4: Reference services at connection points (ancillary)

Reference service name	Short name
Supply Abolishment Service	D1
Capacity Allocation Service	D2
Remote Load/Inverter Control Service	D6
Remote De-energise Service	D8
Remote Re-energise Service	D9
Streetlight LED Replacement Service	D10
Site Visit to Support Remote Re-energise Service	D11
Manual De-energise Service	D12
Manual Re-energise Service	D13

# 2.2.6 Western Power specifies 20 standard metering services as *reference services*:

Table 5: Standard metering services

Reference service name	Short name
Unidirectional, accumulation, bi-monthly, manual	M1
Unidirectional, accumulation (TOU), bi-monthly, manual	M2
Unidirectional, interval, bi-monthly, manual	M3
Unidirectional, interval, monthly, manual	M4
Unidirectional, interval, weekly, manual	M17
Unidirectional, interval, bi-monthly, remote	M5



Reference service name	Short name
Unidirectional, interval, monthly, remote	M6
Unidirectional, interval, weekly, remote	M18
Unidirectional, interval, daily, remote	M7
Bidirectional, accumulation, bi-monthly, manual	M8
Bidirectional, accumulation (TOU), bi-monthly, manual	M9
Bidirectional, interval, bi-monthly, manual	M10
Bidirectional, interval, monthly, manual	M11
Bidirectional, interval, weekly, manual	M19
Bidirectional interval, bi-monthly, remote	M12
Bidirectional, interval, monthly, remote	M13
Bidirectional, interval, weekly, remote	M20
Bidirectional, interval, daily, remote	M14
Unmetered supply, accumulation, bi-monthly, manual	M15
One off manual interval read	M16

- 2.2.7 Appendix E of this *access arrangement* provides details of each *reference service*, including:
  - a description of the reference service;
  - the *user* eligibility criteria;
  - the applicable reference tariff;
  - the applicable standard access contract; and
  - the applicable *service standard benchmark*.

# 2.3 Payment by users

2.3.1 *Users* are required to pay a *charge* for *reference services* calculated by applying the related *reference tariffs*.



#### 3. Excluded services

# 3.1 Purpose

3.1.1 This section of the *access arrangement* describes the *excluded services* offered by Western Power.

#### 3.2 Excluded services

- 3.2.1 In accordance with section 6.35 of the *Code*, Western Power may at any time request the *Authority* to determine under section 6.33 of the *Code* that one or more *services* provided by means of the *Western Power Network* are *excluded services* and the *Authority* will confirm such determination to Western Power. Any capital costs incurred by Western Power for *excluded services* shall not be included in Western Power's regulated asset base.
- 3.2.2 At the access arrangement revisions commencement date, there is one excluded service as follows:
  - Western Power owned storage devices.



# 4. Service standard benchmarks

#### 4.1 Purpose

4.1.1 Pursuant to section 5.1(c) of the *Code*, this section provides the *service standard benchmarks* applicable to the *reference services*. *Service standard benchmarks* are not applicable to *non-reference services*.

#### 4.2 Service standard benchmarks for distribution reference services

- 4.2.1 For the *reference services* A1 to A10, A12 to A23, B1 and B3, C1 to C21, C23 and C24 and any applicable ancillary *reference service* D2 and D6, the *service standard benchmarks* are expressed in terms of System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI) and call centre performance.
- 4.2.2 In sections 4.2.3 and 4.2.5 "distribution customer" means a *consumer* connected to the *distribution system*.

#### **System Average Interruption Duration Index (SAIDI)**

4.2.3 SAIDI is applied as follows:

Table 6: Application of SAIDI

	System Average Interruption Duration Index (SAIDI)  CBD  Urban  Rural Short  Rural Long	
Unit of Measure	Minutes per year.	
Definition	Over a 12-month period, the sum of the duration of each sustained (greater than 1 minute) distribution customer interruption (in minutes) attributable to the distribution system (after exclusions) divided by the number of distribution customers served, that is:	
	Sustained distribution customer interruption durations	
	Number of distribution customers served	
	where:	
	<ul> <li>A CBD feeder is a feeder supplying predominantly commercial, high-rise buildings, supplied by a predominantly underground distribution system containing significant interconnection and redundancy when compared to urban areas.</li> </ul>	
	An Urban feeder is a feeder, which is not a CBD feeder with actual maximum demand over the reporting period per total high voltage feeder route length greater than 0.3 MVA/km.	
	A Rural Short feeder is a feeder which is not a CBD or urban feeder with a total high voltage feeder route length less than 200 km.	
	A Rural Long feeder is a feeder which is not a CBD or urban feeder with a total high voltage feeder route length greater than 200 km.	



	System Average Interruption Duration Index (SAIDI)  CBD  Urban  Rural Short  Rural Long  The number of distribution customers served is determined by averaging the start of month values for the 12 months included in the 12-month period.	
Exclusions	<ul> <li>For an unplanned interruption on the distribution system, a day on which the major event day threshold, applying the "2.5 beta method", is exceeded. This method excludes events which are more than 2.5 standard deviations greater than the mean of the log normal distribution of five financial years of SAIDI data. The major event day threshold is determined at the end of each financial year for use in the next financial year. The data set comprises daily unplanned SAIDI calculated over the five immediately preceding financial years after exclusions (below) are applied. Where the logarithms of the data set are not normally distributed, the Box-Cox transformation will be applied to reach a better approximation of the normal distribution.</li> <li>Interruptions shown to be caused by a fault or other event on a third-party system (for instance, without limitation, interruptions caused by an intertrip signal, generator unavailability or a consumer installation).</li> <li>Planned interruptions caused by scheduled works on the transmission system and distribution system.</li> <li>Interruptions caused or extended by a total fire ban or direction from a local or state government body or state or federal emergency services, provided that a fault in, or the operation of, the network did not cause, in whole or part, the event giving rise to the direction.</li> </ul>	

4.2.4 The service standard benchmarks expressed in terms of SAIDI for the reference services A1 to A10, A12 to A23, B1 and B3, C1 to C21, C23 and C24 and any applicable ancillary reference service D2 and D6 for each year of this access arrangement period are shown in the following table:

Table 7: SAIDI service standard benchmarks for reference services A1 to A10, A12 to A23, B1 and B3, C1 to C21, C23 and C24 and any applicable ancillary reference service D2 and D6

SAIDI	For the financial year ending 30 June 2023	For the financial year ending 30 June 2024 and each financial year thereafter
CBD	33.7	13.7
Urban	130.6	123.8
Rural Short	215.4	202.5
Rural Long	848.3	733.5

**System Average Interruption Frequency Index (SAIFI)** 



# 4.2.5 SAIFI is applied as follows:

Table 8: Application of SAIFI

Unit of Moosure	System Average Interruption Frequency Index (SAIFI)  CBD  Urban  Rural Short  Rural Long
Unit of Measure  Definition	Sustained interruptions per year.  Over a 12-month period, the number of sustained (greater than 1 minute) distribution customer interruptions (number) attributable to the distribution system (after exclusions) divided by the number of distribution customers served, that is:
	<ul> <li>Number of sustained distribution customer interruptions         Number of distribution customers served     </li> <li>A CBD feeder is a feeder supplying predominantly commercial, high-rise buildings, supplied by a predominantly underground distribution system containing significant interconnection and redundancy when compared to urban areas.</li> <li>An Urban feeder is a feeder, which is not a CBD feeder, with actual maximum demand over the reporting period per total high voltage feeder route length greater than 0.3 MVA/km.</li> <li>A Rural Short feeder is a feeder which is not a CBD or urban feeder with a total high voltage feeder route length less than 200 km.</li> <li>A Rural Long feeder is a feeder which is not a CBD or urban feeder with a total high voltage feeder route length greater than 200 km.</li> <li>The number of distribution customers served is determined by averaging the start of month values for the 12 months included in the 12-month period.</li> </ul>
Exclusions	<ul> <li>One or more of:</li> <li>For unplanned interruptions on the distribution system, a day on which the major event day threshold, applying the "2.5 beta method", is exceeded.</li> <li>This method excludes events which are more than 2.5 standard deviations greater than the mean of the log normal distribution of five financial years of SAIDI data. The major event day threshold is determined at the end of each financial year for use in the next financial year. The data set comprises daily unplanned SAIDI calculated over the five immediately preceding financial years after exclusions (below) are applied. Where the logarithms of the data set are not normally distributed, the Box-Cox transformation will be applied to reach a better approximation of the normal distribution.</li> <li>Interruptions shown to be caused by a fault or other event on a third-party system (for instance, without limitation interruptions caused by an intertrip signal, generator unavailability or a consumer installation).</li> </ul>



System Average Interruption Frequency Index (SAIFI)  CBD  Urban  Rural Short  Rural Long	
<ul> <li>Planned interruptions caused by scheduled works on the transmission system and distribution system.</li> <li>Interruptions caused or extended by a total fire ban or direction from a local or state government body or state or federal emergency services, provided that a fault in, or the operation of, the network did not cause, in whole or part, the event giving rise to the direction.</li> </ul>	

4.2.6 The service standard benchmarks expressed in terms of SAIFI for the reference services A1 to A10, A12 to A21, B1 and B3, C1 to C21, C23 and C24 and any applicable ancillary reference service D2 and D6 for each year of this access arrangement period are shown in the following table:

Table 9: SAIFI service standard benchmarks for reference services A1 to A10, A12 to A21, B1 and B3, C1 to C21, C23 and C24 and any applicable ancillary reference service D2 and D6

SAIFI	For the financial year ending 30 June 2023	For the financial year ending 30 June 2024 and each financial year thereafter
CBD	0.21	0.21
Urban	1.27	1.25
Rural Short	2.34	2.09
Rural Long	5.70	4.45

4.2.7 For the purpose of this *access arrangement*, the definitions of CBD, Urban, Rural Short and Rural Long feeder classifications are consistent with those applied by the Steering Committee on National Regulatory Reporting Requirements.

## Call centre performance

4.2.8 Call centre performance is applied as follows:

 Table 10:
 Application of call centre performance

	Call centre performance	
Unit of Measure	Percentage of calls per year.	
Definition	Over a 12 month period, in relation to interruptions and life-threatening emergencies, percentage of calls responded to in 30 seconds or less (after exclusions), that is:	
	Number of fault calls responded to in 30 seconds or less	
	Total Number of fault calls	
	where:	



	Call centre performance	
	(a)	"Fault calls responded to in 30 seconds or less" is:
		(i) unless paragraph (a)(ii) applies, where the caller's postcode is automatically determined or when a valid postcode is entered by the caller, the number of fault calls where a recorded message commences within 30 seconds from that determination or entry; or
		(ii) where the call is placed in the queue to be responded to by a human operator, the number of fault calls where the human operator commences to speak with the caller within 30 seconds of that placement.
	(b)	A "fault call" is a telephone call from a caller entering the fault line or life threatening emergency line.
	(c)	A call may be placed in a queue to be responded to by a human operator when the caller:
		(i) chooses to hold (when invited to do so) at the end of the recorded message;
		(ii) chooses to hold (when invited to do so) rather than enter a postcode when prompted to do so; or
		(iii) enters an invalid postcode.
	(d)	For a call to be counted as being responded to under paragraph (a), the caller must receive from the recorded message or the human operator information regarding power interruptions in their area and related restoration information
	(e)	A call where the interactive message service fails to automatically determine the caller's postcode or invite the entry of a postcode, as a result of which the service of providing information regarding power interruptions in their area and related restoration information does not commence, will be counted as a fault call not responded to in 30 seconds or less.
Exclusions	One or more of:	
	• Calls abandoned by a caller in 4 seconds or less of their postcode being automatically determined or when a valid postcode is entered by the caller.	
	<ul> <li>Calls abandoned by a caller in 30 seconds or less of the call being placed in the queue to be responded to by a human operator.</li> </ul>	
	All telephone calls received on a major event day which is excluded from SAIDI and SAIFI.	
	ab	fact or circumstance beyond the control of Western Power affecting the ility to receive calls to the extent that Western Power could not contract reasonable terms to provide for the continuity of service.



4.2.9 The service standard benchmarks expressed in terms of call centre performance for the reference services A1 to A10, A12 to A23, B1 and B3, C1 to C21, C23 and C24 and any applicable ancillary reference service D2 to D6 for each year of this access arrangement period are shown in the following table:

Table 11: Call centre service standard benchmarks for reference services A1 to A10, A12 to A21, B1 and B3, C1 to C21, C23 and C24 and any applicable ancillary reference service D2 and D6

	For the financial year ending 30 June 2023	For the financial year ending 30 June 2024 and each financial year thereafter
Call centre performance	86.8%	91.7%

#### 4.3 Service standard benchmarks for transmission reference services

4.3.1 For the *reference services* A11, B2 and B3, C22 and D2, where applicable, the *service standard benchmarks* are expressed in terms of loss of supply event frequency and average outage duration.

# Loss of supply event frequency

4.3.2 Loss of supply event frequency is applied as follows:

Table 12: Application of loss of supply event frequency

	Loss of supply event frequency >0.1 and ≤1.0 system minutes interrupted >1.0 system minutes interrupted	
Unit of Measure	Number of events per year.	



	Loss of supply event frequency
	>0.1 and ≤1.0 system minutes interrupted
	>1.0 system minutes interrupted
Definition	Over a 12-month period, the frequency of Unplanned consumer outage events for consumers connected to the regulated transmission circuits (after exclusions) where loss of supply:
	<ul> <li>exceeds 0.1 system minutes interrupted and less than or equal to 1.0 system minutes interrupted; or</li> </ul>
	exceeds 1.0 system minutes interrupted.
	System minutes are calculated for each supply interruption by the "load integration method" using the following formula, that is:
	∑ (MWh unsupplied x 60)
	System Peak MW
	where:
	<ul> <li>"Unplanned customer outages" relates to unplanned customer outages occurring on all parts of the regulated transmission system.</li> </ul>
	<ul> <li>"MWh unsupplied" is the energy not supplied as determined by using Western Power metering and PI server database. This data is used to estimate the profile of the load over the period of the interruption by reference to historical load data.</li> </ul>
	<ul> <li>Period of the interruption starts when a loss of supply occurs and ends when Western Power offers supply restoration to the customer.</li> </ul>
	<ul> <li>"System Peak MW" is the maximum peak demand recorded for the South-West Interconnected System for the previous financial year, excluding the coincident demand for those customers receiving a non-reference service where the impact of an Unplanned customer outage event is excluded for the purpose of this measure.</li> </ul>
Exclusions	One or more of:
	Planned interruptions.
	<ul> <li>Momentary interruptions (less than one minute).</li> </ul>
	Unregulated transmission assets.
	<ul> <li>Interruptions affecting the transmission system shown to be caused by a fault or other event on a third-party system (for instance, without limitation interruptions caused by an intertrip signal, generator unavailability or a consumer installation).</li> </ul>
	• Force majeure events affecting the transmission system.



4.3.3 The *service standard benchmarks* expressed in terms of loss of supply event frequency for the *reference services* A11, B2 and B3, C22 and D2, where applicable, for each year of this *access arrangement period* are shown in the following table:

Table 13: Loss of supply event frequency service standard benchmarks for reference services A11, B2 and B3, C22 and D2

Loss of supply event frequency	For the financial year ending 30 June 2023	For the financial year ending 30 June 2024 and each financial year thereafter
> 0.1 and ≤1.0 system minutes interrupted	26	2
> 1.0 system minutes interrupted	7	1

#### Average outage duration

4.3.4 Average outage duration is applied as follows:

Table 14: Application of average outage duration

	Average outage duration
Unit of Measure	Minutes per year.
Definition	Over a 12-month period, the sum of the duration (in minutes) of all Unplanned outages divided by the total Number of events for consumers connected to regulated transmission circuits (after exclusions), that is:
	∑ Duration (in minutes) of all Unplanned outages
	Total Number of events
	where:
	<ul> <li>"Unplanned outages" relates to interruptions occurring on all parts of the regulated transmission system.</li> </ul>
	<ul> <li>"Number of events" includes all forced and fault interruptions whether or not loss of supply occurs.</li> </ul>
	<ul> <li>A "transmission circuit" is an arrangement of primary transmission elements on the transmission system that is overhead lines, underground cables, and bulk transmission power transformers used to transport electricity.</li> </ul>
Exclusions	One or more of:
	Planned interruptions.
	Momentary interruptions (less than one minute).
	Unregulated transmission assets.
	Reactive compensation plant.
	<ul> <li>Interruptions affecting the transmission system shown to be caused by a fault or other event on a third-party system (for instance, without limitation interruptions caused by an intertrip signal, generator unavailability or a consumer installation).</li> </ul>
	• Force majeure events affecting the transmission system.
	The impact of each event is capped at 14 days.



4.3.5 The *service standard benchmarks* expressed in terms of average outage duration for the *reference services* A11, B2 and B3, C22 and D2, where applicable, for each year of this *access arrangement period* is shown in the following table:

Table 15: Average outage duration service standard benchmarks for reference services A11, B2 and B3, C22 and D2

	For the financial year ending 30 June 2023	For the financial year ending 30 June 2024 and each financial year thereafter
Average outage duration	1,234	822

# 4.4 Service standard benchmarks for street lighting reference services

4.4.1 For the *reference service* A9, the *service standard benchmarks* are expressed in terms of street lighting repair time.

# Street lighting repair time

4.4.2 Street lighting repair time is applied as follows:

Table 16: Application of street lighting repair time

	Street lighting repair time Metropolitan area Regional area
Unit of Measure	Average number of business days.
Definition	Over a 12-month period, average number of <i>business days</i> to repair faulty streetlights is the sum of the number of <i>business days</i> to repair each faulty streetlight divided by the number of faulty streetlights repaired (after exclusions).
	∑ Number of <i>business days</i> to repair each faulty streetlight
	Number of faulty streetlights repaired
	where:
	• In calculating the number of <i>business days</i> to repair a faulty streetlight, the first <i>business day</i> is:
	<ul> <li>where a faulty streetlight is detected by, or reported to, Western Power on a business day, the next business day; or</li> </ul>
	<ul> <li>where a faulty streetlight is detected by, or reported to, Western Power on a day that is not a business day, the second business day after that day.</li> </ul>
	• In calculating the number of <i>business days</i> to repair a faulty streetlight, the <i>business day</i> a fault is repaired is included (subject to the next point) even if the repair is effected part way through that <i>business day</i> .
	• In calculating the number of <i>business days</i> to repair a faulty streetlight:
	<ul> <li>where a faulty streetlight is detected by, or reported to, Western Power on a business day and the repair is effected on that business day, that business day is included as zero;</li> </ul>



	Street lighting repair time Metropolitan area Regional area
	<ul> <li>where a faulty streetlight is detected by, or reported to, Western Power on a day that is not a business day and the repair is effected on the next business day, that business day is included as zero.</li> </ul>
	A "faulty streetlight" is defined by a recorded fault report.
	• Metropolitan area means the areas of the State defined in Part 1.5 of the Code of Conduct for the Supply of Electricity to Small Use Customers 2018.
	• Regional area means all areas in the <i>Western Power Network</i> other than the metropolitan area.
	Note:
	<ul> <li>If a given streetlight is the subject of more than one fault report for the same fault, then only one fault report is recorded.</li> </ul>
	If a given streetlight is the subject of multiple fault reports that relate to different faults, then one report relating to each distinct fault is recorded.
Exclusions	<ul> <li>Force majeure events.</li> <li>Streetlights for which Western Power is not responsible for streetlight maintenance.</li> </ul>

4.4.3 The *service standard benchmarks* for the *reference service* A9 for each year of this *access arrangement period* are set out in the following table:

Table 17: Street lighting repair time service standard benchmark for reference service A9

Region	For each financial year ending 30 June
Metropolitan area	5 business days
Regional area	9 business days

4.4.4 For the *reference service* D10 the *service standard benchmark* is the LED replacement, requested by the *user*, will be completed as soon as reasonably practicable in accordance with *good electricity industry practice*.



# 4.5 Service standard benchmark for supply abolishment reference service

4.5.1 For the *reference service* D1, the *service standard benchmark* is expressed in terms of response time.

# Supply abolishment response time

4.5.2 Supply abolishment response time is applied as follows:

 Table 18:
 Application of supply abolishment response time

	Supply abolishment (whole current meter) response time
Unit of Measure	Percentage of the time that the supply abolishment request was performed within response time
Definition	Over a 12 month period, percentage of times to abolish supply is the number of supply abolishment requests performed within the response time multiplied by 100, divided by the number of supply abolishment requests made (after exclusions).
	Number of supply abolishment requests performed within response time x 100
	Number of supply abolishment requests
	where:
	• In calculating the number of <i>business days</i> to abolish supply, the first <i>business day</i> is:
	<ul> <li>where a supply abolishment request is made by a user to Western Power before 3:00 PM on a business day, the next business day; or</li> </ul>
	<ul> <li>where a supply abolishment request is made by a user to Western Power on a day that is not a business day, or after 3:00 PM on a business day, the second business day after that day.</li> </ul>
	• In calculating the number of business days to abolish supply:
	<ul> <li>the business day supply is abolished is included (subject to the next point) even if the abolishment is performed part way through that business day; and</li> </ul>
	<ul> <li>where a supply abolishment request is made by a user to Western Power on a business day and the abolishment is performed on that business day, that business day is counted as zero; or</li> </ul>
	<ul> <li>where a supply abolishment request is made by a user to Western Power on a day that is not a business day, or after 3:00 PM on a business day, and the abolishment is performed on the next business day, that business day is counted as zero.</li> </ul>
	• A "supply abolishment request" is defined as an electricity transfer application for a supply abolishment made in accordance with the <i>Applications and Queuing Policy</i> containing all information that Western Power, as a <i>reasonable and prudent person</i> , requires to abolish supply.
	• "Abolish supply" is defined as the time when the permanent disconnection of supply and the removal of the <i>meter</i> (as defined in the <i>Electricity Industry (Metering) Code 2012</i> ) is completed.



	Supply abolishment (whole current meter) response time
Exclusions	Supply abolishment requests that:
	<ul> <li>are cancelled or are requested to be deferred;</li> </ul>
	<ul> <li>relate to non-whole current meters or non-standard technical configurations, site access issues or safety issues;<sup>1</sup></li> </ul>
	<ul> <li>require external approvals or actions beyond the control of Western</li> <li>Power as a reasonable and prudent person; or</li> </ul>
	<ul> <li>A fact or circumstance beyond the control of Western Power as a reasonable and prudent person affecting the ability to abolish supply.</li> </ul>
	Force majeure events affecting the ability to abolish supply.

4.5.3 The *service standard benchmarks* for the *reference service* D1 for each year of this *access arrangement period* are set out in the following table:

Table 19: Supply abolishment response time for reference service D1

	For each financial year ending 30 June
Supply abolishment response time	15 business days

Table 20: Supply abolishment service standard benchmark for reference service D1

	For each financial year ending 30 June
Supply abolishment	95% of supply abolishment requests performed within the response time

# 4.6 Service standard benchmarks for remote de-energise and remote re-energise reference services

- 4.6.1 For the *reference service* D8 and D9, the *service standard benchmarks* are expressed in terms of response time.
- 4.6.2 These *service standard benchmarks* only come into effect once the remote de-energise and remote re-energise *reference services* are provided to one or more *users*.

#### Remote de-energise response time

4.6.3 Remote de-energise response time is applied as follows:

Table 21: Application of remote de-energise response time

	Remote de-energise response time
Unit of Measure	Percentage of the time that the remote de-energise request was performed within response time.
Definition	Over a 12 month period, percentage of times to remotely de-energise is the number of remote de-energise requests performed within the response

In such instances, the supply abolishment will be carried out as soon as reasonably practicable in accordance with good electricity industry practice.



	Remote de-energise response time
	time multiplied by 100, divided by the number of remote de-energise requests made (after exclusions).
	Number of remote de-energise requests performed within response times x 100
	Number of remote de-energise requests
	where:
	• In calculating the number of <i>business days</i> to remotely de-energise, the first <i>business day</i> is:
	<ul> <li>where a remote de-energise request is made by a user to Western</li> <li>Power before 12 noon on a business day, the next business day; or</li> </ul>
	<ul> <li>where a remote de-energise request is made by a user to Western         Power on a day that is not a business day, or after 12 noon on a business day, the second business day after that day.     </li> </ul>
	<ul> <li>Fridays and the business days occurring before a public holiday are not calculated as business days in relation to this measure.</li> </ul>
	• In calculating the number of <i>business days</i> to remotely de-energise:
	<ul> <li>the business day the remote de-energise is performed is included (subject to the next point), even if the remote de-energise is performed part way through that business day; and</li> </ul>
	<ul> <li>where a remote de-energise request is made by a user to Western         Power on a business day and the remote de-energise is performed on             that business day, that business day is counted as zero; or     </li> </ul>
	<ul> <li>where a remote de-energise request is made by a user to Western         Power on a day that is not a business day, or after 12 noon on a             business day, and the remote de-energise is performed on the next             business day, that business day is counted as zero.     </li> </ul>
	A "remote de-energise" is defined as the time when supply voltage is removed from all outgoing circuits from the <i>meter</i> on a non-permanent basis by a command sent to a <i>meter</i> from a remote locality.
Exclusions	<ul> <li>Remote de-energise requests that are cancelled or are requested to be deferred.</li> </ul>
	<ul> <li>Remote de-energisation requests received on a business day in relation to this measure, where the total number of de-energisation requests exceeds the maximum operational capacity of the infrastructure supporting the remote de-energisation requests.</li> </ul>
	• A fact or circumstance beyond the control of Western Power as a reasonable and prudent person affecting the ability to remote de-energise.
	Force majeure events affecting the remote de-energise service.

4.6.4 The *service standard benchmark* for the *reference service* D8 for each year of this *access arrangement period* is set out in the following table:

 Table 22:
 Remote de-energise response time for reference service D8

	For each financial year ending 30 June
Remote de-energise response time	1 business day



 Table 23:
 Remote de-energise service standard benchmark for reference service D8

	For each financial year ending 30 June
Remote de-energise	95% of remote de-energise requests performed within the response time

# Remote re-energise response time

# 4.6.5 Remote re-energise response time is applied as follows:

Table 24: Application of remote re-energise response time

	Remote re-energise response time
Unit of Measure	Percentage of the time that the remote re-energise request was performed within response time.
Definition	Over a 12 month period, percentage of times to remotely re-energise is the number of remote re-energise requests performed within the response time multiplied by 100, divided by the number of remote re-energise requests made (after exclusions).
	Number of remote re-energise requests performed within response time x 100
	Number of remote re-energise requests
	where:
	• In calculating the number of <i>business days</i> to remotely re-energise, the first <i>business day</i> is:
	<ul> <li>where a remote re-energise request is made by a user to Western</li> <li>Power before 12 noon on a business day, the next business day; or</li> </ul>
	<ul> <li>where a remote re-energise request is made by a user to Western Power on a day that is not a business day, or after 12 noon on a business day, the second business day after that day.</li> </ul>
	• In calculating the number of business days to remotely re-energise:
	<ul> <li>the business day the remote re-energise is performed is included (subject to the next point), even if the remote re-energise is performed part way through that business day; and</li> </ul>
	<ul> <li>where a remote re-energise request is made by a user to Western         Power on a business day and the remote re-energise is performed on             that business day, that business day is counted as zero; or     </li> </ul>
	<ul> <li>where a remote re-energise request is made by a user to Western Power on a day that is not a business day, or after 12 noon on a business day, and the remote re-energise is performed on the next business day, that business day is counted as zero.</li> </ul>
	<ul> <li>A "remote re-energise" is defined as the time when a previously de- energised meter is re-armed by a command sent to that meter from a remote locality.</li> </ul>



	Remote re-energise response time
Exclusions	Remote re-energise requests that are cancelled or are requested to be deferred or where the remote re-energise request requires site visit, refer to "site visit to support remote re-energise service".
	• Remote re-energisation requests received on a <i>business day</i> in relation to this measure, where the total number of re-energisation requests exceeds the maximum operational capacity of the infrastructure supporting the remote re-energisation requests.
	• A fact or circumstance beyond the control of Western Power as a reasonable and prudent person affecting the ability to remote re-energise.
	Force majeure events affecting the remote re-energise service.

4.6.6 The *service standard benchmark* for the *reference service* D9 for each year of this *access arrangement period* is set out in the following table:

Table 25: Remote re-energise response time for reference service D9

	For each financial year ending 30 June
Remote re-energise response time	1 business day

Table 26: Remote re-energise service standard benchmark for reference service D9

	For each financial year ending 30 June
Remote re-energise	95% of remote re-energise requests performed within the response time

# 4.7 Service standard benchmark for site visit to support remote re-energise service

4.7.1 For the *reference service* D11, the *service standard benchmark* is expressed in terms of response time.

# Site visit to support remote re-energise service

4.7.2 Site visit to support remote re-energise response time is applied as follows:

Table 27: Application of site visit to support remote re-energise response time

	Site visit to support remote re-energise response time
Unit of Measure	Percentage of the time that the site visit to support remote re-energise request was performed within response time.
	Over a 12 month period, percentage of times for a site visit to support remote re-energise is the number of site visits to support remote re-energise requests performed within the response time multiplied by 100, divided by the number of site visit to support remote re-energise requests made (after exclusions).
	Σ Number of site visits to support remote re-energise requests performed within the response time x 100
	Number of site visit to support remote re-energise requests



	Site visit to support remote re-energise response time
	where:
	• In calculating the number of <i>business days</i> to site visit to support remotely re-energise, the first <i>business day</i> is:
	<ul> <li>where a site visit to support remote re-energise request is made by a user to Western Power before 12 noon on a business day, the next business day; or</li> </ul>
	<ul> <li>where a site visit to support remote re-energise request is made by a     user to Western Power on a day that is not a business day, or after 12     noon on a business day, the second business day after that day.</li> </ul>
	• In calculating the number of <i>business days</i> to site visit to support remotely re-energise:
	<ul> <li>the business day the site visit to support remote re-energise is performed is included (subject to the next point), even if the manual re-energise is performed part way through that business day; and</li> </ul>
	<ul> <li>where a site visit to support remote re-energise request is made by a user to Western Power on a business day and the manual re-energise is performed on that business day, that business day is counted as zero; or</li> </ul>
	<ul> <li>where a site visit to support remote re-energise request is made by a user to Western Power on a day that is not a business day, or after 12 noon on a business day, and the manual re-energise is performed on the next business day, that business day is counted as zero.</li> </ul>
	<ul> <li>A site visit to support remote re-energise is deemed to have been completed at the time when a previously de-energised meter is re-armed by a site visit to that meter from a manual locality.</li> </ul>
	<ul> <li>A site visit to support remote re-energise business day is performed between the hours of 7am and5pm on a business day. An extended after- hours service of 5pm – Midnight is offered by agreement with the user and Western Power.</li> </ul>
	• Perth metropolitan area means the areas of the State defined in Schedule 3 of the <i>Planning and Development Act 2005</i> .
	• Metropolitan area means the areas of the State defined in Part 1.3 of the Electricity Industry (Metering) Code 2012.
	Regional area means all areas in the Western Power Network other than the Perth metropolitan area and metropolitan area.
Exclusions	• Site visit to support remote re-energise requests that are cancelled or are requested to be deferred.
	<ul> <li>Site visit to support remote re-energisation requests received on a business day in relation to this measure, where the total number of re- energisation requests exceeds the maximum operational capacity of the infrastructure supporting the site visit to support remote re-energisation requests.</li> </ul>
	• A fact or circumstance beyond the control of Western Power as a reasonable and prudent person affecting the ability to site visit to support remote re-energise.
	• Force majeure events affecting the site visit to support remote re-energise service.



4.7.3 The *service standard benchmark* for the *reference service* D9 for each year of this *access arrangement period* is set out in the following table:

Table 28: Site visit to support remote re-energise standard response time for reference service D11

	For each financial year ending 30 June
Metropolitan area	1 business day
Regional area	5 business days

Table 29: Site visit to support remote re-energise urgent response time for reference service D11

	For each financial year ending 30 June
Perth Metropolitan area	3 hours
Other Metropolitan areas	1 business day
Regional area	1 business day

Table 30: Site visits to support remote re-energise service standard benchmark for reference service D11

	For each financial year ending 30 June
Site visits to support remote re- energise	95% of site visits to support remote re-energise requests performed within the response time

# 4.8 Service standard benchmarks for manual de-energise and manual re-energise reference services

- 4.8.1 For the *reference service* D12 and D13, the *service standard benchmarks* are expressed in terms of response time.
- **4.8.2** These *service standard benchmarks* only come into effect once the manual de-energise and manual re-energise *reference services* are provided to one or more *users*.

#### Manual de-energise response time

Manual de-energise response time is applied as follows:

Table 31: Application of manual de-energise response time

	Manual de-energise response time
Unit of Measure	Percentage of the time that the manual de-energise request was performed within response time.
Definition	Over a 12 month period, percentage of times to manually de-energise is the number of manual de-energise requests performed within the response



	Manual de-energise response time
	time multiplied by 100, divided by the number of manual de-energise requests made (after exclusions).
	Number of manual de-energise requests performed within response times x 100  Number of manual de-energise requests
	where:
	• In calculating the number of <i>business days</i> to manually de-energise, the first <i>business day</i> is:
	<ul> <li>where a manual de-energise request is made by a user to Western</li> <li>Power before 12 noon on a business day, the next business day; or</li> </ul>
	<ul> <li>where a manual de-energise request is made by a user to Western         Power on a day that is not a business day, or after 12 noon on a business day, the second business day after that day.     </li> </ul>
	• Fridays and the <i>business days</i> occurring before a <i>public holiday</i> are not calculated as <i>business days</i> in relation to this measure.
	• In calculating the number of <i>business days</i> to manually de-energise:
	<ul> <li>the business day the manual de-energise is performed is included (subject to the next point), even if the manual de-energise is performed part way through that business day; and</li> </ul>
	<ul> <li>where a manual de-energise request is made by a user to Western         Power on a business day and the manual de-energise is performed on             that business day, that business day is counted as zero; or     </li> </ul>
	<ul> <li>where a manual de-energise request is made by a user to Western Power on a day that is not a business day, or after 12 noon on a business day, and the manual de-energise is performed on the next business day, that business day is counted as zero.</li> </ul>
	A manual de-energise deemed to have been completed at the time when supply voltage is removed from all outgoing circuits from the <i>meter</i> on a non-permanent basis by a site visit to a <i>meter</i> from a manual locality.
	• A manual de-energise business day is performed between the hours of 7:30am and 2:00pm (WST) on a <i>business day</i> , where the <i>business day</i> is not a Friday or a business day prior to a public holiday
	Metropolitan area means the areas of the State defined in Part 1.3 of the Electricity Industry (Metering) Code 2012.
	Regional area means all areas in the Western Power Network other than the Perth metropolitan area and metropolitan area.
Exclusions	Manual de-energise requests that are cancelled or are requested to be deferred.
	Manual de-energisation requests received on a business day in relation to this measure, where the total number of de-energisation requests exceeds the maximum operational capacity of the infrastructure supporting the manual de-energisation requests.
	A fact or circumstance beyond the control of Western Power as a reasonable and prudent person affecting the ability to manual de-energise.
	Force majeure events affecting the manual de-energise service.



4.8.3 The *service standard benchmark* for the *reference service* D12 for each year of this *access arrangement period* is set out in the following table:

Table 32: Manual de-energise response time for reference service D12

	For each financial year ending 30 June
Metropolitan area	1 business day
Regional area	5 business days

 Table 33:
 Manual de-energise service standard benchmark for reference service D12

	For each financial year ending 30 June
Manual de-energise	95% of manual de-energise requests performed within the response time

# Manual re-energise response time

4.8.4 Manual re-energise response time is applied as follows:

Table 34: Application of manual re-energise response time

	Manual re-energise response time		
Unit of Measure	Percentage of the time that the manual re-energise request was performed within response time.		
Definition	Over a 12 month period, percentage of times manual re-energise requests performed within the response time multiplied by 100, divided by the number of manual re-energise requests made (after exclusions).  Number of manual re-energise requests performed within response time x 100  Number of manual re-energise requests		
	<ul> <li>In calculating the number of business days to manually re-energise, the first business day is: <ul> <li>where a manual re-energise request is made by a user to Western Power before 12 noon on a business day, the next business day; or</li> <li>where a manual re-energise request is made by a user to Western Power on a day that is not a business day, or after 12 noon on a business day, the second business day after that day.</li> </ul> </li> <li>In calculating the number of business days to manually re-energise: <ul> <li>the business day the manual re-energise is performed is included (subject to the next point), even if the manual re-energise is performed part way through that business day; and</li> <li>where a manual re-energise request is made by a user to Western Power on a business day and the manual re-energise is performed on that business day, that business day is counted as zero; or</li> </ul> </li> </ul>		



	Manual re-energise response time
	<ul> <li>where a manual re-energise request is made by a user to Western Power on a day that is not a business day, or after 12 noon on a business day, and the manual re-energise is performed on the next business day, that business day is counted as zero.</li> </ul>
	<ul> <li>A manual re-energise is deemed to have been completed when a previously de-energised <i>meter</i> is re-armed by a site visit to that <i>meter</i> from a manual locality.</li> </ul>
	<ul> <li>A manual re-energise business day is performed between the hours 7am and 5pm on a business day. An extended after-hours service of 5pm – Midnight is offered by agreement with the retailer and Western Power.</li> </ul>
	<ul> <li>Perth metropolitan area means the areas of the State defined in Schedule 3 of the Planning and Development Act 2005.</li> </ul>
	<ul> <li>Metropolitan area means the areas of the State defined in Part 1.3 of the Electricity Industry (Metering) Code 2012.</li> </ul>
	• Regional area means all areas in the <i>Western Power Network</i> other than the Perth metropolitan area and metropolitan area.
Exclusions	<ul> <li>Manual re-energise requests that are cancelled or are requested to be deferred.</li> </ul>
	<ul> <li>Manual re-energisation requests received on a business day in relation to this measure, where the total number of re-energisation requests exceeds the maximum operational capacity of the infrastructure supporting the manual re-energisation requests.</li> </ul>
	<ul> <li>A fact or circumstance beyond the control of Western Power as a reasonable and prudent person affecting the ability to manual re-energise.</li> </ul>
	Force majeure events affecting the manual re-energise service.

4.8.5 The *service standard benchmark* for the *reference service* D13 for each year of this *access arrangement period* is set out in the following table:

 Table 35:
 Manual re-energise standard response time for reference service D13

	For each financial year ending 30 June		
Metropolitan area	1 business day		
Regional area	5 business days		

Table 36: Manual re-energise urgent response time for reference service D13

	For each financial year ending 30 June
Perth Metropolitan area	3 hours
Metropolitan area	1 business day
Regional area	1 business days



Table 37: Manual re-energise service standard benchmark for reference service D13

	For each financial year ending 30 June	
Manual re-energise	95% of manual re-energise requests performed within the response time	

#### 4.9 Service standard benchmarks for metering services

4.9.1 The service standards for metering services are set out in the MSLA.

#### 4.10 Exclusions

- 4.10.1 In each of the *service standard benchmarks* there is a definition of the measure and stated exclusions. Each exclusion is a circumstance in relation to which, when it occurs, the resulting units are not included in the measure. For example, for SAIDI, when a planned interruption event occurs the duration of the interruption in minutes is not included in the calculation of the measure.
- 4.10.2 Whether or not particular circumstances meet the criteria to be an exclusion, such that the resulting units are not included in the measure, may be considered by the *Authority* when it *publishes* Western Power's actual *service standard* performance against the *service standard* benchmarks under section 11.2 of the *Code*. Where the *Authority* accepts an exclusion in such a report, it will be an exclusion for the purposes of the application of this *access arrangement* and the *Code*.
- 4.10.3 Where Western Power has applied a Box-Cox transformation method to the daily unplanned SAIDI data set to determine the major event day threshold, in the *service standard performance report* provided for the financial year in which the major event day threshold is used, Western Power must:
  - a) Demonstrate that the natural logarithm of the data set of each unplanned SAIDI value is not normally distributed.
  - b) Provide the calculations that demonstrate the application of the Box-Cox transformation method to the unplanned SAIDI values.
  - c) Provide the data set resulting from applying the Box-Cox transformation method.
  - d) Demonstrate that the resulting data set is normally distributed or that the normality of the data set is improved.



#### 5. Price control

# **5.1** Overview of price control

#### 5.1.1 In this access arrangement:

"non-revenue target services" means the following services:

- a) *non-reference services* provided by Western Power by means of the *Western Power Network* other than *non-reference services* that are provided as *revenue target services*;
- b) reference services described as reference services (ancillary) in Appendix E; and
- c) reference service (metering) M16 as set out in Appendix E.

"revenue target services" means the following covered services provided by Western Power by means of the Western Power Network:

- a) connection service;
- b) exit service;
- c) entry service;
- d) bi-directional service;
- e) reference services (metering) M1 to M15 and M17 to M20 as set out in Appendix E; and
- f) streetlight maintenance.
- 5.1.2 In accordance with sections 6.1 and 6.2(c) of the *Code*:
  - a) a *price control* will apply to *revenue target services* that is set by reference to Western Power's *approved total costs*;
  - b) subject to paragraph (c), charges for *non-revenue target services* will be:
    - i. any applicable lodgement fees payable under the Applications and Queuing Policy;
    - ii. a charge set out in the Price List for, *reference service* (metering) M16; and if not provided for in the above instruments, then the charges will be;
    - iii. negotiated in good faith;
    - iv. consistent with the Code objective; and
    - v. reasonable; and
  - c) charges for access applications will be consistent with the Applications and Queuing Policy and charges for extended metering services (within the meaning of the MSLA) will be consistent with the MSLA and clause 6.6(1)(e) of the Electricity Industry (Metering) Code 2012.



- 5.1.3 A single revenue target will apply in respect of the *revenue target services* provided by means of the *transmission system* and the *distribution system*. The establishment of the revenue target has been made by reference to Western Power's *approved total costs* for *revenue target services* provided by the *transmission system* and the *distribution system*.
- 5.1.4 The calculation of Western Power's *approved total costs* for *revenue target services* has been undertaken in accordance with the building block method for each of the *transmission system* and the *distribution system*, as contained in the revenue model.
- 5.1.5 Despite section 1.3.1 of this *access arrangement*, the *price control* and all incentive and cost recovery mechanisms described in this *access arrangement* operate from 1 July 2022, and therefore references to *access arrangement period* should be interpreted accordingly.

# **5.2** Capital base value

5.2.1 The tables below show the derivation of the *capital base* value as at 30 June 2022.

Table 38: Derivation of Transmission Initial Capital Base (net) (\$ million real as at 30 June 2022)

Financial year ending:	30 June 2018	30 June 2019	30 June 2020	30 June 2021	30 June 2022
Opening capital base value	3,396.8	3,328.3	3,300.5	3,398.5	3,410.7
less depreciation	120.2	126.6	134.0	141.4	145.0
less accelerated depreciation	0.0	0.0	0.0	0.0	0.0
plus new facilities investment (net of capital contributions and asset disposals)	51.7	98.9	232.0	153.5	164.0
Closing capital base value	3,328.3	3,300.5	3,398.5	3,410.7	3,429.7

Table 39: Derivation of Distribution Initial Capital Base (net) (\$ million real as at 30 June 2022)

Financial year ending:	30 June 2018	30 June 2019	30 June 2020	30 June 2021	30 June 2022
Opening capital base value	6,337.2	6,388.0	6,468.8	6,613.2	6,772.7
less depreciation	281.6	301.3	305.7	294.4	286.3
less accelerated depreciation	4.4	6.9	4.4	0.0	0.0
Plus, new facilities investment (net of capital contributions and asset disposals)	336.8	389.1	454.5	453.9	452.7
Closing capital base value	6,388.0	6,468.8	6,613.2	6,772.7	6,939.2



#### 5.3 Depreciation

- 5.3.1 Pursuant to section 6.70 of the *Code*, the *price control* set out in this *access arrangement* provides for the depreciation of the *network assets* that comprise the *capital base*. References to depreciation in this *access arrangement* relate solely to regulatory depreciation for the purposes of calculating the *target revenue*, and do not relate to the calculation of depreciation for accounting or taxation purposes.
- 5.3.2 The depreciation provision contained in the *target revenue* for each year of this *access arrangement period* is calculated using:
  - a) the straight-line depreciation method;
  - b) the existing weighted average lives for each of the *transmission system* and *distribution* system that comprise the capital base value as at 30 June 2022; and
  - c) for new facilities investment forecast for this access arrangement period the weighted average lives for each of the transmission system and distribution system based on the asset lives for each group of network assets as set out in the following tables:

Table 40: Transmission asset groupings and economic lives for depreciation purposes

Asset group	Economic Life (years) for depreciation purposes
Transmission transformers	50 years
Transmission reactors	40 years
Transmission capacitors	40 years
Transmission circuit breakers	40 years
Transmission lines – steel towers	60 years
Transmission lines - wood poles	45 years
Transmission cables	55 years
Transmission metering	40 years
Transmission SCADA and communications	11 years
Transmission IT	6 years
Transmission other, non-network assets	27 years
Transmission secondary systems	30 years



Table 41: Distribution asset groupings and economic lives for depreciation purposes

Asset group	Economic Life (years) for depreciation purposes
Distribution lines - wood poles	41 years
Distribution underground cables	60 years
Distribution transformers	35 years
Distribution switchgear	35 years
Street lighting	20 years
Distribution meters and services	15 years
Distribution IT	6 years
Distribution SCADA & communications	10 years
Distribution other, non-network assets	27 years
Stand-alone power systems	20 years
Storage	20 years

- 5.3.3 Western Power is not proposing any accelerated depreciation in this *access arrangement period* in relation to *network assets* for the *transmission system*.
- 5.3.4 Western Power is not proposing any accelerated depreciation in this *access arrangement period* in relation to *network assets* for the *distribution system*.
- 5.3.5 The depreciation of the opening *capital base* at the commencement of the next *access* arrangement period will be the forecast depreciation contained in the *target revenue* for the *access* arrangement period.

# 5.4 Weighted average cost of capital

5.4.1 Pursuant to section 6.64 of the *Code* the *weighted average cost of capital* for the for the financial year ending 30 June 2023 is 7.10% nominal post tax, derived using the following formula:

$$WACC_{Nom} = r_e \times \frac{E}{E+D} + r_d \times \frac{D}{E+D}$$

where:

re is the cost of equity, being 8.16%

 $r_d$  is the cost of debt, being 6.24% for the financial year ended 30 June 2023

**E** is the proportion of equity used to finance regulated assets by a benchmark electricity network service provider (45%)

**D** is the proportion of debt used to finance regulated assets by a benchmark electricity network service provider (55%)

- 5.4.2 The cost of debt ( $r_d$ ) in section 5.4.1 will be updated annually to give effect to the annual update of the trailing average cost of debt approach described in section 5.4.4 to 5.4.6. The annual update of the cost of debt will give rise to an annual update of the weighted average cost of capital. The update of the cost of debt and weighted average cost of capital will apply to the financial years ending 30 June 2024, 30 June 2025, 30 June 2026 and 30 June 2027.
- 5.4.3 The updated cost of debt and resulting updated *weighted average cost of capital* will be reflected in the update of the *price list* in accordance with sections 6.4.1 and 6.4.2.

### Trailing average cost of debt variation

5.4.4 The annual update of the trailing average cost of debt in each relevant financial year of this *access* arrangement period is to be calculated by applying the following formula:

$$rd_t = DIC + \frac{\sum_{i=-1}^{-10} BY_i}{10}$$

Where;

rdt is the cost of debt in financial year t

DIC is the debt issuing cost, which is equal to 10 basis points

BY; is the Bond Yield estimated for each of the 10 regulatory years

**BYi** refers to the Bond Yields estimated in each year, which are either:

- (a) The forward looking estimators for the financial years ending 30 June 2022, 30 June 2023, 30 June 2024, 30 June 2026 and 30 June 2027 estimated during the 20 *business* day averaging period, using the method set out in section 5.4.5 or as otherwise set in accordance with section 5.4.6; or
- (b) The following estimates, derived as follows:
  - financial year 2012/13: BY<sub>2012/13</sub>: 7.034 per cent;
  - financial year 2013/14: BY<sub>2013/14</sub>: 5.666 per cent;
  - financial year 2014/15: BY<sub>2014/15</sub>: 5.167 per cent;
  - financial year 2015/16: BY<sub>2015/16</sub>: 4.508 per cent;
  - financial year 2016/17: BY<sub>2016/17</sub>: 4.491 per cent;
  - financial year 2017/18: BY<sub>2017/18</sub>: 4.522 per cent;
  - financial year 2018/19: BY<sub>2018/19</sub>: 3.474 per cent;
  - financial year 2019/20: BY<sub>2019/20</sub>: 3.072 per cent;
  - financial year 2020/21: BY<sub>2020/21</sub>: 3.025 per cent.

Where an estimate of BY<sub>i</sub> is not available, a placeholder value of the most recently available estimate will be used.



- 5.4.5 Western Power will nominate an averaging period for the purposes of determining the cost of debt for each of the financial years ending 30 June 2024, 30 June 2025, 30 June 2026 and 30 June 2027. The averaging periods are a nominated 20 *business days* (based on NSW public holidays) during the period 1 November to 1 March in the financial year prior to the relevant financial year. The nominated 20 *business day* averaging period does not need to be identical in each year.
- 5.4.6 Estimation of BY<sub>i</sub> will be undertaken based on the method set out by the Australian Energy Regulator in the 2018 Rate of Return Instrument<sup>2</sup> relying solely on data from the Reserve Bank of Australia.

### 5.5 Deferred revenue from the second and third access arrangement period

- 5.5.1 Western Power deferred the recovery of some transmission and distribution revenue from the second *access arrangement period* to the third or subsequent *access arrangement periods*.
- 5.5.2 The tables below show the derivation of the *deferred revenue* value as at 30 June 2022 to be recovered so that Western Power is financially neutral compared to a situation where revenue deferral had not occurred.

Table 42: Derivation of transmission system deferred revenue (\$ million real as at 30 June 2022)

Financial year ending:	30 June 2018	30 June 2019	30 June 2020	30 June 2021	30 June 2022
Opening deferred revenue value	101.4	100.6	99.7	98.7	97.7
less principal recovered	0.8	0.9	1.0	1.0	1.1
Closing deferred revenue value	100.6	99.7	98.7	97.7	96.7

Table 43: Derivation of distribution system deferred revenue (\$ million real as at 30 June 2022)

Financial year ending:	30 June 2018	30 June 2019	30 June 2020	30 June 2021	30 June 2022
Opening deferred revenue value	748.7	739.4	729.8	719.4	708.5
less principal recovered	9.3	9.6	10.4	10.9	11.4
Closing deferred revenue value	739.4	729.8	719.4	708.5	697.1

- 5.5.3 Western Power will recover the *deferred revenue* amounts detailed in section 5.5.2 of this *access arrangement* as a real annuity amount over:
  - a) a 50 year period for the transmission system deferred revenue commencing 1 July 2012; and
  - b) a 42 year period for the distribution system deferred revenue commencing 1 July 2012.

<sup>&</sup>lt;sup>2</sup> https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-instrument-2018



- 5.5.4 The interest rate applicable for the calculation of the real annuity during this access arrangement period is the weighted average cost of capital for the Western Power Network as set out in section 5.4.1 of this access arrangement.
- 5.5.5 The amounts that will be added to the *target revenue* for the *transmission system* and *distribution system* and recovered during this *access arrangement period* are detailed in the table below.

Table 44: Amount to be added to the target revenue due to the recovery of deferred revenue (\$ million real as at 30 June 2022)

Financial year ending:	30 June 2023	30 June 2024	30 June 2025	30 June 2026	30 June 2027
Transmission system	4.9	4.9	4.9	4.9	4.9
Distribution system	39.1	39.1	39.1	39.1	39.1

### 5.6 Price control – period of application

Despite section 1.3.1 of this *access arrangement*, the *transmission system price control* commences on 1 July 2022. This *price control* applies annually on a financial year basis for the duration of the *access arrangement period*.

### 5.7 Price control for revenue target services

- 5.7.1 The *price control* for *revenue target services* is used to determine the maximum total network revenue target (TNR<sub>t</sub>) for each financial year t, where t is financial years ending 30 June 2023 through to 30 June 2027.
- 5.7.2 TNR<sub>t</sub>is determined as follows:

$$TNR_t = NR_t + TEC_t + DTEC_t$$

where:

 $\mathbf{TNR}_{t}$  is the maximum total network revenue target services revenue for each financial year, t, of this *access arrangement* period

 $\mathbf{NR}_{t}$  is the annual revenue target services revenue in financial year t

 $\mathsf{TEC}_\mathsf{t}$  is any cost incurred for the financial year t as a result of the tariff equalisation contribution in accordance with section 6.37A of the *Code*.

**DTEC**<sub>t</sub> is an adjustment for any shortfall or over recovery of actual distribution system revenue compared to TECt in preceding years and is calculated in accordance with section 5.7.4 of this access arrangement.

5.7.3 Notwithstanding section 5.7.2 for the financial year ending 30 June 2025, TNR<sub>t</sub> will also include an additional term TK' as follows:

**TK'** = 
$$(FTNR_{2022/23} - ATNR_{2022/23}) * (1 + WACC_{2022/23}) * (1 + WACC_{2023/24})$$

where:

**FTNR**<sub>2022/23</sub> = \$1,734.6M nominal



ATNR<sub>2022/23</sub> is the actual network revenue received in 2022/23.

WACC<sub>2022/23</sub> is as defined in section 5.4.

**WACC**<sub>2023/24</sub> is as defined in section 5.4.

### 5.7.4 DTEC<sub>t</sub> is determined as follows:

$$\begin{aligned} \textbf{DTEC}_t = & (\text{FTEC}_{t-2} - \text{ATEC}_{t-2}) * (1 + \text{WACC}_t) * (1 + \text{WACC}_{t-1}) + (\text{TEC}_{t-1} - \text{FTEC}_{t-1}) * (1 + \text{WACC}_t) \\ & \text{where:} \end{aligned}$$

ATEC<sub>t</sub> is the actual tariff equalisation contribution revenue received in financial year t.

FTECt is the forecast of tariff equalisation contribution revenue to be received in financial year t.

 $\mathbf{TEC_t}$  is the amount of tariff equalisation contribution to be recovered in a financial year t as gazetted.

**WACC**<sub>t</sub> is the *weighted average cost of capital* in year t-1 for the *Western Power Network* as detailed in section 5.4 of this *access arrangement*, on a post-tax real basis.

Table 45: Annual revenue target service revenues to be used for calculating TNR<sub>t</sub> (\$ million real as at 30 June 2022)

Financial year ending:	30 June 2023	30 June 2024	30 June 2025	30 June 2026	30 June 2027
NRt	1,516.7	1,497.0	1,469.5	1,451.0	1,424.9

For the purpose of calculating  $NR_t$ ,  $TK_t$  and therefore  $TNR_t$ , in each financial year *CPI* adjustments will be effected by using published *CPI* data relating to the most recent December quarter compared to the December quarter in the previous year.



# 6. Pricing methods, price lists and price information

# 6.1 Purpose

6.1.1 Pursuant to section 5.1(e) and chapter 7 of the *Code*, this section describes the *pricing methods* applied by Western Power.

### 6.2 Network pricing objectives

- 6.2.1 Western Power's *pricing methods* are designed to achieve the *pricing objective* set out in section 7.3 of the *Code* and comply with the *pricing principles* in sections 7.3D to 7.3J of the *Code*.
- 6.2.2 In accordance with the *pricing objective* and the *pricing principles*, Western Power's *pricing methods* seek to recover the costs of providing *reference services* from *users* in a manner that is simple, practical and equitable.

### 6.3 Overview of pricing methods

- 6.3.1 *Reference tariffs* are derived from an analysis of the cost of *reference service* provision which entails:
  - a) identifying the costs of providing revenue target services;
  - b) determining the expected *non-reference service* revenue within the costs of providing *revenue target services*;
  - c) deducting the expected *non-reference service* revenue from the costs of providing *revenue* target services to determine the costs of providing *reference services*;
  - d) allocating the costs of providing *reference services* to particular *reference service* customer groups;
  - e) translating the costs of serving particular *reference service* customer groups to the costs of providing *reference tariffs*; and
  - f) determining a structure of *reference tariffs* in a manner that reflects the underlying cost structure, in accordance with section 7.6 of the *Code*.



- 6.3.2 The costs relating to *reference services* A1 to A10, A12 to A23 and C1 to C21, C23 and C24 are allocated so that these costs can determine the relevant *reference tariff* in a cost reflective manner.
- 6.3.3 *Reference tariffs* for *reference services* A11, B1 to B3 and C22 are location-specific and are published for each electrical node.

#### 6.4 Price list and tariff structure statement

- 6.4.1 The price list in respect of the pricing year commencing on 1 July 2022 is attached at Appendix F.3.
- 6.4.2 In accordance with section 8.1 of the *Code* this *access arrangement* requires Western Power to submit to the Authority, as soon as practicable, and in any case within 15 business days, after the *Authority* publishes its final decision, a *price list* (the "initial price list") for the pricing year commencing 1 July 2023. For subsequent pricing years, section 8.1 of the *Code* requires Western Power to submit to the *Authority*, at least 3 months before the commencement of the second and each subsequent pricing year of the access arrangement period, a further price list (an "annual price list") for the relevant pricing year, being the financial years commencing 1 July 2024, 1 July 2025 and 1 July 2026.
- 6.4.3 The pricing years for the access arrangement period are defined in the table below:

Table 46: Pricing years for this access arrangement period

Pricing year	Start date	End date
1	1 July 2022	30 June 2023
2	1 July 2023	30 June 2024
3	1 July 2024	30 June 2025
4	1 July 2025	30 June 2026
5	1 July 2026	30 June 2027



- 6.4.4 Chapter 7 of the *Code* requires Western Power to prepare a *tariff structure statement*. Western Power's Tariff Structure Statement Overview and Tariff Structure Statement Technical Summary are attached at Appendices F.1 and F.2 respectively.
- 6.4.5 For the purposes of the price list and tariff structure statement in the financial years ending 30 June 2024, 30 June 2026 and 30 June 2027, Western Power will use the customer information in the table below to determine prices:

 Table 47:
 Customer numbers and energy volumes

		2023	3/24	202	4/25	202	5/26	2026	6/27
Customer segment	Tariffs	Customer numbers	Energy volumes GWh	Customer numbers	Energy volumes GWh	Customer numbers	Energy volumes GWh	Customer numbers	Energy volumes GWh
Residential	RT1, RT3, RT13, RT15, RT17, RT19, RT21, RT35, RT37	1,103,159	5,205	1,112,494	5,073	1,122,457	4,989	1,133,184	4,878
LV business – small	RT2, RT4, RT14, RT16, RT18, RT20, RT22, RT34, RT36	100,629	2,247	107,187	2,206	113,743	2,145	119,913	2,037
LV business – large	RT6, RT8	3,749	1,933	3,774	1,933	3,800	1,940	3,827	1,942
HV business	RT5, RT7	686	4,013	711	4,021	737	4,042	764	4,053
Streetlights	RT9	293,180	138	297,685	140	302,467	142	307,357	144
Unmetered	RT10	19,811	47	20,162	48	20,513	49	20,864	49
Electric vehicle chargers	RT40, RT41	12	0	24	0	36	1	50	1
CMD	TRT1	42	4,430	42	4,431	42	4,431	42	4,431



### 6.5 Pricing methods

6.5.1 The *pricing methods* are set out in Appendix F.1 Tariff Structure Statement Overview and Appendix F.2 Tariff Structure Statement Technical Summary of this *access arrangement*. In accordance with the *Code* requirements, the *tariff structure statement* explains the *pricing methods* that underpin the development of *reference tariffs* for this *access arrangement period*.

### 6.6 Policy on prudent discounting

- 6.6.1 In accordance with section 7.9 of the *Code and section 10.6 of the applications and queuing policy*, if a *user* seeks to implement initiatives to promote the economically efficient investment in and operation of the *Western Power Network*, Western Power must reflect in the *user's tariff*, by way of a *discount*, a share of any reductions in either or both of the *capital-related costs* or *non-capital costs* which arise as a direct result of such initiatives by:
  - a) entering into an agreement with a *user* to apply a *discount* to the equivalent *tariff* to be paid by the *user* for a *reference service* or *non-reference service*; and
  - b) then, recovering the amount of the *discount* from other *users* of *reference services* or *non-reference services* through the applicable *tariffs*.
- 6.6.2 In exercising its discretion with regard to prudent discounting, Western Power will have regard to the *pricing objective* in section 7.3 of the *Code*.
- 6.6.3 Western Power may offer a prudent discount if the existing *user* or *applicant* seeking *access* to the *Western Power Network* is able to demonstrate that another supply option arising as the result of its initiative will directly provide a reduction in Western Power's future capital related costs or non-capital *costs*.
- 6.6.4 The existing *user* or *applicant* must pay the appropriate fee and satisfy the discount criteria published on Western Power's website from time to time in order to qualify for the *discount*.
- 6.6.5 Western Power's discounted price offer will be as described and calculated under the *price list* and set to reflect the higher of:
  - a) the cost of the other option; or
  - b) the incremental cost of service provision.

### 6.7 Policy on discounts for distributed generation

6.7.1 In accordance with section 7.10 of the Code and section 10.6 of the applications and queuing policy, Western Power will provide, through reference services B3 and C15, to users who connect distributed generating plant and other non-network solutions behind the connection point which provide benefits to the Western Power Network that defer its capital-related costs or non-capital costs and which benefits arise as a result of the entry point or bi-directional point being located in a particular part of the Western Power Network a discount as described and calculated under the price list.



# 7. Adjustments to target revenue in the next access arrangement period

### 7.1 Adjusting target revenue for unforeseen events

- 7.1.1 If a *force majeure* event occurs which results in Western Power incurring unrecovered costs (within the meaning of the *Code*) during this *access arrangement period* then Western Power will, as part of its *proposed revisions* for the next *access arrangement period*, provide a report to the *Authority* setting out:
  - a) a description of the nature of the force majeure event;
  - b) a description of the insurance cover that Western Power had in place at the time of the *force majeure* event;
  - the unrecovered costs borne, or an estimate of the unrecovered costs likely to be borne, by Western Power during the access arrangement period as a result of the occurrence of the force majeure event; and
  - d) a demonstration that the amount to be added to the *target revenue* for the next *access* arrangement period in respect of those unrecovered costs does not exceed the costs which would have been (or, in the case of estimated costs, would be) borne by a *service provider* efficiently minimising costs.
- 7.1.2 Pursuant to sections 6.6 to 6.8 of the *Code*, an amount will be added to the *target revenue* for the next *access arrangement period* in respect of the unrecovered costs relating to a *force majeure* event which occurred in this *access arrangement period*.
- 7.1.3 The addition to *target revenue* in the next *access arrangement period* must leave Western Power financially neutral given the timing of when Western Power incurred any unrecovered costs by taking account of:
  - a) the effects of inflation; and
  - b) the time value of money as reflected by Western Power's weighted average cost of capital for the Western Power Network as determined in section 5.4.

### 7.2 Adjusting target revenue for technical rule changes

- 7.2.1 If the technical rules are amended during this access arrangement period, Western Power will, as part of its proposed revisions for the next access arrangement period, provide a report to the Authority setting out:
  - a) a description of the nature and timing of the impact of the technical rule change on Western Power's non-capital costs and new facilities investment for this access arrangement period;
     and
  - the costs (or cost savings) incurred, or an estimate of the costs (or cost savings) likely to be incurred, by Western Power as a result of that *technical rule* change.



- 7.2.2 Pursuant to sections 6.9 to 6.12 of the *Code*, if the *technical rule* change leads to a cost increase, an amount will be added to the *target revenue* for the next *access arrangement period*.
- 7.2.3 Pursuant to sections 6.9 to 6.12 of the *Code*, if the *technical rule* change leads to a cost saving, an amount will be deducted from the *target revenue* for the next *access arrangement period*.
- 7.2.4 The adjustment to *target revenue* in the next *access arrangement period* must leave Western Power financially neutral given the timing of when Western Power incurred any costs or received cost savings as a result of the *technical rule* change by taking account of:
  - a) the effects of inflation; and
  - b) the time value of money as reflected by Western Power's weighted average cost of capital for the Western Power Network as determined in section 5.4.

### 7.3 Investment adjustment mechanism

- 7.3.1 In accordance with sections 6.13 to 6.18 of the *Code*, an *investment adjustment mechanism* applies in relation to this *access arrangement*.
- 7.3.2 An amount will be added to, or deducted from, the *target revenue* for the next *access arrangement period* in accordance with the *investment adjustment mechanism* set out below.
- 7.3.3 The *investment adjustment mechanism* will apply separately to each of:
  - a) new facilities investment for the transmission system; and
  - b) new facilities investment for the distribution system.
- 7.3.4 The purpose of the *investment adjustment mechanism* is to adjust Western Power's *target revenue* in the next *access arrangement period* in a manner that exactly corrects for the economic loss or gain to Western Power as a result of any *investment difference* in this *access arrangement period* in relation to the categories of *new facilities investment* specified in section 7.3.7 of this *access arrangement*. In order to give effect to this purpose, the *investment adjustment mechanism* must take account of:
  - a) the effects of inflation;
  - b) the time value of money as reflected by Western Power's weighted average cost of capital for the Western Power Network as determined in section 5.4; and
  - c) the capital-related costs due to any investment difference in the access arrangement period.
- 7.3.5 Given the requirements of the *investment adjustment mechanism* as described in section 7.3.4 of this *access arrangement*, Western Power's approach to calculating the *capital-related costs* due to any *investment difference* is to calculate the difference in present value terms between:
  - the target revenue that would have been calculated for this access arrangement period if the investment difference had been zero (i.e. there was no forecasting error in relation to the new facilities investment categories that are subject to the investment adjustment mechanism); and
  - b) the target revenue that actually applied in this access arrangement period.



- 7.3.6 The amount under section 7.3.2 of this *access arrangement* is equal to the present value of the difference calculated under section 7.3.5 of this *access arrangement*.
- 7.3.7 The categories that are used in calculating the *investment difference* are *new facilities investment* undertaken for *augmentation* of:
  - (a) the *transmission system* and *distribution system* under the current or succeeding underground power program;
  - (b) the distribution system under the standalone power systems program; and
  - (c) the distribution system under the Distribution Capacity Expansion program.

# 7.4 Gain sharing mechanism and efficiency and innovation benchmarks

- 7.4.1 In accordance with sections 6.20 and 5.25 of the *Code*, a *gain sharing mechanism* and *efficiency* and innovation benchmarks will apply with respect to the access arrangement.
- 7.4.2 An above-benchmark surplus or a below-benchmark deficit (within the meaning of the Code) is to be calculated for each of the financial years of the access arrangement period as follows:

$$SD_{t1} = EIB_{t1} - A_{t1}$$

$$SD_{t2} = (EIB_{t2} - A_{t2}) - (EIB_{t1} - A_{t1})$$

$$SD_{t3} = (EIB_{t3} - A_{t3}) - (EIB_{t2} - A_{t2})$$

$$SD_{t4} = (EIB_{t4} - A_{t4}) - (EIB_{t3} - A_{t3})$$

$$SD_{t5} = (EIB_{t5} - A_{t5}) - (EIB_{t4} - A_{t4})$$

where:

 $SD_t$  is the above-benchmark surplus in financial year t of the access arrangement period (if positive) or the below-benchmark deficit in financial year t of the access arrangement period (if negative);

EIB<sub>t</sub> is the efficiency and innovation benchmark for financial year t as set out in Table 48.

Table 48: Efficiency and innovation benchmarks (\$M real as at 30 June 2022)

Financial year ending:	30 June 2023	30 June 2024	30 June 2025	30 June 2026	30 June 2027
Network	288.4	295.3	296.2	298.4	298.7
Corporate	104.0	107.5	110.7	113.8	114.8
Indirect costs	38.9	37.8	36.4	37.4	39.0
Efficiency and innovation benchmark -	431.3	440.7	443.3	449.6	452.5
EIBt					



and

**A**<sub>t</sub> is the sum of the actual *non-capital costs* incurred by Western Power for the *transmission system* and *distribution system* in financial year t, excluding any amount of *non-capital costs* incurred by Western Power:

- A. in accordance with the D-factor scheme in the *access arrangement* and providing that the expenditure has been approved by the *Authority*;
- B. in accordance with the *demand management innovation allowance* mechanism in the *access arrangement;*
- C. in accordance with any adjustment made under section 7.1;
- D. in accordance with any adjustment made under section 7.2; and
- E. in relation to *non-revenue target services*.
- 7.4.3 The gain sharing mechanism amount (GSMA<sub>AA</sub>) for the *access arrangement period* is to be calculated as follows:

$$\begin{split} & \mathsf{GSMA}_{\mathsf{AA}} = \sum [\mathsf{GSMA}_{1:5}] \\ & \mathsf{where:} \\ & \mathsf{GSMA}_1 = (\mathsf{SD}_{t1} + \mathsf{SD}_{t2} + \mathsf{SD}_{t3} + \mathsf{SD}_{t4} + \mathsf{SD}_{t5}) \\ & \mathsf{GSMA}_2 = (\mathsf{SD}_{t2} + \mathsf{SD}_{t3} + \mathsf{SD}_{t4} + \mathsf{SD}_{t5}) \\ & \mathsf{GSMA}_3 = (\mathsf{SD}_{t3} + \mathsf{SD}_{t4} + \mathsf{SD}_{t5}) \\ & \mathsf{GSMA}_4 = (\mathsf{SD}_{t4} + \mathsf{SD}_{t5}) \\ & \mathsf{GSMA}_5 = (\mathsf{SD}_{t5}) \end{split}$$

where:

**GSMA**<sub>n</sub> is the total *above-benchmark surplus* (if positive) or the *below-benchmark deficit* (if negative) for the equivalent financial year of the *access arrangement period*; and

**SD**<sub>t</sub> is the *above-benchmark surplus* (if positive) or the *below-benchmark deficit* (if negative) in financial year t of the *access arrangement period* calculated in accordance with section 7.4.2.

7.4.4 The total gain sharing mechanism revenue amount for the access arrangement (GSMA<sub>AA</sub>) will be added to, or deducted from, target revenue for the next access arrangement period. The gain sharing mechanism does not affect the ordinary operation of the transmission system and distribution system revenue targets (absent the gain sharing mechanism), which already provides for Western Power to retain 100% of any efficiency gains achieved during the access arrangement period. This characteristic is consistent with section 6.24 of the Code which ensures that Western Power can retain all of the surplus achieved in the access arrangement period.

### 7.5 Service standards adjustment mechanism

- 7.5.1 In accordance with section 6.30 of the *Code*, a *service standards adjustment mechanism* applies to the *access arrangement*.
- 7.5.2 An amount will be added to, or deducted from, the *target revenue* for each of the *transmission* system and the *distribution system* for the next *access arrangement period* in accordance with the service standards adjustment mechanism set out below.
- 7.5.3 The service standards adjustment mechanism will apply to the "SSAM Measures" meaning the units of measure for each of SAIDI, call centre performance, loss of supply event frequency and average outage duration as defined in section 4.
- 7.5.4 In relation to actual service performance for each financial year of the access arrangement period, a reward (a positive amount) or a penalty (a negative amount) will be calculated for each SSAM Measure by applying the applicable incentive rate specified in section 7.5.11 to the relevant Service Standard Difference ("SSD"). SSDt is calculated as SSB SSAt.

where:

SSD<sub>t</sub> is the Service Standard Difference in financial year t;

SSB is the relevant Service Standard Benchmark detailed in Section 4; and

 $SSA_t$  is the actual service performance in financial *year* t with respect to the relevant *SSAM Measure*.



- 7.5.5 In relation to SAIDI and SAIFI, the rewards or penalties are calculated as the sum of the application of the formula in section 7.5.4 to each component of SAIDI and SAIFI.
- 7.5.6 The rewards and penalties are applied to the performance *in each financial year* of the *access arrangement period* and:
  - (a) the reward or penalty for SAIDI and SAIFI will be allocated to the performance of the *distribution system*;
  - (b) the reward or penalty for call centre performance will be allocated to the performance of the *distribution system*;
  - (c) the reward or penalty for loss of supply event frequency will be allocated to the performance of the *transmission system*; and
  - (d) the reward or penalty for average outage duration will be allocated to the performance of the *transmission system*.
- 7.5.7 The rewards and penalties applied to each *financial year* as allocated to each of the *transmission* system and distribution system are summed for each of the *transmission system* and distribution system.
- 7.5.8 Notwithstanding section 7.5.7 of this *access arrangement*, the sum of the rewards and penalties for the *transmission system* applied to each financial year is capped at 1% of the total average revenue applicable to reference service customers connected to the *transmission system* for this *access arrangement period* which is \$953,338. For the avoidance of doubt, the amount will not be updated as a result of the annual updates to *weighted average cost of capital* as determined in section 5.4.
- 7.5.9 Notwithstanding section 7.5.7 of this *access arrangement*, the sum of the rewards and penalties for the *distribution system* applied to each financial year is capped at 1% of the total average revenue applicable to reference service customers connected to the *distribution system* for this *access arrangement period* which is \$14,980,300. For the avoidance of doubt, the amount will not be updated as a result of the annual updates to *weighted average cost of capital* as determined in section 5.4.
- 7.5.10 The amount that will be added to, or deducted from, the *target revenue* for each of the *transmission system* and the *distribution system* is equal to the present value of the sum of the amounts for each of the *transmission system* and the *distribution system* calculated under section 7.5.7 of this *access arrangement* (as subject to sections 7.5.8 and 7.5.9 of this *access arrangement*).
- 7.5.11 The incentive rates for the SSAM Measures are as follows:

Table 49: SAIDI incentive rates (\$ real as at 30 June 2022)

	Reward side incentive rate (\$ per SAIDI minute)	Penalty side incentive rate (\$ per SAIDI minute)
SAIDI - CBD (minutes)	21,195	21,195
SAIDI - Urban (minutes)	393,457	393,457
SAIDI - Rural Short (minutes)	159,066	159,066



	Reward side incentive rate (\$ per SAIDI minute)	Penalty side incentive rate (\$ per SAIDI minute)
SAIDI - Rural Long (minutes)	48,918	48,918

# Table 50: SAIFI incentive rates (\$ real as at 30 June 2022)

	Reward side incentive rate (\$ per 0.01 event)	Penalty side incentive rate (\$ per 0.01 event)
SAIFI - CBD (events)	9,237	9,237
SAIFI - Urban (events)	258,737	258,737
SAIFI - Rural Short (events)	102,754	102,754
SAIFI - Rural Long (events)	53,755	53,755

# Table 51: Call centre performance incentive rate (\$ real as at 30 June 2022)

	Reward side incentive rate (\$ per 0.1%)	Penalty side incentive rate (\$ per 0.1%)
Call centre performance (Percentage of calls responded to within 30 seconds)	-59,921	-59,921

# Table 52: Loss of supply event frequency incentive rate (\$ real as at 30 June 2022)

	Reward side incentive rate (\$ per event)	Penalty side incentive rate (\$ per event)
Loss of supply event frequency >0.1 and ≤1.0 system minutes interrupted (number of events)	143,008	143,008
Loss of supply event frequency >1.0 system minutes interrupted (number of events)	286,017	286,017

# Table 53: Average outage duration incentive rate (\$ real as at 30 June 2022)

	Reward side incentive rate (\$ per minute)	Penalty side incentive rate (\$ per minute)	
Average outage duration (minutes)	464	464	



### 7.6 D factor

- 7.6.1 In section 7.6.3 "**network control service**" means demand management or generation solutions (such as *distributed generating plant*) that can be a substitute for *network augmentation*.
  - For the avoidance of doubt, this definition of "network control service" applies exclusively in relation to this *access arrangement* and does not apply in any other context (including but not limited to the Wholesale Electricity Market Rules ("**WEM Rules**")).
- 7.6.2 This D factor scheme applies separately to each of:
  - a) non-capital costs for the transmission system; and
  - b) non-capital costs for the distribution system.
- 7.6.3 In the next *access arrangement period*, the *Authority* will add to Western Power's *target revenue* an amount so that Western Power is in a financially neutral position as the result of:
  - a) any additional *non-capital costs* incurred by Western Power as a result of deferring a *new* facilities investment projects during this access arrangement period, net of any amounts previously included in target revenue in relation to the deferred new facilities investment (other than such amounts included in the calculation of the *capital-related costs* due to any investment difference under section 7.3.5); and
  - b) any additional *non-capital costs* incurred by Western Power in relation to demand management initiatives or *network control services*;
- 7.6.4 In relation to section 7.6.3(a), the *new facilities investment* project that has been deferred must have been included in the *forecast new facilities investment* for this *access arrangement period*.
- 7.6.5 In relation to sections 7.6.3(a) and 7.6.3(b), an amount will only be added to *target revenue* for the next *access arrangement period* if there is an approved business case for the relevant expenditure, and this business case is made available to the *Authority*. The business case must demonstrate to the *Authority's* satisfaction that the proposed *non-capital costs* satisfy the requirements of sections 6.40 and 6.41 of the *Code*, as relevant.
- 7.6.6 In relation to sections 7.6.3(a) and 7.6.3(b), the adjustment to the *target revenue* for the next *access arrangement period* must leave Western Power in a financially neutral position by taking account of:
  - a) the effects of inflation; and
  - b) the time value of money as reflected by Western Power's weighted average cost of capital for the Western Power Network as determined in section 5.4.



#### 7.7 Deferred revenue

- 7.7.1 For the purposes of sections 6.5A to 6.5E of the *Code* an amount must be added to the target revenue for the *distribution system* in the sixth *access arrangement period* or subsequent *access arrangement periods* such that the present value (at 30 June 2022) of the total amount added to *target revenue* (taking account of inflation and the time value of money) is equal to \$637.1 million (real dollars values as at 30 June 2022).
- 7.7.2 For the purposes of sections 6.5A to 6.5E of the *Code* an amount must be added to the *target* revenue for the *transmission system* in the sixth access arrangement period or subsequent access arrangement periods such that the present value (at 30 June 2022) of the total amount added to target revenue (taking account of inflation and the time value of money) is equal to \$91.2 million ( real dollars values as at 30 June 2022).
- 7.7.3 The timeframe for recovering the deferred revenue amounts in section 7.7.1 will be 27 years and in section 7.7.2 will be 35 years at the end of this *access arrangement*.



# 8. Trigger events

- 8.1.1 For the purposes of sections 4.37 and 5.34 of the *Code*, a *trigger event* in this *access arrangement* is any significant unforeseen event which has a materially adverse impact on Western Power, and which is:
  - a) outside the control of Western Power; and
  - b) not something that Western Power, acting in accordance with *good electricity industry practice*, should have been able to prevent or overcome; and
  - c) so substantial that the advantages of making a variation to this *access arrangement* before the end of this *access arrangement period* would outweigh the disadvantages of doing so, having regard to the impact of the variation on regulatory certainty.
- 8.1.2 The designated date by which Western Power must submit proposed revisions to the Authority is 90 business days after a trigger event has occurred. If the costs associated with the trigger event are uncertain at the time of the designated date, Western Power's proposed revision submitted to the Authority under sections 4.37 and 5.34 of the Code must incorporate an appropriate mechanism for cost recovery having regard to the Code objective.

# 9. Demand management innovation allowance mechanism

- 9.1.1 Pursuant to section 6.32A of the *Code* a *demand management innovation allowance* mechanism applies to this fifth access arrangement period and subsequent access arrangement periods.
- 9.1.2 For the purposes of section 6.32B of the *Code* the *demand management innovation allowance* is an annual, ex-ante allowance provided in the form of a fixed amount of additional non-capital target revenue at the commencement of each pricing year of an access arrangement period. For this *access arrangement period*, the allowance is 0.08% of the target revenue for each pricing year during the period as shown in the table below.

Table 54: Target revenue excluding the *demand management innovation allowance* (\$m real as at 30 June 2022)

Pricing year	FY23	FY24	FY25	FY26	FY27
Target Revenue smoothed less demand management innovation allowance		1,664.61	1,635.84	1,612.52	1,612.52
Demand management innovation allowance	1.35	1.33	1.31	1.29	1.27

- 9.1.3 Pursuant to section 6.32F of the *Code*, if any amount of the *demand management innovation* allowance is not used or not approved by the *Authority* over the access arrangement period, this amount must not be carried over into the subsequent access arrangement period or reduce the amount of the demand management innovation allowance for the next access arrangement period.
- 9.1.4 The *demand management innovation allowance* mechanism will operate as per the demand management innovation allowance guideline published by the *Authority* in accordance with sections 6.32D, 6.32J and 6.32K of the *Code*.



### 10. Supplementary matters

### 10.1 General

10.1.1 Western Power will discharge the obligations it has under the WEM Rules as in force from time to time relating to balancing requirements, ancillary services, trading and settlement requirements in accordance with the WEM Rules. Western Power will also support the Australian Energy Market Operator ("AEMO") in the discharge of its functions, including by providing information to AEMO as required by the WEM Rules.

{Note: Previous access arrangements have referred, in the Supplementary Matters chapter, to balancing requirements, ancillary services, trading and settlement requirements. Under the WEM Rules, these functions are now principally undertaken by AEMO. This occurred when the System Management functions were transferred from Western Power to AEMO on 1 July 2016.}

#### 10.2 Line losses

10.2.1 Requirements for the treatment of line losses under the *access arrangement* shall be in accordance with the WEM Rules.

### 10.3 Metering

10.3.1 Metering requirements under the *access arrangement* shall be in accordance with the *Electricity Industry (Metering Code) 2012* and the MSLA.



# **Appendix A**

# **Electricity Transfer Access Contract**

Revised proposed access arrangement

15 November 2022



# **Electricity Transfer Access Contract**

Between

Electricity Networks Corporation ABN 18 540 492 861

and

[Name of User] ABN/ACN/ARBN [XXXXXXXXX]

and

[Name of Indemnifier] ABN/ACN/ARBN [XXXXXXXXX]

### NOTES TO USER: TO BE DELETED PRIOR TO FINALISING THE DOCUMENT

- 1. **[User** Please note that the User under this contract must be the same entity as the Connection Applicant.
- 2. Intermediary Please note that the contract template contains optional provisions to be used in circumstances where the User has been exempted from registering as a Rule Participant and has notified AEMO that an Intermediary (as that term is defined in the WEM Rules) will instead be registered as a Rule Participant. See 19.11, 33.4(a)(vi) and definition of Intermediary]



<sup>1</sup> Delete if no Indemnifier as at the date of execution of this Contract.				
{Note: This contract has been prepared in accordance with the requirements of the Electricity Networks Access Code 2004}				

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# **Parties**

**ELECTRICITY NETWORKS CORPORATION ABN 18 540 492 861**, a statutory body corporate established under section 4(1)(b) of the *Electricity Corporations Act 2005 (WA)*, of 363 Wellington Street, Perth, Western Australia (**Western Power**)

– ar	nd –	
[	<b>]</b> of [	] (User)
– ar	nd –	
ſ	<b>1</b> of [	] (Indemnifier)

# Introduction

### **Background**

- (a) The User has made an Application requesting Covered Services at one or more Connection Points.
- (b) Western Power has made an Access Offer in accordance with the Applications and Queuing Policy to provide the Covered Services to the User.
- (c) The User has signed the Access Offer, which has become this Access Contract.
- (d) The Indemnifier has agreed to indemnify Western Power in respect of the User's liabilities under this Access Contract. <sup>1</sup>

# **Operative Provisions**

# 1. Interpretation

# 1.1 Interpretation

In this Contract:

- (a) a reference to:
  - (i) the singular includes the plural and the plural includes the singular; and
  - (ii) an officer or body of persons includes any other officer or body for the time being exercising the powers or performing the functions of that officer or body; and
  - (iii) this Contract or any other instrument includes any variation or replacement of it; and
  - (iv) "under" includes "by", "by virtue of", "pursuant to" and "in accordance with"; and
  - (v) "day" means a calendar day; and
  - (vi) "person" includes a public body, company, or association or body of persons, corporate or unincorporated; and

 $<sup>^{\</sup>rm 1}$  Delete this paragraph if there is no Indemnifier as at the date of execution of this Contract.



- (vii) a person includes a reference to the person's personal representatives, executors, administrators, successors and permitted assigns; and
- (viii) any monetary amount means that amount in Australian dollars,

and

- (b) a word of any gender includes the corresponding words of each other gender; and
- (c) if a period of time is specified and dates from a given day or the day of an act or event, it is to be calculated exclusive of that day; and
- (d) "copy" includes a, photocopy or (subject to the Electronic Communications Protocol in Schedule 7) electronic copy; and
- (e) "including" and similar expressions are not words of limitation; and
- (f) where a word or expression is given a particular meaning, other parts of speech and grammatical forms of that word or expression have a corresponding meaning; and
- (g) where information is set out in braces (namely "{" and "}"), whether or not preceded by the expression "Note", "Outline" or "Example", the information:
  - (i) is provided for information only and does not form part of this Contract; and
  - (ii) is to be disregarded in interpreting this Contract; and
  - (iii) might not reflect amendments to this Contract or other documents or Laws,

and

- (h) a reference to:
  - (i) this Contract includes any Schedule to this Contract; and
  - (ii) a clause is a reference to a clause of this Contract; and
  - (iii) a series of consecutive clauses or Schedules is to be read as inclusive of the first and last in the series; and
  - (iv) "other party", in relation to the Indemnifier, means Western Power.

### 1.2 Interpretation Act applies

Unless the contrary intention is apparent, the rules of interpretation in the <u>Interpretation</u> Act 1984 (WA) apply to the interpretation of this Contract.

### 1.3 CPI adjustment

In this Contract, "CPI-Adjusted" in reference to an amount means that amount is adjusted under the following formula:

$$N = C \times (1 + \frac{CPI_n - CPI_c}{CPI_c})$$

where:

"N" is the new amount being calculated; and

"C" is the current amount being adjusted; and

"CPI<sub>n</sub>" is the CPI applicable at the end of the calendar quarter (quarter <sub>n</sub>) most recently ended prior to the current adjustment date; and



"CPI<sub>c</sub>" is the value of CPI applicable for the calendar quarter occurring 12 months before the calendar quarter referred to in the definition of CPI<sub>n</sub>.

### 2. Duration

### 2.1 Commencement and Term

- (a) This Contract commences on the Commencement Date.
- (b) This Contract ends on the Termination Date (unless terminated earlier under this Contract).

# 2.2 Option to extend Term

- (a) Subject to clause 2.2(b), the User may, by notice to Western Power given no later than 6 months prior to the expiration of the Term as at the time the notice is given, elect to extend the Term by such period as is specified in Part 2 of Schedule 2 as the "Extension Period", in which event the Termination Date shall be the last day of the Extension Period.
- (b) The Term shall not in any event be extended such that the Termination Date is later than the date specified in Part 2 of Schedule 2 as the "Latest Termination Date", except by mutual agreement between the Parties.

### 2.3 Conditions Precedent

- (a) The formation of this Contract, other than this clause 2.3 and clauses 29.1 to 29.5 {disputes}, 31.1 to 1 {assignment}, 33.1 to 33.10 {confidentiality}, 35 {notices} and 37.14 {governing law} is subject to and conditional upon each of the Conditions Precedent being satisfied on or before the date specified in Part 3 of Schedule 2 or:
  - (i) where a Condition Precedent is not specified to be for the benefit of a particular Party, that Condition Precedent being waived by agreement between all Parties; and
  - (ii) where a Condition Precedent is specified to be for the benefit of a particular Party, that Condition Precedent being waived by that Party, on or before the respective date specified in Part 3 of Schedule 2.
- (b) Where a Condition Precedent is not specified to be for the benefit of a particular Party, each of the Parties must use all reasonable endeavours to obtain the fulfilment of the Condition Precedent.
- (c) Where a Condition Precedent is specified to be for the benefit of a particular Party, that Party must use all reasonable endeavours to obtain the fulfilment of the Condition Precedent and the other Party shall not, by wilful act or omission, prevent its fulfilment.
- (d) A Party must promptly notify the other Parties if it:
  - (i) discovers that any of the Conditions Precedent are not satisfied by the date specified in Part 3 of Schedule 2; or
  - (ii) discovers that any of the Conditions Precedent have become incapable of being satisfied by the date specified in Part 3 of Schedule 2; or
  - (iii) waives any right to continue to treat any of the Conditions Precedent as conditions precedent to the formation of this Contract.



(e) If a Condition Precedent is not satisfied or waived by the date specified in Part 3 of Schedule 2 (or such longer period as the Parties may in writing agree) then, if the Party who seeks to terminate this Contract has complied with clause 2.3(b) or 2.3(c), as the case requires, that Party may, without prejudice to any other right or remedy it may have, terminate this Contract by giving written notice to the other Party.

# **Electricity Transfer Provisions**

### 3. Services

### 3.1 Provision and use of Services

- (a) For each Connection Point, on and from the Start Date and up to and including the End Date, subject to and under this Contract:
  - (i) Western Power must provide the Services (up to the Contracted Capacity); and
  - (ii) the User must pay the Charges for, and may use, the Services.
- (b) The User must not:
  - (i) transfer electricity out of the Network at a Connection Point unless it has an Exit Service or Bidirectional Service for that Connection Point; and
  - (ii) transfer electricity into the Network at a Connection Point unless it has an Entry Service or Bidirectional Service for that Connection Point.
- (c) For each Service at each Connection Point, the User must endeavour, as a Reasonable and Prudent Person, to ensure that the rate at which electricity is transferred into or out of the Network by or on behalf of the User does not exceed the Contracted Capacity for that Service. This clause 3.1(c) does not relieve the User of the User's obligation to comply with clause 16 or clause 25.
- (d) Western Power provides the Services under this Contract to the User and does not provide any such Services to the Indemnifier. Western Power's sole liability in connection with the provision of the Services (including any failure of, or defect in provision of the Services) is to the User and Western Power has no liability of any nature to the Indemnifier in connection with the provision of the Services.
- (e) The Contracted Capacity for an Entry Service or an Entry Service Component at a Connection Point represents the maximum Capacity of the Network to accept a transfer of electricity into the Network at that Connection Point in the absence of a Constraint.
- (f) The actual amount of electricity which may be transferred into the Network at any point in time is subject to the Constraints affecting the Network from time to time. Constraints may, without limitation, be caused by the technical limitations and configuration of the Network, the actions or omissions of Generators or Customers or by factors external to the Network and may increase over time as additional Generators or Customer are connected to the Network.
- (g) Without limiting Western Power's obligation to operate the Network in accordance with Good Electricity Industry Practice, Laws and the Technical Rules, Western Power has no obligation to the User to ensure Constraints do not occur or arise.



- (h) Despite any other provision of this Contract, the Capacity of the Network to accept the transfer of electricity at a Connection Point pursuant to an Entry Service or Entry Service Component is only available to be utilised by the User on a non-exclusive or non-firm basis and the User has no exclusive or firm right or entitlement to use all or any part of the available Capacity of the Network in priority to any other Generator or other person who transfers electricity into the Network.
- (i) Nothing in this clause limits the operation of clause 25.

### 3.2 User may select Services

- (a) The User may from time to time give notice to Western Power seeking to change the Service in respect of a Connection Point in accordance with the Applications and Queuing Policy.
- (b) If Western Power receives a notice from the User under clause 3.2(a), then Western Power must process that request in accordance with the Applications and Queuing Policy.

### 3.3 Eligibility Criteria

- (a) Subject to clause 3.3(b), the User must in relation to each Reference Service Point, comply with the Eligibility Criteria applicable to the Reference Service provided, or to be provided, at the Reference Service Point.
- (b) The User is not in breach of clause 3.3(a) to the extent the User is unable to comply with its obligation under clause 3.3(a) as a result of a breach by Western Power of clause 3.2(b).

### 3.4 Increase or decrease of Contracted Capacity

- (a) The User may not increase or decrease the Contracted Capacity at an existing Connection Point to this Contract unless the User makes an application to Western Power and Western Power approves that application under the Applications and Queuing Policy.
- (b) If the User makes an application to Western Power under clause 3.4, then Western Power must process the application under the Applications and Queuing Policy.

### 3.5 Addition of a Connection Point

- (a) The User may not add an additional Connection Point to this Contract unless the User makes an application to Western Power, and Western Power approves that application, under:
  - (i) the Applications and Queuing Policy; or
  - (ii) the Customer Transfer Code, as applicable.
- (b) If the User makes an application to Western Power under clause 3.5, then Western Power must process the application under:
  - (i) the Applications and Queuing Policy; or
  - (ii) the Customer Transfer Code, as applicable.



#### 3.6 Deletion of a Connection Point

- (a) The User may give notice to Western Power seeking to delete a Connection Point from this Contract where:
  - (i) a transfer request has been made in relation to the Customer for that Connection Point under the Customer Transfer Code; or
  - (ii) the Connection Point will be added to another Access Contract by some other means to that stipulated in clause 3.6(a)(i); or
  - (iii) the Facilities and Equipment in respect of the Connection Point will be permanently Disconnected from the Connection Point.
- (b) If the User seeks to permanently Disconnect any Facilities and Equipment at a Connection Point, then the notice under clause 3.6(a) must be given to Western Power:
  - (i) for Generating Plant, excluding Generating Plant up to and including 30 kVA which is being used to offset load, at a Connection Point, at least 6 months before the planned Disconnection; and
  - (ii) for Consuming plant and Generating Plant up to and including 30 kVA which is being used to offset load, at a Connection Point, at least one month before the planned Disconnection.
- (c) Clause 3.6(b) does not limit, and applies in addition to, the requirement the User and Western Power comply with their obligations (including timeframe service standards) specified in the model service level agreement under the Metering Code (to the extent that model service level agreement applies to the User and Western Power) in respect of any supply abolishment service required to give effect to a permanent Disconnection of Facilities and Equipment.
- (d) Subject to clause 3.6(e), if Western Power receives a notice from the User under clause 3.6(a), then it must notify the User that it accepts the deletion, and the date that the deletion takes effect, if:
  - (i) Western Power has successfully processed a Customer transfer request in relation to the Connection Point under the Customer Transfer Code;
  - (ii) the Connection Point has been added to another Access Contract by some other means; or
  - (iii) the Facilities and Equipment in respect of the Connection Point have been permanently Disconnected from the Connection Point,
  - as soon as reasonably practicable, otherwise Western Power may notify the User as soon as reasonably practicable that it rejects the deletion.
- (e) Clause 3.6(d) does not limit the requirement that the User and Western Power comply, in respect of any supply abolishment service required to give effect to a permanent Disconnection, with their obligations (including timeframe service standards) specified in the model service level agreement under the Metering Code (to the extent that model service level agreement applies to the User and Western Power).
- (f) Subject to the Customer Transfer Code, Western Power must not delete a Connection Point other than in accordance with a notice given by a User under clause 3.6.



(g) If Western Power commits a breach of clause 3.6(f) in circumstances that constitute Wilful Default it is liable to the User for any damage caused by, consequent upon or arising out of the Wilful Default. In this case, the exclusion of Indirect Damage in clause 19.3 does not apply.

### 3.7 Amendment to Connection Point data

- (a) Unless the Parties otherwise agree, Western Power must, as soon as reasonably practicable, record the information referred to in Part 1 of Schedule 3, with respect to each Connection Point, in the Connection Point Database.
- (b) Subject to clauses 3.7(g) and 3.7(h), Western Power must, as soon as reasonably practicable, update the information contained in a Connection Point Database following any variation made under this clause 3.
- (c) Upon request by the User for information referred to in the Connection Point Database, Western Power will, as soon as reasonably practicable, provide to the User the most up-to-date version of that information.
- (d) The Parties acknowledge that if the User is a Metering Code Participant, for each Connection Point Western Power must also record and update the relevant information required under Part 1 of Schedule 3 in the Metering Database in accordance with the provisions of the Metering Code and, to the extent that a timeframe is not specified in the Metering Code or a service level agreement in force between the User and Western Power, Western Power must do so as soon as is reasonably practicable.
- (e) Nothing in this Contract restricts or prohibits Western Power from maintaining and updating the Metering Database in accordance with the Metering Code.
- (f) Western Power will provide the User with access to the information in the Metering Database in accordance with the Build Pack.
- (g) Subject to clause 3.7(h), where Western Power causes a Permanent Reconfiguration of the Network which results in the information contained in the Contract Database having to be updated:
  - (i) Western Power is not required to update the information contained in the Connection Point Database before the next 1 July following the Permanent Reconfiguration of the Network; and
  - (ii) Western Power must update the information contained in the Connection Point Database before the next 21 July following the Permanent Reconfiguration of the Network.
- (h) Where a Permanent Reconfiguration of the Network occurs as a result of, or arising from, a notice or application by the User under clauses 3.4, 3.5 or 3.6 which results in the information contained in the Contract Database having to be updated:
  - (i) clause 3.7(g) does not apply;
  - (ii) Western Power must update the information contained in the Connection Point Database\_as soon as reasonably practicable after the Permanent Reconfiguration of the Network; and
  - (iii) where the information to be updated is contained in Part 1 of Schedule 3, then the information must be updated in accordance with clause 37.2.



- (i) The Parties must notify each other of any errors discovered in the Connection Point Database as soon as reasonably practicable after becoming aware of the error
- (j) Western Power must amend any error in the Connection Point Database as soon as reasonably practicable after becoming aware of the error, provided that if Western Power becomes aware of an error otherwise than by notice from the User under clause 3.7(i), no amendment shall be made until Western Power has given notice to the User of the error.
- (k) Where under this Contract Western Power has recorded information in more than one of Part 1 of Schedule 3, the Metering Database and any other database maintained by Western Power for the purposes of this Contract and there is an inconsistency or conflict between the information in the databases in which the information is recorded, then the following order of precedence applies, from highest to lowest:
  - (i) where the circumstances in clauses 3.7(g)or 3.7(h) apply:
    - (A) Part 1 of Schedule 3;
    - (B) any other database;
    - (C) the Metering Database; and
  - (ii) in all other circumstances:
    - (A) the Metering Database;
    - (B) Part 1 of Schedule 3;
    - (C) any other database.
- (I) Western Power must notify the User as soon as reasonably practicable upon becoming aware that a Connection Point has reverted to the User as a default supplier retailer (being a retailer of the type contemplated in section 59 of the Act).

# 4. The User must provide forecast information

### 4.1 Western Power may request information

Western Power may as a Reasonable and Prudent Person, in respect of a Connection Point, request power and energy forecast information from the User.

# 4.2 When Western Power may request information

A request under clause 4.1 must not be made more than once in any 12 month period, except in an Emergency or where any forecasts provided by the User materially differ from the User's actual performance and, in the opinion of Western Power (as a Reasonable and Prudent Person), require revision in order to facilitate the operation of the Network in accordance with Good Electricity Industry Practice.

# 4.3 User must comply with request

The User must comply with Western Power's reasonable request under clause 4.1.



# 5. Title to electricity

#### **5.1** Transfer into the Network

Title to electricity that is transferred into the Network at a Connection Point passes from the User to Western Power at the time it passes through the Connection Point.

### **5.2** Transfer out of the Network

Title to electricity that is transferred out of the Network at a Connection Point passes from Western Power to the User at the time it passes through the Connection Point.

### 6. Controllers

### 6.1 User must nominate Controller where Connection Point exceeds threshold

- (a) If the User is not the Controller of a Connection Point then the User must, by notice to Western Power before the Start Date of the relevant Services, or as soon as reasonably practicable thereafter (but in all cases no later than 30 Business Days after the Start Date of the relevant Services), nominate a person as the Controller for a Connection Point where:
  - (i) Generating Plant with installed capacity exceeding 30 kVA is connected at the Connection Point; or
  - (ii) the Connection Assets for the Connection Point are operated at 66 kV or greater; or
  - (iii) the rating of the largest motor connected at the Connection Point is greater than 0.4% of the three phase short circuit fault level at the Attachment Point.
- (b) The User may, from time to time, by notice to Western Power, change the person the User nominates as the Controller of a Connection Point.
- (c) The Parties must amend the Connection Point Database following any variation made under this clause 6.1.
- (d) Western Power, acting as a Reasonable and Prudent Person, may at any time on reasonable technical or commercial grounds object to a person nominated by the User as a Controller under clause 6.1, in which case the User must either:
  - (i) Dispute Western Power's objection; or
  - (ii) nominate a different person as a Controller.
- (e) If Western Power requires, the User must use reasonable endeavours to procure that the person nominated by the User as a Controller enters into a Connection Contract with Western Power in respect of the Connection Point.
- (f) If the User requests Western Power to do so, Western Power must use reasonable endeavours and act in good faith to enter into a Connection Contract with a Controller (validly nominated by the User under clause 6.1(a)) in respect of the Connection Point.

# 6.2 Where the User is not the Controller

(a) Subject to clause 6.2(g), if the User is not the Controller of a Connection Point, and the Controller of that Connection Point has not entered into a Connection Contract with Western Power in respect of the Connection Point, then the User



must ensure that the Controller of that Connection Point complies, and will continue to comply, with the obligations set out in this Contract, to the extent that such compliance is reasonably necessary for the Parties to satisfy their obligations under this Contract, including, but not limited to:

- (i) clause 11 (Good Electricity Industry Practice); and
- (ii) clause 12 (Technical Rules and Registered Generator Performance Standards); and
- (iii) clause 13 (Technical characteristics of Facilities and Equipment); and
- (iv) clause 14 (Cooperation); and
- (v) clause 15 (Access to premises); and
- (vi) clause 16 (Network Constraints); and
- (vii) clause 17 (Removal of equipment); and
- (viii) clause 25 (Curtailment); and
- (ix) clause 35 (Notices).
- (b) If the User is not the Controller of a Connection Point, and the Controller of that Connection Point has not entered into a Connection Contract with Western Power in respect of the Connection Point, then the User must ensure that it enters into a contract with the Controller obliging the Controller to comply with the obligations set out in this Contract (to the extent set out in clause 6.2(a)) and that such contract entered into between the User and a Controller relating to Services under this Contract contains a provision:
  - (i) that neither the User nor Western Power is in any circumstances liable for Indirect Damage suffered by the Controller, however arising, excluding any damage caused by, consequent upon or arising out of fraud; and
  - (ii) under which the Controller covenants in favour of Western Power (which covenant is expressed to be enforceable by Western Power in accordance with section 11 of the <u>Property Law Act 1969 (WA)</u>) that it will not bring a claim against Western Power for such Indirect Damage and will not bring a claim which will result in Western Power's aggregate liability to the Controller and the User, under or in connection with this Contract or the Services provided under or in connection with this Contract, exceeding the monetary cap on Western Power's liability in clause 19.5(a).
- (c) The exclusion of Indirect Damage in clause 19.3 does not apply to a failure by the User to ensure that its contract with the Controller contains the covenant referred to in paragraph (ii) above.
- (d) On reasonable request from Western Power, the User must (unless the Controller has already entered into a Connection Contract with Western Power) provide evidence to Western Power's satisfaction as a Reasonable and Prudent Person that the User is complying, and will continue to comply, with clause 6.2(a).
- (e) If the User does not satisfy Western Power under clause 6.2(d), Western Power may refuse to commence the Services or may Curtail the provision of Services in respect of the relevant Connection Point unless and until:



- (i) the Controller has entered into a Connection Contract with Western Power in respect of the Connection Point; or
- (ii) the User satisfies Western Power under clause 6.2(d).
- (f) For the avoidance of doubt, if the User is in breach of clause 6.2(a), then the User is liable for, and must indemnify Western Power pursuant to clause 19.2 against any Direct Damage caused by, consequent upon or arising out of the acts and omissions, negligent or otherwise, of the Controller to the extent that the acts or omissions, negligent or otherwise, of the Controller are attributable to that breach, unless the Controller has entered into a Connection Contract with Western Power.
- (g) Subject to clause 6.2(h), the User is required to commence, maintain or continue legal proceedings to procure compliance of the Controller with the obligations set out in this Contract, to the extent that such compliance is reasonably necessary for the Parties to satisfy their obligations under this Contract.
- (h) For a Connection Point other than as referred to in clause 6.1, the User is not required to comply with clause 6.2(g) unless Western Power provides an indemnity to the User for all of the User's costs of and incidental to the proceedings.
- (i) Nothing in clause 6.2(g) or clause 6.2(h):
  - (i) limits the User's obligations under the remainder of this clause 6.2; or
  - (ii) derogates from Western Power's other rights under this Contract including its rights under clause 6.2(e),or requires Western Power to pay any compensation to the User for exercising any of those rights.

### **6.3** Western Power may enter into Access Contracts

Nothing in clause 6.2 is to be taken to prevent Western Power from entering into an Access Contract with any person, including a person who is a Controller.

# 6.4 Liability and Force Majeure not limited

Nothing in clause 6.2 limits the operation of clauses 19.2 or 22.1 in respect of either the User or Western Power.

# 7. Tariff and Charges

# 7.1 Tariff

- (a) The tariff payable under this Contract for a Service is the tariff, or tariffs, as applicable, specified in the Approved Price List from time to time for the Service. For the avoidance of doubt, the tariffs specified in the Approved Price List apply to all consumption during the Pricing Year applicable to the Approved Price List. Where consumption is metered with an accumulation meter and the meter reading interval causes some of the metered consumption to lie within the Pricing Year applicable to the Approved Price List and the remainder within a Pricing Year applicable to another Approved Price List, the consumption covered by the Approved Price List will be determined by prorating the metered consumption uniformly on a daily basis.
- (b) If:



- (i) no Approved Price List is published by the Authority on the date required under the Code; or
- (ii) a purported Price List which does not comply with the Access Arrangement is published as an Approved Price List,

then to the extent that the effect of a Price List (if it had been published on the date required under the Code and had been compliant with the Access Arrangement) would have been to reduce the Tariff payable by the User, then the User may recover the Tariff reduction as an overpayment under clause 8.6.

- (c) If applicable, the Tariff payable under clause 7.1(a) for a Service after the end of the current Access Arrangement period is to be determined as follows:
  - (i) if the new Access Arrangement contains a Reference Service
    ("Equivalent Reference Service") which is materially the same as the
    Service then the tariff for the Service is to be the tariff for the Equivalent
    Reference Service; and
  - (ii) if the new Access Arrangement does not contain an Equivalent Reference Service, or if for any reason there is no new Access Arrangement or new Approved Price List under the new Access Arrangement, then the tariff for each quarter will be the Tariff in the final Approved Price List under the previous Access Arrangement, CPI-Adjusted annually each 1 July (or if there was no Approved Price List under the previous Access Arrangement, the Tariff in the final Price List which Western Power was required to publish under the previous Access Arrangement, CPI-Adjusted annually each 1 July).
- (d) Clause 7.1(c) applies, with appropriate modifications, in respect of the end of each successive Access Arrangement period.
- (e) Western Power must notify the User of the Tariffs calculated from time to time under clause 7.1(c).
- (f) For the purposes of calculating Tariffs and Charges for a Service:
  - (i) Western Power is entitled to rely on the information contained in the Contract Database (as updated from time to time in accordance with this Contact); and
  - (ii) where information contained in the Contract Database is updated, or to be updated, in accordance with this Contract, the updated information:
    - (A) will not apply to any period before; and
    - (B) must not be used to calculate a Tariff or Charge until, the date that the information is actually updated in accordance with this Contract.

# 7.2 Charges

The User must pay to Western Power:

- (a) the Charge for each Service calculated at the Tariff determined under clause 7.1.
- (b) Nothing in this clause 7.2 prevents Western Power from recovering any other monies otherwise payable by the User to Western Power under this Contract or at Law.



### 7.3 Charges during Western Power's Force Majeure Event

- (a) If a Service ("Affected Service") is unavailable for any consecutive period of two days or longer ("Affected Service Period") due to a Force Majeure Event where:
  - (i) Western Power is the Affected Person;
  - (ii) the User is unable to use the Affected Service because of the Force Majeure Event; and
  - (iii) Western Power's inability to provide the Affected Service has not been caused by the User's default or negligence,

then, for that part of the Affected Service Period in which the User's Facilities and Equipment in respect of the Affected Service were not or would not have been subject to a scheduled or unscheduled outage by which the User's Facilities and Equipment were De-energised, the User is relieved of its obligation under clause 7.2 and instead must pay 10% of the "Standing Charges" (as defined in clause 7.3(b)) for the Affected Service during that part of the Affected Service Period.

- (b) Under this clause 7.3, Standing Charges means:
  - (i) those Charges or components of a Charge which apply to a Service regardless of the actual Generation or Consumption by the User in respect of that Service, as recorded by the Metering Equipment; and
  - (ii) is not those components of a Charge which are determined by reference to the actual Generation or Consumption by the User in respect of that Service, as recorded by the Metering Equipment.

# 8. Invoicing and payment

#### 8.1 Western Power invoices

- (a) Subject to clause 8.1(d), Western Power must, within 14 Business Days after the end of an Accounting Period, issue to the User a Tax Invoice for the Accounting Period showing:
  - (i) all amounts payable by the User to Western Power under this Contract for the Accounting Period; and
  - (ii) all outstanding amounts as at the end of the Accounting Period and interest payable on those amounts; and
  - (iii) GST payable on those amounts under clause 8.8.
- (b) A Tax Invoice issued by Western Power under clause 8.1(a) or 8.1(d) may include other amounts payable by the User to Western Power with regards to the Service under this Contract or at Law.
- (c) At the same time as issuing a Tax Invoice under this clause 8.1, Western Power must provide to the User, in electronic form, the metering information used to calculate the Charges shown on the Tax Invoice in sufficient detail to enable the User to understand how Western Power calculated the Charges.
- (d) Notwithstanding clause 8.1(a), the Parties may, by mutual agreement, implement a different system of invoicing to that stipulated in clause 8.1(a) including, for example, issuing two or more Tax Invoices per Accounting Period, and separate invoicing for different classes or groups of consumers, Connection Points or Services.



#### 8.2 User invoices

- (a) At the same time as Western Power issues to the User a Tax Invoice for an Accounting Period under clause 8.1, Western Power must provide the User with all information necessary for the User to determine any amounts payable by Western Power to the User for the Accounting Period.
- (b) The User must, within five Business Days after receiving the information under clause 8.2(a), issue to Western Power a Tax Invoice for the Accounting Period showing:
  - (i) all amounts payable by Western Power to the User under this Contract, which amounts may be calculated using the information provided to the User by Western Power under clause 8.2(a); and
  - (ii) all outstanding amounts as at the end of the Accounting Period and interest payable on those amounts; and
  - (iii) GST payable on those amounts payable under clause 8.8.
- (c) If the User Disputes the information provided by Western Power under clause 8.2(a), then:
  - (i) the User may issue a Tax Invoice under clause 8.2(b) for an amount the User (acting as a Reasonable and Prudent Person) estimates to be the correct amount payable; and
  - (ii) the User must, before the Due Date of the Tax Invoice under clause 8.2(b), give notice to Western Power that it Disputes the information provided under clause 8.2(a) and provide in that notice full details of the Dispute, including the difference between the amount for which the Tax Invoice has been issued by the User and the amount for which that Tax Invoice would have been issued had the information provided by Western Power under clause 8.2(a) been accepted by the User as correct.
- (d) Clause 8.4 applies in respect of a Tax Invoice issued under clause 8.2(b), for the purposes of which the "Undisputed Portion" is taken to be an amount calculated in accordance with the information provided by Western Power under clause 8.2(a).

# 8.3 Payment of invoices

- (a) Each Party which receives a Tax Invoice under clause 8.1 or 8.2, must on or before the Due Date of the Tax Invoice pay to the Party issuing the Tax Invoice all amounts shown on the Tax Invoice which are payable under this Contract.
- (b) If a Party fails to comply with clause 8.3(a) then, without prejudice to the other Party's other rights, the Party must pay interest on any unpaid amount, calculated daily at the Prescribed Rate from the Due Date of the Tax Invoice until payment.

### 8.4 Disputed invoices

- (a) If a Party Disputes any amount set out in a Tax Invoice issued under clause 8.1 or 8.2 then that Party must pay the Undisputed Portion (if any) and must, prior to the Due Date of the Tax Invoice, give notice to the other Party that it Disputes the amount and provide in that notice full details of the Dispute.
- (b) Without prejudice to the other Party's other rights, any amount withheld by a Party under clause 8.4(a) but subsequently found to have been payable attracts



- interest calculated daily at the Prescribed Rate from the Due Date of the Tax Invoice until payment.
- (c) Without prejudice to the other Party's other rights, any amount paid by a Party under clause 8.4(a) but subsequently found not to have been payable attracts interest calculated daily at the Prescribed Rate from the date the Party paid the amount to the date the other Party repays the amount.

# 8.5 Charge errors

(a) Nothing in this clause or elsewhere in this Contract affects or limits the operation of sections 65 and 66 of the *Energy Operators (Powers) Act 1979 (WA)* in relation to Charges paid or payable by the User under this Contract.

### 8.6 Under and over payments

- (a) Subject to clause 8.6(e), if a Party detects a Payment Error by a Party of any amount within 18 calendar months after the Payment Error:
  - (i) the Party must as soon as reasonably practicable give notice to the other Parties of the Payment Error; and
  - (ii) an adjusting payment must be made by the appropriate Party within 10 Business Days of the notice.
- (b) Except where clause 8.6(c) applies, the adjusting payment must, without prejudice to the Party's other rights, include interest calculated daily at the Prescribed Rate from the date of the Payment Error until the date of the adjusting payment.
- (c) An adjusting payment by a Party will not attract interest under clause 8.6(b) if it is made in relation to an underpayment and the underpayment was the result of an error by the other Party.
- (d) Subject to clause 8.6(e), a Party is not entitled to an adjusting payment for a Payment Error notified to the other Parties after the expiry of 18 calendar months after the Payment Error.
- (e) Notwithstanding clauses 8.6(a) and 8.6(d), where:
  - (i) Payment Errors have occurred as a result of an error in the data used to calculate the Charges; and
  - (ii) the Payment Errors occurred in one or more Accounting Periods, the Party who was underpaid or who made an overpayment (as applicable) is entitled to an adjusting payment only for the Payment Errors that occurred in the Accounting Periods that were within the 12 month period preceding the date that the Payment Errors were notified by one Party to the other.
- (f) Where a Payment Error is an error as a result of which the amount set out in a Tax Invoice is less than what it would have been had the error not been made, the Payment Error will be taken to have occurred on the Due Date of the Tax Invoice.
- (g) Where a Payment Error is an error as a result of which the amount set out in a Tax Invoice is more than what it would have been had the error not been made, the Payment Error will be taken to have occurred on the date the User has paid the total amount of the Tax Invoice in full.

# 8.7 Interest on overdue payment

If a Party Defaults in due and punctual payment of a Tax Invoice:



- (a) clauses 27.1 to 28.1(d)(i) apply; and
- (b) the overdue payments attract interest payable at the Prescribed Rate from the Due Date of the Tax Invoice until the Default is remedied.

#### 8.8 **GST**

- (a) Unless expressly included, the consideration for any supply under or in connection with this Contract (including any Charge or Tariff derived from an Approved Price List and any Contribution) is GST exclusive.
- (b) To the extent that any supply made under or in connection with this Contract is a taxable supply and the price for it (including any Charge or Tariff derived from a Approved Price List and any Contribution) is stated to be GST exclusive, the consideration for that supply is increased by an amount determined by the supplier, not exceeding the amount of the consideration (or its market value) multiplied by the rate at which GST is imposed in respect of the supply.
- (c) Without limiting the obligation to provide a Tax Invoice under clauses 8.1 and 8.2, the supplier must issue a Tax Invoice to the recipient of a supply to which clause 8.8(b) applies before the payment of the GST inclusive consideration determined under that clause.
- (d) If a Party is entitled under this Contract to be reimbursed or indemnified by another Party for a cost or expense incurred in connection with this Contract, the reimbursement or indemnity payment must not include any GST component of the cost or expense for which an input tax credit may be claimed by the Party entitled to be reimbursed or indemnified, or by its representative member.
- (e) If a Party becomes aware of an adjustment event, that Party agrees to notify the other Party as soon as practicable after becoming so aware, and the Parties agree to take whatever steps are necessary, including the issue of an adjustment note, and to make whatever adjustments are required, to ensure that any GST or additional GST on that supply or any refund of any GST (or part of GST) is paid as soon as is practicable but no later than 10 Business Days after the Party has satisfied itself that the adjustment event has occurred.
- (f) Definitions in the GST Act apply also in this clause 8.8 unless the context indicates otherwise.

# 9. Security for User's and Indemnifier's obligations

- (a) If Western Power, acting as a Reasonable and Prudent Person determines that there is a material risk that the User will be unable to meet any or all of its liabilities under this Contract, then Western Power may, by notice to the User, require the User to procure a person acceptable to Western Power (acting as a Reasonable and Prudent Person) to execute such documents (in a form acceptable to Western Power) as required to ensure they accede to this Contract as, and assume the obligations of, the "Indemnifier".
- (b) Subject to clause 9(c), if Western Power determines at any time during the Term that either or both of the User's or the Indemnifier's technical, operational or financial resources are such that a Reasonable and Prudent Person would consider there to be a material risk that either the User or the Indemnifier will be unable to meet their obligations under this Contract, then:



- (i) Western Power may require the User to within 15 Business Days nominate which of the User or the Indemnifier ("Nominated Person") is to provide security; and
- (ii) within 15 Business Days of the User's nomination under clause 9(b)(i), the Nominated Person, at the User's election, must either:
  - (A) pay to Western Power a cash deposit equal to the Charges for two months' Services ("Secured Period"), provided Western Power, acting as a Reasonable and Prudent Person is only required to accept a cash deposit if arrangements acceptable to Western Power are in place to ensure Western Power's entitlements to that cash deposit will prevail against any secured creditors of the Nominated Person or insolvency official appointed to the Nominated Person; or
  - (B) provide an irrevocable and unconditional bank guarantee or equivalent financial instrument issued by a financial institution acceptable to Western Power (acting as a Reasonable and Prudent Person) in terms acceptable to Western Power, guaranteeing or otherwise securing the Charges for the Secured Period; or
  - (C) if Western Power is satisfied, as a Reasonable and Prudent Person, that the User's parent company's financial, operational and technical resources are such that the User's parent company would be able to meet the User's obligations under this Contract (including because the User's parent company meets at least one of the credit ratings given in clauses 9(c)(i) and 9(c)(ii)), procure from the User's parent company a guarantee substantially in the form set out in Schedule 8.
- (c) If the User or the Indemnifier has an unqualified credit rating of at least:
  - (i) BBB from Standard and Poor's Australia Pty Ltd; or
  - (ii) Baa from Moody's Investor Service Pty Ltd,
  - and provides evidence to this effect to Western Power, then Western Power is not entitled to determine under clause 9(a) or 9(b) that the User's financial resources are such that there would be a material risk that the User will be unable to meet its obligations under this Contract.
- (d) If any security held by Western Power under clause 9(b)(ii)(A)) or 9(b)(ii)(B) at any time is not equal to the Charges for the Secured Period, then the Nominated Person must, within 15 Business Days of a written request by Western Power to the User:
  - (i) if the security is a cash deposit under clause 9(b)(ii)(A), provide Western Power with an additional cash payment to increase the security so that it is equal to the Charges for the Secured Period; or
  - (ii) if the security is a guarantee under clause 9(b)(ii)(B), replace the guarantee with another guarantee (that is in accordance with clause 9(b)(ii)(B)) in an amount that is equal to the Charges for the Secured Period.
- (e) If any security held by Western Power under clause 9(b)(ii)(A) or 9(b)(ii)(B) is called upon by Western Power or if that security ceases to be enforceable for any



- reason (including due to expiry of the security) then within 15 Business Days the Nominated Person must provide replacement security to Western Power complying with the requirements of clause 9(b)(ii).
- (f) Where a guarantee has been provided to Western Power by the User's parent company but Western Power ceases to be satisfied at any time during the Term, as a Reasonable and Prudent Person, that the criteria in clause 9(b)(ii)(C) are met then by notice to the User Western Power may require the provision of a new security complying with the requirements of clause 9(b)(ii)(A) or 9(b)(ii)(B) which security must be provided within 15 Business Days of service of Western Power's notice.
- (g) Upon the termination of this Contract and receipt by Western Power of all amounts due by the User and the Indemnifier to it under this Contract, Western Power will return to the Nominated Person any security provided under this clause 9 which is still held by Western Power. Where the security provided to Western Power is a cash deposit, then Western Power will return to the Nominated Person the unutilised balance of the cash deposit and interest accrued on the deposit less any fees, charges and taxes associated with establishing and maintaining the interest bearing account in which the cash deposit was kept in accordance with clause 9(j).
- (h) Western Power may call upon a cash deposit, bank guarantee or equivalent financial instrument provided to it under this clause 9 if an amount due by the User and the Indemnifier to Western Power under this Contract is not paid by the due date for payment of that amount or, where this Contract does not specify a due date for payment, is not paid within 10 Business Days of Western Power issuing a notice to the User and the Indemnifier requiring payment of the amount.
- (i) In this clause 9, a reference to the Charges for at least two months' Services means Western Power's reasonable estimate of the Charges which will be incurred by the User for the Services provided under this Contract in the next Secured Period from the end of the next Accounting Period (that is, from the end of the Accounting Period which expires after the Accounting Period in which the User is notified of the current level of security it is required to provide).
- (j) Where security is provided to Western Power in the form of a cash deposit, then Western Power shall deposit the amount in an interest bearing account maintained with a financial institution, selected consistently with Western Power's policies, or with the Western Australian Treasury Corporation or other government body. Any interest which accrues on the cash deposit shall form part of the security. However where, as at the end of a month, the aggregate amount of cash deposit held by Western Power (including interest and after deducting any fees, charges and taxes associated with establishing and maintaining the interest bearing account) exceeds the Charges for the Secured Period Western Power will, within a reasonable time, pay the excess amount held to the Nominated Person's nominated bank account.
- (k) Where Western Power is required, under this Contract, to return the whole of a security held as a cash deposit then it will, within a reasonable time, return to the Nominated Person the unutilised balance of the cash deposit and interest accrued less any fees, charges and taxes associated with establishing and maintaining the interest bearing account.



(I) Nothing in this Contract is to be taken as imposing any obligation on Western Power to maximise or obtain any return on cash deposit amounts held by Western Power as security.

# 10. Security for Contribution

Without limiting the User's security obligations related to clause 26, where Western Power has determined in accordance with the Contributions Policy that the User is required to provide an irrevocable and unconditional bank guarantee (or equivalent financial instrument) in terms acceptable to Western Power (acting as a Reasonable and Prudent Person), guaranteeing the present value of any amount of any Contribution to be made by the User that remains unpaid or unprovided as calculated by Western Power under the Contributions Policy, the Nominated Person must provide to Western Power the requested bank guarantee issued by a financial institution acceptable to Western Power (or equivalent financial instrument).

# **Technical Compliance Provisions**

# 11. Good Electricity Industry Practice

# 11.1 Western Power must comply with Good Electricity Industry Practice

Western Power must comply with Good Electricity Industry Practice when providing Services and performing its obligations under this Contract.

# 11.2 User must comply with Good Electricity Industry Practice

The User must comply with Good Electricity Industry Practice in using the Services and performing its obligations under this Contract.

# 12. Technical Rules and Registered Generator Performance Standards

### **12.1** Western Power and the User must comply

- (a) Western Power and the User must each comply with the Technical Rules.
- (b) The User must ensure each Generating Plant of the User complies with the Registered Generator Performance Standards for that Generating Plant.
- (c) The User must comply with the Generator Monitoring Plan for each Generating Plant of the User.

#### 12.2 User to bear costs

- (a) The User must bear its own costs in relation to compliance with the Technical Rules, the Registered Generator Performance Standards for the User's Generating Plant and each Generator Monitoring Plan for the User's Generating Plant.
- (b) Western Power must bear its own costs in relation to compliance with the Technical Rules.
- (c) Notwithstanding clause 12.2(b), where an act or omission of the User in breach of this Contract causes Western Power to incur extra costs in order to ensure Western Power complies with the Technical Rules, the User shall bear Western Power's reasonable extra costs so incurred to the extent that such costs are not



- already recovered from the User or any other person under any other arrangement, including the Contributions Policy.
- (d) Without limiting clause 12.2(c), where a User's equipment increases the fault levels in the Network, the User must bear Western Power's reasonable costs of any upgrades to the Network required under the Technical Rules to the extent that such costs are not already payable by the User under the Contributions Policy.
- (e) For the avoidance of doubt, the User is not liable for any costs incurred by another user of the Network arising from compliance by the other user with the Technical Rules.
- (f) If Western Power recovers costs referred to in clause 12.2(c) from another party in circumstances where the User has already paid them to Western Power, Western Power must refund those costs without interest to the User.

### 12.3 Actions of third parties

Subject to clause 6.2(f), if the actions of a third party cause a Party to breach the Technical Rules, then the Party is not in breach of the obligation in clause 12.1 to comply with the Technical Rules unless the Party has:

- (a) been negligent; or
- (b) has not acted as a Reasonable and Prudent Person.
- (c) Nothing in this clause 12.3 limits the operation of clauses 19.2 or 22 in respect of either Party.

# 13. Technical characteristics of Facilities and Equipment

- (a) The Parties must record:
  - (i) in Part 2 of Schedule 3 any technical information that the User was required to provide to Western Power under the Applications and Queuing Policy;
  - (ii) in Part 3 of Schedule 3 any exemptions to the Technical Rules given to the User under Chapter 1 of the Technical Rules; and
  - (iii) in Schedule 9 any Registered Generator Performance Standards for the User's Generating Plant that are Negotiated Performance Standards.
- (b) Each Party must record any other information required to be recorded in this Contract by the Technical Rules in Part 4 of Schedule 3 , or otherwise within a database maintained by that Party, and provide the other Parties with reasonable access to the information upon request by that Party.
- (c) The User must not materially modify any Generating Plant connected at a Connection Point unless:
  - (i) where such modification requires an Application under the Applications and Queuing Policy:
    - (A) the User makes such an Application; and
    - (B) the Application is processed by Western Power under the Applications and Queuing Policy, resulting in an Access Offer for the change, which the User accepted;



- (ii) where such modification does not require an Application under the Applications and Queuing Policy and relates to a Generating Plant owned by a person other than a Small Customer:
  - (A) the User notifies Western Power of the modifications to the Generating Plant in writing at least 45 days prior to the modifications being made; and
  - (B) the modified Generating Plant does not adversely impact the safety or security of the Network.
- (d) For the purposes of clause 13(c)(ii) a modification is material only if:
  - (i) it involves expenditure of more than \$100,000; or
  - (ii) the modification is one which, consistently with Good Electricity Industry Practice, requires review by a duly qualified engineer before being made.
- (e) Notwithstanding clause 13(d), the replacement of like for like parts within a Generating Plant or the replacement of parts in the ordinary course of maintenance and repair is not a material modification for the purposes of clause 13(c)(ii).
- (f) If Western Power does not notify the User within 45 days of receipt of notice under clause 13(c)(ii) that the modification may adversely impact the safety or security of the Network the User may proceed to make the modification. However nothing in this clause derogates from the User's responsibility to ensure the Generating Plant complies with the requirements of this Contract including the obligations to comply with the Technical Rules.

# 14. Cooperation

### 14.1 General Obligation to Co-operate

The User and Western Power (each acting as a Reasonable and Prudent Person) must cooperate and coordinate with each other where reasonably necessary in relation to:

- (a) the planning, development, inspection, testing and commissioning of Facilities and Equipment for a Connection Point and Network Assets for the Network; and
- (b) the development and implementation of Maintenance schedules for Facilities and Equipment for a Connection Point and Network Assets for the Network.

# 14.2 System Operator Directions

Without limiting the generality of clause 14.1, Western Power and the User must each comply with any directions given by the System Operator.

# 15. Access to premises

### 15.1 Parties must allow reasonable rights of entry

Each Party ("Host Party") must allow, or use its reasonable endeavours to procure for, the other Party ("Guest Party") all reasonable rights of entry to the Host Party's premises:

(a) for the purposes of constructing, installing, operating, maintaining and verifying the accuracy of any Metering Equipment or other equipment or thing; and



- (b) to inspect for safety or other reasons the construction, installation, operation, maintenance and repair of any Metering Equipment or other equipment or thing; and
- (c) for any other reasonable purpose connected with or arising out of this Contract.

### 15.2 Entry made at risk of Guest Party

Any entry under clause 15.1 is made in all respects at the expense and risk of the Guest Party, who must, subject to clauses 19.3 and 19.5, make good any damage occasioned by or resulting from the entry, other than to the extent the damage is caused by:

- (a) fair wear and tear; or
- (b) the negligence or Default of the Host Party or any of its Workers or Visitors; or
- (c) a Force Majeure Event.

# 15.3 Guest Party obligations

A Guest Party must:

- (a) before exercising a right of entry under clause 15.1, give reasonable notice to the Host Party specifying the purpose, proposed time and estimated duration of entry, except where it is not practicable to do so due to any Emergency; and
- (b) while exercising a right of entry under clause 15.1:
  - (i) act as a Reasonable and Prudent Person; and
  - (ii) without limiting clause 15.3(b)(i), take steps that are reasonable in the circumstances to ensure that during the entry its Workers and Visitors cause as little inconvenience to the Host Party as possible, except to the extent that it is not practicable to do so due to any Emergency, and at all times comply with:
    - (A) all reasonable health and safety standards, induction and supervision requirements and other requirements of the Host Party; and
    - (B) all reasonable and lawful directions by or on behalf of the Host Party.

### 15.4 Third person's premises

To the extent that any equipment or thing relevant to the obligations or rights of a Party under this Contract is located on the premises of a third person, the Parties must use their reasonable endeavours to secure for either or both of the Parties a reasonable right of entry to the third person's premises.

### **16.** Network Constraints

# **16.1** Determining Impact of Constraints

- (a) Western Power may, from time to time, give such advice and information to AEMO as Western Power considers, acting in good faith, is required to assist AEMO act and give directions to preserve Power System Reliability and address Constraints.
- (b) Western Power will, to the extent provided for in the WEM Rules and having regard to AEMO's responsibilities under the WEM Rules, determine or assist



AEMO to determine from time to time which Generators (and other operators of Facilities and Equipment which can transfer electricity into the Network) will have their ability to transfer electricity into the Network curtailed or interrupted from time to time given the nature of the Constraints affecting the Network and the actions required to preserve Power System Reliability in accordance with the WEM Rules.

#### 16.2 AEMO Directions

- (a) The User must reduce or cease its transfer of electricity into the Network at a Connection Point in accordance with any direction issued to the User by AEMO from time to time.
- (b) Without limiting clause 25 Western Power may, in accordance with Good Electricity Industry Practice, take such action as it considers is required to give effect to any direction issued by AEMO relating to a reduction or cessation in the transfer of electricity into the Network at a Connection Point (whether that direction is given by AEMO to the User or to Western Power).

#### 16.3 Western Power Directions

Irrespective of whether AEMO has issued a direction referred to in clause 16.2 Western Power may Curtail the provision of Services to the User at one or more Connection Points where Western Power, in accordance with Good Electricity Industry Practice, considers that because of Constraints such Curtailment is necessary to preserve Power System Reliability and the supply of electricity to Customers.

#### 16.4 Liability

- (a) Except to the extent it has not acted in good faith, Western Power has no liability (whether in contract, tort (including negligence), for breach of statutory duty or on any other basis whatsoever) to the User for any Curtailment by Western Power under clause 16.3 or for any directions issued by AEMO (as contemplated by clause 16.2) which are made on the advice of, or using information provided by, Western Power.
- (b) Except to the extent it has engaged in a Wilful Default, Western Power has no liability to the User for any determinations, assessments, analysis or other work of any nature which Western Power undertakes in connection with determining the Capacity Credits or other entitlements under the WEM Rules to be allocated to the User (including without limitation for the impact any such acts or omissions of Western Power have on the User's entitlement to the provision of Services or entitlement to revenue from the Western Australian electricity market or otherwise) and the User agrees that Western Power has no duty of care to the User in contract or tort in respect of any action taken by Western Power in connection with the determination of Capacity Credits and other entitlements under the WEM Rules.
- (c) If a failure by the User to comply with this clause 16 causes Western Power to incur any liability to a third party then the User is liable to Western Power for and must indemnify Western Power against any liability Western Power incurs to that third party and any costs Western Power incurs in defending any Claim by such third party. The exclusion of Indirect Damage in clause 19.3 does not apply to the indemnity in this clause 16.4(c).



### 16.5 Intermediary

If a person is registered under the WEM Rules as the User's Intermediary in respect of a Connection Point then the User is responsible for ensuring that person complies with all obligations in the WEM Rules compliance with which is required to ensure the User complies with this clause 16 and is liable to Western Power for all acts or omissions of such person relating to any directions given by AEMO or Western Power as contemplated by this clause 16.

# 17. Removal of equipment

On the permanent Disconnection of Facilities and Equipment at any Connection Point:

- (a) Western Power may dismantle, decommission and remove Western Power's Works and any Metering Equipment installed on the User's Premises; and
- (b) under Western Power's reasonable instructions, the User must dismantle and decommission or remove any of the User's Works at or connected to the Connection Point.

# **Common Provisions**

# 18. Representations and warranties

# 18.1 The User's representations and warranties

- (a) The User represents and warrants to Western Power that:
  - (i) the User has complied with the Applications and Queuing Policy in the Access Arrangement and the requirements in the Code in respect of its Application under the Access Arrangement provided that the User will not be taken to be in breach of this warranty because of a failure by the User to comply with the Applications and Queuing Policy or the Code which is the direct result of a breach by Western Power of the Applications and Queuing Policy or the Code; and
  - (ii) the User's obligations under this Contract are valid and binding and are enforceable against the User under their terms; and
  - (iii) this Contract and any other transaction under it does not contravene the User's constituent documents or any Law or any of the User's obligations or undertakings by which the User or any of the User's assets are bound or cause to be exceeded any limitation on the User's or the User's directors' powers; and
  - (iv) neither the User nor any of its Related Bodies Corporate have immunity from the jurisdiction of a court or from legal process (whether through service of notice, attachment prior to judgment, attachment in aid of execution, execution or otherwise).
- (b) The representations and warranties in clause 18.1(a) are to be taken to be made on each day on which:
  - (i) this Contract is in effect; or
  - (ii) any amount payable by the User to Western Power under this Contract is or may be outstanding.



- (c) To the maximum extent permitted by Law, the only warranties given by and terms which apply to the User under this Contract are those expressly contained in this Contract, and all warranties and terms implied by Law, including those on the part of the User implied by the <u>Competition and Consumer Act 2010</u> of the Commonwealth or the <u>Fair Trading Act 2010 (WA)</u> or any other Law to similar effect do not apply to this Contract.
- (d) If at Law the exclusion of any warranty or term is prohibited, then the User's liability in respect of a breach of such warranty or term is limited to the maximum extent permitted by Law. For example, where any Law permits the User to limit its liability in respect of a breach of an implied warranty or condition to the replacement or resupply of equivalent goods and services, then the User's liability will be so limited.

# 18.2 Western Power's representations and warranties

- (a) Western Power represents and warrants to the User that:
  - (i) Western Power has complied with the Applications and Queuing Policy in the Access Arrangement and the requirements in the Code in respect of the User's Application under the Access Arrangement provided that Western Power will not be taken to be in breach of this warranty because of a failure by Western Power to comply with the Applications and Queuing Policy or the Code which is the direct result of a breach by the User of the Applications and Queuing Policy or the Code; and
  - (ii) Western Power's obligations under this Contract are valid and binding and are enforceable against Western Power under their terms; and
  - (iii) this Contract and any other transaction under it does not contravene Western Power's constituent documents or any Law or any of Western Power's obligations or undertakings by which Western Power or any of Western Power's assets are bound or cause to be exceeded any limitation on Western Power's or Western Power's directors' powers; and
  - (iv) neither Western Power nor any of its related bodies corporate have immunity from the jurisdiction of a court or from legal process (whether through service of notice, attachment prior to judgment, attachment in aid of execution, execution or otherwise).
- (b) The representations and warranties in clause 18.2(a) are to be taken to be made on each day on which:
  - (i) this Contract is in effect; or
  - (ii) any amount payable by Western Power to the User under this Contract is or may be outstanding.
- (c) To the maximum extent permitted by Law, the only warranties given by and terms which apply to Western Power under this Contract are those expressly contained in this Contract, and all warranties and terms implied by Law, including those on the part of Western Power implied by the <u>Competition and Consumer Act 2010</u> (<u>Cth)</u> of the Commonwealth or the <u>Fair Trading Act 2010 (WA)</u> or any other Law to similar effect do not apply to this Contract.
- (d) If at Law the exclusion of any warranty or term is prohibited, then Western Power's liability in respect of a breach of such warranty or term is limited to the



maximum extent permitted by Law. For example, where any Law permits Western Power to limit its liability in respect of a breach of an implied warranty or condition to the replacement or resupply of equivalent goods and services, then Western Power's liability will be so limited.

# 18.3 Indemnifier's representations and warranties

The Indemnifier represents and warrants to Western Power that, as at the Commencement Date, there has been no material change in the Indemnifier's financial position since the date Western Power received information from the Indemnifier stating that position.

# 19. Liability and indemnity

### 19.1 No several liability

All parties constituting the User shall be liable under this Contract jointly, or jointly and severally, but not severally.

# 19.2 Liability for Direct Damage

Subject to the terms of this Contract:

- (a) a Party who:
  - (i) is negligent; or
  - (ii) commits a Default under this Contract,

is liable to the other Party for, and must indemnify the other Party against, any Direct Damage caused by, consequent upon or arising out of the negligence or Default; and

(b) the Indemnifier must indemnify Western Power in respect of the liabilities of the User under this Contract.

### 19.3 Exclusion of Indirect Damage

- (a) Subject to clause 19.3(b):
  - (i) either or both of the User or the Indemnifier is not in any circumstances liable to Western Power for any Indirect Damage suffered by Western Power, however arising; and
  - (ii) Western Power is not in any circumstances liable to either or both of the User or the Indemnifier for any Indirect Damage suffered by the User, however arising.
- (b) Where this Contract states that "the exclusion of Indirect Damage in clause 19.3 does not apply", or words to a similar effect, in relation to a matter, then:
  - (i) the exclusion of Indirect Damage in clause 19.3 does not apply in relation to that matter; and
  - (ii) the Parties' liability in relation to the matter is to be determined by Law, and to avoid doubt the definition of Indirect Damage in this Contract is to be disregarded for the purposes of that determination.

### **19.4** Fraud

(a) If Western Power is fraudulent in respect of its obligations to the User under this Contract, then Western Power is liable to either the User or the Indemnifier for, and is to indemnify both the User and the Indemnifier against, any damage caused



- by, consequent upon or arising out of the fraud. In this case, the exclusion of Indirect Damage in clause 19.3 does not apply.
- (b) If the User or the Indemnifier is fraudulent in respect of its obligations to Western Power under this Contract, then the User or the Indemnifier is liable to Western Power for, and is to indemnify Western Power against, any damage caused by, consequent upon or arising out of the fraud. In this case, the exclusion of Indirect Damage in clause 19.3 does not apply.

# 19.5 Limitation of liability

- (a) Subject to clause 19.5(c), the maximum liability of Western Power to the User and the Indemnifier collectively under and in connection with this Contract is limited to an amount of \$5 million in the aggregate and refreshed annually each 1 July, except that the liability described in clauses 7, 8 and 20 are not counted for the purposes of Western Power's maximum liability under this Contract.
- (b) Subject to clause 19.5(c), the maximum liability of both the User and the Indemnifier collectively to Western Power under and in connection with this Contract is limited to the lesser of:
  - (i) an amount of \$80 million in the aggregate, refreshed annually each 1 July; and
  - (ii) the sum of:
    - (A) for each Connection Point at which Generation Plant (other than wind or solar powered generation) is connected at a voltage of 66 kV and above - \$22 million in the aggregate, refreshed annually each 1 July; and
    - (B) for each Connection Point at which wind or solar powered Generation Plant is connected at a voltage of 66 kV or above \$11 million in the aggregate, refreshed annually each 1 July; and
    - (C) for each Connection Point at which Generation Plant is connected at a voltage below 66 kV \$1.2 million in the aggregate, refreshed annually each 1 July; and
    - (D) for each Connection Point at which Consuming plant is connected at a voltage of 66 kV and above \$6 million in the aggregate, refreshed annually each 1 July; and
    - (E) for every 100 Connection Points at which Consuming plant is connected at a voltage below 66 kV \$1.2 million in the aggregate, refreshed annually each 1 July,

except that the liabilities described in clauses 7, 8 and 20 are not counted for the purposes of both the User's and the Indemnifier's collective maximum liability under this Contract.

(c) The monetary caps on liability in this clause 19.5 will be CPI-Adjusted every three years from the Commencement Date, provided that for the purposes of such CPI adjustment the following formula will be used:

$$N = C \times (1 + \frac{CPI_n - CPI_c}{CPI_c})$$



#### where:

"N" is the new liability cap amount being calculated; and

"C" is the current liability cap amount being adjusted; and

"CPI<sub>n</sub>" is the CPI applicable at the end of the calendar quarter (quarter <sub>n</sub>) most recently ended prior to the adjustment date; and

"CPI<sub>c</sub>" is the value of CPI applicable for the calendar quarter occurring 36 months before the calendar quarter referred to in the definition of CPI<sub>n</sub>.

(d) At the end of each three-year period from the Commencement Date, if there has been a Material Change affecting the liability of a Party under this Contract, then the Parties must negotiate in good faith to reset the monetary caps on liability in this clause. If the Parties are unable to agree on re-setting the monetary caps on liability, the matter shall be determined by an expert nominated by the Parties or, failing agreement, an expert nominated by the Resolution Institute and the determination of the expert shall be final and binding upon the Parties.

# 19.6 Procedure for party seeking to rely on indemnity

If any Claim is made or instituted against:

- (a) either or both of the User or the Indemnifier in respect of which either or both of the User or the Indemnifier ("Indemnified Party") may seek to claim indemnity under this Contract against Western Power ("Indemnifying Party"); or
- (b) Western Power in respect of which Western Power ("Indemnified Party") may seek to claim indemnity under this Contract against either or both of the User or the Indemnifier ("Indemnifying Party"),

the following procedure applies:

- (i) the Indemnified Party must give notice of the Claim to the Indemnifying Party as soon as reasonably practicable; and
- (ii) the Indemnified Party must not admit, compromise, settle or pay any Claim or take any other steps which may in any way prejudice the defence or challenge of the Claim without the prior written consent of the Indemnifying Party (which must not be unreasonably withheld) except as may be reasonably required in order to defend any judgment against the Indemnified Party (to avoid doubt, Part 1E of the <u>Civil Liability Act 2002 (WA)</u> applies in respect of any 'apology' (as defined in Section 5AF of that Act) given by the Indemnified Party); and
- (iii) the Indemnified Party must permit the Indemnifying Party to take, at the Indemnifying Party's expense, any reasonable action in the name of the Indemnified Party to defend or otherwise settle the claim as the Indemnifying Party may reasonably require; and
- the Indemnified Party must ensure that the Indemnifying Party and its representatives are given reasonable access to any of the documents, records, staff, premises and advisers of the Indemnified Party as may be reasonably required by the Indemnifying Party in relation to any action taken or proposed to be taken by the Indemnifying Party under clause 19.6(b)(iii).



# 19.7 Obligation to pay and right to indemnities survives termination

- (a) A Party's and the Indemnifier's obligation to pay an amount to another Party under this Contract is a continuing obligation, separate and independent from the other obligations of either or both of the Party and the Indemnifier and survives termination (for any reason) of this Contract.
- (b) Each indemnity in this Contract is a continuing obligation, separate and independent from the other obligations of both the Parties and the Indemnifier and survives termination (for any reason) of this Contract. It is not necessary for either or both of a Party or an Indemnifier to incur expense or make payment before enforcing a right of indemnity conferred by this Contract.

# 19.8 Apportionment of liability

- (a) For the avoidance of doubt, where either or both of the User or the Indemnifier is liable to, or is to indemnify, the other Party under this Contract, the liability or indemnity owed by either or both of the User or the Indemnifier is limited to the proportion of the damage suffered by Western Power as a consequence of the Default, negligence or fraud of either or both of the User or the Indemnifier giving rise to the liability or indemnity.
- (b) For the avoidance of doubt, where Western Power is liable to, or is to indemnify, either or both of the User or the Indemnifier under this Contract, the liability or indemnity owed by Western Power is limited to the proportion of the damage suffered by either or both of the User or the Indemnifier as a consequence of the Default, negligence or fraud of Western Power giving rise to the liability or indemnity.
- (c) For the purposes of the application of the indemnity given by the Indemnifier under clause 19.2(b):
  - (i) clause 19.8(a) may apply to reduce the User's liability to Western Power and, consequently, the amount of liability for which the Indemnifier must indemnify Western Power;
  - (ii) except as provided in clause 19.8(c)(i), clause 19.8(a) does not apply to reduce the Indemnifier's indemnification obligation.

### 19.9 Mitigation of losses

A Party and the Indemnifier must take such action as is reasonably required to mitigate any loss or damage to it for which indemnity may be claimed under this Contract or otherwise.

### 19.10 Recoveries under insurance

- (a) To the extent that Western Power recovers against any insurer under an insurance policy effected by either Party or the Indemnifier for a Claim in connection with this Contract in respect of which either or both of the User or the Indemnifier is liable, for any reason (including negligence), the amount as recovered shall, for the purposes of clause 19.5, be deemed to have been paid.
- (b) To the extent that the User recovers against any insurer under an insurance policy effected by either Party or the Indemnifier for a Claim in connection with this Contract in respect of which Western Power is liable, for any reason (including negligence), the amount as recovered shall, for the purposes of clause 19.5, be deemed to have been paid.



### 19.11 Intermediary Indemnity [Note: Optional Clause]

Where:

- (a) the User is the Intermediary (as defined in the WEM Rules) of a person and in so far as they are registered as a Rule Participant (as defined in the WEM Rules) and to the extent they perform the functions of an Intermediary; and
- (b) that person is not party to this Contract, then the User must indemnify and keep indemnified Western Power against any costs, expenses, losses or damages suffered or incurred by Western Power due to Claims made by that person against Western Power:
  - (i) which Claims are in connection with the provision of the Services (including any failure of, or defect in provision of, the Services); or
  - (ii) which Claims relate to a matter for which Western Power's liability to that person would have been limited or excluded had that person been party to this Contract (jointly with the User).

# 20. Personal injury

The liability for any personal injury Claim will be determined under Law.

### 21. Insurances

#### 21.1 The User's insurances

- (a) Subject to clause 21.1(b), the User must obtain and maintain insurance, commencing from the Commencement Date, covering those matters, on the terms and basis, and for the amounts, referred to in Part 1 of Schedule 5.
- (b) To the extent that Western Power consents (such consent not to be unreasonably withheld), the User may self-insure for some or all of the matters and amounts referred to in Schedule 5.
- (c) For each Connection Point, prior to the Start Date of a Service at the Connection Point, and at such other times as Western Power shall reasonably request in writing (such request not to be made more than once in respect of a 12 month period unless extraordinary circumstances apply), the User must provide Western Power with certificates of currency for the insurances required under clause 21.1(a).

### **21.2** Western Power's insurances

- (a) Subject to clause 21.2(b), Western Power must obtain and maintain insurance, commencing from the Commencement Date, covering those matters, on the terms and basis, and for the amounts referred to in Part 2 of Schedule 5.
- (b) To the extent that the User consents (such consent not to be unreasonably withheld), Western Power may self-insure for some or all of the matters and amounts referred to in Part 2 of Schedule 5.
- (c) Western Power must, before the Commencement Date and at such other times as the User reasonably requests in writing (such request not to be made more than once in respect of a 12 month period unless extraordinary circumstances apply), provide the User with certificates of currency for the insurances required under clause 21.2(a).



#### 21.3 Names of insured

In respect of the insurances referred to in Schedule 5 Part 1 (a)(i) (public and products liability insurance) and Schedule 5 Part 1 (a)(iv) (contractors' plant and equipment insurance) the insurance must list Western Power as an additional insured.

### 21.4 Cross liability

Every policy of public and products liability insurance must include a cross liability clause in which the insurer expressly accepts that the term insured applies to every person who is named in the policy as if there was a separate policy of insurance for each of them but not so as to increase the limit of liability.

#### 21.5 Notice of cancellation

A Party must notify the other Party immediately on being advised by its insurer of cancellation or non-renewal of any of the insurance policies in Schedule 5, and immediately use all reasonable endeavours to reobtain the insurance policies in Schedule 5.

# 21.6 Further obligation

Both Parties and the Indemnifier must not do any act or make any omission that would be grounds for an insurer to refuse to pay a claim under any of the policies of insurance.

# 22. Force Majeure

# 22.1 Affected Person's obligations are suspended

If a Party ("Affected Person") is unable wholly or in part to perform any obligation ("Affected Obligation") under this Contract (other than an obligation to pay money) because of the occurrence of a Force Majeure Event, then, subject to this clause 22, the Affected Person's obligation to perform the Affected Obligation is suspended to the extent that, and for so long as, the Affected Person's ability to perform the Affected Obligation is affected by the Force Majeure Event (such period being the "FM Period").

# 22.2 When Services are Curtailed

Without limiting clause 22.1, Western Power's obligation in respect of a Connection Point to provide the Services is suspended during any period that the provision of the Services in respect of that Connection Point is Curtailed under clause 25.1, to the extent of the Curtailment.

### 22.3 Affected Person's obligations

Subject to clauses 22.4 and 22.6, if a Force Majeure Event occurs and the Affected Person is unable wholly or in part to perform any obligation under this Contract, then the Affected Person must:

- (a) notify the other Party if the FM Period continues for a period of two days or longer; and
- (b) use reasonable endeavours (including incurring any reasonable expenditure of funds and rescheduling personnel and resources) to:
  - (i) mitigate the consequences of the Force Majeure Event; and
  - (ii) minimise any resulting delay in the performance of the Affected Obligation.



(c) A notice under clause 22.3(a) must be given as soon as reasonably practicable and in any event within 5 Business Days of a Party becoming aware an event is or is likely to be a Force Majeure Event.

### 22.4 In case of breach

An Affected Person is not obliged to incur any expenditure in complying with clause 22.3(b) if the Force Majeure Event is constituted by a breach of, or failure to comply with, this Contract by the other Party.

### 22.5 Failure to minimise delays

If an Affected Person fails to comply with clause 22.3(b)(ii), then the only consequence of that failure is that the FM Period is reduced by the period of any delay in the performance of the Affected Obligation attributable to that failure.

# 22.6 Settlement of a labour dispute

The settlement of a labour dispute which constitutes a Force Majeure Event is a matter which is within the absolute discretion of the Affected Person.

# 23. Provisions of Access Arrangement on Supplementary Matters apply

The provisions of the Access Arrangement in respect of Supplementary Matters apply also as terms of this Contract, to the extent they are relevant.

# 24. User does not acquire interest in Network

To avoid doubt, nothing in, and nothing done under or in connection with, this Contract causes the User to acquire any right, title or interest in or to the Network or any part of it.

# 25. Curtailment

# **25.1** Western Power may Curtail Services

Western Power may, in accordance with Good Electricity Industry Practice, Curtail the provision of Services in respect of a Connection Point:

- (a) to carry out planned Augmentation or Maintenance to the Network; or
- (b) to carry out unplanned Maintenance to the Network where Western Power considers it necessary to do so to avoid injury to any person or material damage to any property or the environment; or
- (c) if there is any breakdown of or damage to the Network that affects Western Power's ability to provide Services at that Connection Point; or
- (d) if a Force Majeure Event occurs affecting Western Power's ability to provide Services at the Connection Point, for so long as Western Power's ability to provide Services is affected by the Force Majeure Event; or
- (e) if Western Power considers it necessary to do so to preserve Power System Reliability; or
- (f) to the extent necessary for Western Power to comply with a Law.



#### 25.2 Extent of Curtailment

Western Power must keep the extent and duration of any Curtailment under clause 25.1 or clause 16.3 to the minimum reasonably required in accordance with Good Electricity Industry Practice.

#### 25.3 Notification of Curtailment

Western Power must use reasonable endeavours to notify the User of any Curtailment under clause 25.1 or clause 16.3 as soon as practicable.

### 25.4 User must comply with Curtailment

If Western Power notifies the User of a Curtailment of Services under clause 25.3 or clause 16.3 in respect of a Connection Point, the User (acting as a Reasonable and Prudent Person) must comply, or procure compliance, with any reasonable requirements set out in the notice concerning the Curtailment.

# 25.5 Contract does not limit other powers and rights

This Contract does not limit any power or right conferred on Western Power by any other agreement between the Parties or any Law, including Section 57 of the <u>Energy Operators</u> (<u>Powers</u>) Act 1979 (WA).

# 26. Payments and recoveries under the Contributions Policy

The Parties must comply with the provisions set out in Schedule 4 regarding any Contributions.

### 27. Default

# 27.1 Default

A Party is in "Default" if:

- (a) that Party defaults in the due and punctual payment, at the time and in the manner required for payment by this Contract, of any amount payable under this Contract; or
- (b) that Party defaults in the due and punctual performance or observance of any of its obligations contained or implied by operation of Law in this Contract; or
- (c) an Insolvency Event occurs in respect of that Party; or
- (d) that Party materially breaches any representation or warranty given to the other Party under this Contract.

# 27.2 Default by the User

In the event of the User's Default, then Western Power may:

- (a) notify the User of the User's Default and require the User to remedy the User's Default; or
- (b) if the User's Default is a Default in the payment of any amount and has not been remedied by the end of the third Business Day after the notice was given, Deenergise, or Curtail the provision of Services in respect of, all or any of the User's Connection Points from the Network whilst the User's Default is continuing; or
- (c) if the User's Default is any other type of Default and at the end of the fifth Business Day after the notice was given:



- (i) the User's Default has not been remedied; or
- (ii) the User has not to the reasonable satisfaction of Western Power begun remedying the User's Default or has begun remedying but is not, in the reasonable opinion of Western Power, diligently proceeding to remedy the User's Default,

De-energise, or Curtail the provision of Services in respect of, all or any of the User's Connection Points from the Network whilst the User's Default is continuing; and

(d) if the User's Default has not been remedied at the end of the 20th Business Day after the notice was given, terminate this Contract.

# 27.3 Immediate Suspension

- (a) If the User breaches a Registered Generator Performance Standard for a Generating Plant of the User, or otherwise commits a breach of this Contract, which breach threatens Power System Reliability, Western Power's ability to deliver electricity to Customers or Western Power's ability to discharge its contractual obligations to other persons relating to the Network then Western Power may suspend the provision of Services to the User for the period Western Power considers, in good faith, is required to ensure there is no adverse impact upon Power System Reliability, Customers or Western Power's remaining contractual counterparties.
- (b) If Western Power, in good faith, considers it can allow the User an opportunity to cure a breach referred to in clause 27.3(a) without adversely affecting Power System Reliability, Customers or Western Power's remaining contractual counterparties it will do so (and will allow such period for remedy of the breach as Western Power in good faith considers it can so allow). However Western Power may implement an immediate suspension (and without prior notice) if it considers this necessary to ensure there is no adverse impact upon Power System Reliability, Customers or Western Power's remaining contractual counterparties.
- (c) Western Power will lift a suspension under this clause 27.3 if satisfied, acting in good faith, that the User is able to, and will, comply with this Contract or if Western Power, in good faith, considers the suspension is no longer required to ensure there is no adverse impact upon Power System Reliability, Customers or Western Power's remaining contractual counterparties.
- (d) Western Power's rights under this clause 27.3 are in addition to its right under clause 27.2.

# 27.4 Western Power's rights not affected

The User's Default under clause 27.2 does not prejudice the rights or remedies accrued to Western Power at the date of the User's Default.

### 27.5 Default by Western Power

If Western Power is in Default, the User may:

- (a) notify Western Power of Western Power's Default and require Western Power to remedy the Default; and
- (b) if Western Power's Default has not been remedied at the end of the 20<sup>th</sup> Business Day after the notice was given:



- (i) terminate this Contract; or
- (ii) withhold payment of any charges payable by the User from the date of Default under this Contract for so long as the Default continues unremedied (and no interest is payable by the User on any amounts so withheld provided they are paid within 10 Business Days after the Default is remedied).

# 27.6 User's rights not affected

Western Power's Default under clause 27.5 does not prejudice the rights or remedies accrued to the User at the date of Western Power's Default.

### 28. Termination

#### 28.1 Termination

- (a) Subject to clause 28.1(b), this Contract terminates on the Termination Date.
- (b) This Contract may be terminated before the Termination Date by:
  - (i) written agreement between Western Power and the User; or
  - (ii) notice by either Party at any time at which this Contract does not include at least one Connection Point; or
  - (iii) notice by either Party where there is a Default by the other Party under this Contract, subject to clauses 27.2 or 27.5, as the case may be; or
  - (iv) notice by either Party to an Affected Person if a Force Majeure Event occurs and then:
    - (A) the Affected Person is unable wholly or in part to perform any obligation under this Contract; and
    - (B) the FM Period continues for a period of greater than 180 days in aggregate in any 12-month period.
- (c) On termination of this Contract Western Power may Disconnect any one or more of the User's Connection Points, permanently (under clause 17) or otherwise.
- (d) On termination of this Contract, unless otherwise agreed by the Parties:
  - (i) the User must pay any unpaid amount owed to Western Power pursuant to this Contract; and
  - (ii) Western Power must pay any unpaid amount owed to the User pursuant to this Contract.

# 28.2 Rights of Parties not affected

Termination of this Contract under clause 28.1(b) does not prejudice the rights or remedies accrued to either Party at the date of termination.

# 29. Disputes

# 29.1 Party may give notice of Dispute and require Representatives' Meeting

If a Dispute arises between the Parties, either Party may give to the other Party written notice setting out the material particulars of the Dispute and requiring duly authorised representatives of each Party to meet at a place, agreed between the Parties, within 10 Business Days of the date of receipt of such notice by the relevant Party ("Receipt Date"),



to attempt in good faith by way of discussions and using their best endeavours to resolve the Dispute ("Representatives' Meeting") and the Parties must do so.

# 29.2 Party may require CEO Meeting

If the Dispute is not resolved (as evidenced by the terms of a written settlement signed by each Party's duly authorised representative) within 20 Business Days after the Receipt Date then either Party may, by written notice, require that the senior executive officer of each Party meet at a place agreed between the Parties within 30 Business Days after the Receipt Date and must attempt in good faith by way of discussions and using their best endeavours to resolve the Dispute within 35 Business Days after the Receipt Date ("CEO Meeting").

# 29.3 Method of Meetings

- (a) A Representatives' Meeting or CEO Meeting may be conducted in person, by telephone, video conference or similar method of real time communication.
- (b) If the Parties are unable to agree on a meeting place under clause 29.1 or 29.2 in the allocated time frame, the meeting will take place at a place determined by Western Power (acting as a Reasonable and Prudent Person).

# 29.4 Party may commence court proceedings

If, after complying with the process set out in clauses 29.1 and 29.2 a Dispute is not resolved, then either Party may commence an action to resolve the Dispute through litigation and other court processes.

# 29.5 Obligations must be performed

A Party must continue to perform its obligations under this Contract despite the existence of a Dispute, unless otherwise agreed.

#### 30. Set off

# 30.1 Party may set off payment

A Party ("First Party") may set off any amount due for payment by it to the other Party under this Contract against any amount which is due for payment by the other Party to the First Party under this Contract.

# 30.2 No other set off permitted

Except as permitted in clause 30.1, no set off is permitted by either Party in connection with this Contract, whether under this Contract or otherwise.

# 31. Assignment

# **31.1** Transfer of rights and obligations

- (a) The User may, in accordance with the Transfer and Relocation Policy, request Western Power's consent to the User transferring or Assigning its rights or obligations under this Contract.
- (b) Without limiting clause 32, Western Power may transfer or Assign its rights or obligations under this Contract only if it has the consent of the User, which consent is not to be unreasonably delayed or withheld.
- (c) Without limiting the considerations the User may have regard to in determining whether to give consent such considerations include the financial and technical



capacity of any person who is proposed to assume Western Power's obligations under this Contract.

#### **31.2** Costs

A Party seeking consent under clause 31.1 must pay:

- (a) the other Party's costs of determining whether to give such consent and of drafting and negotiating any documentation required to effect the transfer or Assignment; and
- (b) any taxes and imposts levied on any such transfer or Assignment or documentation.

# **32.** Corporate restructuring of Western Power

#### 32.1 If Western Power is restructured

If Western Power is restructured under government policy:

- (a) by Law; or
- (b) through other means, including the:
  - (i) use of subsidiary or associated companies; or
  - (ii) transfer of assets, rights and liabilities,

then the rights and obligations of Western Power under this Contract are assigned to and assumed by the appropriate legal entity pursuant to the restructure.

# 32.2 User's consent not required

A restructure, transfer or Assignment under clause 32.1 does not require the User's approval or consent.

# 33. Confidentiality

### 33.1 Confidential information

This Contract and information exchanged between the Parties under this Contract or during the negotiations preceding this Contract is confidential to them if:

- (a) the information disclosed contains a notification by the disclosing Party that the information is confidential; or
- (b) the circumstances in which the information was disclosed or the nature of the information disclosed may reasonably be considered as being confidential; or
- (c) the information constitutes trade secrets; or
- (d) the information has a commercial value to a Party which would be destroyed or diminished by the publication of the information; or
- (e) the information relates to the business, professional, commercial or financial affairs of a Party and the value to the Party would be destroyed or diminished by the publication of the information; or
- (f) the information is about or relating to a Controller or a person who is proposed to be a Controller.



#### 33.2 When information is not confidential

Clause 33.1 does not apply to information which, without breach of this Contract or other breach of confidence:

- (a) is or becomes generally and publicly available; or
- (b) is lawfully obtained by a Party from a person other than a Party or a Related Body Corporate of a Party where such person is entitled to disclose the Confidential Information; or
- (c) is, at the date of this Contract, lawfully in the Possession of the recipient of the Confidential Information through sources other than the Party which supplied the information.

#### 33.3 Prohibited disclosure

Subject to clause 33.4, an Information Recipient must not disclose or allow to be disclosed any Confidential Information to a Third Party Recipient.

#### 33.4 Permitted disclosure

- (a) An Information Recipient may disclose or allow to be disclosed any Confidential Information to a Third Party Recipient in the following circumstances:
  - (i) with written consent of the Information Provider; or
  - (ii) to employees, a Related Body Corporate or legal advisers, auditors or other consultants of the Party requiring information for the purposes of this Contract or for the purposes of providing professional advice in relation to this Contract; or
  - (iii) to a bona fide proposed assignee of a Party to this Contract or registered shareholder of 20 percent or more of the voting shares in a Party; or
  - (iv) if required by Law or by an authority (including AEMO) which has jurisdiction over a Party or any of its Related Bodies Corporate or by the rules of a stock exchange which has jurisdiction over a Party or any of its Related Bodies Corporate; or
  - if required for the purposes of prosecuting or defending a Dispute or if otherwise required in connection with legal proceedings related to this Contract; or
  - (vi) [to any person nominated as an Intermediary in respect of the User's Facilities and Equipment. As at the date of this Contract, the User's proposed nominated Intermediary is [Insert] [NOTE: Optional clause].
- (b) The User may disclose or allow to be disclosed a copy of this Contract to a Controller with whom the User will enter, or has entered into, a contract as required by clause 6.
- (c) Nothing in clause 33.4 limits Western Power's obligations to comply with Chapter 13 of the Code.

### 33.5 Third party disclosure

An Information Recipient disclosing information under clause 33.4 must:

(a) use all reasonable endeavours to ensure that a Third Party Recipient does not disclose the Confidential Information except in the circumstances permitted by clause 33.4; and



- (b) notify the Third Party Recipient that it has a duty of confidence to the Information Provider in respect of the Confidential Information; and
- (c) except to the extent that the Third Party Recipient is under an existing enforceable legal obligation to maintain the confidence of the Confidential Information as contemplated in clause 33.5(b), procure a written confidentiality undertaking from the Third Party Recipient consistent with clauses 33.1 to 33.10.

# 33.6 No unauthorised copying

Subject to any obligation under any Law to do so, a Party must not copy any document containing the other Party's Confidential Information except as necessary to perform this Contract.

### 33.7 Secure storage

A Party must ensure that proper and secure storage is provided for the Confidential Information while in its Possession, provided that if a Party is a corporation it may retain any such documents or parts of documents that form part of board papers (or other formal approval processes) of such corporation and which are required to be retained by that corporation under usual corporate governance requirements.

# 33.8 Return of materials

Subject to any obligation under any Law relating to records retention and subject to prudent recording – keeping procedures (including, in contemplation of potential legal action), a Party must return all documents containing the other Party's Confidential Information, including all copies, to the other Party on termination of this Contract, or, upon request by the other Party, destroy all such documents.

### 33.9 Remedies

Each Party acknowledges and agrees that any breach or threatened breach of clauses 33.1 to 33.10 may cause a Party immediate and irreparable harm for which damages alone may not be an adequate remedy. Consequently, each Party has the right, in addition to any other remedies available at Law, to seek injunctive relief or compel specific performances of these clauses 33.1 to 33.10 in respect of any such breach or threatened breach.

# 33.10 Survival of obligations

- (a) Clauses 33.1 to 33.10 survive the termination of this Contract and remain enforceable for a period of 7 years from the date of such termination.
- (b) Any person who ceases to be a Party to this Contract continues to be bound by these clauses 33.1 to 33.10.

# 34. Ring Fencing

If Western Power is an Integrated Provider, then a court or tribunal, in considering whether:

- (a) representations made by Workers of the Other Business can or ought be attributed to the Network Business, or vice versa; or
- (b) a notice or other information given to a Worker of the Other Business has been communicated, or should be deemed to have been communicated, to the Network Business, or vice versa; or



(c) a Contract entered into by the Other Business does or ought to express or imply an intention to vary this Contract, or vice versa,

must have fair and reasonable regard to:

- (d) the fact that Western Power comprises a Network Business and an Other Business and the distribution of personnel and responsibilities between those businesses; and
- (e) the intent and purpose of Western Power's obligations under Chapter 13 of the Code and anything done or not done by Western Power in connection with those obligations.

### 35. Notices

# **35.1** Requirements for Communications

Except as provided in clause 35.2, or where given under the electronic communications protocol in Schedule 7, a Communication must be:

- in writing (which includes any Electronic form capable of being reduced to paper writing by being printed); and
- (b) delivered or sent to the address of the addressee as specified in Schedule 6 by one or more of the following means:
  - (i) by hand delivery; or
  - (ii) by priority post (airmail if posted to or from a place outside Australia); or
  - (iii) by way of a courier service for hand delivery; or
  - (iv) Electronically to the email address of the addressee.

### 35.2 Operational and urgent Communication

Where this Contract expressly provides:

- (a) and where the Parties agree in writing, Communications of a day to day operational nature; or
- (b) Communications given in an operational Emergency,

may be given orally and confirmed in writing, under the electronic communications protocol in Schedule 7, within five Business Days.

#### 35.3 Communication takes effect

Subject to clause 35.4, a Communication takes effect from the later of:

- (a) the time it is received; and
- (b) any later time specified in the Communication.

# 35.4 Deemed receipt

For the purposes of this Contract:

- (a) a Communication delivered by hand to the address of a Party (including where a reputable courier service is used for that purpose) is deemed to be received if it is handed (with or without acknowledgment of delivery) to any person at the address who, in the reasonable judgment of the person making the delivery (upon making appropriate enquiries):
  - (i) appears to be; and



- (ii) represents himself or herself as,
- a representative of the Party to whom the Communication is addressed;
- (b) a Communication which is posted is deemed to be received by the Party to whom the Communication is addressed:
  - (i) where the Communication is sent from outside the country of the address to which it is sent 10 Business Days after the day of posting; and
  - (ii) otherwise three Business Days after the day of posting;
- (c) a Communication sent Electronically, other than under the electronic communications protocol in Schedule 7, is deemed to have been received by the Party under the Metering Code; and
- a Communication sent under the electronic communications protocol in Schedule
   7 is deemed to be received by the party as specified in the electronic
   communications protocol in Schedule 7.

# 36. Change of address

A Party may at any time, by notice given to the other Party to this Contract, designate a different email or postal address for the purpose of these clauses 35.1 to 35.4.

### 37. Miscellaneous

# 37.1 Compliance

Each Party to this Contract must comply with all applicable Laws.

# 37.2 Variation

- (a) Subject to clause 37.2(b), a purported agreement between Western Power and the User to revoke, substitute or amend any provision of this Contract has no effect unless it is in writing.
- (b) Clause 37.2 does not prevent the User and Western Power from agreeing by non-written means under clause 35.2 to revoke, substitute or amend any provision of this Contract in an Emergency provided that the non-written revocation, substitution or amendment applies only while the effects of the Emergency subsist.

# 37.3 No third party benefit

This Contract does not confer any right or benefit on a person other than the User and Western Power, despite the person being named or identified, or belonging to a class of persons named or identified, in this Contract.

### 37.4 **Duty**

The User is liable for and must pay any duty that is assessed on this Contract under the <u>Duties Act 2008 (WA)</u>. If it is dutiable, the User must produce this Contract to the Office of State Revenue for assessment.

### **37.5** Costs

Each Party must pay its own costs, charges, expenses, disbursements or fees in relation to:



- (a) the negotiation, preparation, execution, performance, amendment or registration of, or any notice given or made; and
- (b) the performance of any action by that Party in compliance with any liability arising,

under this Contract, or any agreement or document executed or effected under this Contract, unless this Contract provides otherwise.

#### 37.6 Waiver

A provision of this Contract may only be waived by a Party giving written notice signed by a duly authorised representative to the other Party.

# 37.7 Entire agreement

This Contract constitutes the entire agreement between the Parties as to its subject matter and, to the extent permitted by Law, supersedes all previous agreements, arrangements, representations or understandings.

### 37.8 Severance

If the whole or any part of this Contract is void, unenforceable or illegal in a jurisdiction, it is severed for that jurisdiction. The remainder of this Contract has full force and effect and the validity or enforceability of the provision in any other jurisdiction is not affected. This clause 37.8 has no effect if the severance alters the basic nature of this Contract or is contrary to public policy.

# 37.9 Counterpart execution

- (a) This Contract may be signed in any number of counterparts and all such signed counterparts, taken together, shall be deemed to constitute one and the same instrument even though all Parties may not have signed each separate counterpart.
- (b) Where it has been signed in counterparts, the date of this Contract shall be taken to be the day on which the last of the Parties to give such notice gives notice in writing or by fax or electronic mail to the other Parties that it has signed a counterpart, such notice being accompanied by a copy, or a printable Electronic image, of the whole of that counterpart.

#### 37.10 Further assurance

Each Party agrees, at its own expense, on the request of another Party, to do everything reasonably necessary to give effect to this Contract and the transactions contemplated by it, including, but not limited to, the execution of documents.

### **37.11** Authorised officers

- (a) Notice, approval, consent or other Communication given under this Contract may be given by an Authorised Officer of a Party specified in Schedule 6 to an Authorised Officer of another Party specified in Schedule 6.
- (b) A Party may at any time, by notice given to the other Party, add or replace an Authorised Officer for the purposes of clause 37.11.

# **37.12** Merger

The warranties, undertakings and indemnities in this Contract do not merge on termination of this Contract.



#### 37.13 Remedies

- (a) Subject to clause 37.13(b), the rights, powers and remedies provided in this Contract are cumulative with and not exclusive of the rights, powers or remedies provided by Law independently of this Contract.
- (b) A Party may only terminate this Contract in circumstances permitted by express provisions of this Contract. Any rights to terminate this Contract at common law are excluded.

# 37.14 Governing Law

- (a) This Contract and the transactions contemplated by this Contract are governed by the Law in force in Western Australia.
- (b) Without limiting clause 37.14, each Party irrevocably and unconditionally submits to the non-exclusive jurisdiction of the Courts of Western Australia and the Courts of appeal from them for the purpose of determining any Dispute concerning this Contract or the transactions contemplated by this Contract.



# **Execution Clause:**

Executed as an agreement on the	day of	20	by:
<b>EXECUTED</b> for and on behalf of <b>ELECTRICITY NETWORKS CORPORATION ABN 18 540 492 861</b> in accordance with paragraph 135(4) of the <i>Electricity Corporations Act 2005 (WA)</i> :			
Signature of Authorised Officer	Signature of Authorised Officer		
Full name	Full name		
Position title	Position title		
<b>EXECUTED</b> by <b>[NAME OF PARTY &amp; ABN/ACN/ARBN]</b> in accordance with section 127(1) of the <i>Corporations Act 2001 (C'th)</i> :			
Signature of Director	Signature of Director/Company Sec	retary	
Full name	- Full name		



# **EXECUTE**D by **[NAME OF PARTY & ABN/ACN/ARBN]** in accordance with section 127(1) of the *Corporations Act 2001 (C'th)*:

Signature of Director	Signature of Director/Company Secretary
Full name	Full name

#### **SCHEDULE 1 - DICTIONARY**

Unless the context otherwise requires, the defined terms in column 1 below have the respective meanings in column 2:

Column 1 Column 2

Access Arrangement means the current 'access arrangement' (as defined in the Code)

approved in respect of the Network under the Code.

Access Contract has the meaning given to 'access contract' in the Code.

Access Offer has the meaning given to 'access offer' in the Applications and

Queuing Policy.

Access Rights means all or part of the User's rights under this Contract to obtain a

Covered Service.

Accounting Period means one calendar month.

Act means the *Electricity Industry Act 2004 (WA)*.

AEMO has the meaning given to that term in the WEM Rules.

Affected Obligation has the meaning given to it in clause 22.1.

Affected Person has the meaning given to it in clause 22.1.

Affected Service has the meaning given to it in clause 7.3(a).

Affected Service Period has the meaning given to it in clause 7.3(a).

Application means an application made under the Applications and Queuing Policy.

Applications and means the 'applications and queuing policy' (as defined in the Code) in

Queuing Policy the Access Arrangement.

Approved Price List means the current approved price list (as that term is defined in the

Code) applying under the Access Arrangement.

Assign includes assign or Novate.

Assignment includes an assignment or Novation.

Attachment Point has the meaning given to 'attachment point' in the Applications and

Queuing Policy.

Augmentation in relation to the Network, means an increase in the capability of the

Network to provide Covered Services, including by the development, construction, acquisition or commissioning of new Network Assets.

Authorised Officer means the authorised officer of a party as specified in Schedule 6 to

whom any Communication may be given.

Authority means the Economic Regulation Authority established by the *Economic* 

Regulation Authority Act 2003(WA).

Bidirectional Point has the meaning given to 'bidirectional point' in the Applications and

Queuing Policy.

Bidirectional Service means a Covered Service provided by Western Power at a Connection

Point under which the User may transfer electricity into and out of the

Network at the Connection Point.



Build Pack means the 'Build Pack' developed under the Customer Transfer Code

<u>Communication Rules</u> (made under Part 5 of the Customer Transfer Code) and/or the <u>Metering Code Communication Rules</u> (made under Part 6 of the Metering Code), as applicable in the circumstances.

Business Day means a day that is not a Saturday, Sunday or public holiday

throughout Western Australia.

Capacity with regards to a Connection Point, means the maximum rate at which

the Network can transfer electricity at the Connection Point in accordance with Good Electricity Industry Practice in the absence of

Constraints.

Capacity Credits has the meaning given to that term in the WEM Rules.

CEO Meeting has the meaning given to it in clause 29.2.

Charge for a Service for an Accounting Period, means the amount that is

payable by the User to Western Power for the Service, calculated by applying the Tariff for the Service, during the Accounting Period.

Claim means any claim, demand, action or proceeding made or instituted

against a Party.

CMD means Contract Maximum Demand.

Code means the *Electricity Networks Access Code 2004*.

Code Objective has the meaning given to 'Code objective' in section 2.1 of the Code.

Commencement Date means the date of execution of this Contract by the last signing Party,

or the first date on which all of the Conditions Precedent are satisfied

or waived, whichever is later.

Communication means a notice, approval, consent or other communication given or

 $made\ under\ this\ Contract.$ 

Conditions Precedent means the conditions precedent specified in Schedule 2.

Confidential Information means information which is confidential under clause 33.1.

Connect has the meaning given to 'connect' in the Code.

Connection Assets has the meaning given to 'connection assets' in the Code.

Connection Contract means, at the option of Western Power:

(a) a contract containing provisions materially equivalent to those in

this Contract; or

(b) some other agreement in writing to be bound by provisions

materially equivalent to such terms and conditions of this

Contract satisfactory to Western Power,

but omitting clauses 3 to 9 of this Contract.

Connection Point means a point on the Network identified, or to be identified, as an Exit

Point or Entry Point or Bidirectional Point in the Contract Database.

Connection Point Database

means:

- (a) Part 1 of Schedule 3; or
- (b) another database or databases containing information relating to this Contract and maintained by Western Power as agreed between the Parties, which for the avoidance of doubt can include the Metering Database if the User is not a Metering Code Participant and this is agreed by the User and Western Power,

as applicable.

Constraint

means a limitation on the capability of the Network (including arising by reference to the technical limitations and configuration of the Network) such that it is unsafe, inconsistent with the maintenance of the reliability and security of the Network or otherwise unacceptable to transfer (including accept the transfer of electricity into or out of the Network at a Connection Point) the level of electricity that would occur if the limitation was removed. Constraints affecting the Network may increase over time due to changes in load or generation connected to the Network.

Consume

has the meaning given to 'consume' in the Code.

Consumer

has the meaning given to 'consumer' in the Code.

Consumption

for a Connection Point, means the amount of electricity Consumed at the Connection Point, and is measured in Watt-hours.

Contract

means this agreement between Western Power and the User.

**Contract Database** 

means the Connection Point Database or, if the Metering Database is not included within the Connection Point Database and clause 3.7(k)(ii) applies, then it means the Metering Database.

**Contracted Capacity** 

for a Connection Point, means the maximum rate at which the User is permitted to transfer electricity to or from the Network at the Connection Point, being either:

- (a) the rate specified in the Connection Point Database from time to time: or
- (b) if no rate is specified in the Connection Point Database, the maximum rate of electricity permitted to be transferred under the Eligibility Criteria for the Reference Service for that Connection Point; or
- (c) if no rate is specified in the Connection Point Database or in the Eligibility Criteria for the Reference Service for that Connection Point, the maximum rate of electricity permitted to be transferred though the Connection Assets under the Technical Rules,

and is measured in Watts or Volt-Amps.

Contribution

means any contribution made under the Contributions Policy.

**Contributions Policy** 

means the contributions policy' (as defined in the Code) contained in the Access Arrangement.



Controller means, in respect of a Connection Point, a person, including a

Customer, who owns, operates, controls or otherwise is responsible for the operation of the Facilities and Equipment at the Connection Point,

and includes the Controller's Workers and Visitors.

Corporations Act means the <u>Corporations Act 2001</u> of the Commonwealth.

Covered Service has the meaning given to 'covered service' in the Code.

CPI, or Consumer Price

Index.

means the Consumer Price Index (all groups) for the Weighted Average of Eight Capital Cities published by the Australian Bureau of Statistics from time to time or, if the Consumer Price Index (all groups) for the Weighted Average of Eight Capital Cities ceases to be published, such alternative index as Western Power acting reasonably and in good faith may determine, and in all cases the CPI figure is to be adjusted to

correct for any effects of a change in the rate of GST.

CPI-Adjusted has the meaning given to it in clause 1.3.

Curtail means curtailing or interrupting the whole or part of a Service.

Curtailment includes a whole or partial curtailment or whole or partial interruption

of a Service.

Customer has the meaning given to 'customer' in the Act.

Customer Transfer Code means the Electricity Industry Customer Transfer Code 2016, made

under section 39(2a) of the Act in respect of the matter referred to in section 39(2)(b) of the Act, and includes all rules, policies or other subordinate documents developed under the Customer Transfer Code.

De-energise in respect of a Connection Point, means to operate, modify or remove

switching or other equipment to prevent the transfer of electricity

through the Connection Point.

Default in relation to a Party, has the meaning given to it in clause 27.1.

Direct Damage suffered by a person means loss or damage suffered by the person

which is not Indirect Damage.

Disconnect in respect of a Connection Point, means physically detach Network

Assets from assets owned by another person at the Connection Point.

Dispute means any dispute or difference concerning:

(a) construction of; or

(b) anything contained in or arising out of; or

(c) rights, obligations, duties or liabilities of a Party under,

this Contract.

DSOC means Declared Send Out Capacity.

Due Date means, for a Tax Invoice issued under clause 8.1 or 8.2, the date 10

Business Days after the Party to whom it is addressed receives the Tax

Invoice.



Electronically in relation to a Communication, means a communication of

information by means of guided or unguided electromagnetic energy, or both, by way of packet transfer between and within computer networks using the TCP/IP or other widely accepted protocol for packet

transfer.

Eligibility Criteria means, for a Reference Service, the 'Eligibility Criteria' stipulated in the

Access Arrangement for that Reference Service.

Emergency means any accident, emergency, potential danger or other unavoidable

cause or extraordinary circumstance.

End Date for a Connection Point, means the date specified as such in the

Connection Point Database for the Connection Point.

Entry Point has the meaning given to 'entry point' in the Applications and

Queuing Policy.

Entry Service means a Covered Service provided by Western Power at a Connection

Point under which the User may transfer electricity into the Network at

the Connection Point.

Entry Service means, in respect of a Bidirectional Service and a Connection Point, the

Component of that Bidirectional Service relating to the transfer of

electricity by the User into the Network at that Connection Point.

**Equivalent Reference** 

Service

has the meaning given to it in clause 7.1(c)(i).

Exit Point has the meaning given to 'exit point' in the Applications and Queuing

Policy.

Exit Service means a Covered Service provided by Western Power at a Connection

Point under which the User may transfer electricity out of the Network

at the Connection Point.

Exit Service Component means, in respect of a Bidirectional Service and a Connection Point, the

component of that Bidirectional Service relating to the transfer of electricity by the User out of the Network at that Connection Point.

Extension Period has the meaning given to it in clause 2.22.2(a).

Facilities and Equipment has the meaning given to 'facilities and equipment' in the Code.

First Party has the meaning given to it in clause 30.1.

#### Force Majeure

in respect of a Party, means an event or circumstance beyond the Party's control, and which the Party, acting as a Reasonable and Prudent Person, is not able to prevent or overcome, including (where the foregoing conditions are satisfied):

- (a) any act of God, lightning, earthquake, storm, fire, flood, subsidence, land slide, mud slide, wash-out, explosion or natural disaster; or
- (b) any insurrection, revolution or civil disorder, terrorism, act of public enemies, malicious damage, sabotage, vandalism, war (whether declared or undeclared) or a military operation, blockade or riot; or
- (c) any determination, award or order of any court or tribunal, or any regulatory authority or the award of any arbitrator arising after the Commencement Date; or
- (d) any act or omission of government or any government or regulatory department, body, instrumentality, ministry, agency, fire brigade or any other authority other than a Party (including restraint, expropriation, prohibition, intervention, direction or embargo); or
- (e) any inability or delay in obtaining any governmental, quasi-governmental or regulatory approval, consent, permit, licence or any other authority; or
- (f) any industrial disputes of any kind, strike, lock-out, ban, limitation or other industrial disturbances; or
- (g) any significant plant or equipment failure which could not have been avoided by the exercise of Good Electricity Industry Practice; or
- (h) any act or omission of any person (other than a Party) with Facilities and Equipment connected to the Network which prevents the Party's ability to perform its obligations under this Contract; or
- (i) any application of any law of the Commonwealth, any Commonwealth authority, the State, any State authority or any local government; or
- accidents, weather and acts of third parties (such as Generators or Consumers) that affect the quality, frequency and continuity of the supply of electricity.

Force Majeure Event

means an event of Force Majeure.

**FM Period** 

means the period of suspension of the Affected Obligation pursuant to clause 22.1.

Generate

has the meaning given to 'generate' in the Code.

**Generating Plant** 

has the meaning given to 'generating plant' in the Code.

Generation

for a Connection Point, means the amount of electricity Generated at the Connection Point, and is measured in Watt-hours.

Generator

has the meaning given to 'generator' in the Code.



Good Electricity Industry

Practice

has the meaning given to 'good electricity industry practice' in the Code.

**Generator Monitoring** 

Plan

means, for a Generating Plant at a Connection Point, the Generator Monitoring Plan (as that term is defined in the WEM Rules) approved for that Generating Plant by AEMO in accordance with the WEM Rules.

**GST** 

means goods and services tax or similar value added tax levied or imposed in Australia on a taxable supply under the GST Act or otherwise.

**GST Act** 

means the A New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth.

**Guest Party Host Party** 

has the meaning given to it in clause 15.1. has the meaning given to it in clause 15.1.

**Ideal Generator** 

Performance Standard

has the meaning given to that term in the WEM Rules.

Indemnifier

means a person who has agreed to indemnify Western Power in respect of the liabilities of the User under this Contract (and which person is specified in the Parties section of this Contract if there is an Indemnifier as at the date of execution of this Contract).

**Indemnified Party Indemnifying Party** 

**Indirect Damage** 

has the meaning given to it in clause 19.6.

has the meaning given to it in clause 19.6.

suffered by a person means any one or more of:

- any consequential loss, consequential damage or special damages however caused or suffered by the person, including any:
  - (i) loss of (or loss of anticipated) opportunity, use, production, revenue, income, profits, business and savings; or
  - (ii) loss due to business interruption; or
  - (iii) increased costs; or
  - punitive or exemplary damages, whether or not the (iv) consequential loss or damage or special damage was foreseeable; or
- (b) in respect of contractual damages, damages which would fall within the second limb of the rule in *Hadley v Baxendale* [1854] 9 Exch. 341; or
- (c) any liability of the person to any other person, or any Claim brought against the person by any other person, and the costs and expenses connected with the Claim.

Information Provider

in relation to Confidential Information, means the party providing the information.

Information Recipient

in relation to Confidential Information, means the recipient of the information.

**Insolvency Event** 

in respect of a Party, means any one or more of:



- (a) the Party is insolvent within the meaning of section 95A of the Corporations Act; or
- (b) any execution or other process of any court or authority being issued against or levied upon any material part of that Party's property or assets; or
- (c) a petition or application being presented (and not being withdrawn within 10 Business Days) or an order being made or a resolution being passed for the winding up or dissolution without winding up of that Party otherwise than for the purpose of reconstruction or amalgamation under a solvent scheme; or
- (d) a receiver or a receiver and manager of the undertaking or any material part thereof of that Party being appointed; or
- (e) that Party proposing to enter into or enters into any arrangement, reconstruction or composition with or for the benefit of its creditors; or
- (f) an administrator of that Party being appointed or the board of directors of that Party passing a resolution to the effect that is specified in section 436A(1) of the Corporations Act; or
- (g) that Party failing (as defined by section 459F of the Corporations Act) to comply with a statutory demand; or
- (h) a controller (as defined in the Corporations Act) being appointed in respect of that Party or the whole or a material part of that Party's undertaking, property or assets; or
- (i) an application being made to a court for an order in respect of that Party under part 2F.1 of the Corporations Act; or
- (j) an event referred to in section 459C(2) of the Corporations Act occurring in respect of that Party; or
- (k) anything analogous or having a substantially similar effect to any of the events specified above occurring under the Law of any applicable jurisdiction.

**Insured Year** 

Intermediary

means the period between and including 1 July in a Year and 30 June in the following Year.

Integrated Provider

has the meaning given to 'integrated provider' in the Code.

Latest Termination Date

has the meaning given to that term in the WEM Rules.

has the meaning given to it in clause 2.2(b).

Law

means "written laws" and "statutory instruments" as defined in the Code, orders given or made under a written law or statutory instrument as so defined or by a government agency or authority, Codes of Practice and Australian Standards deemed applicable under a

written law and rules of the general law including the common law and

equity.

Maintain, and Maintenance

includes (as necessary and as applicable) calibrate, test, verify, renew, replace, repair and update.



Material Change any change external to a Party, including any change to the regulatory

environment or market structure of the Western Australian electricity market, which materially alters or could reasonably be expected to materially alter the risk of a Party under this Contract, the nature of

any Claim that can be made under this Contract or both.

Meter has the meaning given to 'meter' in the Metering Code.

Metering Code means the code made under Section 39(1) of the Act in respect of a matter referred to in Section 39(2)(a) of the Act, and includes any

service level agreement, metering data agency agreement,

communications rules, metrology procedure, mandatory link criteria

and registration process developed under that code.

Metering Code has the meaning given to 'Code Participant' in the Metering Code. Participant

Metering Database means the metering database operated by Western Power under the

Metering Code.

Metering Equipment means a Meter or Meters and associated equipment complying with

the Metering Code used to measure and record electricity as

transferred to or from the Network at a Connection Point, which may include the measurement of the rate of transfer and the quantity and

quality of the transferred electricity.

Negotiated Generator has the meaning given to that term in the WEM Rules.

Network has the same meaning given to 'Western Power Network' in the Code.

Network Assets in relation to the Network, means the apparatus, equipment, plant and

buildings used to provide or in connection with providing Covered Services on the Network, which assets are either Connection Assets or

Shared Assets.

Performance Standard

Network Business has the same meaning given to 'network business' in the Code.

NMI, or National Market means the unique identifier assigned to the Connection Point. Identifier

Nominated Person has the meaning given to it in clause 9(b)(i).

Novate and Novation mean to substitute, with the consent of all Parties to this Contract and with effect on and from a date nominated as the effective date of the novation, an assignee for the User as a party to this Contract, with the

result that:

(a) all rights and obligations of the User under this Contract become rights and obligations of the assignee as if the assignee had been

named in the Contract in place of the User; and

(b) the User is released from any obligations under this Contract arising on or after the effective date of the novation, but remains liable for any default by it in the performance of those

obligations prior to the effective date of the novation.

Other Business has the meaning given to 'other business' in the Code.



Party means Western Power or the User .

{Note: If there is an Indemnifier, refer to clause 1.1(h)(iv)}

Parties means Western Power and the User.

{Note: If there is an Indemnifier, refer to clause 1.1(h)(iv)}

Payment Error means:

(a) any underpayment or overpayment by a Party of any amount in respect of a Tax Invoice; or

(b) any error in a Tax Invoice (including the omission of amounts from that Tax Invoice, the inclusion of incorrect amounts in that Tax Invoice, calculation errors in the preparation of a Tax invoice or a Tax Invoice being prepared on the basis of data which is later established to have been inaccurate).

Permanent Reconfiguration means:

 a permanent physical change (including a change to the zone substation applicable to a Connection Point and a change to the distance from the applicable zone substation to a Connection Point); or

(b) a change to the pricing zone applicable to a Connection Point.

Possession includes custody, control, and an immediate right to possession,

custody, or control.

Power System Reliability

**Prescribed Rate** 

has the meaning given to that term in the WEM Rules.

means, at any point in time, the interest rate (expressed as a rate per cent per annum) equal to the aggregate of 3 annual percentage points and the interest rate (expressed as a rate per cent per annum) then published by the Reserve Bank of Australia as the large business

variable indicator lending rate.

Price List means the 'price list' (as defined in the Code) specified in the Access

Arrangement.

Pricing Year has the meaning given to 'pricing year' in the Code.

Reasonable and Prudent

Person

means a person acting in good faith and, where applicable, in

accordance with Good Electricity Industry Practice.

Receipt Date has the meaning given to it in clause 29.1.

Reference Service means a 'reference service' (as defined in the Code) specified in the

Access Arrangement.

Reference Service Point means a Connection Point for which under this Contract Western

Power provides, or is to provide, a Reference Service.

Registered Generator Performance Standard has the meaning given to that term in the WEM Rules.

Related Body Corporate has the meaning given to 'Related Body Corporate' in section 50 of the

Corporations Act.

Representatives'

Meeting

has the meaning given to it in clause 29.1.



Service means a service to be provided under this Contract in respect of a

Connection Point as specified in the Contract Database.

Shared Assets has the meaning given to 'shared assets' in the Code.

Small Customer means a customer (as defined in the *Electricity Industry Act 2004 (WA)*)

consuming not more than 160 MWh of electricity per annum.

Standing Charges has the meaning given to it in clause 7.3.

Start Date for a Connection Point, means the date specified as such in the

Connection Point Database for the Connection Point.

Supplementary Matters means the provisions incorporated in the Access Arrangement under

sections 5.27 and 5.28 of the Code.

System Operator for the Network means, unless the Technical Rules provide otherwise,

the person or persons who:

(a) operate and control the system operation control centre; or

(b) where there is no system operation control centre — is responsible for the control of the Network through monitoring,

switching and dispatch; or

(c) where the system operation control centre and another party are both responsible for the control of the Network through monitoring, switching and dispatch — perform the tasks

described in either or both of paragraphs (a) and (b).

Tariff for a Service, means the tariff specified in clause 7.1 for that Service.

Tax Invoice has the meaning given to 'Tax Invoice' in the GST Act.

Technical Rules means the technical rules applying from time to time to the Network

under Chapter 12 of the Code, as modified in accordance with the Code, including any derogations agreed to by Western Power in writing

and specified in Part 3 of Schedule 3.

Term means, from time to time, the term of this Contract which commences

on the Commencement Date and ends on the date which is then the

Termination Date.

Termination Date means, subject to clause 2.2, the date specified in Part 1 of Schedule 2.

Third Party Recipient means any person to whom the Information Recipient discloses

Confidential Information, or allows Confidential Information to be

disclosed.

Transfer and Relocation

**Policy** 

means the transfer and relocation policy (as defined in the Code)

contained in the Applications and Queuing Policy.

Undisputed Portion for the purposes of a Tax Invoice issued under 8.2(b) has the meaning

given to it in clause 8.2(d) and, in all other cases, means the portion of

the amount set out in a Tax Invoice that is not in Dispute.

User has the meaning given to it in the Code, and for the purposes of this

Contract is the User stipulated in the 'Parties section' of this Contract.

User's Default means an event of Default by the User.

User's Premises means the land on which the User's Facilities and Equipment are

located.



Visitors means the customers, invitees, licensees and visitors of a Party or a

Controller, as the case requires.

WEM Rules means the 'market rules' referred to in section 123(1) of the Act, and

includes all rules, policies or other subordinate documents developed

under the WEM Rules.

Western Power means the Electricity Networks Corporation established under section

4(1)(b) of the *Electricity Corporations Act 2005 (WA)*.

Western Power's Default means an event of Default by Western Power.

Wilful Default means a deliberate and purposeful act or omission carried out with:

(a) a calculated regard for the consequences of the act or omission; or

(b) a reckless or wilful disregard for the consequences of the act or

but does not include any error of judgment, mistake, act or omission,

whether negligent or not, which is made in good faith.

Workers means the directors, officers, servants, employees, agents and

contractors of a Party or a Controller, as the case requires.

Works has the meaning given to it in the Contributions Policy.

Year means calendar year.

# **SCHEDULE 2 - ACCESS CONTRACT INFORMATION**

#### Part 1 Term

Termination Date:		

#### **Part 2 Extension of Term**

{Note: Referred to in clause 2.2.}

Extension Period:	
Latest Termination Date:	

#### **Part 3 Conditions Precedent**

{Note: Referred to in clause 2.3.}

For the benefit of	1	[Description]
the User		[Date to be satisfied by]
For the benefit of	1	[Description]
Western Power		[Date to be satisfied by]



#### **SCHEDULE 3 - DETAILS OF CONNECTION POINTS**

#### **Part 1 Commercial Details**

{Note:

- (a) If in accordance with clause 3.7 the Parties agree to not have these details stored in this Part then state in each row in the right hand column below where the respective details are to be stored; and
- (b) Western Power will store these details in the Metering Database where the User is a Metering Code Participant.}

1	Connection Point 1 Title	
	Address of Premises	
	Name and contact details of	
	Controller	
	NMI	
	Service	
	Start Date	
	End Date	
	CMD (kW/ kVA) (if applicable)	
	DSOC (kW/ kVA) (if applicable)	
	Size of Generator (if applicable)	
	Make and model of Generator (if applicable	
	Substation (if applicable)	
	Substation distance (if applicable)	

#### **Part 2 Technical Details**

{Note: referred to in clause 13(a)}

#	Connection Point	Description of Facilities and Equipment
1		

{Note: attach plans, drawings and other documentation as necessary to fulfil the requirements of clause 13(a).}

#### Part 3 Agreed exemptions from Technical Rules

{Note: referred to in clause 13(a)(ii) }

#	Connection Point	Technical Rules Reference	Description of Technical Rules requirement	Description of Derogation
1				

#### **Part 4 Technical Characteristics**





# **SCHEDULE 4 - WORKS AND CONTRIBUTIONS**

{Note: Referred to in clause 26.}

1	[Connection Point Title / NMI]	
	[Contribution provisions]	
2	[Connection Point Title / NMI]	
	[Contribution provisions]	



#### **SCHEDULE 5 - INSURANCES**

{Note: Referred to in clause 21.}

#### Part 1 User insurances

- (a) The User must effect and maintain, commencing from the Commencement Date the following policies of insurance:
  - (i) public and products liability of:
    - (A) public liability insurance for a limit of not less than \$50 million or the maximum liability of the User under clause 19.5 (whichever is greater) in the aggregate of all claims made in an Insured Year; and
    - (B) products liability insurance for a limit of not less than the maximum liability of the User under clause 19.5 per claim and in the aggregate, refreshed annually;
  - (ii) covering the User's liability to Western Power or any third party for death, bodily injury and loss or damage to property caused by any act, omission or negligence in relation to this Contract;
  - (iii) when reasonably requested by Western Power, workers' compensation insurance for all persons employed by the User including employer's liability at common law, with a limit of cover in respect of any one occurrence at least equal to \$50 million;
  - (iv) when reasonably requested by Western Power, motor vehicle third party property insurance for all loss or damage to property caused by or attributable to the use of a motor vehicle in the performance of the Services or any Works under the Contract, for a limit of \$10 million per claim and unlimited in the aggregate of all claims made; and
  - (v) contractors' plant and equipment insurance covering all loss or damage to the User's plant or equipment used in connection with this Contract for its replacement value.
- (b) The policies of insurance under Schedule 5 Part 1(a) must be with an insurer authorised under the <u>Insurance Act 1973 (Cth)</u> or the equivalent in the United States of America or the United Kingdom.

#### Part 2 Western Power insurances

- (a) Western Power must effect and maintain, commencing from the Commencement Date, the following policies of insurance:
  - (i) public and products liability of:
    - (A) public liability insurance for a limit of not less than the maximum liability of Western Power under clause 19.5 per claim and unlimited in the aggregate of all claims made; and
    - (B) products liability insurance for a limit of not less than the maximum liability of Western Power under clause 19.5 per claim and in the aggregate, refreshed annually;



- covering Western Power's liability to the User or any third party for death, bodily injury and loss or damage to property caused by any act, omission or negligence in relation to this Contract;
- (ii) workers' compensation insurance for all persons employed by Western Power including employer's liability at common law, with a limit of cover in respect of any one occurrence at least equal to \$50 million;
- (iii) motor vehicle third party property insurance for all loss or damage to property caused by or attributable to the use of a motor vehicle in the performance of the services or any work under the Contract, for a limit of \$10 million per claim and unlimited in the aggregate of all claims made; and
- (iv) contractors' plant and equipment insurance covering all loss or damage to Western Power's plant or equipment used in connection with this Contract for its replacement value.
- (b) The policies of insurance under Schedule 5 Part 2(a) must be with an insurer authorised under the <u>Insurance Act 1973 (Cth)</u> or the equivalent in the United States of America or the United Kingdom.



# **SCHEDULE 6 - NOTICES**

{Note: Referred to in clause 35.}

#### Part 1 User

Subject	Information
Address for service of notices/ place of business:	
Authorised Officers:	
Email address:	

#### Part 2 Western Power

Subject	Information
Address for service of notices/ place of business:	
Authorised Officers:	
Email address:	



## **SCHEDULE 7 - ELECTRONIC COMMUNICATIONS PROTOCOL**

{Note: Referred to in clause 35.}

In this Schedule, unless the context otherwise requires, the defined terms in column 1 below have the respective meanings in column 2:

Column 1	Column 2	
Addressee		
Automated Response Message	means the person to whose Email Address an email is sent.  means an email ("Reply Email") sent automatically upon receipt of ar email ("Original Email"), where the Reply Email is sent from an Addressee's Information System to the Originator of the Original Email acknowledging that the Original Email has been received by the Addressee's Information System and containing:	
	(i) the name of the Originator of the Original Email; and	
	(ii) at least the time, date and subject title of the Original Email; and	
	(iii) the name of the Addressee of the Original Email; and	
	(iv) the date and time the Original Email was received by the Addressee's Information System (which in the absence of evidence to the contrary is taken to be the creation date of the Reply Email).	
Data	includes the whole or part of a computer program within the meaning of the Copyright Act 1968 of the Commonwealth.	
Email	means a communication of Information by means of guided or unguided electromagnetic energy, or both, by way of packet transfer between and within computer networks using the TCP/IP protocol.	
Email Address	means the address nominated in Schedule 6, being an address which is a combination of a personal identifier and a machine/network identifier, which are together capable of being resolved by computer networks transmitting email using the TCP/IP protocol, so that email is transmitted to the person providing that email address.	
Information	means information in the form of Data, text, images or sound.	
Information System	means a system for generating, sending, receiving, storing or otherwise processing emails.	
Originator	means the person who sends an email to an Addressee.	
Place of Business	means a place of business nominated under Schedule 6 and in relation to a government, a government authority or a non-profit body, includes a place where any operations or activities are carried out by that government, authority or body.	
Purported Originator	means the person on the face of the email who appears to be, or purports to be the Originator, including by purported compliance with	

clause 4 of this Schedule.



#### 1. Application to invoicing

Where the Parties have agreed under clause 8.1(d), the procedure set out in this Schedule does not apply to invoicing under this Contract, and the alternative agreed procedure will apply in its place.

#### 2. Parties to establish email Addresses

Western Power and the User must:

- (i) from time to time, nominate a Place of Business and establish an Email Address to be used for the Communications under this Contract; and
- (ii) use reasonable endeavours to ensure that the Information System, on which emails addressed to the Email Address are received, is operational:
  - (A) a 24 hours-a-day; and
  - (B) 7 days-a-week,

to receive emails and send Automated Response Messages as required by this Contract; and

- (iii) as soon as practicable notify the other Party of its Place of Business and Email Address and of any change in each of them; and
- (iv) establish a mechanism to generate an Automated Response Message for each email (other than an Automated Response Message) received at the Email Address.

#### 3. Requirement for Automated Response Message

- (a) An email is neither given nor received under this Contract until the Originator receives the Addressee's Automated Response Message for the email.
- (b) It is the Originator's responsibility for each attempted email to verify that it receives an Automated Response Message, and if it does not receive an Automated Response Message arrange either for:
  - (i) retransmission of the email; or
  - (ii) communication of the Information by an alternative medium (but this clause 3(b) does not limit the Addressee's responsibilities under clause 4 of this Schedule).
- (c) If the Originator receives an Automated Response Message for an email, then (unless the Addressee proves otherwise) for the purposes of this Contract the:
  - (i) Originator has sent; and
  - (ii) Addressee has received,

the email at the date and time shown in the Automated Response Message.

- (d) It is the Addressee's responsibility for each email for which the Addressee's Information System generates an Automated Response Message to:
  - (i) read the email and the Information it contains, and if applicable communicate it to the appropriate Worker within the Addressee's organisation; and



- (ii) if necessary, notify the Originator of any difficulty in opening, reading, de-compressing or otherwise accessing (in a form reasonably readable) any Information contained in the email; and
- (iii) if it appears to the Addressee that the Addressee was not the intended or correct recipient of the Information in the email, communicate this fact to the Originator.

#### 4. Location

Unless otherwise agreed between the Originator and the Addressee of an email, the email and the Information it contains is deemed to have been sent from the Originator's Place of Business and received at the Addressee's Place of Business.

#### 5. Attribution of emails and reliance

Except to the extent that:

- (a) the Purported Originator of an email and the Addressee of the email agree otherwise; or
- (b) the Purported Originator of an email proves otherwise,

the Addressee of an email in respect of which an Automated Response Message has been given may assume for all purposes under this Contract that the:

- (c) Purported Originator of the email is the Originator of the email; and
- (d) email was sent by, or with the knowledge and express authority of, the Purported Originator.

#### 6. Signatures

For the purposes of this Contract, an email must identify the Originator.

#### 7. Information format

An Originator must use reasonable endeavours, in selecting the data format for Information contained in an email, to adopt a consistent format over time to facilitate any automated processing of the Information by the Addressee.



#### **SCHEDULE 8 - FORM OF GUARANTEE**

#### **Date** [###]

#### **Parties**

- 1. [### ACN ### a company registered in ### of ###] ("Guarantor"); and
- 2. **Electricity Networks Corporation ABN 18 540 492 861**, a statutory body corporate established by paragraph 4(1)(b) of the *Electricity Corporations Act 2005 (WA)* of 363 Wellington Street, Perth, Western Australia ("**Western Power**").

#### **Recitals**

- A. Western Power may in its discretion provide Services to [###] ("User") under an Access Contract at the request of each of the User and the Guarantor.
- B. The Guarantor wishes to execute this Guarantee to secure payment of all amounts payable under the Access Contract to Western Power.

#### **Operative Provisions**

#### 1. Guarantee

The Guarantor unconditionally and irrevocably Guarantees as a continuing security to Western Power payment by the User of all moneys and liabilities due and/or payable from or by the User to Western Power under or in connection with the contract dated [###] ("Access Contract") created between the User and Western Power ("Secured Moneys"), including moneys and liabilities incurred or arising:

- (a) (liability): at any present or future time, whether actually or contingently;
- (b) (default): as a result of any breach of or default under the Access Contract; and/or
- (c) (account): by way of principal, interest, cost, charge, expense, disbursement, fee, tax, stamp or other duty, indemnity, damages or monetary judicial order.

#### 2. Secured Moneys

#### 2.1 Demand payment

The Guarantor must pay to Western Power, upon demand by Western Power at any present or future time, the amount of the Secured Moneys due from and payable by the User to Western Power at that time under, and in the manner and currency specified in, the Access Contract.

#### 2.2 Costs

The Guarantor must at any present or future time indemnify Western Power upon demand for any cost, charge, expense, disbursement, fee, tax or stamp or other duty incurred by Western Power at any time in connection with the Access Contract, this Guarantee or the Secured Moneys relating to:



- (a) (security agreements): preparation, negotiation, execution or performance, or any termination, amendment, consent, claim, demand or waiver;
- (b) (security rights): any exercise or enforcement of any right or power conferred on Western Power;
- (c) (credit increases): any extension of further, additional or increased credit or financial accommodation by Western Power, or agreement by Western Power to increase the amount secured; and/or
- (d) (payments): the receipt or payment of any moneys, including moneys paid by Western Power by way of reimbursement to any third party.

#### 2.3 Set-Off exclusion

The Guarantor must make any payment required under this Guarantee without set-off or other deduction, except for the deduction or withholding of any tax compelled by law.

#### 3. Indemnity

The Guarantor must as a separate and additional liability of the Guarantor as a principal debtor, and not as a surety, indemnify Western Power against, and pay to Western Power upon demand by Western Power an amount equal to, all Secured Moneys that are or may become invalid, unenforceable, illegal or irrecoverable for any reason or under any circumstances as a liability to Western Power by the Guarantor as a surety, despite any other provision of this Guarantee.

#### 4. Guarantee protection

This Guarantee, and the liability of the Guarantor under this Guarantee, is not affected at any time by:

- (a) (waiver): the granting to any person by Western Power of any waiver;
- (b) (agreements): any agreement, deed or document created with, or action or omission performed, representation made or non-disclosure of any fact or information by, Western Power or any person;
- (c) (Secured Moneys): any increase or variation in the amount of the Secured Moneys occurring for any reason;
- (d) (document amendment): any amendment to or transfer, release or termination of any agreement, deed or document or any right, power or liability of any person under any agreement, whether for or without consideration;
- (e) (enforcement decisions): any exercise or enforcement, or any failure or invalidity in, the exercise or enforcement by Western Power of any right or power conferred on Western Power under any agreement, deed or document or by law;
- (f) (invalidity): any actual or potential invalidity, unenforceability, illegality or irrecoverability of any agreement, deed or document or consent or any payment made or due to Western Power under any agreement for any reason;
- (g) (incapacity): any incapacity or absence of power or authorisation of, or other fact relating to, any person in connection with the execution of any agreement, deed or document or otherwise, including any change in the constitution or membership of any person; or
- (h) (residual): any other breach, default, waiver or fact which, except for this provision, might legally operate:



- (i) to release or discharge or have any prejudicial effect on; or
- (ii) in any manner to release or discharge the Guarantor from performance of, or limit or provide a defence to any legal action to enforce,

this Guarantee, or any liability of the Guarantor under or in connection with this Guarantee.

#### 4.2 Termination

The Guarantor is not entitled to terminate or limit this Guarantee, or any liability of the Guarantor under this Guarantee, until the Secured Moneys have been paid in full.

#### 5. Governing Law

This Guarantee is governed by and construed under the law of the State of Western Australia.

#### 6. General

#### 6.1 Continuing Security

This Guarantee is a continuing security and is not wholly or partially discharged by the payment at any time of any Secured Moneys, settlement of account or other fact and applies to the balance of the Secured Moneys at any time until a final termination of this Guarantee by Western Power.

#### **6.2** Further Assurance

The Guarantor must upon request by Western Power at any time execute any document and perform any action necessary to give full effect to this Guarantee, whether prior or subsequent to performance of this Guarantee.

#### 6.3 Waivers

Any failure or delay by Western Power to exercise any right or power under this Guarantee does not operate as a waiver and the single or partial exercise of any right or power by Western Power does not preclude any other or further exercise of that or any other right or power by Western Power.



# SCHEDULE 9 - NEGOTIATED GENERATOR PERFORMANCE STANDARDS

(NOTE: The Ideal Generator Performance Standard	ds as at the date of this Schedu	le 9 are th	ose set
out in Appendix 12 of the WEM Rules Version	dated	.)	



# **Appendix B**

# **Applications and Queuing Policy**

Revised proposed access arrangement

15 November 2022



# **Applications and Queuing Policy**

1 July 2023



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#### Part A – Common Provisions

### 1. Operation and Objectives

#### 1.1 Status of Figure 1

Figure 1 contains additional explanatory material regarding information provided to *applicants* and the processes contemplated by this applications and queuing policy. To avoid doubt, Figure 1 is included for explanatory purposes and do not form part of the operative provisions of this applications and queuing policy.

#### 1.2 Objectives

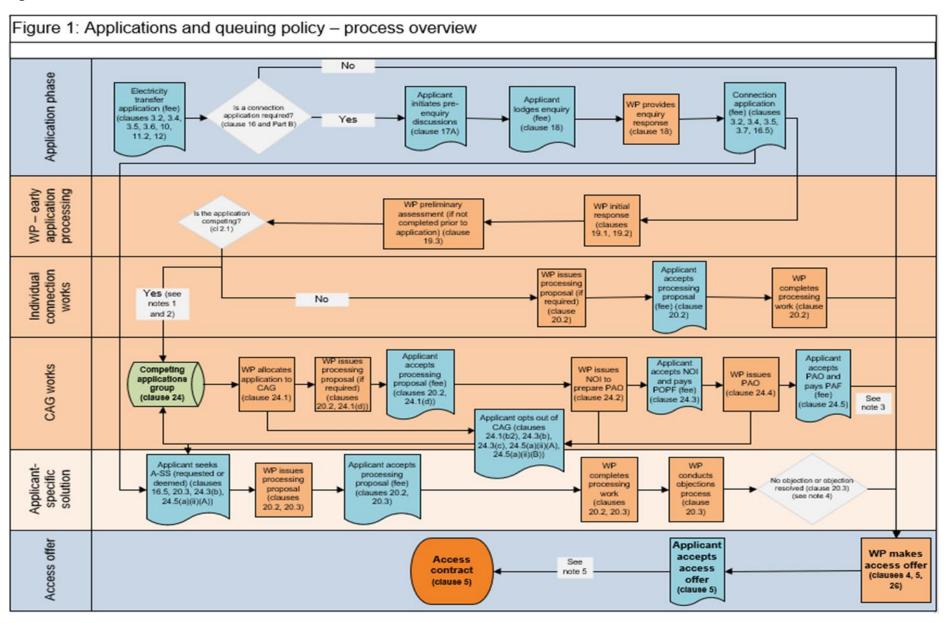
The objectives of this applications and queuing policy are:

- (a) To provide an equitable, transparent and efficient process for assessing the suitability of plant and equipment to connect to Western Power's *network* and to make *access offers* based on that assessment; and
- (b) To undertake assessments and to provide shared *network access offers* that facilitate access by *generators* and loads to the WA Electricity Market (**WEM**) on an economically efficient and non-discriminatory basis that is consistent with WEM requirements, and uses a process that is equitable, transparent and efficient; and
- (c) Where feasible and cost-effective, to facilitate joint solutions for connection applications.

Western Power may from time to time determine that it can provide *shared asset works* that can provide access to multiple *applicants*.



Figure 1



#### {Notes regarding Figure 1:

- 1. Western Power may allocate *spare capacity* to *applicants* in order of *priority date*, regardless of whether they are members of a *competing applications group* (see clause 24.8(b)).
- 2. Where an *applicant* is a member of one or more *competing applications groups*, the processing of its *application* in respect of that group(s) must progress in parallel with the processing of its *application* in respect of its individual connection *works*. Where an *applicant* receives a *preliminary access offer* or *access offer*, they will each relate to both the *competing applications group works*, and any other *works* required to connect that *applicant* to the *network*, including that *applicant's* individual connection *works*.
- 3. If the *preliminary acceptances* received by Western Power for the proposed *competing applications group works* cannot all be fulfilled having regard to the circumstances which lead to applications being classified as *competing*, Western Power will make *access offers* in order of *priority date*, and those who do not receive *access offers* will retain their *priority date* and be refunded the *competing applications group* fees (clause 24.6(c)). If the *preliminary acceptances* received by Western Power are insufficient to progress the proposed *works*, Western Power will revise and reissue the *preliminary access offers* to *applicants* (clause 24.6(b)).
- 4. If Western Power accepts the objection and cannot otherwise modify the *applicant-specific solution* to resolve it, Western Power cannot make an *access offer* in respect of that *applicant-specific solution* (clause 20.39(d)9(d)(ii)).
- 5. If the acceptances received by Western Power exceed the maximum levels set by Western Power, those acceptances which fall within those maximum levels will be effective and those which exceed those levels will be ineffective. *Applicants* whose acceptances are ineffective will be reallocated to a new *competing applications group*, unless they are eligible to receive and willing to accept an *access offer* that partially meets their requirements (clause 24.6C). If the acceptances received by Western Power are below the minimum levels set by Western Power, Western Power will revise and reissue the *access offers* to *applicants* (clause 24.6B).
- 6. Figure 1 is not intended to be an exhaustive depiction of all processes and outcomes under this applications and queuing policy nor list all clauses to each step of the process. Figure 1 depicts the successful pathways to obtaining an *access offer* only.
- 7. Figure 1 is limited to the processes that arise under this applications and queuing policy and does not capture processes that otherwise apply pursuant to the *access* arrangement.
- 8. Figure 1 should be read in conjunction with the operative provisions of this applications and queuing policy.
- 9. To avoid doubt, where *electricity transfer applications* and *connection applications* are required, the *electricity transfer application* may be made at the same time as the *connection application* or subsequently.}

#### 2. Introduction

#### 2.1 Definitions

In this applications and queuing policy, unless the contrary intention is apparent:

"2020 (No. 2) amendments" has the meaning given to it in the Code.

{Note: Under the Code "2020 (No. 2) amendments" means "the amendments made to this Code by the Electricity Networks Access Code Amendments (No. 2) 2020".}

"access arrangement" means the current access arrangement approved in respect of the network under the Code.

"access contract" means an agreement between Western Power and another person for that person to have access to covered services.

#### {Note:

Under the *Code "access contract"* has the same meaning as 'access agreement' does in Part 8 of the Act, and under section 13.4(d) includes a *deemed access contract*. The definition of "access agreement" under the *Act* is "an agreement under the *Code* between a network service provider and another person (a "network user") for that person to have access to services".}

"access contract number" means the unique identifier given to each access contract by Western Power.

"access dispute" has the meaning given to it in the Code.

{Note: under the *Code* "access dispute" means "a dispute, in connection with an *access application*, between the *applicant* and the service provider, including a dispute in relation to any one or more of the following (and the paragraphs of this definition do not limit each other):

- (a) whether the *applicant* or the service provider has complied with, or the manner in which the *applicant* or the service provider has purported to comply with, the applications and queuing policy; and
- (b) the terms and conditions, including service standards, on which the *applicant* should be permitted to acquire *covered* services from the service provider; and
- (c) whether work is required work and the terms and conditions applying, or proposed to apply, to any such work; and
- (ca) anything connected with or arising out of a proposed contribution; and
- (cb) a matter heard under section 15.7; and
- (cc) anything connected with or arising out of Appendix 8; and
- (cd) [not used]; and
- (d) whether the service provider should grant the applicant an exemption to the technical rules under section 12.34; and
- (e) the arrangements which will apply in respect of a supplementary matter connected with the access application".}

"access offer" means a form of contract developed under this applications and queuing policy which has been *signed* by Western Power and is in such a form that it can, without anything else being required, become an *access contract* when *signed* by an *applicant*.

"Act" means the Electricity Industry Act 2004.

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

{Note: Under the *Metering Code*, "accumulation meter" means "a *meter* that measures accumulated energy data and records it in one or more accumulated energy registers and includes a *meter* with interval energy data storage capability which is deemed to be an accumulation *meter* under clause 3.2(2)".}

"ancillary service" means one or more of the following reference services: supply abolishment service, capacity allocation service, remote direct load/inverter control service, remote de-energise service, remote



re-energise service, site visit to support remote re-energise service, manual de-energise service, and manual re-energise service.

"applicant" means a person (who may be a *user* or a *customer*) who has lodged, or intends to lodge, an application.

"applicant-specific solution" means a method of satisfying a connection application by either:

- (a) works funded solely by the applicant whether by direct funding or through payment of tariffs and/or contributions by that applicant and not involving another applicant; or
- (b) an operational solution involving only that applicant; or
- (c) a combination of works funded solely by the applicant and an operational solution involving only that applicant.

"application" means an electricity transfer application or a connection application.

"application form" with regards to an *application*, means the applicable *application* form (as is specified as being applicable to the *applicant's application* in this applications and queuing policy or on Western Power's website) provided by Western Power on its website, or otherwise published by Western Power, for that type of *application*.

"attachment point" means a point on the *network* at which *network assets* are *connected* to assets owned by another person.

"augment" and "augmentation" have the meaning given to 'work' in the Code.

{Note: Under the *Code* "work" means "any activity or undertaking in connection with the covered *network*, whether of a capital or non-capital nature, including the planning, designing, development, approval, construction, acquisition and commissioning of new facilities and new *network* assets and the procurement or provision of any good or service".}

"bidirectional point" means a single, indivisible (except as allowed under this applications and queuing policy) point, that for purposes under the access arrangement involving the transfer of electricity, is deemed to consist of a single attachment point, connected or to be connected to a user's connection point, with a single meter (regardless of the actual configuration of network assets making up the bidirectional point), at which electricity is to be transferred into and out of the network.

"bidirectional service" means a covered service provided by Western Power at a connection point under which the user may transfer electricity into and out of the network at the connection point.

"capacity", with regards to a part of the network (including a connection point), refers to the maximum rate at which electricity can be transported through that part of the network in accordance with good electricity industry practice.

"capacity allocation service" means a reference service ancillary to specified exit services and bi-directional services, under which a user's contracted capacity is increased or decreased at one or more connection points under its access contract and there is a corresponding increase or decrease in contracted capacity at one or more connection points under its own access contracts or connection points under another user's access contract for one or more intra-day periods for a specified period of time nominated by the user following which the contracted capacity under the user's access contract is reinstated.

"charge", for a covered service relating to the transfer of electricity, means the amount that is payable by a user to Western Power for the covered service under an access contract.

"Code" means the Electricity Networks Access Code 2004 (as amended).



"competing", in relation to two or more connection applications, means that the provision of the covered service sought in one connection application may impede Western Power's ability to provide the covered services that are sought in the other connection applications.

"competing applications group" means a number of *applications* that are *competing* for access to the *network* and that have been grouped together by Western Power in accordance with clause 24.

"complete", in relation to an application or notice, means where the applicant or controller (as applicable) has:

- (a) used reasonable endeavours to accurately and completely address each item in the applicable application form (including by the provision of any supporting information required by the application form); and
- (b) with respect to an *electricity transfer application*, provided all of the information required under clauses 3.5 and 3.6 for the *application*; and
- (c) with respect to a *connection application*, provided all of the information required under clauses 3.5 and 3.7 for the *application*,

to Western Power's satisfaction, acting as a reasonable and prudent person.

"completion date" means, in relation to works, the date when the works are complete except for minor omissions and minor defects which will not prevent the use of the works.

#### "confidential information" means:

- (a) in the case of information disclosed by an *applicant* or a *disclosing person* to Western Power in or in connection with an *application*, information which the *disclosing person* (acting as a *reasonable and prudent person*) has identified as being commercially sensitive or confidential; and
- (b) in the case of information disclosed by Western Power to an *applicant* or a *disclosing person* in connection with an *application*, information which Western Power (acting as a *reasonable and prudent person*) has identified as being commercially sensitive or confidential, and

does not include the information referred to in clause 6.1.

"connection application" means an application in relation to a covered service lodged with Western Power under this applications and queuing policy that has the potential to require a modification to the network, including an application to:

- (a) connect facilities and equipment at a new connection point; or
- (b) increase consumption or generation at an existing connection point; or
- (c) materially modify facilities and equipment connected at an existing connection point in a way that means that they no longer meet the eligibility criteria for the covered service at the relevant connection point or if the modification is likely to adversely impact the security, safety or reliability of the network; or
- (d) augment the network for any other reason,

and includes any additional information provided by the applicant in regard to the application.

"connection asset" has the meaning given to it in the Code.



{Note: Under the Code "connection assets" for a connection point means "all of the network assets that are used only in order to provide covered services at the connection point".}

#### "connection point" means:

- (a) an exit point; or
- (b) an entry point; or
- (c) a bidirectional point;

identified or to be identified as such in an access contract.

"consume" has the meaning given to it in the Code.

{Note: Under the *Code*, "consume" means "to consume electricity".}

"consumption", for a connection point, means the amount of electricity consumed at the connection point, and is measured in Watt-hours.

"constraint" means a limitation on the capability of the *network* (including arising by reference to the technical limitations and configuration of the *network*) such that it is unsafe, inconsistent with the maintenance of the reliability and security of the *network* or otherwise unacceptable to transfer (including accept the transfer of electricity into or out of the *network* at a *connection point*) the level of electricity that would occur if the limitation was removed. *Constraints* affecting the *network* may increase over time due to changes in load or generation connected to the *network*.

"contestable customer" means a *customer* to whom the supply of electricity is not restricted under section 54 of the *Electricity Corporations Act 2005* or under another enactment dealing with the progressive introduction of *customer* contestability.

{Note: At the time this applications and queuing policy comes into effect, the relevant instrument under section 54 of the *Electricity Corporations Act* 2005 was the *Electricity Corporations (Prescribed Customers) Order 2007*, gazetted 29 June 2007.}

"contract for services" has the meaning given to it in the Code.

{Note: Under the *Code "contract for services"* means "an agreement between a service provider and another person for the person to have access to services and includes an *access contract"*.}

"contracted capacity", for a connection point, means the maximum rate at which a user is permitted to transfer electricity to or from the network at the connection point, being either:

- (a) the rate specified in the user's access contract from time to time; or
- (b) if no rate is specified in the *user's access contract*, the maximum rate of electricity permitted to be transferred under the *reference service* eligibility criteria for the *reference service* for that *connection point* in the *user's electricity transfer access contract*; or
- (c) if no rate is specified in the *user's access contract* or in the *reference service* eligibility criteria, the maximum rate of electricity permitted to be transferred through the *connection assets* under the *technical rules*,

as applicable, and is measured in Watts or Volt-Amps.

"contribution" means any contribution applicable under the contributions policy.

"contributions policy" means the contributions policy in the access arrangement.



"controller" means a person, which includes a *customer*, who owns, operates or controls (or will own, operate or control) *facilities and equipment* at a *connection point*, and who is specified by an *applicant* in an *application* in respect of the *connection point*.

"covered service" has the same meaning given to it in the Code.

{Note: Under the Code "covered service" means "a service provided by means of a covered network, including:

- (a) a connection service; or
- (b) an entry service, exit service or bidirectional service; or
- (c) a network use of system service; or
- (d) a common service; or
- (e) a service ancillary to a service listed in paragraph (a) to (d) above,

but does not include an excluded service".}

"customer" has the meaning given to it in the Act.

"Customer Transfer Code" means the Electricity Industry Customer Transfer Code 2016, made under section 39(2)(a) of the Act in respect of the matter referred to in section 39(2)(b) of the Act, and includes all rules, policies or other subordinate documents developed under the Customer Transfer Code.

"customer transfer request" has the meaning given to it in the Customer Transfer Code.

{Note: Under the *Customer Transfer Code*, "customer transfer request" means "a request by a *retailer* to a *network* operator made using the form published under clause 4.1 to transfer a *contestable customer* at a *connection point* in the *network* operator's *network* from one *retailer* to another".}

"de-energise" in respect of a *connection point*, means to operate, modify or remove switching or other equipment to prevent the transfer of electricity through the *connection point*.

"disclosing person", in relation to an application, means a person who discloses confidential information to Western Power in, or in connection with, an application.

"distributed energy or other non-network solution" means the *generation* and export of electricity or provision of other services by a *user* at a *connection point* on the distribution *network* where that electricity or other service provides a *network* benefit.

"dormant application" means a connection application in respect of which:

- (a) no work has been undertaken by Western Power; or
- (b) no work has been agreed by Western Power and the *applicant* to be undertaken by Western Power,

to progress the *application*, including a system or other study, the preparation of a detailed cost estimate or other work, under clauses 20.2, 20.3 or 24, for a period of 12 continuous months calculated retrospectively from the date that the assessment as to dormancy is made, with the exception that an *application* is not a *dormant application* where:

- (c) the application's lack of progress is due to Western Power not progressing the application; or
- (d) the *application* has a *priority date* that is less than 3 years before the date that the assessment as to dormancy is made.

"electricity transfer application" means an application in relation to a covered service lodged with Western Power under this applications and queuing policy seeking to obtain or modify an entry service or an exit



service or a bidirectional service or an ancillary service and includes any additional information provided by the applicant in regard to the application.

"electricity transfer access contract" means a type of access contract that provides the user with an entry service or exit service or bidirectional service, or any combination of the three, at a connection point or connection points.

"enquiry" means an enquiry by an applicant under clause 18.

"entry point" means a single, indivisible (except as allowed under this applications and queuing policy) point, that for purposes under the access arrangement involving the transfer of electricity, is deemed to consist of a single attachment point, connected or to be connected to a user's connection point, with a single meter (regardless of the actual configuration of network assets making up the entry point), at which electricity is more likely to be transferred into the network than out of the network.

"entry service" means a covered service provided by Western Power at a connection point under which the user may transfer electricity into the network at the connection point.

"entry service component" means the component of a *bidirectional service* relating to the transfer of electricity by the *user* into the *network* at the *connection point*.

"exit point" means a single, indivisible (except as allowed under this applications and queuing policy) point, that for purposes under the access arrangement involving the transfer of electricity, is deemed to consist of a single attachment point, connected or to be connected to a user's connection point, with a single meter (regardless of the actual configuration of network assets making up the exit point), at which electricity is more likely to be transferred out of the network than into the network.

"exit service" means a covered service provided by Western Power at a connection point under which the user may transfer electricity out of the network at the connection point.

"exit service component" means the component of a *bidirectional service* relating to the transfer of electricity by the *user* out of the *network* at the *connection point*.

"final notice" has the meaning given in clause 20A.

"generate" has the meaning given to it in the Code.

{Note: Under the Code, "generate" means "to produce electricity".}

"generating plant" has the meaning given to it in the Code.

{Note: Under the Code, "generating plant" means in relation to a connection point "all equipment involved in generating electricity".}

"generation", for a connection point, means the amount of electricity generated at the connection point, and is measured in kilowatts.

"generation application" means a connection application which relates to generating plant to be established or modified or an increase in contracted capacity for entry services or entry service components servicing a generating plant but excluding any generating plant which is not expected to be registered under the WEM Rules as a registered facility (as defined in the WEM Rules) participating in security constrained economic dispatch.

"generator" has the meaning given to it in the Code.

{Note: Under the Code "generator" means a person who generates electricity".}



"good electricity industry practice" has the meaning given to it in the Code.

{Note: Under the Code "good electricity industry practice" means the exercise of that degree of skill, diligence, prudence and foresight that a skilled and experienced person would reasonably and ordinarily exercise under comparable conditions and circumstances consistent with applicable written laws and statutory instruments and applicable recognised codes, standards and guidelines}

"Ideal Generator Performance Standard" has the meaning given to it in the WEM Rules.

"incoming retailer" has the meaning given to it in the Customer Transfer Code.

{Note: Under the Customer Transfer Code, "incoming retailer", in relation to a customer transfer request or transfer, means "the retailer that will supply a contestable customer after the transfer time".}

"indemnifier" means a person who agrees to indemnify Western Power against a failure by a *user* to discharge its liabilities under an *access contract*.

"initial response" means the *initial response* of Western Power to an *applicant* under clause 19.1 in relation to a *connection application*.

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

{Note: Under the Metering Code, "interval meter" means "a meter that measures interval energy data and records it in a data logger, and excludes a meter with interval energy data storage capability which is deemed to be an accumulation meter under clause 3.2(2)".}

"law" means "written law" and "statutory instruments" as defined in the Code, orders given or made under a written law or statutory instrument as so defined or by a government agency or authority, Codes of Practice and Australian Standards deemed applicable under a written law and rules of the general law including the common law and equity.

"LED replacement service" means to replace an existing streetlight luminaire with an LED luminaire.

"lodgement fee" means the fee specified for an enquiry or an application in the price list.

"loss factor" has the meaning given to it in the WEM Rules.

{Note: Under the WEM Rules, "loss factor" means "(a) a factor representing network losses between any given node and the Reference Node where the Loss Factor at the Reference Node is 1, expressed as a product of a Transmission Loss Factor and a Distribution Loss Factor and determined in accordance with clause 2.27.5 [of the WEM Rules]; and (b) in relation to the Balancing Portfolio, the Portfolio Loss Factor".}

"market operator" means the entity conferred the functions in respect of the 'Wholesale Electricity Market' under the WEM Rules which, as at the date this version of the applications and queuing policy comes into effect, is the Australian Energy Market Operator Limited.

"market participant" means a person who, at a time after "energy market commencement" (as defined in the WEM Rules) is a "market participant" (as defined in the WEM Rules).

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

{Note: Under the Metering Code, "meter" means "a device which measures and records electricity production or consumption".}

"Metering Code" means the code made under section 39(1) of the *Act* in respect of a matter referred to in section 39(2)(a) of the *Act*, and includes any service level agreement, metering data agency agreement, communications rules, metrology procedure, mandatory link criteria and registration process developed under that code.



"metering database" means the "metering database" (as defined in the Metering Code) operated by Western Power under the Metering Code.

"metering equipment" means a meter or meters and associated equipment complying with the Metering Code used to measure and record electricity transferred to or from the network at a connection point, which may include the measurement of the rate of transfer and the quantity and quality of the transferred electricity.

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

{Note: Under the *Metering Code*, "*metering installation*" means "the *devices* and methods for the purpose of metrology which lie between: (a) at one boundary, a *metering point*; and (b) at the other boundary, either: (i) if a telecommunications *network* is used for the delivery of *energy data* from the *metering point* – the point of connection to the telecommunications *network*; or (ii) if there is no such telecommunications *network* – the interface port of either the *meter* or *data logger* or both."}

"Negotiated Generator Performance Standard" has the meaning given to it in the WEM Rules.

"network" has the meaning given to "Western Power Network" in the Code.

{Note: Under the *Code*, "Western Power *Network*" means "the *covered network* that is *covered* under section 3.1". The "Western Power *Network*" is the portion of the SWIN that is owned by the Electricity Networks Corporation.}

"network assets" has the meaning given to it in the Code.

{Note: Under the *Code*, "network assets", in relation to a network means "the apparatus, equipment, plant and buildings used to provide or in connection with providing covered services on the network, which assets are either connection assets or shared assets".}

"Network Control Services" has the meaning given to Network Control Service in the WEM Rules.

**"NMI"** means National Market Identifier, which is the unique identifier assigned by Western Power to each connection point.

"operational solution" means a method of satisfying a *connection application* that does not rely primarily on construction of new *network assets* or *augmentation* of existing *network assets*.

{Note: Examples of operational solutions could include generator runback schemes, load inter-trips, and off grid voltage support.}

"preliminary acceptance" has the meaning given to it in clause 24.5(b).

"preliminary access offer" mean an indicative and non-binding access offer that is made to an applicant within a competing applications group in accordance with clause 24.

"premise" has the meaning given to it in the Energy Operators (Powers) Act 1979.

"previous retailer" has the meaning given to it in the Customer Transfer Code.

{Note: Under the Customer Transfer Code "previous retailer", in relation to a transfer, "means the retailer that supplied the contestable customer before the transfer time".}

"price list" means the then current approved price list (as defined in the Code) applying under the Code.

{Note: under the Code, "approved price list" means "a price list approved by the Authority"}

{Note: Some costs and fees that may be levied under this applications and queuing policy may not be specified as firm values in the price list.}

"priority date" has the meaning given to it in clause 3.21(c).

"Proposed Generator Performance Standard" has the meaning given to that term in the WEM Rules.



"Proposed Negotiated Generator Performance Standard" has the meaning given to that term in the WEM Rules.

"reallocated applicant" has the meaning given to it in clause 24.6C(a).

"reasonable and prudent person" has the meaning given to it in the Code.

**{note: under the Code, "reasonable and prudent person"** means "a person acting in good faith and in accordance with *good electricity industry practice.*"}

"re-energise", in respect of a previously *de-energised connection point*, means to operate switching or other equipment so as to permit the transfer of electricity through the *connection point*.

"reference service" means a covered service designated in the access arrangement as a reference service (as defined by the Code).

{Note: under the Code, "reference service" means "a covered service provided to a user and designated as a reference service in an access arrangement under section 5.1(a) for which there is a reference tariff, a standard access contract and service standard benchmarks."}

"Registered Generator Performance Standard" has the meaning given to it in the WEM Rules.

"remote de-energise service" means to de-energise a meter associated with a connection point on a non-permanent basis by a command sent to the meter from a remote locality.

"remote load/inverter control service" means a service to send a command to an activated device for the control of a load or inverter at a *connection point* from a remote locality.

"remote re-energise service" means to re-arm a previously de-energised meter by a command sent to a meter from a remote locality.

"retailer" has the meaning given to it in the Act.

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

{Note: Under the *Metering Code*, "revenue meter" means "subject to clause 3.13(5), a meter that is used under this Code as the source of energy data, unless this Code permits an alternative source of energy data to be used".}

"services end date" means, in respect of a *connection point*, the date on which Western Power ends the provision of *covered services* to the *user* in respect of that *connection point*.

"services start date" means, in respect of a *connection point*, the date on which Western Power commences providing *covered services* to the *user* in respect of that *connection point*.

"shared assets" has the meaning given to it in the Code.

{Note: Under the Code "shared assets" mean "those network assets which are not connection assets".}

"signed" by Western Power or the *applicant* means duly *signed* or otherwise executed by or on behalf of all persons who comprise Western Power or the *applicant*, as the case may be.

"spare capacity" means the *capacity*, from time to time, of the network, as configured at the time of an *application*, to provide an *exit service* or *exit service component* sought in the *application*, having regard to matters including Western Power's contractual obligations in respect of the *network*.

"standard access contract", with respect to a reference service, means the access contract applicable to that reference service under the access arrangement.



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

"supply abolishment service" means a service to permanently disconnect electricity supply, remove the *meter* and abolish a *connection point*.

"technical requirement" has the meaning given to the term "Technical Requirement" in the WEM Rules.

"technical rules" means the technical rules (as defined in the Code) applying from time to time to the network under Chapter 12 of the Code, as modified in accordance with the Code and in the case of a transmission connected generating system or proposed transmission connected generating system also includes the Registered Generator Performance Standards for that transmission connected generating system.

"transfer and relocation policy" has the meaning given to it in the Code .

{Note: Under the Code "transfer and relocation policy" means "the provisions of an access and queuing policy that relate to a user's rights to transfer its access rights to another person".}

"transition application" means an application which:

- (a) seeks modifications to an access contract or any other contract for services; and
- (b) the modifications, if implemented, would not materially impede Western Power's ability to provide a *covered service* sought in one or more other *applications* compared with what the position would be if the modifications were not implemented.

"transmission connected generating system" has the meaning given to the term "Transmission Connected Generating System" in the WEM Rules.

"unmetered connection", with respect to a *connection point*, has the same meaning as the term "type 7 connection point" when that term is used in the *Metering Code*.

"user" has the meaning given to it in the Code.

{Note: Under the Code "user" means "a person, including a generator or a consumer, who is a party to a contract for services with a service provider, and under section 13.4(e) includes an other business as a party to a deemed access contract".}

"verifiable consent" has the meaning given to it in the Customer Transfer Code.

{Note: Under the Customer Transfer Code "verifiable consent", in relation to a request for historical consumption data or a customer transfer request, means "consent that is given by a contestable customer—

- (a) expressly; and
- (b) either:
  - (i) orally, if the oral consent is evidenced in such a way that it can be verified and made the subject of a record under clause 3.9.4; or
  - (ii) in writing; and
- (c) after the *retailer* obtaining the consent has in plain language appropriate to the *contestable customer* disclosed all matters materially relevant to the giving of the consent, including each specific purpose for which the consent will be used: and
- (d) by a person whom a retailer (acting reasonably) would consider competent to give consent on the contestable customer's behalf; and
- (e) which has not expired under clause 1.5".}

"WEM Rules" means the market rules referred to in section 123(1) of the Act.

"works" has the meaning given to it in the contributions policy.



{Note: Under the contributions policy, "works" means "headworks and all works required to be undertaken to provide an applicant with the covered services sought by the applicant in a connection application, including works associated with:

- (a) augmentation of connection assets;
- (b) augmentation of shared assets;
- (c) alternative options; and
- (d) other non-capital works".}

# 2.2 Application of this Applications and Queuing Policy to Connection Applications and Electricity Transfer Applications

- (a) Part A and Part B but not Part C of this applications and queuing policy apply to an *electricity* transfer application.
- (b) Part A and Part C but not Part B of this applications and queuing policy apply to a *connection* application.
- (c) To avoid doubt, this applications and queuing policy only applies to *applications* in relation to *covered services*.
- (d) An applicant and Western Power may agree to deal with any matter in connection with an application in a manner different to the treatment of the matter in this applications and queuing policy as long as the ability of Western Power to provide a covered service that is sought by another applicant is not impeded.
- (e) Part D of this applications and queuing policy sets out the *transfer and relocation policy* for the purposes of the *Code*.

#### 2.3 Interpretation

- (a) Unless:
  - (i) the contrary intention is apparent; or
  - (ii) the term has been redefined in clause 2,

a term with a defined meaning in the Code has the same meaning in this applications and queuing policy.

- (b) Unless the contrary intention is apparent:
  - (i) a rule of interpretation in the Code; and
  - (ii) the Interpretation Act 1984,

apply to the interpretation of this applications and queuing policy.

#### 2.4 Prior Applications

- (a) Unused.
- (b) To the extent permitted by *law*, an *application* made prior to the date of commencement of this applications and queuing policy shall be deemed to have been made under this applications and queuing policy, with its *priority date* being the date it was lodged under the previous version of the applications and queuing policy, but if the *application* was taken to be amended under that version of the policy such that its priority was determined by the time of amendment, then the *priority date* is that time of amendment.



(c) To the extent permitted by *law*, for the purposes of timeframes within this applications and queuing policy only, an *application* made prior to the current *access arrangement period* shall be deemed to have been made on the day the current *access arrangement period* commences.

## 2.5 Supplementary Matters Apply

Western Power and the *applicant* must, in accordance with section 5.28 of the *Code*, comply with any provisions of the *supplementary matters* relating to this applications and queuing policy.

#### 2.6 Exercising an Option Not Affected

An option granted to a *user* as part of the terms of an *access contract* to extend the duration of the *access contract* is not an *application* and is not subject to this applications and queuing policy if it is exercised in accordance with its terms.

# 2.7 Nature of Capacity Available for transferring electricity into the *Network*

- (a) This clause 2.7 applies to *entry services* and *entry service components*.
- (b) Contracted capacity for entry services and entry service components is provided on a non-firm basis and the provision of such services is subject to interruption or curtailment for constraints.
- (c) In the case of *entry services* and *entry service components, capacity* and *contracted capacity* represent the maximum capacity available to provide such services in the absence of *constraints*.
- (d) A *user* provided with an *entry service* or *entry service component* under an *access contract* has no greater priority to the *capacity* of the *network* than any other *user*.
- (e) The definition of *spare capacity* does not apply to *entry services* and *entry service components* or to *applications* for *entry services* and *entry service components*.
- (f) This clause 2.7 does not affect the operation of *access contracts* entered into prior to the date of the 2020 (No. 2) amendments unless such *access contract* is amended so as to increase the *contracted capacity* for *entry services* and *entry service components*.

# 3. The Application

#### 3.1 Applications to be Made in Good Faith

Western Power and an *applicant* must act reasonably and in good faith with regard to each other in relation to an *application*.

#### 3.2 Commencing the *Application* Process

- (a) The application process is commenced by the applicant submitting an enquiry to Western Power.
- (b) Following Western Power's response to the enquiry, the applicant must submit:
  - (i) an application to Western Power on the appropriate application form; or
  - (ii) where permitted under this applications and queuing policy, notice to Western Power, that is *complete*.



(c) Western Power will stamp *complete applications* with the date on which the *applications are* lodged and *complete*, and this date will be the *priority date*. The *priority date* may change in accordance with the provisions of clause 24A or otherwise be determined in accordance with clauses 10 or 11.2.

#### 3.3 Applicant to be Market Participant

An applicant who seeks an exit service or an entry service or a bidirectional service or an ancillary service:

- (a) must submit an electricity transfer application; and
- (b) must be, or intend to be (providing reasonable proof of intent), a market participant at the time the electricity transfer is to take place.

#### 3.4 Related Electricity Transfer Application and Connection Application

Where:

- (a) a retailer seeks to obtain or modify an exit service or an entry service or a bidirectional service or an ancillary service on behalf of a customer; or
- (b) a *generator* seeks to obtain or modify an *entry service* or a *bidirectional service* or a *capacity* allocation service on behalf of a *controller* who is not the *generator*,

and both a *connection application* and an *electricity transfer application* will be required under this applications and queuing policy, then the *applications* may:

- (c) be submitted concurrently by the retailer or the generator; or
- (d) be submitted at different times by the *retailer* or *generator* and the *customer* or *controller* as applicable, in which case both parties are *applicants*.

#### 3.5 Information Required with All Applications

All *applicants* must provide the following information to Western Power in respect of an *application* at the time of submitting the *application*:

- (a) details of the applicant, including:
  - (i) the full name and address of the applicant; and
  - (ii) whether the *applicant* is acting as agent for any person in making the *application*, and if so, details of the *applicant's* principals; and
  - (iii) whether the *applicant* is an existing *user*, and if so, details of the *applicant's* existing *access* contract,

and

- (b) any conditions precedent that the applicant seeks to include in the resulting access offer; and
- (c) details of the connection point, including:
  - (i) the location or NMI of the connection point, as applicable; and
  - (ii) the forecast annual consumption of electricity, if applicable; and
  - (iii) the forecast annual generation of electricity, if applicable,



and

(d) such information concerning the *applicant* as Western Power requires, acting as a *reasonable and* prudent person, to assess the *applicant's* ability to meet its obligations under the resulting *access* contract.

## 3.6 Information Required with Electricity Transfer *Applications*

The *applicant* must provide the following information to Western Power in respect of an *electricity transfer* application at the time of submitting the *electricity transfer* application:

- (a) the covered services requested, and for each requested covered service:
  - (i) the requested services start date and requested services end date;
  - (ii) if the covered service is a non-reference service, then a description of the non-reference service, including any deviation sought from the applicable tariff, service standard or standard access contract for an equivalent reference service;
  - (iii) if applicable, the contracted *capacity* sought or sought to be increased or decreased for the *covered service*; and
  - (iv) the applicant's eligibility for the covered service sought; and
- (b) details of the connection point, including:
  - (i) for an existing *connection point*, any changes to be made to the *standing data* for that *connection point* as a result of the *application*; and
  - (ii) for a new connection point:
    - (A) such information regarding the connection point required as standing data; and
    - (B) any facilities and equipment likely or required to be connected at the connection point; and
  - (iii) for the abolishment of an existing *connection point*, details of the *connection point* to be abolished and the *connection assets* to be removed or disconnected; and
    - if the *applicant* will not be the *controller*, information regarding the *controller* in compliance with the relevant provisions of the *Metering Code* in regard to the provision of *controller* information (with all references to a 'customer' under the relevant provisions of the *Metering Code* to be read as references to the *controller* for the purposes of this clause 3.6).
- (c) if applicable, details of any discount sought by the applicant under clause 10.6.

## 3.7 Information Required with *Connection Applications*

The *applicant* must provide the following information to Western Power in respect of a *connection* application at the time of submitting the *connection application*:

- (a) the covered services requested; and
- (b) the requested *services start date* and requested *services end date* for *covered services* involving the transfer of electricity that are likely to be sought under an associated *electricity transfer application*,

as applicable; and



- (c) the capacity sought or sought to be increased or decreased, if applicable; and
- (d) such information regarding the *facilities and equipment* likely or required to be connected at the *connection point* to the extent required by:
  - (i) the technical rules; and
  - (ii) Western Power acting as a reasonable and prudent person; and
- (e) where the connection application relates to a transmission connected generating system:
  - (i) whether, for each technical requirement, it is proposed that the Ideal Generator Performance Standard will apply or a Proposed Negotiated Performance Standard will be submitted for that technical requirement; and
  - (ii) if the applicant proposes to submit a Proposed Negotiated Generator Performance Standard for a technical requirement, the Proposed Negotiated Generator Performance Standard for that technical requirement; and
- (f) a full description of any exemptions to the *technical rules* sought by the *applicant* under Chapter 12 of the *Code*.

#### 3.8 One Electricity Transfer Access Contract per Connection Point

Each connection point must be included in one and only one electricity transfer access contract to allow the transfer of electricity at that connection point except to the extent necessary to facilitate a capacity allocation service.

#### 3.9 Forecasts of Information

When an *application* contains estimates or forecasts of any information:

- (a) Western Power may treat that estimated or forecast information as factual information; and
- (b) the *applicant* warrants to Western Power that each such estimate or forecast is the *applicant's* best estimate or forecast acting as a *reasonable and prudent person*.

#### 3.10 Errors or Omissions in an Application

- (a) If Western Power becomes aware of any material error or omission in an *application* it must immediately notify the *applicant* about it and may request information under clause 3.11.
- (b) If an *applicant* is notified by Western Power under clause 3.10(a), or otherwise becomes aware of any material error or omission in an *application*, it must amend the *application* to remedy it as soon as practicable after becoming aware of it.
- (c) If Western Power has notified the *applicant* under clause 3.10(a), the *applicant* must amend the *application* to remedy the material error or omission within 20 business days, or the *application* and, as applicable, any associated *electricity transfer application* or *connection application* will be deemed to have been withdrawn.
- (d) If remedying an error or omission in an *application* amounts to a material amendment to the *application*, clause 24A.2 applies.



#### 3.11 Additional Information

- (a) At any time, Western Power may, acting as a *reasonable and prudent person*, request the *applicant* to provide further information that Western Power reasonably requires to enable it to process the *application*.
- (b) If Western Power has notified the *applicant* under clause 3.11(a), the *applicant* must amend the *application* to provide the additional information within 20 business days, or the *application* and, as applicable, any associated *electricity transfer application* or *connection application* will be deemed to have been withdrawn.
- (c) If providing additional information for an *application* amounts to a material amendment to the *application*, clause 24A.2 applies.

#### 3.12 Western Power must be Expeditious and Diligent

Western Power must process an application expeditiously and diligently.

#### 3.13 Amendment and Withdrawal of *Application*

- (a) Subject to clauses 3.10, 3.11, 24A.2 and 24.7A, an *applicant* may at any time by notice in writing to Western Power, amend an *application*.
- (b) If an amendment to an *application* results in a change to the original *lodgement fee*, Western Power may *charge* the *applicant* the new *lodgement fee* or refund part of the original *lodgement fee*, having regard to the work already *completed* in processing the *application*.
- (c) An *applicant* may at any time before it enters into an *access contract*, by notice in writing to Western Power, withdraw an *application*.
- (d) Unused.
- (e) Without limiting this clause 3.13, an amendment to an *application* may include a change to the identity of the *applicant* in which case the other information in the *application* must also be amended and the information provisions of clause 3 shall apply to the new applicant.

#### 3.14 Applications Do Not Expire

Unless expressly provided otherwise by this applications and queuing policy, an *application* does not expire due to the passage of time.

#### 3.15 *Network* Planning

- (a) In processing applications (including as applicant-specific solutions or competing applications groups) Western Power must have regard to the general network planning otherwise being undertaken by Western Power and seek to develop solutions and process applications in a manner which most effectively enables applicants to benefit from any efficiencies and costs savings provided by that network planning.
- (b) Due to the range of potential *network constraints* and related solutions, timeframes for the development of solutions will be variable. Western Power will keep *applicants* informed on a regular basis of the *network constraints* that affect them and expected timeframes for the development of solutions.



- (c) The information Western Power will provide to *applicants*, and the further studies it may be requested to undertake, extend to information and studies as to how *applications* co-ordinate with *network* planning being undertaken by Western Power.
- (d) In undertaking network planning Western Power will have regard to the nature and number of enquiries and applications Western Power has received under this applications and queuing policy, it being acknowledged that in doing so Western Power will need to make a good faith assessment as to the likelihood that specific projects will proceed.

# 4. The Access Offer

#### 4.1 Access Offer to be Signed by Western Power

Western Power must present the *access offer* in such a form that it can, without anything else being required, become or modify an *access contract* or *access contracts* when *signed* by an *applicant*.

#### 4.2 If Application Requests Reference Services

If an *application* requests a *reference service*, then the *access offer* must be on materially the same terms as the *standard access contract* applicable to the *reference service*.

## 4.3 If Application Requests Non-Reference Service

If an application requests a non-reference service, then the terms of the access offer must be:

- (a) consistent with the Code objective; and
- (b) reasonable; and
- (c) subject to this applications and queuing policy, as similar as practicable to those terms requested in the *application* dealing with the relevant matter, and negotiated in good faith by the *applicant* and Western Power during the processing of the *application*.

#### 4.4 Services Start Date and Services End Date

The services start date and the services end date specified in the access offer must be as close as practicable to the services start date and the services end date sought in the application.

#### 4.5 Conditions Precedent Permitted in Access Contract

Western Power and an *applicant* must negotiate in good faith regarding any conditions precedent that the *applicant* or Western Power seek to have included in an *access contract* in order to achieve the objectives set out in clause 4.6. For the avoidance of doubt, Western Power may require a condition precedent in the *access contract* that:

- (a) the works involved in providing access to the applicant pass a regulatory test (if required); and
- (b) other applicants that:
  - (i) are in the same competing applications group as the applicant; and
  - (ii) have been or are subsequently offered access contracts,

enter those *access contracts* with Western Power and that any conditions precedent in those *access contracts* are fulfilled.



### 4.6 Objectives with Regard to Conditions Precedent

The objectives of this applications and queuing policy with regard to conditions precedent are:

- (a) conditions precedent in *access contracts* should facilitate the development of electricity consuming and generating projects and provide flexibility; and
- (b) conditions precedent should not unduly impede the ability of Western Power to provide *covered* services to competing applicants or cause uncertainty and delay; and
- (c) conditions precedent should not constitute an inappropriate barrier to entry into a market or be for the purpose of hindering or preventing *access* by any person to *covered services*.

## 4.7 Conditions Precedent and Determination of *Spare Capacity*

In determining whether there is sufficient *spare capacity* to provide *covered services* requested in an *application*, Western Power must regard any existing *access contracts* with conditions precedent as being unconditional.

## 4.8 Conditions Precedent Not Longer Than 8 Months

- (a) Western Power and an *applicant* must not enter into an *access contract* that contains a condition precedent that may be fulfilled more than 8 months from the date the *access contract* was entered into, unless the condition precedent relates to the completion of the related *works* and the *applicant* and Western Power agree that a longer period is reasonably necessary due to the nature of *works* to be conducted, in which case the period of 8 months may be extended by agreement between the *applicant* and Western Power.
- (b) If, after the period of time agreed under clause 4.8(a), a condition precedent in an *access* contract has not been fulfilled, then:
  - (i) if there is no competing application, Western Power and the relevant user may agree within 20 business days to extend the period in the access contract allowed for the satisfaction of the condition precedent by up to a further 6 months; or
  - (ii) if there is a *competing application*, then, subject to clause 6, Western Power and the existing *user* must negotiate in good faith within 20 business days to accommodate both the *user's* and the *competing applicant's* requirements.

{Note: this might mean sharing the costs of *augmentation* as calculated under the *contributions policy*, or some *other means* of resolving the conflict.}

- (c) If no agreement is reached under clause 4.8(b), then either Western Power or the user may:
  - (i) terminate the access contract; or
  - (ii) waive any conditions precedent that are for the benefit of that party if that would result in the *access contract* becoming unconditional; or
  - (iii) refer this matter to the Arbitrator as an access dispute.

#### 4.9 Security

(a) Subject to clause 4.9(b), if there is a material risk that the *applicant* will be unable to meet any or all of its liabilities under an *access contract* resulting from the *applicant's application*, then Western Power may require the *applicant* to procure



- (i) an *indemnifier* acceptable to Western Power (acting as a *reasonable and prudent person*) who will agree to be a party to the *access contract* and indemnify Western Power in respect of those liabilities.; or
- (ii) a guarantor acceptable to Western Power (acting as a reasonable and prudent person) to provide a guarantee in favour of Western Power substantially in the form set out in Schedule 1,
- (b) If an applicant has an unqualified credit rating of at least:
  - (i) BBB from Standard and Poor's Australia Pty Ltd; or
  - (ii) BAA from Moody's Investor Service Pty Ltd,

and provides evidence to this effect to Western Power, without limiting the *User*'s security obligations related to clause 4.9(c), then Western Power is not entitled to require the *User* to provide the security under clause 4.9(a).

- (c) Notwithstanding an *applicant* providing evidence that it has an unqualified credit rating in accordance with clause 4.9(b), Western Power may, as a condition under an *access contract* or otherwise, require the *user or indemnifier* to provide an irrevocable and unconditional bank guarantee or equivalent financial instrument in terms acceptable to Western Power (acting as a *reasonable and prudent person*), guaranteeing the present value of any amount of any *contribution* that remains unpaid or not provided as calculated by Western Power under the *contributions policy*.
- (d) Western Power may perform a financial, credit and/or security assessment under this clause 4.9 prior to making an *access offer*.

#### 4.10 Arbitrator's Powers Preserved

Nothing in this clause 4 limits the *Arbitrator's* power to make an award compelling Western Power to provide *access* to a *covered service* on terms specified in the award.

# 5. Entering Into or Modifying an Access Contract

## 5.1 When Access Offer Becomes Access Contract

- (a) An access offer becomes an access contract, or modifies an existing access contract in accordance with the terms of that access contract, as applicable, when signed by both parties.
- (b) Western Power must sign the access offer before giving the access offer to the applicant.

## 5.2 Applicant's Options on Receipt of an Access Offer

The *applicant* must as soon as practicable, and in any event within 30 business days after receipt of an *access offer*, either:

- (a) sign the access offer, thereby entering into an access contract or modifying an existing access contract, as applicable; or
- (b) by notice to Western Power reject the *access offer* and request amendments to the *application*; or
- (c) by notice to Western Power withdraw the application,



and if 30 Business Days after receipt of the *access offer* the *applicant* has not complied with any of clauses 5.2(a), 5.2(b) or 5.2(c), then (unless the *Arbitrator* makes an order extending the time limit on the ground that the delay is beyond the *applicant's* reasonable control) the *applicant* is to be taken to have withdrawn its *application* and any, as applicable, associated *electricity transfer application* or *connection application*.

## 5.3 If Applicant Rejects Access Offer and Requests Amendments

If the *applicant* rejects an *access offer* and requests amendments to the *application* under clause 5.2(b), Western Power and the *applicant* must negotiate in good faith regarding the *application*, but if Western Power and the *applicant* have not *signed* an *access contract* (including an *access contract* with conditions precedent) within 30 business days, then the *application* and any, as applicable, associated *electricity transfer application* or *connection application* will be deemed to have been withdrawn.

## 5.4 If Applicant Accepts Access Offer

If the *applicant* signs the *access offer*, it must:

- (a) forthwith give written notice of the signing to Western Power;
- (b) as soon as practicable procure the stamping of the *signed access contract*, if applicable, and pay all duties that are assessed by the Office of State Revenue on the *access contract*; and
- (c) as soon as practicable thereafter give to Western Power at least one original copy of the *signed* and stamped *access contract*.

#### 5.5 Connection Application Ceases to Exist After Signing

Without limiting any other circumstances in which an *application* may cease to exist, an *application* is satisfied, and ceases to exist, upon:

- (a) both Western Power and the applicant signing an access contract as a result of the making of that application, and any conditions precedent in the access contract have been satisfied or waived;
- (b) the *access contract* being terminated due to a failure by the *applicant* to satisfy the conditions precedent in the *access contract*; or
- (c) the access contract being terminated due to a breach or default of the applicant.

# 6. Confidentiality

## 6.1 Confidential Information

Information which Western Power is required to disclose under clauses 18.2A, 24.9(a), 24.9(b) and 24.9(c) is not *confidential information*.

#### 6.2 Confidential Information Must Not be Disclosed

Western Power, an applicant or a disclosing person must not disclose confidential information unless:

- (a) the disclosure is made to the Authority on a confidential basis; or
- (b) the disclosure, where it is made by an *applicant* or a *disclosing person*, is made to a worker of Western Power who is bound by an adequate confidentiality undertaking; or



- (c) the disclosure is made with the consent of the disclosing person; or
- (d) the disclosure is required or allowed by *law*, or by the *Arbitrator* or another court or tribunal constituted by *law*; or
- (e) the information has entered the public domain other than by breach of this clause 6.2; or
- (f) the information could be inferred by a *reasonable and prudent person* from information already in the public domain;
- (g) the disclosure is made in accordance with clauses 24.9(d) or 24.10;
- (h) the disclosure is made in accordance with clause 16.6;
- (i) the disclosure is made in accordance with clause 6.3.

#### 6.3 Disclosure to AEMO

Western Power may disclose the following information relating to connection applications to AEMO:

- (a) information relating to a *generation application* required to be provided to current other *applicants* under clause 16.6 and, in addition, in respect of each such *generation application* the identity of the *applicant* and the forecast in service date for their *generating plant*, modified *generating plant* or increased *contracted capacity*;
- (b) any information required for AEMO to undertake its system management functions under the WEM Rules (including any information AEMO notifies Western Power it requires to discharge those functions);
- (c) that a particular *access contract* has been executed and the key details of that contract such as the parties' names, the name and location of the *generating plant* and of any facilities which will *consume* load, and the initial *contracted capacity;* and
- (d) that all conditions precedent in an access contract have been satisfied or waived.

# Part B – Electricity Transfer Applications

# 7. Costs and Timing of Processing *Electricity Transfer Applications*

# 7.1 Where Applicant Seeks a Reference Service

- (a) An applicant who seeks a reference service must pay to Western Power the lodgement fee in the price list specified as being applicable to the applicant's application in this applications and queuing policy, which will be:
  - (i) a new connection point fee;
  - (ii) an access contract modification fee;
  - (iii) a new standard access contract fee;
  - (iv) a capacity allocation service fee;
  - (v) a remote load/inverter control service fee, remote re-energise service fee or remote deenergise service fee; or
  - (vi) a distributed energy or other non-network solution assessment fee.



- (b) If the *applicant* is not an existing *user*, then the *lodgement fee* must be paid at the time the *applicant* lodges its *electricity transfer application*.
- (c) If the *applicant* is an existing *user*, then the *lodgement fee* will be added to the next invoice under the *user's* existing *access contract*.
- (d) Western Power must notify the *applicant* that it has received the *applicant's electricity transfer* application within 5 business days.
- (e) Subject to Western Power performing a security assessment under clause 4.9, if the *applicant* is an existing *user* and selects a *reference service*, then Western Power must use reasonable endeavours to make an *access offer*, by notice to the *applicant*, to modify the *applicant's access contract*:
  - (i) within 5 business days of receiving the complete electricity transfer application; or
  - (ii) within 5 business days of an *access offer* being *signed* by an *applicant* for any associated *connection application*,

#### whichever is later.

- (f) Subject to Western Power performing a security assessment under clause 4.9, if the *applicant* is not an existing *user*, and selects a *reference service*, Western Power must use reasonable endeavours to make an *access offer*:
  - (i) within 10 business days of receiving the complete electricity transfer application; or
  - (ii) within 5 business days of an *access offer* being *signed* by an *applicant* for any associated connection application,

whichever is later.

#### 7.2 Where Applicant Seeks a Non-Reference Service

- (a) An applicant seeking a non-reference service, including, but not limited to, an exit service or an entry service or a bidirectional service with a different tariff or a different access contract than for an equivalent reference service, must, when requested by Western Power, pay an amount to Western Power in respect of a reasonable cost incurred, or to be incurred within a reasonable timeframe, in processing the application.
- (b) The total of the costs referred to in clause 7.2(a) must not exceed the reasonable costs which would be incurred by a prudent *service provider*, acting efficiently and in good faith, seeking to achieve the lowest practicable cost of processing the *application*.
- (c) The costs referred to in clause 7.2(a) must not include any costs of Western Power in relation to an *access dispute* (which are to be awarded by the *Arbitrator* under Chapter 10 of the *Code*).
- (d) If an applicant selects a non-reference service, then Western Power must make an access offer as soon as practicable after the complete application is lodged, having regard to the nature of the non-reference service being sought by the applicant.

### 7.3 Connection Application Costs Not Affected

Nothing under this Part B affects costs applicable for a *connection application*.



#### 7.4 Unused

# 8. Eligibility Criteria for Reference Services

If an applicant seeks a reference service under this Part B and Western Power is satisfied as a reasonable and prudent person that the applicant does not meet the eligibility criteria given in the access arrangement for the reference service, then Western Power may reject the applicant's electricity transfer application.

# 9. Electricity Transfer Application for a New Connection Point

## 9.1 Customer Transfer Request

- (a) An *incoming retailer* may lodge a *customer transfer request* with Western Power with respect to an *exit point* at which electricity is proposed to be supplied to a *contestable customer*. With respect to the *customer transfer request*:
  - (i) Western Power, the *incoming retailer* and the *previous retailer* must comply with the *Customer Transfer Code*; and
  - (ii) except as specified in this clause 9, this applications and queuing policy does not apply.
- (b) Western Power must not process the *customer transfer request* if it determines under clause 13 that the *customer transfer request* relates to the supply of electricity to a *customer* who is not a *contestable customer*.
- (c) Western Power must process a *customer transfer request* such that the *incoming retailer* receives the same *covered service* at the same *contracted capacity* as the *previous retailer*.
- (d) The *exit point* must be transferred as a *complete* and indivisible unit such that all associated *meters* are transferred in one transaction.
- (e) If the incoming retailer seeks to modify the covered service with respect to an exit point that has been the subject of a customer transfer request, then that incoming retailer must make an application under this applications and queuing policy as a separate transaction after the customer transfer request has been processed.

## 9.2 Creating a New Connection Point or Connecting New Generating Plant

- (a) An *applicant* who seeks to create a new *connection point* or to install new *generating plant* at an existing *connection point* must:
  - (i) submit an *electricity transfer application* on the *application form* that is applicable for the type of *facilities and equipment* to be *connected* at the *connection point*; and
  - (ii) submit, or procure that its *customer* submits, a *connection application*.
- (b) If the *applicant* is seeking a *reference service*, then:
  - (i) if the *applicant* is an existing *user*, the new *connection point lodgement fee* applies to the *application*; or
  - (ii) if the *applicant* is not an existing *user*, the new *access contract lodgement fee* applies to the *application*,

but if the applicant is seeking a non-reference service then clause 7.2 applies to the application.



- (c) If an *applicant* submits an *electricity transfer application* subsequent to Western Power making an *access offer* for an associated *connection application* (to the *applicant*, its *customer* or another person) and:
  - (i) the capacity; or
  - (ii) the services start date (as relates to the transfer of electricity); or
  - (iii) the services end date (as relates to the transfer of electricity),

sought in the connection application and the electricity transfer application are not the same, such that the application of the contributions policy based on the information in the electricity transfer application would produce a contribution different to that specified in the access offer for the associated connection application, then Western Power may:

- (iv) where the *contribution* would be higher to that specified in the *access offer*, require the *applicant* to pay the difference; or
- (v) where the *contribution* would be lower to that specified in the *access offer* and the *contribution* specified in the *access offer* has been paid by the *applicant*, rebate the difference to the person who paid a *contribution* in respect of the *connection application*,

#### as applicable.

- (d) The *services start date* for the *covered services* sought under the electricity transfer application will be the later of:
  - (i) the *services start date* (as relates to the transfer of electricity) sought in the *connection* application; or
  - (ii) the services start date sought in the electricity transfer application; or
  - (iii) the completion date of any works resulting from the connection application.

# 10. Electricity Transfer Application to Modify an Existing Covered Service

# 10.1 Selection of Different *Covered Service* or Selection or Modification of an Existing Non-*Reference Service*

- (a) An applicant may make an electricity transfer application to:
  - (i) select a different exit service, entry service or bi-directional service;
  - (ii) modify an *exit service*, *entry service* or *bi-directional service* by selecting a component reference service (metering) under Appendix E to the *access arrangement*;
  - (iii) select or modify an ancillary service;
  - (iv) select an LED replacement service; or
  - (v) select or modify a *non-reference service*, with respect to a *connection point* in the *applicant's access contract*, by notice to Western Power.
- (b) If the applicant is seeking:
  - (i) an exit service, entry service or bi-directional service, then the new connection point lodgement fee applies to the application;



- (ii) a different exit service, entry service or bi-directional service, then the access contract modification fee applies to the application;
- (c) If the *applicant* is seeking a *non-reference service* or a modification to a *non-reference service* then clause 7.2 applies to the *application*.
- (d) If Western Power considers, as a *reasonable and prudent person*, that the requested change in *covered service* indicates that the *applicant* will require a greater *capacity*, then:
  - (i) Western Power must notify the *applicant* within 5 business days whether the *applicant* must also submit, or procure that its *controller* submits, a *connection application* for an increase in *contracted capacity*; and
  - (ii) the *priority date* of such *connection application* shall comprise:
    - (A) if a *complete connection application* is received by Western Power within 20 business days of the notice sent to the *applicant* under clause 10.1(d)(i), the date Western Power received the *electricity transfer application* under clause 10.1(a); and
    - (B) otherwise, the date Western Power received the complete connection application.
- (e) If the *application* requests a new *covered service* that is serviced at a different voltage than the existing *covered service*, then Western Power must notify the *applicant* that it must submit, or procure that its *controller* submits, a *connection application*.

#### 10.2 Increase or Decrease in *Contracted Capacity*

- (a) An electricity transfer application to increase or decrease contracted capacity with respect to an existing covered service under the applicant's access contract, may be made by notice to Western Power.
- (b) The *lodgement fee* for *an access contract* modification applies to the *applicant's application*, plus any costs for any associated *connection application*.
- (c) Western Power must notify the *applicant* whether or not it accepts the increase or decrease in *contracted capacity* within 5 business days of receipt by Western Power of the *applicant's* notice under clause 10.2(a) (or such further time as a prudent *service provider* would reasonably require to consider such *application*).
- (d) Western Power must accept the increase or decrease in *contracted capacity* if it forms the view as a *reasonable and prudent person* that:
  - (i) accepting the increase or decrease in *contracted capacity* would not be likely to impede the ability of Western Power to provide a *covered service* sought in an *application* lodged by another *applicant*; and
  - (ii) it is not likely that an *augmentation* or any work would be required to provide the increase or decrease in *contracted capacity*; and
  - (iii) in the case of a second or further *application* or notice in any rolling period of 12 months, the additional *application* or notice satisfies clause 10.3.
- (e) If Western Power determines that it cannot form the view required for acceptance of the increase or decrease in *contracted capacity* under clause 10.2(d), then:
  - (i) Western Power must notify the *applicant* that it must submit, or procure that its *controller* submits, a *connection application*; and
  - (ii) the *priority date* of such *connection application* shall comprise:



- (A) if a complete connection application is received by Western Power within 20 business days of the notice sent to the applicant under clause 10.2(e)(i), the date Western Power received the electricity transfer application under clause 10.2(a); and
- (B) otherwise, the date Western Power received the complete connection application.

#### 10.3 More than 1 Change or Modification Within 12 Months

If Western Power receives:

- (a) more than 1 application or notice under clause 10.1; or
- (b) more than 1 application or notice under clause 10.2,

seeking to change the *covered service*, including to decrease or increase the *contracted capacity*, with respect to a single *connection point* in any rolling period of 12 months, then in relation to each additional *application* or notice, Western Power:

- (c) must, subject to this clause 10 and acting as a reasonable and prudent person, accept the change of covered service, where the new covered service will be sufficient to meet the actual requirements of the applicant, and it is required by reason of one or more of the following circumstances:
  - (i) a change in the actual *consumption* or *generation* by the *applicant* in respect of that *connection point* over the 12 month period prior to the *applicant* giving notice under clause 10.1(a) or 10.2(a) (as applicable), as recorded by the *metering equipment*; or
  - (ii) a change in the nature of the business or operation conducted at the connection point; or
  - (iii) a shutdown of the business or operation conducted at the *connection point* (including a shutdown for maintenance purposes) for longer than 1 continuous month; or
  - (iv) a rapid increase or decline in the business at the connection point; or
  - (v) a decrease in the number of *capacity* credits (as defined in the *WEM Rules*) allocated to any *generating plant* at the *connection point* under the *WEM Rules*; or
  - (vi) as part of a relocation; or
  - (vii) some other special circumstance,

and

(d) is entitled to refuse the change in *covered service* where Western Power is satisfied, as a *reasonable and prudent person*, that the change is sought by reason of the seasonal nature of the business or operation at the *connection point*.

## **10.4** Modification of *Generating Plant*

- (a) An *applicant* must make a *connection application* before materially changing any of those characteristics of *generating plant connected at a connection point* required to be provided in the applicable *application form*.
- (b) If the *applicant signs an access offer* in respect of the *connection application*, then the parties must amend the *applicant's access contract* accordingly.



#### 10.5 Capacity Allocation services

- (a) Subject to clauses 10.5(c), 10.5(d) and 10.5(e), an *applicant* may make an *application* for a *capacity allocation service* between one or more *connection points*, provided that the proposed *capacity allocation service* satisfies the *reference service* description and eligibility criteria as set out in the relevant *reference service*.
- (b) The *application fee* for the *capacity allocation service* as specified in the *price list* shall be paid by the applicant to Western Power simultaneously with the submission of the application.
- (c) Where the applicant seeks a *capacity allocation service*, Western Power will within 30 business days of its receipt of the application under clause 10.5(a) and the application fee under clause 10.5(b) undertake a preliminary assessment of the application to determine that in approving the proposed *capacity allocation service* the following requirements will be met:
  - (i) the increases or decreases in *contracted capacity* in the proposed *capacity allocation service* would not be likely to impede the ability of Western Power to provide *covered services* to existing *users*; and
  - (ii) no augmentation or any work would be required to be carried out in order to provide the proposed *capacity allocation service*.
- (d) If Western Power acting as a *reasonable and prudent person* forms the view that in approving the proposed *capacity allocation service* the requirements of clause 10.5(c) will be met, Western Power must:
  - (iii) approve the capacity allocation service application;
  - (iv) notify the applicant of its decision as soon as reasonably practicable; and
  - (v) implement the *capacity allocation service* within 50 business days of receipt by Western Power of the application under clause 10.5(a).
- (e) If Western Power acting as a *reasonable and prudent person* determines that any of the requirements of clause 10.5(c) will not be met, Western Power must notify the applicant within 30 business days of such determination, outlining which requirement or requirements of clause 10.5(c) will not be met.
- (f) Upon receipt of a notice under clause 10.5(e), if the applicant wishes to prepare a connection application in relation to the modifications to the *network* that may be required in order to facilitate the proposed *capacity allocation service*, then prior to lodging such connection application it must lodge an *enquiry* regarding a proposed connection application with Western Power pursuant to clause 18 of this applications and queuing policy.

#### 10.6 Discounts in accordance with Sections 7.9 and 7.10 of the *Code*

- (a) As set out in sections 7.1 and 7.2 of the *price list*, subject to payment of the relevant *fee*, the *applicant* may in its *application* seek a discount to the tariff in respect of a *reference service* or a *non-reference service* in accordance with the discount criteria published on Western Power's website as amended from time to time (*discount criteria*) on the basis that its facilities and equipment connected behind the *connection point* (including *distributed generating plant* and other non-*network* solutions) will directly cause a reduction in Western Power's future *network* capital related costs or *non-capital costs* as a result of the relevant *entry point* being located in that particular part of the *network*.
- (b) The *applicant* will provide to Western Power together with its *application* all supporting information as set out in the *discount criteria*.



- (c) Western Power will provide a determination regarding the discount to the *applicant* within 45 business days of receiving the application for a discount specifying whether a discount is:
  - (i) approved, and if so the amount of the discount (including the method of calculation as set out in the *price list*). Western Power will then submit a discount offer to the *applicant* and subject to the entry into of an agreement with the *user* in relation to the discount, implement the discount in accordance with the terms of the executed agreement; or
  - (ii) not approved, and if not the reasons why the discount is not approved.

# 11. De-energisation and Re-energisation

## 11.1 De-energisation

A request by a *user* to Western Power to *de-energise* an existing *connection point* under the *user's access contract* or applicable *laws* is not an *application* and this applications and queuing policy does not apply to it.

## 11.2 Re-energisation

- (a) An *applicant* who seeks to *re-energise* an existing *de-energised* connection point must submit an *electricity transfer application* on the *application form* that is applicable for the type of facilities and equipment connected or to be connected at the connection point.
- (b) If the *applicant* does not have an *electricity transfer access contract*, then the *lodgement fee* for a new *access contract* applies to the application, plus costs associated with the re-energisation under the *Metering Code*.
- (c) If the *de-energised* connection point is not on the *applicant*'s electricity transfer *access contract*, then the *lodgement fee* for a new connection point applies to the application, plus costs associated with the re-energisation under the *Metering Code*.
- (d) If the *de-energised* connection point is on the *applicant*'s electricity transfer *access contract*, then only the costs associated with the re-energisation under the *Metering Code* apply to the application.
- (e) Subject to clause 11.2(g), Western Power must determine, as a *reasonable and prudent person*, within 5 business days whether it will accept the request for re-energising.
- (f) If Western Power determines that it cannot accept the request for re-energising under clause 11.2(e), then:
  - (i) Western Power must notify the *applicant* that it must submit, or procure that its *controller* submits, a *connection application*; and
  - (ii) the *priority date* of such *connection application* shall comprise:
    - (A) if a *complete connection application* is received by Western Power within 20 business days of the notice sent to the *applicant* under clause 11.2(f)(i) the date Western Power received the *electricity transfer application* under clause 11.2(a); and
    - (B) otherwise, the date Western Power received the complete connection application.
- (g) Nothing in clause 11.2 derogates from the obligations of Western Power to *re-energise a connection point* within the timeframes specified in clause 8.2 of the Code of Conduct for the



Supply of Electricity to Small Use Customers 2004 or regulations 7 and 8 of the Electricity Industry (Obligation to Connect) Regulations 2005.

# 12. Electricity Transfer Application to Obtain a New Access Contract

- (a) An *applicant* who seeks a new *access contract*, other than under clauses 8 to 11 may make an *electricity transfer application* by notice to Western Power.
- (b) If an applicant makes an application under clause 12(a), then:
  - (i) if the *applicant* seeks a *standard access contract*, the *lodgement fee* for a new *standard access contract* applies to the *application*; or
  - (ii) if the *applicant* seeks an *access contract* that is materially different to a standard access contact, then clause 7.2 applies to the *application*.

# 13. Contestability Assessment

#### 13.1 Western Power Must Perform Contestability Assessment

- (a) When:
  - (i) an applicant makes an electricity transfer application or a connection application to establish a new exit point; or
  - (ii) an incoming retailer makes a customer transfer request with regard to an exit point,

Western Power must determine if the *application* or *customer transfer request* is being made for the purpose of the supply of electricity to a *contestable customer* at that *exit point*.

(b) Western Power must perform an assessment under this clause 13 within 5 business days of the event that triggered the assessment.

#### 13.2 Unused

## 13.3 Rejection of *Application*

Western Power must reject an *application* where it is not authorised under the *Electricity Corporations Act* 2005 or other *written law* to make an *access offer* for the purpose of the supply of electricity to a *customer* because that *customer* is not a *contestable customer*.

{Note: Under section 54 of the *Electricity Corporations Act 2005*, Western Power is prohibited from supplying services for the purpose of the supply of electricity to a *customer* that is not a *contestable customer* by a person other than the 'Electricity Generation and Retail Corporation' (as defined in section 3 of the *Electricity Corporations Act 2005*) or a subsidiary of that corporation.}

# 14. Connection Point Configuration

#### 14.1 Rules for Mapping Network Assets to a Single Connection Point

Western Power must comply with the following when determining the configuration of a connection point:

(a) the proposed configuration must meet the WA Electrical Requirements, made pursuant to regulation 49 of the Electricity (Licensing) Regulations 1991; and



- (b) a *connection point* may be associated with one or more *revenue meters* which measure and record *energy data*, or none if it is an *unmetered connection point*; and
- (c) if the *connection point* is associated with more than one *revenue meter*, they must be either all *interval meters* or all *accumulation meters*, and not a combination of more than one type of *revenue meter*; and
- (d) a *connection point* may comprise more than one *attachment point* to the *network* provided that each *attachment point* is to the same lot or *premises* and is operated at the same voltage; and
- (e) a connection point must have one and only one controller at the connection point; and
- (f) a *connection poin*t must have only one type of *exit service*, if any, and only one type of *entry service*, if any, and only one type of *bidirectional service*, if any; and
- (g) a connection point must have only one applicable loss factor.

## 14.2 One NMI per Connection Point

Western Power must allocate one *NMI* per *connection point*.

#### 14.3 Combining Multiple Connection Points into a Single Connection Point

- (a) A person may make an *electricity transfer application* to have multiple *connection points* supplying a single *premise* or adjacent *premises* of a single commercial or industrial complex combined into a single *connection point*, subject to clause 14.1, by notice to Western Power.
- (b) The lodgement fee for a new connection point applies to an application made under clause 14.1.
- (c) Where an *applicant* applies under clause 14.3(a) the *applicant* must demonstrate that the *connection points* are integral to a single business.
  - {For example, a supermarket acquiring adjacent *premises* to its existing *premises* with the intention of expanding its operation across these *premises* can combine the two *exit points* into a single *exit point*.}
- (d) Where an *application* is made under clause 14.3(a) by an *applicant* who is not the *retailer* in relation to a relevant *connection point*, the *applicant* must obtain the consent of the *retailer*.
- (e) A retailer must have verifiable consent from its customer before making an electricity transfer application to change the configuration of a connection point.
- (f) Western Power must determine, as a *reasonable and prudent person*, within 5 business days whether it will accept the *application*.
- (g) If Western Power determines that it cannot accept the *application* under clause 14.3(f), then:
  - (i) Western Power must notify the *applicant* that it must submit, or procure that its *controller* submits, a *connection application*; and
  - (ii) the *priority date* of such *connection application* shall be determined:
    - (A) if a *complete connection application* is received by Western Power within 20 business days of the notice sent to the *applicant* under clause 14.3(g)(i), from the date Western Power received the *electricity transfer application* under clause 14.3(a); and
    - (B) otherwise, from the date Western Power received the *complete connection* application.



## 14.4 Separating a Single Connection Point to Create Multiple Connection Points

- (a) An *applicant* may make an *electricity transfer application* to divide a single *connection point* into multiple *connection points*, subject to clause 14.1.
  - {Note: This might occur, for example, to allow the new *connection points* to be migrated to a different *user's access contract*.}
- (b) Each connection point created under clause 14.4(a) must have its own metering equipment.
- (c) Where an *application* is made under clause 14.4(a) by an *applicant* who is not the *retailer* in relation to the *connection point*, the *applicant* must obtain the consent of the *retailer*.
- (d) A retailer must have verifiable consent from its customer before making an electricity transfer application to change the configuration of a connection point.
- (e) Western Power must determine, as a *reasonable and prudent person*, within 5 business days whether it will accept the *application*.
- (f) If Western Power determines that it cannot accept the application under clause 14.4(e), then:
  - (i) Western Power must notify the *applicant* that it must submit, or procure that its *controller* submits, a *connection application*; and
  - (ii) the *priority date* of such *connection application* shall be determined:
    - (A) if a *complete connection application* is received by Western Power within 20 business days of the notice sent to the *applicant* under clause 14.4(f)(i), from the date Western Power received the *electricity transfer application* under clause 14.4(a); and
    - (B) otherwise, from the date Western Power received the *complete connection* application.

# 15. Time to Perform Obligations

### **15.1** Extension of Time to Perform Obligations

- (a) If:
  - (i) Western Power (acting as a reasonable and prudent person) has requested further information from an applicant under clause 3.11 which it reasonably requires to process an electricity transfer application; and
  - (ii) the request was made as soon as Western Power became aware that it required the information; and
  - (iii) Western Power has expeditiously and diligently progressed the processing of the *electricity* transfer application before making the request, after receiving the information and (to the extent possible) between making the request and receiving the information,

then the time period for complying with any obligation under this applications and queuing policy is extended by an amount of time equal to the time taken by the *applicant* to comply with the request.

- (b) Without limiting the generality of clause 15.1(a), an *applicant* and Western Power may agree to extend any one or more of any of the time periods set out in this applications and queuing policy on one or more occasions, and:
  - (i) the time period is extended by the amount of time agreed; and
  - (ii) unless otherwise agreed, the time for complying with any other obligation is extended by the same amount of time.



# **15.2** Concurrent *Applications*

Western Power must use reasonable endeavours to comply with the timeframes set out in this applications and queuing policy in respect of each *electricity transfer application* which is lodged with Western Power, whether or not it is processing more than one *electricity transfer application* concurrently.



# Part C – Connection Applications

# 16. Specific Connections Applications

#### 16.1 Connection Application for a New Connection Point

An *applicant* who seeks to create a new *connection point* or to install new *generating plant* at an existing *connection point* must:

- (a) submit a connection application on the connection application form that is applicable for the type of facilities and equipment to be connected at the connection point; and
- (b) submit, or procure that its *retailer* submits, an *electricity transfer application* under Part B *Electricity Transfer Applications* of this applications and queuing policy.

#### 16.2 Connection Application for an Increase or Decrease of Contracted Capacity

- (a) If, after processing an *electricity transfer application* under clause 10.2, Western Power requires a *connection application*, then the *user* must submit or, if applicable, procure that its *customer* submits, a *connection application* on the *connection application form* that is applicable for the type of *facilities and equipment* that is *connected* at the *connection point* or for the *capacity allocation service* sought.
- (b) If a *customer* submits a *connection application* with respect to a *connection point* that will result in an increase to the *contracted capacity* of the *customer's retailer* for that *connection point*, then the *customer* must procure that its *retailer* submits an associated *electricity transfer application* under Part B of this applications and queuing policy.

#### 16.3 Connection Application to Modify Generating Plant

If an *applicant* seeks to materially change the characteristics of *generating plant connected* at a *connection point*, then the *applicant* must *complete* those parts of the appropriate *application form* that deal with those characteristics, and include any additional information specified in the *application form* (which might include equipment schedules, drawings and computer models) that Western Power, as a *reasonable and prudent person* and acting in accordance with *good electricity industry practice*, might require to assess the impact of the modification on the *network* and other *users*, compliance of the modified *generating plant* with the *technical rules*, and in the case of a *transmission system connected generator*, the *Proposed Generator Performance Standards* proposed by the *applicant*.

#### 16.4 Connection Application to Modify or Augment the Network

- (a) An *applicant* who seeks to modify or *augment* the *network* for the purpose of receiving a *covered* service other than under clause 16.1 must submit a *connection application* on the applicable connection application form.
- (b) If there is no applicable *application form* provided for a *connection application* then the *applicant* may submit its *connection application* by notice to Western Power.



### 16.5 Opt-out of Competing Applications Group Process

- (a) An *applicant* may, at the time of making a *connection application* under clause 16, elect that the *connection application* is to be processed as an *applicant-specific solution* and is not to be considered as part of a *competing applications group*.
- (b) If an *applicant* makes an election under clause 16.5(a), it will be deemed to have made a request for a study under clause 20.3(a) and clause 20.3 shall apply to the processing of that *application*.

#### 16.6 Publication

- (a) In respect of each *generation application* Western Power must within a reasonable time (to the extent the information is available to Western Power) notify all other *applicants* with *generation applications* of:
  - (i) the contracted capacity sought in the generation application (and if applicable the existing contracted capacity relevant to that generating plant);
  - (ii) the location, voltage and arrangement of the proposed (or if applicable upgraded) connection point;
  - (iii) the fuel type of the generating plant;
  - (iv) the priority date of the generation application.
- (b) If there is any material change to the information in clause 16.6(a) as it relates to a *generation* application Western Power will, within a reasonable time of becoming aware of the change, notify all applicants with generation applications.

# 17. Lead Time for Connection Applications

An *applicant* must endeavour to lodge a *connection application* to Western Power within a reasonable time before the requested *services start date*, having regard for:

- (a) the time required to determine if any *works* are required, and if so then the time required to plan, design, cost, approve, finance, construct and commission the *works*, including, if applicable, the time required to perform a *regulatory test*; and
- (b) the time required to finalise an access offer for the connection application; and
- (c) if the *applicant* has requested a derogation from the *technical rules*, then the time required to process this request; and
- (d) in the case of a *connection application* which relates to a transmission system connected *generator*, the time required to determine (in accordance with the *WEM Rules*) the *Registered Generator Performance Standards* that will apply to that transmission system connected *generator*.

{Note: As a general guide, the process for connection applications consists broadly of the following phases:

- **Enquiry:** In the *enquiry* phase Western Power provides guidance to the *applicant* regarding the information required to *complete* a *connection application* form. An *enquiry* assessment assists the *applicant* to identify a suitable *connection point* and evaluate the feasibility of the *connection application*.
- **Initiation:** In the project initiation phase Western Power studies any *constraints* applicable to the *connection application*, assesses if the *application* is competing for *capacity* and identifies viable options to *augment* or modify the *network* in order to meet the requirements of the *connection application*.



- **Scoping:** In the project scoping phase Western Power develops a scope of work for each option identified to *augment* or modify the *network*, assesses each option and selects the technical solution to be implemented.
- Planning: The project planning phase requires Western Power to develop a business case, the execution of contracts for services (including the interconnection works contract, the electricity transfer access contract and any other associated contract or documentation), detailed designs and construction plans for the final technical solution to augment or modify the network (including financial and schedule estimates).
- Construction and commissioning: In the construction and commissioning phase Western Power to constructs and commissions the approved *augmentations* or modifications to the *network* under the terms of the interconnection *works* contract.
- Closeout: In the closeout phase the connection asset comes into operation under the terms of the electricity transfer
  access contract.

Indicative timing in relation to the above phases will be published on the Western Power website and will be adjusted as necessary from time to time. Such indicative timing is subject to change based on the characteristics and complexity of individual *connection applications*, any amendments made to the original *connection application* at any time during the process, the timeliness of the *applicants*' responses to requests for information or any other required actions, the completion of the phases set out above and other factors that may impact the process.

Figure 1 contains additional explanatory material regarding information provided to *applicants* and the processes contemplated by this applications and queuing policy. Both Figure 1 and the above information are included for guidance and explanatory purposes only and do not form part of the operative provisions of this applications and queuing policy. In the event of any inconsistency between Figure 1 and/or the above information and this applications and queuing policy, the operative provisions of this application and queuing policy will prevail.}

# 17A Pre-enquiry Discussions

#### 17A.1 Applicant May Contact Western Power

A party considering making a *connection application* may contact Western Power to discuss a proposed *connection application* with Western Power. Western Power will provide reasonable assistance to such *applicants*, but this will not include undertaking studies for the *applicant*.

#### 17A.2 Informal Discussions Not Binding

The discussions under this clause 17A are not binding on Western Power, and Western Power is not liable for any error or omission that is made as a *reasonable and prudent person* in the discussions under this clause 17A.

#### 17A.3 Provision of Information on Request

On request by the party, Western Power will, subject to clauses 17A.4 and 6.2, provide the party with all existing commercial and technical information that is in Western Power's possession, custody or control that is reasonably required or requested by the party to help it decide whether to make an *application*.

#### 17A.4 Provision of Confidential Information

- (a) Where commercial or technical information referred to in clause 17A.3 is *confidential information*:
  - (i) which is confidential to Western Power and in Western Power's possession, custody or control, Western Power will use reasonable endeavours to enter into an adequate



- confidentiality undertaking with respect to the disclosure of the *confidential information* to the party deciding whether to make an *application*;
- (ii) disclosed to Western Power by a *disclosing person*, an *applicant* or a third party, except where clause 24.9(d) applies, Western Power will request the consent of the relevant *disclosing person* or *applicant* to the disclosure of the *confidential information* to the *applicant* and, in the event that the relevant *disclosing person* or *applicant* does not consent to such disclosure, Western Power will use reasonable endeavours to provide the relevant *confidential information* to the party who has requested the information in an aggregated or other form in which its confidential aspects cannot be identified.
- (b) Where the relevant disclosing person or applicant ("first person"), under clause 17A.4(a)(ii), notifies Western Power it will consent to the disclosure of the confidential information to the other applicant ("second person") if the second person executes a confidentiality undertaking in favour of the first person, then Western Power will seek to facilitate the process of conclusion of such undertaking but the first and second person must directly negotiate the terms of that undertaking between themselves.

# 18. Enquiry State

#### 18.1 Compulsory Enquiry Notification

- (a) Where an *applicant* expects, in good faith, to proceed to a *connection application*, then prior to lodging a *connection application* with Western Power, the *applicant*:
  - (i) must lodge an *enquiry* with Western Power to notify Western Power of the proposed *connection application;* and
  - (ii) may request that a preliminary assessment is undertaken under clause 19.3 prior to the *applicant* lodging the *connection application*.
- (b) Western Power must engage in discussions in good faith and use all reasonable endeavours to satisfactorily and promptly address any matters raised by the *applicant*.

#### 18.2 Applicant May Request Studies and Information

An *applicant* may request Western Power to undertake system studies or perform other work necessary to assist the *applicant* in preparing its *connection application*, in which case:

- (a) Western Power must endeavour to perform such work within a reasonable time; and
- (b) unused; and
- (c) clause 20 applies.

{This might occur, for example, if the *applicant* needs input into feasibility studies to determine which of its potential projects proceeds to an *application*.}

# 18.2A Western Power to Issue an *Enquiry* Response Letter at Conclusion of *Enquiry* Stage

(a) At the conclusion of the *enquiry* stage, Western Power must issue an *enquiry* response letter to the *applicant* setting out:



- (i) a description of the information required for a *complete application*, and the results of any assessment that it may have carried out to indicate the extent of any *spare capacity* available to provide *exit services* or *exit service components*;
- (ii) the existence of any competing applications; and
- (iii) any constraints known to Western Power on the ability of the *network* to provide the *capacity* proposed as *contracted capacity* in the *connection application* by the *applicant* to the extent the *connection application* relates to *exit services* or *exit service components*.
- (b) Western Power will provide the *enquiry* response letter to the *applicant* within 20 business days of the lodgement of the *enquiry*, or within 20 business days of completion of any system studies or other *works* requested by the *applicant* under clause 18.2. If not all the information is available within that timeframe, Western Power will provide the *applicant* with as much information as possible within 20 business days and an estimated time, being not greater than 20 business days, when the balance of the outstanding information will be provided.

## 18.3 Enquiry Response Letter and Discussions Not Binding

The *enquiry* response letter and discussions under this clause 18 are not binding on Western Power, and Western Power is not liable for any error or omission that is made as a *reasonable and prudent person* in the *enquiry* response letter and discussions under this clause 18.

## 18.4 Fees Payable

At the time that the *applicant* lodges an *enquiry* under this clause 18, Western Power may *charge* a non-refundable fixed fee for processing the *enquiry* as specified in the *price list*. For the avoidance of doubt, this is in addition to any other payment, *charge* for costs, or fee.

# 19. Reporting During the Processing of the *Connection*Application

#### 19.1 Initial Response

- (a) Subject to clause 19.1(b), Western Power must provide *an initial response* to the *applicant* within 20 business days of receiving the *applicant's connection application*, specifying:
  - (i) the time by which Western Power will provide a preliminary assessment under clause 19.3 of the *connection application* (if such an assessment was not provided under clause 18.1 before the *connection application* was submitted and is required under clause 19.3); and
  - (ii) the time by which Western Power expects to make an access offer.
  - (iii) unused.
- (b) If, by the time by which Western Power is required to give an *applicant* an *initial response* under clause 19.1, Western Power has given the *applicant* an *access offer*, Western Power is not required to provide an *initial response* to the *applicant*.

#### 19.2 *Initial Response* is Not Binding

An *initial response* is not binding on Western Power, and *Western Power* is not liable for any error or omission, which is made as a *reasonable and prudent person*, in an *initial response*.



#### 19.3 Preliminary Assessment

A preliminary assessment with regards to a connection application may consist of an assessment as to:

- (a) to the extent the *connection application* relates to *exit services* or *exit service components*, whether it is likely that there is sufficient *spare capacity* to provide the requested *covered services* or whether any *works* might be required to provide the *covered services*, including whether it is likely that any *new connection assets* will be required to provide the *covered services* requested in the *application*;
- (b) to the extent the connection application relates to entry services or entry service components, the nature of the works which may be required to provide those entry services or entry service components, including whether it is likely that any new connection assets will be required to provide the covered services requested in the application, and the contracted capacity which will be available if those works are undertaken and the contracted capacity (if any) available in the absence of such works; and
- (b2) whether any other *applications* are *competing* with the *application* and the possible grouping of the *application* with *competing applications* into one or more *competing applications groups*; and
- (c) if it is likely that works will be required operational and technical details of the works; and
- (d) if it is likely that *works* will be required whether or not a *contribution* will likely be required from the *applicant* under the *contributions policy* and a good faith estimate of the approximate amount of the *contribution*; and
- (e) if it is likely that *works* will be required a good faith estimate of the likely time required for the planning, designing, approving, financing, construction and commissioning, as applicable, of any necessary *augmentation* or *works*; and
- (f) Western Power's proposal for processing the application, if applicable under clause 20.2.

To avoid doubt, a preliminary assessment must be undertaken in relation to a *connection application* either before that *application* is submitted in accordance with a request under clause 18.1 or after that *connection application* is lodged as advised by Western Power under clause 19.1(a)(i), unless otherwise agreed by Western Power.

### 19.4 Updates and Progress Reporting

- (a) An *applicant* must advise Western Power if there is a material change in any information previously provided by the *applicant* as part of the *applicant's application*.
- (b) Western Power must upon request by the *applicant* (which request must not be made more frequently than once per month, and must not be made less than one month following the provision of an *initial response*) provide a progress report to the *applicant* containing information in reasonable detail regarding the processing of the *connection application*, including whether there has been any material change in any estimates of scope, costs or times, either for processing the *connection application* or for any *works* that might result from the *connection application*, previously provided by Western Power.



# 20. Connection Application Costs

#### **20.1** Applicant Must Pay Costs

- (a) If:
  - (i) the *applicant* lodges an *enquiry* under clause 18, and the *applicant* requests Western Power to perform any system or other studies, prepare detailed cost estimates or do any other work to assist the *applicant* prior to the *applicant* lodging a *connection application*;
  - (ii) an *applicant* has submitted a *connection application* and has agreed for Western Power to perform any system or other studies, prepare detailed cost estimates or do any other work to process the *application*, under clause 20.2, clause 20.3 or clause 24.1(d); or
  - (iii) an actual or prospective *applicant* has sought information or assistance from Western Power and Western Power has agreed to perform any system or other studies, prepare detailed cost estimates or do any other work to provide, or in connection with, that information or assistance,

then the *applicant* must, when requested by Western Power, pay to Western Power its reasonable costs incurred, or to be incurred within a reasonable timeframe, in processing the *enquiry* or *connection application* or otherwise undertaking the studies, cost estimates and work referred to in paragraphs (i), (ii) and/or (iii) above.

- (b) The total of the costs referred to in clause 20.1(a) must not exceed a genuine pre-estimate of the reasonable costs which would be incurred by a prudent *service provider*, acting efficiently and in good faith, in accordance with *good electricity industry practice*, seeking to achieve the lowest practicable cost of processing the *connection application*.
- (b1) For the avoidance of doubt, Western Power may *charge applicants* other fees and *charges* in addition to the costs referred to in this clause, and the provisions of clause 20.1(b) do not apply to such other fees and *charges*. Such fees include the *application* fees referred to in clause 7.1, the *enquiry* fee referred to in clause 18.4, the preliminary offer processing fee referred to in clause 24.3, and the *preliminary acceptance* fee referred to in clause 24.5(b).
- (c) The costs referred to in clause 20.1(a) must not include any costs of Western Power in relation to an *access dispute* (which are to be awarded by the *Arbitrator* under Chapter 10 of the *Code*).

#### **20.2** Processing Proposal

- (a) Where Western Power considers that to process a *connection application*, or in connection with any request for information or other assistance made to it by an actual or prospective *applicant*, it must perform any system or other studies, prepare detailed cost estimates or do any other *works* or where an *applicant* requests a study under clause 20.3 then:
  - (i) Western Power must provide a proposal to the *applicant* outlining the scope, timing and a good faith estimate of the likely costs to be incurred for processing the *connection application* and/or otherwise undertaking the studies, cost estimates or other *works*; and
  - (ii) the *applicant* may request amendments to the scope of work in the proposal, in which case Western Power and the *applicant* must negotiate in good faith regarding the proposal. In the case of a *connection application* which has been lodged, if Western Power and the *applicant* have not agreed within 60 business days on the scope of the work in the proposal,



- then the *connection application* and any associated *electricity transfer application* will be deemed to have been withdrawn; and
- {Note: This might occur, for example, where the applicant is able to perform some of the works itself.}
- (iii) the *applicant* may reject the proposal, and in such a case, where a *connection application* has been lodged, then the *connection application* and any associated *electricity transfer application* are deemed to have been withdrawn; and
- (iv) (if applicable) the applicant may at any time request Western Power to cease processing the connection application, in which case the connection application and any associated electricity transfer application are deemed to have been withdrawn and Western Power must cease all work on the application.
- (b) Where Western Power spends the costs paid to it by an *applicant* under clause 20.1(a) in processing the *connection application* or otherwise undertaking the requested cost estimates, studies or other work and requires further payment to cover its actual costs in completing the proposal, then it will notify the *applicant* of the reasons for these higher costs and will make a proposal for payment of such additional costs, and Western Power's proposal under this clause will be dealt with under clause 20.2(a) as though it was an original proposal.
- (c) Where Western Power has *charged* an *applicant* costs under clause 20.1(a), then at the time of making an *access offer* to that *applicant* or at the time an *application* is withdrawn (whichever is earlier):
  - (i) if Western Power's actual costs are less than the costs that it has *charge*d, Western Power must refund the unexpended portion of those costs; or
  - (ii) if Western Power's actual costs are more than the costs that it has *charged*, Western Power may *charge* an additional fee to cover the reasonable costs in excess of the fee it *charged*, and the *applicant* must pay any such additional fee.
- (d) To avoid doubt, in this clause 20.2 references to an *applicant* may extend to a prospective *applicant*.

#### 20.3 Applicant-specific Solution Option

- (a) An *applicant* may request Western Power to perform a study of the nature and costs of an *applicant-specific solution* to satisfy the *connection application*. Subject to agreement being reached under clause 20.2(a) in respect of that study, the *applicant* must pay the costs of that study. Western Power will endeavour, subject to receiving any necessary cooperation from the *applicant*, to *complete* the study within 60 business days.
- (b) Once Western Power has completed the study, it must provide:
  - (i) existing *users* that Western Power considers may be impeded; and
  - (ii) any competing applicant with an earlier priority datewith the opportunity to object to providing the applicant-specific solution to the applicant.
- (c) An existing user or competing applicant with an earlier priority date may object to the applicant-specific solution within 20 business days of the date that the users or competing applicants receive notice from Western Power under clause 20.3(b), on the grounds that the applicant-specific solution would impede Western Power's ability to provide covered services to that existing user or to provide the covered services that are sought in a competing connection application with an earlier priority date compared with what the position would be if the applicant-specific solution were not implemented. However, an objection may not be made:



- (i) on the basis that the applicant-specific solution will increase constraints; or
- (ii) if the existing *user* or *competing applicant* has made no progress with its *connection application* for over 12 months from the date of submission of its *connection application*, as evidenced by no system or other study being prepared or requested to be prepared, no preparation of a detailed cost estimate, or no any other material work to progress its *connection application* being undertaken in that time.
- (d) If an objection is made under clause 20.3(c), Western Power, acting as a reasonable and prudent person, will evaluate the existing user or competing applicant's right to object under clause 20.3(c). If Western Power is not satisfied that the objection is valid under clause 20.3(c), it must notify the existing user and competing applicant. If Western Power is satisfied that the objection is valid under clause 20.3(c), it will evaluate the objection within 30 business days of it being lodged. If Western Power agrees that the applicant-specific solution would impede its ability to provide covered services to an existing user or to provide the covered services that are sought in a competing connection application with an earlier priority date, then it must either decline to offer an applicant-specific solution to the applicant or modify the applicant-specific solution so that the applicant-specific solution would not impede Western Power's ability to provide covered services to an existing user or the covered services that are sought in that other application with an earlier priority date. If Western Power elects to modify the applicant-specific solution, then it must provide one further and final opportunity to object under clause 20.3(c) to existing users and competing applicants with an earlier priority date that Western Power considers may be impeded by the applicant-specific solution.
- (e) If:
  - (i) no objections are made to an applicant-specific solution; or
  - (ii) an applicant-specific solution (whether the original applicant-specific solution or a further applicant-specific solution developed following modification under clause 20.3(d)) would not impede Western Power's ability to provide covered services to an existing user or to provide the covered services that are sought in a competing connection application with an earlier priority date,

then Western Power within 20 business days must make an *access offer* to the *applicant* based on the *applicant-specific solution* identified in this clause 20.3(e). If Western Power, having regard to any objections received, considers that the modified *applicant-specific* solution under clause 20.3(d) would impede its ability to provide *covered services* to an existing *user* or to provide the *covered services* that are sought in a *competing* connection application with an earlier *priority date*, then it must decline the offer.

# **20.3A** Interaction Between *Applicant-Specific Solutions* and *Competing Applications Groups*

For the avoidance of doubt, an *applicant* may seek *an applicant-specific solution* at any time while its *application* is under consideration. Where an *applicant* seeks an *applicant-specific solution* under clause 20.3 above, its *application* will, subject to clauses 16.5 and 24.1(b2), continue to be considered as part of any relevant *competing applications group*.

#### **20.4** Disputes May be Referred to Arbitrator

A dispute between an *applicant* and Western Power regarding a cost under clause 20 may be referred by either party to the *Arbitrator* under section 10.13 of the *Code* (expedited hearings) for determination, in



which case the *Arbitrator* may either affirm the amount or reduce it. Nothing in this clause limits the matters that may be the subject of an *access dispute*.

#### 20.5 Use of Engineering Firms to Provide Studies

- (a) An *applicant* may ask Western Power to permit an engineering firm to conduct a system or other study under this clause 20.
- (b) Western Power will not unreasonably disagree to a request from an *applicant* to use an engineering firm to conduct a system or other study, and where Western Power does disagree, Western Power will provide written reasons explaining why it has disagreed.
- (c) Where Western Power agrees under clause 20.5(a) to a request from an *applicant*, then where this applications and queuing policy refers to a study done or to be done by Western Power, the reference to Western Power will be taken as a reference to the engineering firm.
- (d) Prior to permitting the engineering firm to conduct a system or other study, Western Power may require the engineering firm to enter into a confidentiality agreement.
- (e) Where Western Power agrees under clause 20.5(a) to a request from an *applicant*, Western Power will provide the engineering firm with all reasonable information and cooperation to enable the engineering firm to conduct the system or other study.
- (f) Western Power reserves the right to require amendments to a system or other study completed by an engineering firm where the system or other study does not provide the information that Western Power considers that Western Power requires from the system or other study.
- (g) Nothing in this clause 20.5 removes Western Power's right to *charge applicants* under clause 20 for Western Power's costs of processing *applications*, including but not limited to Western Power's costs under clause 20.5(e) and clause 20.5(f).

#### **20A.** Unpaid Fees or *Charges*

Where any fees or *charges* under this applications and queuing policy remain unpaid by an *applicant* more than 60 business days after they are levied or *charged*, then Western Power will send a *final notice* to the *applicant* demanding payment of the fees or *charges* ("*final notice*"). Where the *applicant* has not paid the fees or *charges* within 7 business days of the date of Western Power's *final notice*, the *applicant's application* and any associated *electricity transfer application* are deemed to be withdrawn.

# 21. Contributions Policy Applies

If, during the processing of the *connection application*, Western Power determines that *works* are required to provide the *covered services* sought in the *connection application*, then the *contributions policy* applies to the *connection application*.

# 22. Dormant applications

- (a) Subject to clause 22(b), Western Power will give the *applicant* in respect of a *dormant application* a written notice requesting the *applicant* to show cause in writing why Western Power should continue to process the *dormant application*, and stating the work required to be *completed* to process the *dormant application*.
- (b) In exercising its rights under this clause 22, Western Power must act as a *reasonable and prudent* person.



- (c) If an *applicant* does not respond to Western Power in writing within 20 business days of receipt of a notice under clause 22(a), the *dormant application*, and any associated *electricity transfer application*, shall be deemed to have been withdrawn and Western Power shall notify the *applicant* in writing accordingly.
- (d) If an *applicant* responds to Western Power within 20 business days of receipt of a notice under clause 22(a) that it no longer wishes to progress the *dormant application* to an *access offer*, the *dormant application*, and any associated *electricity transfer application*, shall be deemed to have been withdrawn upon Western Power's receipt of that response.
- (e) If the *applicant* responds to Western Power within 20 business days of receipt of a notice under clause 22(a) contending that Western Power should continue to process the *dormant application*:
  - (i) Western Power must issue the *applicant* with a processing proposal under clauses 20.2, 20.3 or 24 as soon as practicable; and
  - (ii) if an access contract has not been entered into in respect of the application within 12 months of the date on which the notice under clause 22(a) was issued, Western Power may provide written notice to the applicant under this clause 22(e)(ii) of that fact upon which the application, and any associated electricity transfer application, shall be deemed to have been withdrawn under this applications and queuing policy.
- (f) In issuing a notice under clause 22(e)(ii), Western Power must have regard to the objectives of this applications and queuing policy, the likelihood of the *application* progressing to an *access* offer and the existence of any competing applications.

# 23. Release of Contracted Capacity

Without limiting the circumstances by which *spare capacity* becomes available on the *network*, when an existing *user* reduces *contracted capacity* at one *connection point* and that reduction increases *spare capacity*, then any *application* for that *spare capacity* must be processed by Western Power in accordance with clause 24 and clause 24A, regardless of whether the *user* makes a concurrent *connection application* at that or another *connection point*.

# 24. Where There Are Competing Applications

## 24.1 Formation of Competing Applications Groups

- (a) Where Western Power assesses that an application is competing with other applications then Western Power will, subject to clauses 16.5 and 24.8(b), manage competing applications by forming them into one or more competing applications groups and assessing a single set of works for shared assets required to meet some or all of the requirements of each competing applications group. To avoid doubt, where there are more than two competing applications Western Power may form all the competing applications into one competing applications group or it may form them into two or more competing applications groups as Western Power considers appropriate given the nature of the applications, including how the competing applications impede each other, the size of the capacity sought in each of the competing applications, and the current level of spare capacity.
- (b) An *application* may be sorted into more than one *competing applications group* where Western Power considers this appropriate given the nature of the *application* (for example where the *application* competes with certain other *applications* in respect of one *network constraint* and with certain other *applications* in respect of another *network constraint*).



- (b1) Western Power will notify an *applicant* within 30 business days of the *application* if it has sorted the *application* into one or more *competing applications groups*.
- (b2) Where Western Power notifies an *applicant* under clause 24.1(b1) that the *application* has been sorted into one or more *competing applications groups*, then the *applicant* may choose by notice to Western Power at any time that it does not wish to be considered in one or more of the *competing applications groups*. Western Power will accept the choice of the *applicant*.
- (c) To the extent necessary to allow:
  - (i) a supplier of last resort (as defined in section 67 of the *Act*) to comply with its obligations under Part 5 of the *Act*; or
  - (ii) a default supplier (as defined in section 59 of the *Act*) to comply with its obligations under section 59 of the *Act*,

an *applicant* may advise Western Power at any time that it does not wish to be considered to be included within a *competing applications group*, in which case it will be treated as having made an *application* for an *applicant-specific solution* and the *applicant's connection application* will be processed as an *applicant-specific solution* in accordance with clauses 19 and 20 (and the other relevant provisions) of this applications and queuing policy and the *applicant* will be deemed to have made a request for a study under clause 20.3(a).

(d) To avoid doubt, where Western Power considers that to issue a notice of intention to prepare a *preliminary access offer* it must perform any system or other studies, Western Power may provide a processing proposal to the *applicants* within the *competing applications group* in accordance with clause 20.2.

## 24.2 Notice of Intention to Prepare a *Preliminary Access Offer*

Where Western Power considers that a single set of *works* for *shared assets* may meet some or all of the requirements of a *competing applications group*, it will issue a notice of intention to prepare a *preliminary access offer* to all *applicants* within that *competing applications group* and *charge* a preliminary offer processing fee. To avoid doubt, the preliminary offer processing fee is not payable by an *applicant* who under clauses 24.3(b) or 24.3(c) elects to opt out of the *competing applications group* or who under clause 24.3(d) withdraws their *application*.

## 24.3 Response to Notice of Intention to Prepare a *Preliminary Access Offer*

Applicants must respond to the notice issued under clause 24.2 within 30 business days by:

(a) agreeing to have their application considered within a competing applications group and paying the preliminary offer processing fee as specified in the price list. By paying the preliminary offer processing fee, applicants demonstrate the good faith of their intention to proceed to an access contract, and as such the preliminary offer processing fee is non-refundable. Where an access contract is subsequently entered into in respect of the application, the preliminary offer processing fee will be counted towards any contribution payable, where permissible under the contributions policy, and where it exceeds any contribution payable under the contributions policy and the reasonable costs of Western Power incurred in processing the application prior to and including Western Power making a preliminary access offer and processing responses to it, the excess will be offset against amounts payable under the access contract or refunded to the applicant where the applicant is not a party to that access contract; or



- (b) advising that they wish to opt out of the *competing applications group* and make an *application* for an *applicant-specific solution*, in which case the *applicant's connection application* will be processed as an *applicant-specific solution* in accordance with clauses 19 and 20 (and the other relevant provisions) of this applications and queuing policy and the *applicant* will be deemed to have made a request for a study under clause 20.3(a); or
- (c) advising that they wish to opt out of the *competing applications group* but that they do not want to make an *application* for an *applicant-specific solution* and wish to retain their *priority date* and be considered for inclusion in another *competing applications group*, in which case the *application* shall retain its *priority date* and will be considered for inclusion in another *competing applications group* in accordance with clause 24.1(a); or
- (d) withdrawing their application.

Where *applicants* fail to respond to the notice issued under clause 24.2 within 30 business days, their *application* and any associated *electricity transfer application* will be deemed to have been withdrawn.

# 24.4 Western Power's Actions Following Response to the Notice of Intention to Prepare a *Preliminary Access Offer*

Following the response of *applicants* under clause 24.3 (if any), Western Power may, if it continues to consider that a single set of *works* for *shared assets* may meet some or all of the requirements of a *competing applications group*, make *preliminary access offers* to each *applicant* within the relevant *competing applications group* at the same time. Western Power will endeavour to make such *preliminary access offers* to each *applicant* within the relevant *competing applications group* within 60 business days after issuing the notice under clause 24.2.

## 24.5 Response to *Preliminary Access Offer*

- (a) Applicants must respond to the preliminary access offers within 30 business days after receipt of the preliminary access offers, by indicating in good faith in writing either:
  - (i) that it would accept such a preliminary access offer if it were an access offer; or
  - (ii) that it would reject such a *preliminary access offer* if it were an *access offer* and would request an amendment to the *preliminary access offer*. In this case Western Power and the *applicant* must negotiate in good faith regarding the form of the *preliminary access offer*, but if Western Power and the *applicant* have not agreed on the form of the *preliminary access offer* within 30 business days from the date on which the *applicant* received the *preliminary access offer*, then the *application* and any associated *electricity transfer application* will be deemed to have been withdrawn unless:
    - (A) the applicant has notified Western Power in writing that it wishes to be treated as having made an application for an applicant-specific solution and the applicant's connection application will be processed as an applicant-specific solution in accordance with clauses 19 and 20 (and the other relevant provisions) of this applications and queuing policy and the applicant will be deemed to have made a request for a study under clause 20.3(a); or
    - (B) the *applicant* has notified Western Power in writing that it wishes to opt out of the *competing applications group* but it does not want to make an *application* for an *applicant-specific solution* and wishes to retain its *priority date* and be considered for inclusion in another *competing applications group*, in which case the *application* shall



- retain its *priority date* and will be considered for inclusion in another *competing* applications group in accordance with clause 24.1(a); or
- (C) the failure to agree on the form of the *preliminary access offer* within 30 business days is due to Western Power acting in bad faith, in which case Western Power and the *applicant* must negotiate in good faith for a further period of 30 business days regarding the form of the *preliminary access offer* and clauses 24.5(a)(ii)(A) and 24.5(a)(ii)(B) shall apply. If no agreement is reached between Western Power and the *applicant* during this further period, and the *applicant* has not notified Western Power in accordance with clauses 24.5(a)(ii)(A) and 24.5(a)(ii)(B), the *application* and any associated *electricity transfer application* will be deemed to have been withdrawn; or
- (iii) that it would not accept such a *preliminary access offer* if it were an *access offer*, in which case the *connection application* and any associated *electricity transfer application* are deemed to have been withdrawn.
- (b) Where applicants respond under either clause 24.5(a)(i) or an agreement is reached regarding the form of the preliminary access offer under clause 24.5(a)(ii) ("preliminary acceptance"), the applicants must pay within 30 business days a preliminary acceptance fee as specified in the price list to Western Power to demonstrate the good faith of their intention to proceed to an access contract. The preliminary acceptance fee is non-refundable but, where an access contract is subsequently entered into in respect of the application, the preliminary acceptance fee will be counted towards any contribution payable, where permissible under the contributions policy, and where it exceeds any contribution payable under the contributions policy and the reasonable costs of Western Power incurred in processing the application until the execution of an access contract, the excess will be offset against amounts payable under the access contract or refunded to the applicant where the applicant is not a party to that access contract.
- (c) If an *applicant* does not respond to Western Power within 30 business days of receipt of the *preliminary access offer* by one of the methods in clause 24.5(a), the *application* and any associated *electricity transfer application* shall be deemed to have been withdrawn.
- (d) To avoid doubt, *preliminary acceptance* does not give rise to a *contract*.

## 24.6 Subsequent Access Offers

After reviewing the responses by *applicants* to *preliminary access offers* under clause 24.5, Western Power will endeavour within 30 business days from the last date on which responses are required to be provided to Western Power under clause 24.5, to complete the following:

- (a) if Western Power considers it can make access offers to applicants within the competing applications group collectively for the costs nominated in the access offers, it will make access offers to applicants within the competing applications group conditional on sufficient acceptance of the access offers by applicants to ensure that access can be provided to the applicants collectively for the costs nominated in the access offers; or
- (b) if Western Power does not consider it can make access offers to applicants within the competing applications group collectively for the costs nominated in the access offers, it will revise its preliminary access offer and submit those revised preliminary access offers to applicants; or
- (c) where the extent of the *preliminary acceptance* by *applicants* within a *competing applications* group exceeds the ability of Western Power to provide services under *access contracts* (if all such *preliminary acceptances* resulted in *access contracts*), Western Power may make *access offers* to *applicants* in the order of the *priority date* of *applications* until:



- (i) to the extent *connection applications* relate to *exit services* or *exit service components*, there is no more *spare capacity*; and
- (ii) to the extent *connection applications* relate to *entry services* or *entry service components* the circumstances which resulted in the *applications* being classified as *competing applications* would prevent Western Power being able to provide such *entry services* or *entry service components* if any further *access offers* were accepted.

If Western Power fails to make an *access offer* to an *applicant* within a *competing applications group*, then notwithstanding any other provision in this applications and queuing policy, the *application* will remain valid and retain its *priority date* and Western Power will refund any *preliminary access offer* processing fee or *preliminary acceptance* fee paid by the *applicant*.

{Note: An access offer might not be made to an applicant under 24.6(c) because there is no more spare capacity after making access offers to applicants with earlier priority dates.}

#### 24.6A Minimum and Maximum Levels of Acceptance

An access offer to applicants within a competing applications group will specify:

- (a) if applicable, the minimum number of *applicants* that must accept the *access offers* made to that *competing applications group* (whether expressed by reference to the number of accepting *applicants*, the amount of *capacity* they accept or both) for Western Power to proceed to undertake the *works* specified in the *access offers* at the cost and on the other terms set out in those *access offers*;
- (b) if applicable, the maximum number of *applicants* that may accept the *access offers* made to that *competing applications group* (whether expressed by reference to the number of accepting *applicants*, the amount of *capacity* they accept or both) for Western Power to proceed to undertake the *works* specified in the *access offers* at the cost and on the other terms set out in those *access offers*.

#### 24.6B Failure to Achieve Minimum Levels

Where the minimum levels of acceptance set out in clause 24.6A are not met then any acceptance of an *access offer* will be of no effect but Western Power will seek to revise the *access offers* so as to meet the requirements of those *applicants* who did accept *access offers* and issue new *access offers*, provided that there is no obligation on Western Power to revise *access offers* where no *applicants* accepted *access offers* (without prejudice to the entitlement of such *applicants* to opt for an *applicant-specific solution* or make new *applications*).

### 24.6C Exceeding Maximum Levels

- (a) Where the maximum levels of acceptance set out in clause 24.6A are exceeded then priority will, subject to clause 24A.4, be given to *applicants* with an earlier *priority date* in determining which *access offers* will be of effect and which of no effect. Subject to paragraph (b) below, where an *applicant's* acceptance is not effective that *applicant* ("reallocated applicant") will be allocated to a new *competing applications group*.
- (b) In respect of the reallocated applicant with the highest queue priority of the reallocated applicants, Western Power will, where it is possible to meet the requirements of that applicant in part (for example supply part of the capacity requested by them), make a further access offer to them to supply those partial requirements which that reallocated applicant may accept or reject. Where the reallocated applicant rejects the access offer then they will be allocated to a new



competing applications group. If the reallocated applicant rejects the access offer then Western Power will, if practicable to do so having regard to the timeframes for undertaking of works set out in those access offers which have been effectively accepted, make a further access offer to the next reallocated applicant with the highest queue priority and the process in this paragraph (b) will continue until Western Power determines it is not practicable to make any further access offers.

## 24.7 Changing Composition of Competing Applications Group

- (a) Western Power may change the composition of a competing applications group:
  - (i) to remove, at any time, applicants within the competing applications group whose applications have been withdrawn or been deemed to be withdrawn or applicants whose applications are to be treated, under a clause of this applications and queuing policy, as having been made for an applicant-specific solution (for example under clause 24.3(b), 24.5(a)(ii)(A) or clause 24.1(c));
  - (ii) to add additional *applications* to a *competing applications group*, but where Western Power has already issued a notice of intention to prepare a *preliminary access offer* under clause 24.2 to *applicants* within a *competing applications group*, then Western Power will only add additional *applications* to that *competing applications group* where the additional *applications* can be added without delaying preparation of the *preliminary access offer* to the existing *applicants*.
- (b) Despite clause 24.7(a) Western Power may change the composition of a *competing applications* group at any time following changes regarding the nature or location of those factors which resulted in *applications* being classified as *competing* following other *network* developments, changes in *generation* or changes in loads in which case Western Power may recommence the processes under this clause 24.

#### 24.7A Termination of a Competing Applications Group

- (a) Western Power may terminate a *competing applications group* by written notice to the *competing applicants* within that *competing applications group* where:
  - (i) Western Power considers, in accordance with this applications and queuing policy, that it will not issue notices of intention to prepare *preliminary access offers* or *preliminary access offers or access offers*, as applicable, in respect of a single set of *works* for *shared assets* to any of the *applicants* within the *competing applications group*;
  - (ii) Western Power considers that a single set of works for shared assets is no longer viable; or
  - (iii) only one *applicant* is remaining in a *competing applications group* (due to the other *competing applications* having been withdrawn or deemed to have been withdrawn or otherwise) and Western Power agrees with the *applicant* that it will withdraw from the *competing applications group*.
- (b) To avoid doubt, where Western Power terminates a *competing applications group* under clause 24.7A, the *applications* previously within that *competing applications group* and their *priority date* shall not be affected and may be considered for inclusion in other *competing applications groups*.



## 24.8 Spare Capacity

- (a) In determining whether there is *spare capacity* to provide *covered services* requested in a *connection application* or group of *applications*, Western Power must assume that any existing *access contract* will be renewed in accordance with the terms of that *access contract*.
- (b) If, at any time, spare capacity to provide covered services becomes available without the need for any works for shared assets and there are applicants who are competing for such spare capacity, Western Power may allocate that spare capacity to applicants on the basis of priority date until no spare capacity remains without forming a competing applications group. To avoid doubt, the spare capacity may be offered to an applicant who is part of a competing applications group and an applicant who is not part of a competing applications group.

## 24.9 Types of Information

Western Power must make known to any *applicant* that has lodged an *application* with Western Power, or to any existing *user* with an *access contract* with conditions precedent which have not yet been satisfied or waived:

- (a) whether there are competing connection applications; and
- (b) a description of the circumstances which caused the *connection applications* to be *competing connection applications* (including in the case of *connection applications* for *exit services* or *exit service components* information in reasonable detail regarding the aggregated *capacity* requirements of those *competing connection applications*); and
- (c) an estimate of the likely time until the making of an access offer; and
- (d) where the *application* is a *competing connection application*, in respect of each *connection application* which is *competing* with that *connection application*:
  - (i) in the case of *connection applications* for *exit services* or *exit service components*, the *capacity* requirements of the *competing connection application*; and
  - (ii) the geographic location at which the *competing connection application* seeks the *capacity*; and
  - (iii) reasonable details regarding any *augmentation* required by the *competing connection application*;
  - (iv) any zone substation relevant to providing the covered service sought in the application;
  - (v) where the applicant is a generator, the fuel type involved; and
  - (vi) the priority date,

in an anonymised format without details of the *applicant's* name or physical address of any *connection point* relevant to the *application*. Western Power must not provide *confidential information* in an anonymised format under this clause 24.9(d) if Western Power determines, acting as a *reasonable and prudent person*, that it is possible from the anonymised information to determine the identity of the associated *competing applicant*.

#### 24.10 When Western Power Must Update Information

Western Power must provide the information in clause 24.9:



- (a) when issuing notices of intention to prepare *preliminary access offers* under clause 24.2, *preliminary access offers* under clause 24.4 and *access offers* under clause 24.6;
- (b) at any time after a reasonable request by the applicant, or by any existing user with an access contract with conditions precedent which have not yet been satisfied or waived, for updated information; and
- (c) as soon as practicable after a material change in the information previously notified under this clause 24.10, including when information of the kind referred to in clause 24.9(d)is no longer required to be provided in an anonymised format.

#### 24.11 Concurrent Consideration

Nothing in clause 24 prevents Western Power from processing more than one *connection application* concurrently.

### 24.12 When Clause 24 Does Not Apply

The provisions in clause 24 do not apply to a transition application.

#### 24A Priority Dates of Applications in Particular Circumstances

### **24A.1** Withdrawn Connection Applications

An *application* which is withdrawn, or deemed by this applications and queuing policy to have been withdrawn, loses its *priority date*, even if it is subsequently amended or resubmitted.

#### 24A.2 Amended Connection Applications

- (a) Subject to clause 24A.2(b), an amended *connection application* has the same *priority date* as the original *connection application*.
- (b) Subject to clause 24A.2(c), if an amended *connection application* is materially different from the original *connection application*, and if the difference is such that an *applicant* whose *competing application* has a *priority date* subsequent to the original *connection application* is materially prejudiced in terms of the likelihood, timing, cost and terms of it obtaining access (compared with that later *applicant's* position with respect to the original *connection application*), then:
  - (i) if it is possible to construe the amended *connection application* as a combination of the original *connection application* and a notional supplementary *connection application* (whether for further *capacity* or otherwise), the original *connection application* retains its *priority date* and the notional supplementary *connection application* has a *priority date* according to the time of amendment and will be treated for the purposes of this applications and queuing policy as a separate *application* with that *priority date*; but
  - (ii) otherwise the amended *connection application* has a *priority date* according to the time of amendment.
- (c) For the purposes of clause 24A.2(b), without limiting the ways in which an amended *connection* application may be materially different from the original *connection* application, an amended *connection* application is not materially different from the original *connection* application if the *capacity* sought in the amended *connection* application is less, or less than 5% more than, the *capacity* sought in the original *connection* application.



- (d) Where an *applicant* has provided a response under clause 24.3 agreeing to have its *application* considered within a *competing applications group* following receipt of a notice of intention to prepare a *preliminary access offer* under clause 24.2 and where that *applicant* subsequently amends its *connection application* then Western Power may if it considers it appropriate (having regard to all relevant factors including the impact of the amendment on other members of the *competing applications group* and on Western Power) make or amend a *preliminary access offer* based on the amended *application*.
- (e) Where Western Power does not agree to make or amend the *preliminary access offer* based on the amended *application* then in making *preliminary access offers* Western Power will treat the relevant *application* on the basis that it has not been amended.

## 24A.3 Network Control Services

Western Power may make an *access offer* as a result of a procurement process for *Network Control Services* without regard to whether there are any *competing connection applications*.

## **24A.4** Supplier of Last Resort and Default Supplier Arrangements

Notwithstanding anything in clause 24A or in this applications and queuing policy, priority must be given to *applications*:

- (a) to the extent necessary to allow a supplier of last resort (as defined in section 67 of the Act) to comply with its obligations under Part 5 of the Act; or
- (b) to the extent necessary to allow a default supplier (as defined in section 59 of the Act) to comply with its obligations under section 59 of the Act.

# 25. Additional Terms of the *Preliminary Access Offer* or *Access Offer*

## 25.1 Terms Under Contributions Policy

Western Power must include as terms of the preliminary access offer or access offer:

- (a) the amount of any *contribution* and other payments, such as rebates, determined under the *contributions policy*; and
- (b) any terms related to the provision of the *contribution* that the *applicant* has selected under the *contributions policy*.

### **25.2** Exemptions from *Technical Rules*

The terms related to any exemption to the *technical rules* determined under Chapter 1 of the *technical rules* must be included in the *preliminary access offer* or *access offer*.

# 26. Making the Access Offer

(a) Subject to clause 26(b) Western Power must, acting as a reasonable and prudent person, give an access offer to the applicant as soon as practicable after the complete connection application is lodged, having regard to the nature of the connection application, consideration of competing



- applications and the need (where applicable) for works involving shared assets in order for Western Power to be able to provide access in accordance with the technical rules.
- (b) In the case of a connection application which relates to a transmission connected generating system Western Power has no obligation to make an access offer until the Registered Generator Performance Standards for that transmission connected generating system have been determined in accordance with the WEM Rules.



# Part D – Transfer and Relocation Policy

## 27. Novation of entire contract

- (a) Western Power will not unreasonably withhold or delay its consent to the counterparty to an *access contract* novating all of its rights and obligations under that *access contract* or give that consent on unreasonable conditions.
- (b) Without limiting the considerations Western Power may have regard to in determining whether to give consent such considerations include the financial and technical capacity of the person who is proposed to assume the obligations under the *access contract*.

# 28. Novation of part of contract

- (a) Subject to clause 28(c), Western Power will not unreasonably withhold or delay its consent to the counterparty to an *access contract* novating part of its rights and obligations under that *access contract* or give that consent on unreasonable conditions.
- (b) Without limiting the considerations Western Power may have regard to in determining whether to give consent such considerations include the financial and technical capacity of the person who is proposed to assume the obligations under the access contract.
- (c) Western Power is not required to consent to part of a novation of an *access contract* unless reasonably satisfied:
  - (i) the rights and obligations to be novated constitute a severable part of the access contract;
  - (ii) all obligations relevant to the rights to be novated are also being novated;
  - (iii) the ongoing operation of the remaining *access contract* and the ongoing operation of the novated provisions will not adversely affect the integrity of the *network*;
  - (iv) the remaining access contract is capable of operating in a meaningful and coherent manner;
  - (v) the novated provisions will operate in a meaningful and coherent manner;
  - (vi) Western Power will not suffer a reduction in revenue as a result of the novation.



### SCHEDULE 1 FORM OF GUARANTEE

#### DATE [ ]

#### **PARTIES**

- 1. [### ACN ### a company registered in ### of ###] ("Guarantor"); and
- 2. **Electricity Networks Corporation ABN 18 540 492 861**, a statutory body corporate established by paragraph 4(1)(b) of the *Electricity Corporations Act 2005 (WA)* of 363 Wellington Street, Perth Western Australia ("**Western Power**").

#### **RECITALS**

- A. Western Power may in its discretion provide Services to [###] ("the *User*") under an *Access Contract* at the request of each of the *User* and the Guarantor.
- B. The Guarantor wishes to execute this Guarantee to secure payment of all amounts payable under the *Access Contract* to Western Power.

#### **OPERATIVE PROVISIONS**

(i) Guarantee

The Guarantor unconditionally and irrevocably Guarantees as a continuing security to Western Power payment by the *User* of all moneys and liabilities due and/or payable from or by the *User* to Western Power under or in connection with the contract dated [###] ("*Access Contract*") created between the *User* and Western Power ("Secured Moneys"), including moneys and liabilities incurred or arising:

- (i) (liability): at any present or future time, whether actually or contingently;
- (ii) (default): as a result of any breach of or default under the Access Contract; and/or
- (iii) (account): by way of principal, interest, cost, charge, expense, disbursement, fee, tax, stamp or other duty, indemnity, damages or monetary judicial order.
- (ii) Secured Moneys
  - (i) Demand payment

The Guarantor must pay to Western Power, upon demand by Western Power at any present or future time, the amount of the Secured Moneys due from and payable by the *User* to Western Power at that time under, and in the manner and currency specified in, the *Access Contract*.

(ii) Costs

The Guarantor must at any present or future time indemnify Western Power upon demand for any cost, *charge*, expense, disbursement, fee, tax or stamp or other duty incurred by Western Power at any time in connection with the *Access Contract*, this Guarantee or the Secured Moneys relating to:

- (A) (security agreements): preparation, negotiation, execution or performance, or any termination, amendment, consent, claim, demand or waiver;
- (B) (security rights): any exercise or enforcement of any right or power conferred on Western Power;



- (C) (credit increases): any extension of further, additional or increased credit or financial accommodation by Western Power, or agreement by Western Power to increase the amount secured; and/or
- (D) (payments): the receipt or payment of any moneys, including moneys paid by Western Power by way of reimbursement to any third party.

#### (iii) Set-Off exclusion

The Guarantor must make any payment required under this Guarantee without set-off or other deduction, except for the deduction or withholding of any tax compelled by *law*.

#### (iii) Indemnity

The Guarantor must as a separate and additional liability of the Guarantor as a principal debtor, and not as a surety, indemnify Western Power against, and pay to Western Power upon demand by Western Power an amount equal to, all Secured Moneys that are or may become invalid, unenforceable, illegal or irrecoverable for any reason or under any circumstances as a liability to Western Power by the Guarantor as a surety, despite any other provision of this Guarantee.

#### (iv) Guarantee protection

This Guarantee, and the liability of the Guarantor under this Guarantee, is not affected at any time by:

- (i) (waiver): the granting to any person by Western Power of any waiver;
- (ii) (agreements): any agreement, deed or document created with, or action or omission performed, representation made or non-disclosure of any fact or information by, Western Power or any person;
- (iii) (Secured Moneys): any increase or variation in the amount of the Secured Moneys occurring for any reason;
- (iv) (document amendment): any amendment to or transfer, release or termination of any agreement, deed or document or any right, power or liability of any person under any agreement, whether for or without consideration;
- (v) (enforcement decisions): any exercise or enforcement, or any failure or invalidity in, the
  exercise or enforcement by Western Power of any right or power conferred on Western Power
  under any agreement, deed or document or by law;
- (vi) (invalidity): any actual or potential invalidity, unenforceability, illegality or irrecoverableness of any agreement, deed or document or consent or any payment made or due to Western Power under any agreement for any reason;
- (vii) (incapacity): any incapacity or absence of power or authorisation of, or other fact relating to, any person in connection with the execution of any agreement, deed or document or otherwise, including any change in the constitution or membership of any person; or
- (viii) (residual): any other breach, default, waiver or fact which, except for this provision, might legally operate:
  - (A) to release or discharge or have any prejudicial effect on; or
  - (B) in any manner to release or discharge the Guarantor from performance of, or limit or provide a defence to any legal action to enforce,

this Guarantee, or any liability of the Guarantor under or in connection with this Guarantee.



#### (v) Termination

The Guarantor is not entitled to terminate or limit this Guarantee, or any liability of the Guarantor under this Guarantee, until the Secured Moneys have been paid in full.

#### (vi) Governing Law

This Guarantee is governed by and construed under the *law* of the State of Western Australia.

#### (vii) General

#### (i) Continuing Security

This Guarantee is a continuing security and is not wholly or partially discharged by the payment at any time of any Secured Moneys, settlement of account or other fact and applies to the balance of the Secured Moneys at any time until a final termination of this Guarantee by Western Power.

#### (ii) Further Assurance

The Guarantor must upon request by Western Power at any time execute any document and perform any action necessary to give full effect to this Guarantee, whether prior or subsequent to performance of this Guarantee.

#### (iii) Waivers

Any failure or delay by Western Power to exercise any right or power under this Guarantee does not operate as a waiver and the single or partial exercise of any right or power by Western Power does not preclude any other or further exercise of that or any other right or power by Western Power.



# **Appendix C.1**

# **Contributions Policy**

Revised proposed access arrangement

15 November 2022



# **Contributions Policy**

1 July 2023

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# 1. Defined Terms and Interpretation

#### 1.1 Defined Terms

In this *contributions policy*, unless the contrary intention is apparent:

"access arrangement" means the current access arrangement approved in respect of the network under the Code.

"access contract" has the same meaning given to it in the Code.

{Note: Under the Code "access contract" has the same meaning as "access agreement" does in Part 8 of the Act, and under section 13.4(d) includes a *deemed access contract*. The definition of "access agreement" under the Act is "an agreement under the Code between a network service provider and another person (a "network user") for that person to have access to services".}

"Act" means the Electricity Industry Act 2004.

"additional revenue" has the same meaning as given to it in the Code.

{Note: Under the Code "additional revenue" has the meaning given to it in section 6.42 of the *Code* when used in section 6.41 of the *Code*.}

"alternative options" means alternatives to part or all of a *network* enhancement, including demand-side management and *generation* solutions (such as distributed *generation*) either instead of or in combination with a *network* enhancement.

"alternative option contribution" means a contribution made, or to be made, by an applicant in respect of an alternative option.

"alternative option test", in respect of the network, means the test set out in section 6.41 of the Code.

"anticipated incremental revenue" has the same meaning given to it in the Code.

{Note: Under the Code "anticipated incremental revenue" for a new facility means "the present value (calculated at the rate of return over a reasonable period) of the increased income from charges (excluding any contributions) reasonably anticipated to arise from the increased sale of covered services on the network to one or more users (where "increased sale of covered services" means sale of covered services which would not have occurred had the new facility not been commissioned), minus

the present value (calculated at the *rate of return* over the same period) of the best reasonable forecast of the increase in *non-capital costs* directly attributable to the increased sale of the *covered services* (being the *covered services* referred to in the expression "increased sale of *covered services*" in paragraph (a) of this definition)".}

"Appendix 8 work" has the same meaning given to it in the Code.

{Note: Under the *Code* "Appendix 8 work" means "work in connection with the *Western Power Network* of a type specified in clause A8.2 of Appendix 8".}

"applicant" means a person (who may be a *user*, a *customer* or a *developer*) who has lodged, or intends to lodge, a *connection application*, and includes a person who does so on behalf of another person.

"applications and queuing policy" means the applications and queuing policy (as defined in the Code) in the access arrangement.

"augmentation" has the same meaning as given to it in the Code.

{Note: Under the Code "augmentation" in relation to a covered network, means "an increase in the capability of the covered network to provide covered services".}

"Authority" has the same meaning as given to it in the Code.

{Note: Under the Code "Authority" means "the Economic Regulation Authority established by the Economic Regulation Authority Act 2003".}

"bidirectional point" has the same meaning given to it in the applications and queuing policy.

{Note: Under the applications and queuing policy "bidirectional point" means "a single, indivisible (except as allowed under this applications and queuing policy) point, that for purposes under the access arrangement involving the transfer of electricity, is deemed to consist of a single attachment point, connected or to be connected to a user's connection point, with a single meter (regardless of the actual configuration of network assets making up the bidirectional point), at which electricity is to be transferred into and out of the network".}

"bidirectional service" means a covered service provided by Western Power at a connection point under which the user may transfer electricity into and out of the network at the connection point.

"capital contribution" has the same meaning given to it in the Code.

{Note: Under the Code "capital contribution" means "a payment or provision in kind made, or to be made, by a user in respect of any new facilities investment in required work".}

"Code" means the *Electricity Networks Access Code 2004* (as amended).

"connect" has the same meaning given to it in the Code.

{Note: Under the Code "connect" means "to form a physical link to or through a network".}

"connection application" means an application lodged with Western Power under the applications and queuing policy that has the potential to require a modification to the network, including an application to:

- (a) connect facilities and equipment at a new connection point; or
- (b) increase consumption or generation at an existing connection point; or
- (c) materially modify facilities and equipment connected at an existing connection point; or
- (d) augment the network for any other reason,

{Note: this might be, for example, to service a subdivision.}

and includes any additional information provided by the applicant in regard to the application.

"connection assets" has the same meaning given to it in the Code.

{Note: Under the Code "connection assets" for a connection point, means "all of the network assets that are used only in order to provide covered services at the connection point".}

"connection point" means an exit point or an entry point or a bidirectional point identified or to be identified as such in an access contract.

"consume" has the same meaning given to it in the Code.

{Note: Under the Code "consume" means "to consume electricity".}

"consumption", for a connection point, means the amount of electricity consumed at the connection point, and is measured in Watt-hours.

"contracted capacity" means the maximum rate at which a *user* is permitted to transfer electricity at a *connection point* under the *user's access contract*.

"contribution" has the same meaning given to it in the Code, but also includes an alternative option contribution.

{Note: Under the Code "contribution" means "a capital contribution, a non-capital contribution or a headworks charge".}

"contributions policy" has the same meaning given to it in the Code.

{Note: Under the Code "contributions policy" means "a policy in an access arrangement under section 5.1(h) dealing with contributions by users".}

"contributions rate of return" means the rate of return most recently approved by the *Authority* for use in price control for the network.

"covered service" has the same meaning given to it in the Code.

{Note: Under the Code "covered service" means "a service provided by means of a covered network, including:

- (a) a connection service; or
- (b) an entry service, exit service or bidirectional service; or
- (c) a network use of system service; or
- (d) a common service; or
- (e) a service ancillary to a service listed in paragraph (a) to (d) above,

but does not include an excluded service".}

"cpi" means the "all capitals consumer price index" as defined by the Australian Bureau of Statistics.

"customer" has the meaning given to it in the Act.

"distribution low voltage connection headworks scheme" means the scheme described in clause 6 of this contributions policy.

"distribution low voltage connection headworks scheme application" means a connection application where the proposed or existing connection point for a new or upgraded connection is to the distribution system low voltage network and is within 25 kms of the relevant zone substation.

"distribution low voltage connection headworks scheme base charge" means the value determined in accordance with section 6.3 of this contributions policy.

"distribution low voltage connection headworks scheme contribution" means a contribution in respect of the distribution low voltage connection headworks scheme.

"distribution low voltage connection headworks scheme works" with respect to a distribution low voltage connection headworks scheme application, means works on the distribution system reasonably adjacent to the connection point (to which the distribution low voltage connection headworks scheme application relates) that directly provides for delivery of electricity capacity to that connection point and that may include switchgear, HV cable, transformers, low voltage cable and ancillary equipment.

"distribution system" has the same meaning given to it in the *Code*, but excludes equipment within zone substations used for the transportation of electricity at nominal voltage of less than 66 kV.

{Note: Under the *Code* "distribution system" means "any apparatus, equipment, plant or buildings used, or to be used, for, or in connection with, the transportation of electricity at nominal voltages of less than 66 kV".}

"entry point" has the same meaning given to it in the applications and queuing policy.

{Note: Under the applications and queuing policy "entry point" means "a single, indivisible (except as allowed under this applications

and queuing policy) point, that for purposes under the *access arrangement* involving the transfer of electricity, is deemed to consist of a single *attachment point*, *connected* or to be *connected* to a *user's connection point*, with a single *meter* (regardless of the actual configuration of *network assets* making up the *entry point*), at which electricity is more likely to be transferred into the *network* than out of the *network*".}

"entry service" has the same meaning given to it in the applications and queuing policy.

{Note: Under the applications and queuing policy "entry service" means "a covered service provided by Western Power at a connection point under which the user may transfer electricity into the network at the connection point".}

"exit point" has the same meaning given to it in the applications and queuing policy.

{Note: Under the applications and queuing policy "exit point" means "a single, indivisible (except as allowed under this applications and queuing policy) point, that for purposes under the access arrangement involving the transfer of electricity, is deemed to consist of a single attachment point, connected or to be connected to a user's connection point, with a single meter (regardless of the actual configuration of network assets making up the exit point), at which electricity is more likely to be transferred out of the network than into the network".}

"exit service" has the same meaning given to it in the applications and queuing policy.

{Note: Under the applications and queuing policy "exit service" means "a covered service provided by Western Power at a connection point under which the user may transfer electricity out of the network at the connection point".}

"facilities and equipment" has the same meaning given to it in the Code.

{Note: Under the *Code*, "facilities and equipment" in relation to a *connection point*, means "the apparatus, equipment, plant and buildings used for or in connection with *generating*, *consuming* and *transporting* electricity at the *connection point*".}

"forecast costs" means any or all of the forecast new facilities investment or the forecast alternative option costs, as applicable, to be incurred by Western Power with regards to works.

"forecast new facilities investment" has the same meaning given to it in the Code.

{Note: Under the Code "forecast new facilities investment" for a covered network means "the capital costs forecast to be incurred in developing, constructing and acquiring new network assets for the covered network".}

"generation", for a connection point, means the amount of electricity generated at the connection point, and is measured in kilowatts.

"good electricity industry practice" has the same meaning given to it in the Code.

{Note: Under the Code "good electricity industry practice" means "the exercise of that degree of skill, diligence, prudence and foresight that a skilled and experienced person would reasonably and ordinarily exercise under comparable conditions and circumstances consistent with applicable written laws and statutory instruments and applicable recognised codes, standards and guidelines".}

"GST" means Goods and Services Tax.

"HV" means the high voltage level of the distribution *network* where the voltage is greater than 6 kV and less than 66 kV.

"low voltage" means the low voltage level of the *distribution system network* where the voltage is less than 1 kV.

"minimum practical works" with regard to covered services sought by an applicant, means the minimum works Western Power must undertake, acting efficiently in accordance with good electricity industry practice, to provide only those covered services required by that applicant.

"network" has the meaning given to "Western Power Network" in the Code.

{Note: Under the Code "Western Power Network" means "the covered network that is covered under section 3.1". The "Western Power Network" is the portion of the SWIN that is owned by the Electricity Networks Corporation.}

"network assets" has the same meaning given to it in the Code.

{Note: Under the Code "network assets", in relation to a network means "the apparatus, equipment, plant and buildings used to provide or in connection with providing covered services on the network, which assets are either connection assets or shared assets".}

"new facilities investment" has the same meaning as given to it in the Code.

{Note: Under the Code "new facilities investment" means, for a new facility, "the capital costs incurred in developing, constructing and acquiring the new facility".}

"new facilities investment test" has the same meaning as given to it in the Code.

{Note: Under the Code "new facilities investment test" means, in respect of a covered network, "the test set out in section 6.52".}

"new revenue" means the *anticipated incremental revenue* or *additional revenue* or both, as applicable, with respect to *works*.

"non-capital contribution" means a payment or provision in kind made, or to be made, by a *user* in respect of any *non-capital costs* (or forecast *non-capital costs*) of *required work*.

"non-capital costs" means the *non-capital costs* (as defined in the *Code*), but excluding *alternative option* costs, to be incurred by Western Power with regards to works.

"price control" has the same meaning as given to it in the Code.

{Note: Under the Code "price control" means "the provisions in an access arrangement under section 5.1(d) and Chapter 6 of the Code which determines target revenue".}

"reasonable and prudent person" means a person acting in good faith and in accordance with good electricity industry practice.

"reasonable time" means the time determined in accordance with clause 5.3.

"relevant distribution transformer" with respect to the distribution low voltage connection headworks scheme and a connection application means the transformer from which the new or upgraded connection (to which that connection application relates) will be supplied under normal system operating conditions.

"relevant zone substation" means the zone substation to which the new or upgraded *connection* will be connected under normal system operating conditions.

"required work" means work which is necessary in order to provide a covered service sought in a connection application.

"retailer" has the meaning given to it in the Act.

"scheme" has the same meaning as given to it in Appendix 8 of the Code.

"service provider" has the same meaning given to it in the Code.

{Note: Under the Code "service provider" in relation to a network means "a person who owns or operates the network".}

"shared assets" has the same meaning given to it in the Code.

{Note: Under the Code "shared assets" means "those network assets which are not connection assets".}

"SWIS" is the South West Interconnected System and it has the meaning given to it in the Code.

{Note: Under the Code "SWIS" has the meaning as given to it in the Act, being "the interconnected transmission and distribution systems, generating works and associated works -

- (a) located in the South West of the State and extending generally between Kalbarri, Albany and Kalgoorlie; and
- (b) into which electricity is supplied by -
- (i) one or more of the electricity generation plants at Kwinana, Muja, Collie and Pinjar; or
- (ii) any prescribed electricity *generation* plant".}

"technical rules" means the *technical rules* (as defined in the *Code*) applying from time to time to the *network* under Chapter 12 of the *Code*, as modified in accordance with the *Code*.

"transmission system" has the same meaning given to it in the Code, but also includes equipment within zone substations used for the transportation of electricity at nominal voltage of less than 66 kV.

"user" has the same meaning given to it in the Code.

{Note: Under the Code "user" means "a person, including a generator or a consumer, who is a party to a contract for services with a service provider, and under section 13.4(e) includes an other business as a party to a deemed access contract".}

"WEM rules" means the 'market rules' referred to in section 123(1) of the *Act*, and includes all rules, policies or other subordinate documents developed under the WEM Rules.

"works" includes distribution low voltage connection headworks scheme works and all works required to be undertaken to provide an applicant with the covered services sought by the applicant in a connection application, including works associated with:

- (a) augmentation of connection assets;
- (b) augmentation of shared assets;
- (c) alternative options; and
- (d) other non-capital works.

## 1.2 Interpretation

- (a) Unless the contrary intention is apparent:
  - (i) a rule of interpretation in the Code; and
  - (ii) the Interpretation Act 1984

apply to the interpretation of this contributions policy.

- (b) Unless:
  - (i) the *contrary* intention is apparent; or
  - (ii) the term has been redefined in clause 1.1,

a term with a defined meaning in the Code has the same meaning in this contributions policy.

# 2. Applications of this Contributions Policy

- (a) Subject to (b), and (c) below, this *contributions policy* applies if it is necessary for Western Power to perform *works* to provide *covered services*.
- (b) If the works required for Western Power to provide the covered services sought by an applicant include Appendix 8 work, then the contribution for those works is the amount determined under and in accordance with Appendix 8 of the Code. For the avoidance of doubt, any such contribution is to be paid in addition to any contribution payable under this contributions policy.
- (c) An *applicant* is required to pay a *contribution* for *works* in any (including any combination of) the following circumstances:
  - (i) in the case of *new facilities investment*, where the capital costs incurred in relation to the relevant *works* do not satisfy the *new facilities investment test*;
  - (ii) in the case of works related to alternative options, where the non-capital costs associated with such works do not satisfy the requirements of clause 6.41(b) of the Code;
  - (iii) in the case of non-capital works including alternative options, where the costs of the works were not included, and could not reasonably have been included, in forecasts of non-capital costs taken into account in setting the price control; or
  - (iv) where the works meet the requirements of clause 6 of this contributions policy (distribution low voltage connection headworks scheme).

## 3. Lowest Sustainable Cost

A contribution with respect to covered services sought by an applicant must not exceed the amount that would be required by a prudent service provider acting efficiently, in accordance with good electricity industry practice seeking to achieve the lowest sustainable cost of providing the covered services.

# 4. Applicant Must Make Contribution

### 4.1 Applicant Must Make Contribution

- (a) Subject to paragraph (b) of this clause 4.1, if the application of this contributions policy in relation to the works produces a contribution amount that is greater than zero, Western Power is not required to undertake the works in respect of a connection application for a covered service until the applicant enters into a contract with Western Power under which the applicant agrees to provide the contribution, including any GST liability, to Western Power in accordance with this contributions policy.
- (b) If the work falls within the class of distribution low voltage connection headworks scheme works, Western Power must undertake and fund the work [whether or not the work is a required work]. This does not excuse the applicant from any obligations to make a contribution under this contributions policy.

## 4.2 Payment of GST

The payment of a *contribution* may be subject to *GST* and, if so, Western Power will request an *applicant* to pay an additional amount equal to Western Power's *GST* liability. [Western Power may request payment of this additional amount at the time Western Power's *GST* liability arises.]

## 4.3 Applicant Must Provide Security for new revenue

- (a) In addition to the payment of a contribution, Western Power may require an *applicant* to provide security under this clause if Western Power determines there to be a risk of not receiving the *new revenue*.
- (b) Western Power may require the *applicant* to provide security in the form of an unconditional, irrevocable bank guarantee, or equivalent financial instrument in terms acceptable to Western Power guaranteeing *new revenue* in the amount of:
  - (i) the *estimated new revenue* (where the *estimated new revenue* is less than the *allocated forecast costs*); or
  - (ii) the *allocated forecast costs* (where the *estimated new revenue* is more than the *allocated forecast costs*).
- (c) Where Western Power requires security under clause 4.3(b), the *applicant* must provide it before the commencement of the *works* the subject of the *connection application*.
- (d) Where an *applicant* has provided security under clause 4.3(c), then 24 months after the commencement of the associated *exit service*, *entry service*, or *bidirectional service* Western Power will reconsider the risk of not receiving the *estimated new revenue* (based on the then expected use of those *services*) and if that risk:
  - (i) no longer remains, Western Power will return the security;
  - (ii) remains, but has abated, Western Power may reduce the amount of the security by requiring a new security for the reduced amount. Western Power will return the security following receipt of the new security; or
  - (iii) has crystallised (such that some or all of the *estimated new revenue* will not be recovered by Western Power), Western Power will re-determine the *contribution* under this *contributions*

*policy* and recover from the *applicant* any difference from the amount of any original *contribution* and, after that recovery, return the security.

- (e) In applying this clause Western Power will act as a reasonable and prudent person.
- (f) For the purposes of this clause 4.3:

"estimated new revenue" means the amount calculated under clause 5.2(d).

"allocated forecast costs" means the amount of the *forecast costs* allocated to the *applicant* under clause 5.4.

#### 4.4 Payment of Tax

The receipt by Western Power of a *contribution* may result in Western Power incurring a tax liability (whether under Commonwealth or State income tax and other legislation or under a tax equivalent regime applicable to Western Power as a government owned enterprise) and Western Power may recover from the *applicant*, as part of the *contribution* payable by the *applicant*, Western Power's forecast of the net tax liability that it will incur as a result of the receipt of such *contribution*. For the avoidance of doubt, this clause 4.4, clause 5.2(f) and clause 5.5 do not deal with liability for *GST*, which is dealt with in clause 4.2.

### 5. Amount of Contribution

#### 5.1 Interpretation

- (a) For the avoidance of doubt, this clause 5 is to be read subject to the provisions of clauses 2 and 6 of this *contributions policy*.
- (b) For the purposes of this clause 5:
  - (i) the definition of 'new facilities investment test' is that set out in section 6.52 of the Code, but without having regard to subsection 6.52(b)(i) thereof; and
  - (ii) the definition of 'alternative option test' is that set out in section 6.41 of the Code, but without having regard to subsection 6.41(b)(i) thereof.

#### 5.2 Calculation of Contribution

The contribution payable in respect of any works to which this policy applies is calculated by:

- (a) determining the appropriate portion of any of the *forecast costs* of the *works* (excluding distribution low voltage connection headworks scheme works, but including any works relating to a distribution low voltage connection headworks scheme application excluded from clause 6 by clause 6.5), which do not meet the *new facilities investment test* or the *alternative option test* (as applicable) to allocate to the *applicant* under clause 5.4; and
- (b) adding any applicable amount calculated under clause 6.3 (distribution low voltage connection headworks scheme base charge); and
- (c) adding any applicable amount calculated under clause 7.4; and
- (d) deducting the amount likely to be recovered in the form of *new revenue* gained from providing covered services to the applicant, or, if the applicant is a customer (including a residential customer), to the customer's retailer, as calculated over the reasonable time, at the contributions rate of return; and
- (e) adding any applicable amount calculated under clauses 7.1, 7.3 and 7.5; and
- (f) adding any tax liability (of the nature referred to in clause 4.4) which Western Power forecasts it will incur due to the receipt of the amount payable under paragraphs (a) to (e) of this clause 5.2, as calculated in accordance with clause 5.5; and
- (g) adding any applicable amount calculated under clause 7.2.

#### 5.3 Reasonable Time

For the purposes of this *contributions policy, reasonable time* is to be determined by Western Power, asa *reasonable and prudent person*, having regard to:

- (a) the anticipated commercial life of the works, up to a maximum of 15 years; and
- (b) the purpose for which the *applicant* requires the *covered services*.

{Note: For example, if the *applicant* is proposing to build a plant with an expected 5 year operating life, then the *reasonable time* might be 5 years or less.}

#### 5.4 Amount of Forecast Costs

- (a) Western Power may, acting as a *reasonable and prudent person*, determine that the amount of the *forecast costs* to be allocated to the *applicant* for the purposes of clause 5.2(a) is:
  - (i) the full amount of the forecast costs; or
  - (ii) an amount determined under clauses 5.4(b) to 5.4(e).
- (b) If Western Power chooses to undertake *works* in excess of the *minimum practical works* to provide *covered services* sought by an *applicant*, then Western Power will determine that the amount of costs allocated to the *applicant* are the *forecast costs* of the *minimum practical works*.
- (c) If:
  - (i) Western Power reasonably expects to receive *tariff* income from future *applicants*, because of *works* to provide *covered services* sought by an *applicant*, within a period of 10 years, (or such longer period as reasonably determined by Western Power acting as a *reasonable and prudent person*), of the original *applicant's connection application*; or
  - (ii) an *applicant* seeks a *covered service* that will make use of *works* undertaken to provide *covered services* to a previous *applicant*, within a period of 10 years, (or such longer period as reasonably determined by Western Power acting as a *reasonable and prudent person*), of the original *applicant's connection application*, and for which the original *applicant* paid a *contribution* calculated under clause 5.2;
  - then Western Power will apportion the costs based on the relative use of the *works* by the *applicant* compared to the relative use of the *works* expected to be sought by those future *applicants*, or the relative use of the *works* sought by previous *applicants*, or both, as applicable.
- (d) If Western Power has received more than one connection application requiring the same works, then Western Power may negotiate with the applicants under the applications and queuing policy to apportion the forecast costs of the works between the applicants, based on the relative use of the works sought by each applicant.
- (e) If works to provide covered services to an applicant provide specific savings to Western Power in performing its legal obligations, then Western Power will determine that the costs to be allocated to the applicant are the forecast costs less the amount saved.

#### 5.5 Estimating Tax Liability

For the purposes of determining the costs representing Western Power's tax liability arising under clause 5.2(f) due to receipt of an amount calculated under paragraphs (a) to (e) of clause 5.2, Western Power must estimate the net tax liability, with respect to the *contribution*, it will incur over the life of the assets to which the *contribution* relates. The calculation of the grossed up tax liability takes into account the circularity arising from the payment of tax costs by the *customer*, the dividend imputation franking credit passed through to Western Power's shareholder and the statutory tax depreciation benefit which offsets the tax costs incurred by Western Power.

## 6. Distribution Low Voltage Connection Headworks Scheme

#### 6.1 Application

Subject to clause 6.5 this distribution low voltage connection headworks scheme applies to an applicant that falls within the class of applicant that may make a distribution low voltage connection headworks scheme application and where the works required to meet the requirements of the connection application of that applicant are distribution low voltage connection headworks scheme works.

#### 6.2 Distribution Low Voltage Connection Headworks Scheme Contribution

- (a) If, acting as a reasonable and prudent person, Western Power considers that the forecast costs of distribution low voltage connection headworks scheme works (required to meet the requirements of the connection application of an applicant) over a 15 year period exceed the amount of new revenue likely to be gained from providing covered services using those distribution low voltage connection headworks scheme works to distribution low voltage connection headworks scheme applicants over that period, then, upon receiving the distribution low voltage connection headworks scheme application of that applicant, Western Power will, in accordance with this clause 6, require a distribution low voltage connection headworks scheme contribution from the applicant.
- (b) Where a distribution low voltage connection headworks scheme contribution is made by an applicant no further contribution shall be required from the applicant for the distribution low voltage connection headworks scheme works for which that distribution low voltage connection headworks scheme contribution was made.
- (c) For the purpose of this contributions policy a distribution low voltage connection headworks scheme contribution is a capital contribution.

## 6.3 Calculation of the Distribution Low Voltage Connection Headworks Scheme Base Charge

The distribution low voltage connection headworks scheme base charge is determined by Western Power:

- (a) identifying the *applicant's* incremental electrical capacity requirement:
  - in relation to a serviced lot, by deducting from the applicant's required electrical capacity, the original design capacity for a greenfield development as determined by Western Power from time to time; or
  - (ii) in relation to an un-serviced lot, as the *applicant*'s required electrical capacity sought in the *distribution low voltage connection headworks scheme application*.
- (b) determining whether the location of the *connection point* (to which the *connection application* relates) is on a lot of land separate from the *relevant distribution transformer*; and
- (c) applying the parameters determined under 6.3(a) and 6.3(b) to the prices determined in clause 6.4.

#### 6.4 Distribution Low Voltage Connection Headworks Scheme Prices

The methodology used to develop the *distribution low voltage connection headworks scheme* prices is described in Appendix C (*Distribution low voltage connection headworks scheme* Methodology) of the

access arrangement.

- (a) The distribution low voltage connection headworks scheme price is expressed as \$ per kVA.
- (b) The distribution low voltage connection headworks scheme prices will vary depending on:
  - (i) whether the incremental capacity requirement at the *connection point* determined under clause 6.3(a) is:
    - (A) less than 216 kVA; or
    - (B) between 216 kVA and 630 kVA; or
    - (C) greater than 630 kVA, and
  - (ii) whether the location of the *connection point* is on a lot of land separate from the *relevant distribution transformer*.

#### 6.5 Exclusion from Distribution Low Voltage Connection Headworks Scheme

A distribution low voltage connection headworks scheme application is excluded from the provisions of this clause 6 where the forecast costs of works (as determined assuming clause 5.4 applies to those works) is in excess of the distribution low voltage connection headworks scheme base charge plus the exclusion threshold. For the purposes of applying this clause 6.5, only the cost of those works which would otherwise fall within the distribution low voltage connection headworks scheme apply.

The methodology used to develop the *distribution low voltage connection headworks scheme* exclusion threshold is described in Appendix C (*Distribution Low Voltage Connection Headworks Scheme* Methodology) of the *access arrangement*.

Where a distribution low voltage connection headworks scheme application is excluded from the provisions of clause 6, the *contribution* is determined otherwise under this *contributions policy* and the provisions of this clause 6 shall not apply.

#### 7. General Provisions

For the avoidance of doubt, this clause 7 is to be read subject to the provisions of clause 2 of this *contributions policy*.

#### 7.1 Connection Assets

The applicant must pay the full forecast costs of any works to provide connection assets.

#### **7.2** Non-capital Costs

The *applicant* must pay to Western Power the full amount of any *non-capital costs* that Western Power incurs in performing *works*, which in any case must not exceed such costs that would be incurred by a prudent *service provider* acting efficiently in accordance with *good electricity industry practice*.

{Note: these costs might include, for example, adjusting protection settings, reprogramming computer equipment and so on.}

#### 7.3 Works Over and Above Standard Works

If an *applicant* seeks a *covered service* that is better or different in some respect than an equivalent *service* in the *technical rules* or an equivalent *reference service* in the *access arrangement*, then the *applicant* must pay to Western Power:

- (a) a contribution calculated under this contributions policy for the equivalent service; and
- (b) the difference between the *forecast costs* of the *works* required to provide the equivalent *service* and the *forecast costs* of the *works* required to provide the better or different *service*, to the extent that the better or different *service* does not otherwise meet those parts of the *new facilities investment test* dealing with *net benefit*, safety or reliability.

{Note: this could be, for example, a design philosophy delivering increased security of supply}

#### 7.4 Costs Related to Technical Rules Compliance

- (a) The *applicant* must pay a *contribution* calculated under this *contributions policy* in respect of any *works* required to upgrade the fault level ratings of *network assets*, or any other *works* required to ensure that Western Power complies with the *technical rules* with respect to the *network assets*.
- (b) The applicant must pay all of its own costs in relation to ensuring that its facilities and equipment comply with the technical rules, and with any requirements of the WEM rules (including any "Registered Generator Performance Standards" (as that term is defined in the WEM rules)) applicable to those facilities and equipment.

#### 7.5 Temporary Supplies

The *contribution* to be paid by an *applicant* who seeks a temporary supply is, if no applicable amount is published on Western Power's website, an amount equal to the full *forecast costs* of the *required works*. For the avoidance of doubt, the provisions of clauses 5.2 and 6 do not apply to temporary supplies.

#### 8. Manner of Contribution

#### 8.1 Options for Payment

A contribution may be made:

- (a) by the *applicant* by way of a financial payment comprising either:
  - (i) periodic financial payments, subject to clause 8.2; or
  - (ii) an upfront financial payment;
- (b) by the Western Australian Government under any appropriate government policy; or
- (c) by the *applicant* undertaking the *augmentation* and transferring ownership of the *augmentation*, subject to clause 8.4.

Where the *contribution* is greater than \$1,000,000, the *applicant* and Western Power may negotiate to adjust the *contribution* to reflect actual costs of the *required works* determined after the completion of the *works*. This does not exclude the *applicant* from any obligations to pay a *contribution* in accordance with the terms and conditions of this *contributions policy*.

### 8.2 When Applicant May Choose Periodic Payment

The *applicant* may not elect under clause 8.1(a)(i) to make the *contribution* by way of a periodic financial payment unless the total amount of the *contribution* exceeds \$50,000.

#### 8.3 Terms and Amount of Periodic Payment

- (a) If the *applicant* elects to make a *contribution* by way of periodic financial payment under clause 8.1(a)(i), then:
  - (i) the maximum term over which the periodic payments may be made is 5 years;
  - (ii) interest will be payable on each periodic payment, at a reasonable commercial rate to be negotiated between Western Power and the *applicant*; and
  - (iii) Western Power (acting as a *reasonable and prudent person*) may require the *applicant* to procure an unconditional, irrevocable bank guarantee, or equivalent financial instrument, interms acceptable to Western Power, guaranteeing the *contribution*.

#### 8.4 Augmentations Undertaken by Applicants

- (a) An *applicant* may, at its own cost and expense with Western Power's approval, construct an *augmentation* of the *network*.
- (b) Where an *applicant*, in accordance with (a) above, constructs an *augmentation* of the *network*, the *applicant* shall agree to transfer the ownership of the *augmentation* to Western Power on such reasonable terms and conditions as may be stipulated by Western Power (after Western Power has tested the *augmentation* and certified that it meets the applicable technical standards under the *technical rules* and the *WEM rules*) but in no circumstance will Western Power become obliged to make any payment tothe *applicant* or any other person with respect to the *augmentation*.

{Note: An applicant is required to pay to Western Power the fees set by Western Power from time to time associated with Western

Power testing the *augmentation* to establish that it meets the applicable technical standards for the *augmentation* to *connect* to the *network*.}

## 9. Rebates and Recoupment

#### 9.1 Applicability

This clause 9 does not apply to *contributions* made under clause 6 (*distribution low voltage connection headworks scheme*) of this *contributions policy*.

#### 9.2 Parties May Negotiate a Rebate

#### (a) Where:

- (i) an *applicant* has paid a *contribution*, or is paying a *contribution* in the form of periodic payments, for *works* with respect to a *connection point*; and
- (ii) the value of the *contribution* is in excess of \$1,000,000,

then Western Power and the *applicant* may negotiate to require Western Power to provide a rebate in circumstances where a subsequent *applicant* associated with a different *connection point* benefits from the *works* or a part of the *works* in respect of the original *connection point*. The rebate can only be in relation to assets, the costs of which were included in the calculation of the original *contribution* under this *contributions policy*.

#### (b) Where:

- (i) an *applicant* has paid a *contribution*, or is paying a *contribution* in the form of periodic payments, for *works* with respect to a *connection point* for which the full *forecast costs* of the *works* were allocated to the *applicant* under clause 5.4;
- (ii) at the time that the *works* are carried out, it is only the *applicant* who will benefit from the *works* in relation to that *connection point*; and
- (iii) the value of the contribution is in excess of \$200,000 but less than \$1,000,000,

then Western Power and the *applicant* may negotiate to require Western Power to provide a rebate in circumstances where a subsequent *applicant* associated with a different *connection point* benefits from the *works* or a part of the *works* in respect of the original *connection point*.

#### (c) Where:

- an applicant has paid a contribution, or is paying a contribution in the form of periodic payments, for works with respect to a connection point for which the full forecast costs of the works were allocated to the applicant under clause 5.4; and
- (ii) at the time that the *works* are carried out, it is only the *applicant* who will benefit from the *works* in relation to that *connection point*; and
- (iii) the value of the *contribution* is less than or equal to \$200,000,

then Western Power and the *applicant* may negotiate to require Western Power to provide a rebate in circumstances where a subsequent *applicant* associated with a different *connection point* benefits from the *works* or a part of the *works* within 10 years of the date that the *contribution* was paid, or periodic payments of the *contribution* began, in respect of the original *connection point*.

- (d) Any negotiated rebate will be payable to the *customer*, or the *user* associated with that *connection point* at the time of the *rebate* being payable.
- (e) The amount of a rebate given to a *user* or *customer* under clause 9.2(a), (b) or (c) is determined by apportioning the amortised *contribution* paid in respect of the original *connection point* between the *user* or *customer* associated with the original *connection point* and each subsequent *applicant* based on the relative *contracted capacity* of each party, where the *contribution* is amortised completely in a straight line over 10 years.
- (f) Western Power is not under any obligation to pay any rebate for a *contribution* to any *user* or *customer* under any circumstance other than that expressly provided for under clause 9.2(a), (b) or (c).

#### 9.3 New Applicants Must Pay Rebate

Where Western Power must pay a rebate to a *user* or a *customer* in respect of a *connection point* under clause 9.2, each subsequent *applicant* that triggers such a rebate must pay to Western Power an upfront amount equivalent to the rebate.

#### 9.4 Scheme Rebates Determined Under Appendix 8 of the Code

Nothing in this clause 9 affects the obligations of Western Power to pay a member of a *scheme* a rebate in accordance with the provisions of Appendix 8 of the *Code*.

## 10. Obligation to provide information

Upon request from an *applicant*, and in respect of a *contribution* for *works*, Western Power will use its reasonable endeavours to provide the *applicant* with the following information:

- (a) where the *contribution* is in respect of *new facilities investment*, details of assessment of the *new facilities investment* against the requirements of the *new facilities investment test* and details of the calculation of the amount that does not meet the *new facilities investment test*;
- (b) where the *contribution* is made in respect of *non-capital costs* related to *alternative options*, details of assessment of the *non-capital costs* against the *alternative options test* and details of the calculation of the amount that does not satisfy the *alternative options test*;
- (c) details of assumptions and calculations applied in the apportionment of any forecast cost of works between the user or applicant and other users or applicants or Western Power under clause 5.4 of this contributions policy; and
- (d) details of the calculation of a *distribution low voltage connection headworks scheme contribution* under clause 6 of this *contributions policy*.

## **Appendix C.2**

# **Distribution Low Voltage Connection Scheme Methodology**

Revised proposed access arrangement

15 November 2022



## Distribution Low Voltage Connection Scheme Methodology

1 July 2023



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## 1. Defined Terms and Interpretation

#### 1.1 Defined Terms

In this methodology document the following terms are used and have the same meaning given to them or as given in the *contributions policy* or the *Code* (reproduced below for convenience).

"applicant" has the same meaning given to it in the contributions policy.

{Note: Under the *contributions policy* "applicant" means "a person (who may be a user, a customer or a developer) who has lodged, or intends to lodge, a connection application, and includes a person who does so on behalf of another person".}

"Code" means the Electricity Networks Access Code 2004 (as amended).

"connection application" has the same meaning given to it in the contributions policy.

{Note: Under the contributions policy "connection application" means "an application lodged with Western Power under the applications and queuing policy that has the potential to require a modification to the network".}

"connection point" has the same meaning given to it in the contributions policy.

{Note: Under the contributions policy "connection point" means "an exit point or an entry point or a bi-directional point identified or to be identified as such in an access contract".}

"contribution" has the same meaning given to it in the Code, but also includes an alternative option contribution.

{Note: Under the Code "contribution" in relation to a covered network, means "a capital contribution, a non-capital contribution or a headworks charge".}

"contributions policy" has the same meaning given to it in the Code.

{Note: Under the Code "contributions policy" means "a policy in an access arrangement under section 5.1(h) dealing with contributions by users".}

"distribution low voltage connection scheme" means the scheme described in clause 6 of the *contributions* policy.

"distribution low voltage connection scheme application" has the same meaning given to "distribution low voltage connection headworks scheme application" in the contributions policy.

{Note: Under the contributions policy "distribution low voltage connection headworks scheme application" means a connection application where the proposed or existing connection point for a new or upgraded connection is to the distribution system low voltage network and is within 25 kms of the relevant zone substation.}

"distribution low voltage connection scheme base charge" has the same meaning given to "distribution low voltage connection headworks scheme base charge" in the *contributions policy*.

{Note: Under the contributions policy "distribution low voltage connection headworks scheme base charge" means the dollar value defined in section 6.3 of this contributions policy.}

"distribution low voltage connection scheme works" has the same meaning given to "distribution low voltage connection headworks scheme works" in the contributions policy.

{Note: Under the contributions policy "distribution low voltage connection headworks scheme works" with respect to a distribution low voltage connection scheme application, means works on the distribution system reasonably adjacent the connection point (to which the distribution low voltage connection headworks scheme application relates) that directly provides for delivery of electricity capacity to that connection point and that may include switchgear, HV cable, transformers, low voltage cable and equipment.}



#### "distribution system" has the same meaning given to it in the contributions policy.

{Note: Under the *contributions policy* "distribution system" has the same meaning given to it in the *Code*, but excludes equipment within zone substations used for the transportation of electricity at nominal voltage of less than 66 kV.}

#### "forecast costs" has the same meaning given to it in the contributions policy.

{Note: Under the contributions policy "forecast costs" means "any or all of the forecast new facilities investment or the forecast alternative option costs, as applicable, to be incurred by Western Power with regards to works".}

#### "headworks charge" has the same meaning given to it in the Code.

{Note: Under the Code "headworks charge" means, "in respect of a headworks scheme, means a payment made, or to be made, by a user under the headworks scheme in respect of a connection point".}

#### "headworks scheme" has the same meaning given to it in the Code.

{Note: Under the Code "headworks scheme" means "a scheme under section 5.17C".}

#### "load" has the same meaning given to it in the Code.

{Note: Under the Code "load" means "the amount of electrical power transferred out of a network at a connection point at a specified time".}

#### "low voltage" has the same meaning given to it in the contributions policy

{Note: Under the Contributions Policy "low voltage" means "the low voltage level of the distribution network where the voltage is less than 1 kV.}

#### "network" has the same meaning given to "Western Power Network" in the Code.

{Note: Under the *Code* "Western Power Network" means "the *covered network* that is *covered* under section 3.1". The "Western Power Network" is the portion of the SWIN that is owned by the Electricity Networks Corporation.}

#### "relevant distribution transformer" has the same meaning given to it in the contributions policy.

{Note: Under the *contributions policy* "relevant distribution transformer" with respect to the *distribution low voltage connection scheme* means the transformer from which the new or upgraded *connection* will be supplied under normal system operating conditions.}

#### "relevant zone substation" has the same meaning given to it in the contributions policy.

{Note: Under the contributions policy "relevant zone substation" means the zone substation to which the new or upgraded connection will be connected under normal system operating conditions.}

#### "SWIS" has the meaning given to it in the Code.

{Note: Under the Code "SWIS" has the same meaning as given to it in the Electricity Industry Act 2004, being "the interconnected transmission and distribution systems, generating works and associated works -

- (a) located in the South West of the State and extending generally between Kalbarri, Albany and Kalgoorlie; and
- (b) into which electricity is supplied by -
  - (i) one or more of the electricity generation plants at Kwinana, Muja, Collie and Pinjar; or
  - (ii) any prescribed electricity generation plant".}

#### "user" has the same meaning given to it in the Code.

{Note: Under the Code "user" means "a person, including a generator or a consumer, who is a party to a contract for services with a service provider, and under section 13.4(e) includes an other business as a party to a deemed access contract".}

"works" has the same meaning given to it in the contributions policy.



{Note: Under the contributions policy "works" includes "headworks and all works required to be undertaken to provide an applicant with the covered services sought by the applicant in a connection application".}

### 1.2 Interpretation

- (a) Unless the contrary intention is apparent:
  - (i) a rule of interpretation in the Code; and
  - (ii) the Interpretation Act 1984,

apply to the interpretation of this methodology document.

- (b) Unless:
  - (i) the contrary intention is apparent; or
  - (ii) the term has been redefined in clause 1.1 or in the contributions policy,

a term with a defined meaning in the *Code* has the same meaning in this methodology document.



#### 2. Introduction

Under section 5.17C of the *Code* (as set out in section 2.1 below) the Authority may approve a *contributions* policy that includes a *headworks scheme*.

Under section 5.17D(d) of the *Code* (as set out in section 2.1 below) the *headworks scheme* must set out the method for calculating the *headworks charge*.

The *distribution low voltage connection scheme* is a *headworks scheme* established in relation to distribution low voltage connection points.

This document explains the methodology used under the *distribution low voltage connection scheme* to determine the prices that may be applied under the *contributions policy* and how the requirements of sections 5.17D(d) have been met in the Contributions Policy.

### 2.1 *Code* Requirements

The following *Code* provisions apply to a *headworks scheme*.

"5.17C Despite section 5.14, the *Authority* may approve a *contributions policy* that includes a "headworks scheme" which requires a *user* to make a payment to the *service provider* in respect of the *user's* capacity at a *connection point* on a *distribution system* because the *user* is a member of a class, whether or not there is any *required work* in respect of the *user*.

#### 5.17D A headworks scheme must:

- (a) identify the class of works in respect of which the scheme applies, which must not include any works on a transmission system or any works which effect a geographic extension of a network; and
- (b) not seek to recover *headworks charges* in an *access arrangement period* which in aggregate exceed 5% of the *distribution system target revenue* for the *access arrangement* period; and
- (c) identify the class of users who must make a payment under the scheme; and
- (d) set out the method for calculating the *headworks charge*, which method:
  - (i) must have the objective that headworks charges under the headworks scheme will, in the long term, and when applied across all users in the class referred to in section 5.17D(c), recover no more than the service provider's costs (such as would be incurred by a service provider efficiently minimising costs) of any headworks; and
  - (ii) must have the objective that the *headworks charge* payable by one *user* will differ from that payable by another *user* as a result of material differences in the *users'* capacities and the locations of their *connection points*, unless the *Authority* considers that a different approach would better achieve the *Code objective*; and
  - (iii) may use estimates and forecasts (including long term estimates and forecasts) of *loads* and costs; and
  - (iv) must contain a mechanism designed to ensure that there is no double recovery of costs in all the circumstances, including the manner of calculation of other *contributions* and *tariffs*;
  - (v) may exclude a rebate mechanism (of the type contemplated by clauses A4.13(d) or A4.14(c)(ii) of Appendix 4) and may exclude a mechanism for retrospective adjustments to account for the difference between forecast and actual values."



#### 2.2 Code Compliance of the Methodology with Section 5.17D (d)

With respect to section 5.17D(d)(i), the distribution low voltage connection scheme is designed to recover the forecast costs of distribution low voltage connection scheme works. The prices of the distribution low voltage connection scheme will be reviewed at least once every 12 months to reflect Western Power's actual costs of the provision of distribution low voltage connection scheme works determined by reference to the costs incurred in the immediately preceding 36 month period.

With respect to section 5.17D (d)(ii), the *distribution low voltage connection scheme* is designed such that the *contribution* for an *applicant* depends on their individual required electricity demand, and the point of the *network* to which they are connected. Consequently, *headworks charges* for each *applicant* will differ as a result of differences in each applicant's capacity requirements and the locations of their *connection points*.

With respect to section 5.17D(d)(iii), the *distribution low voltage connection scheme* prices are based on estimates and forecasts (including long term estimates and forecasts) of *loads* and costs.

#### 2.3 Overview of the Distribution Low Voltage Connection Scheme

- (a) The distribution low voltage connection scheme and associated prices apply to the provision of distribution low voltage connection scheme works only. The class of applicants must have a proposed or existing connection point for a new or upgraded connection to the distribution system low voltage network which is within 25 kms of the relevant zone substation.
- (b) The prices are in terms of \$/kVA.
- (c) The *distribution low voltage connection scheme* price that an *applicant* pays depends on their incremental capacity requirement and whether the location of the *connection point* is on the same, adjoining or nearby lot of land as the *relevant distribution transformer*.



## 3. Objectives of the *Distribution Low Voltage Connection Scheme*

This section sets out the objectives used in determining the *distribution low voltage connection scheme*.

- (a) The *distribution low voltage connection scheme* has been designed to meet the high-level objectives described below.
  - (i) Comply and be consistent with the regulatory framework;
  - (ii) Provide a method for allocating the costs of the provision of *distribution low voltage* connection scheme works in a fair and equitable manner;
  - (iii) Be as cost reflective as is reasonable to reflect the *network user's* utilisation of the *network* capacity;
  - (iv) Be as simple and straight forward as is reasonable taking into account other objectives; and
  - (v) Provide price stability and certainty to enable *network users* to make informed investment decisions.
- (b) The methodology must ensure *contributions* from the *distribution low voltage connection scheme* will, in the long term, recover no more than Western Power's costs of *distribution low voltage connection scheme works*.



## 4. Methodology Overview

This section provides an overview of the methodology used in determining the *distribution low voltage* connection scheme prices.

The cost of the provision of electricity capacity at a particular location is a function of:

- (a) the incremental capacity requirement sought by an applicant; and
- (b) whether:
  - (i) the location of the *connection point* is on the same, adjoining or nearby lot of land as the *relevant distribution transformer* (transformer direct connection); or
  - (ii) the *connection point* is supplied from the *low voltage* street *network* (street feed connection),

as determined by Western Power having regard to what is the most prudent and efficient *network* connection design.

On this basis, the approach taken to determine the *distribution low voltage connection scheme* prices is as follows:

- (a) Western Power determines the actual costs of distribution low voltage connection scheme works for connection of applicants that meet the eligibility criteria for the distribution low voltage connection scheme for the immediately preceding 36-month period.
- (b) The actual costs of *distribution low voltage connection scheme works* are determined with regard to the following:
  - (i) whether the incremental capacity requirement at the *connection point* determined under clause 6.3 (a) of the *contributions policy* is:
    - less than 216 kVA; or
    - between 216 kVA and 630 kVA; or
    - · greater than 630 kVA, and
  - (ii) whether:
    - (A) the location of the *connection point* is on the same, adjoining or nearby lot of land as the *relevant distribution transformer* (transformer direct connection); or
    - (B) the *connection point* is supplied from the *low voltage* street *network* (street feed connection),

as determined by Western Power having regard to what is the most prudent and efficient *network* connection design.

- (c) From the costs of *distribution low voltage connection scheme work* and the incremental capacity requirement associated with the categories defined in paragraph (b) above, the total costs of supply for each tranche can be determined in terms of \$ per kVA.
- (d) The price structure and prices are then derived to reflect the average costs determined under (a) and (b) above. Prices are expressed in a block structure that provides for a continuous price path. Note that there is a separate price path for a connection point on the same, adjoining or nearby lot of land as the relevant distribution transformer to those with a connection point supplied from the low voltage street network.



## 5. Methodology Detail

This section provides additional detail with respect to the price determination process.

#### **5.1** Price Tranche Thresholds

At least once every 12 months, Western Power will develop standard *distribution low voltage connection scheme* prices based on modelling of *connections* over the immediately preceding 36-month period.

Costs per unit of capacity (kVA) reduce as demand increases due to economies of scale based on the following factors:

- fixed costs including cable trenching, reinstatement, traffic management, mobilisation costs and installation costs are incurred regardless of capacity supplied;
- increased utilisation of installed assets; and
- reduction in the per unit cost of transformers in terms of dollars per kVA of capacity. (transformers are purchased in standard sizes, typically 315 kVA, 630 kVA and 1000 kVA and on a per kVA basis the costs of these transformers reduce significantly as their size increases).

In order for these economies of scale to be recognised in the pricing structure, tranche thresholds are set that reflect both the cost of plant and the nature of the *network* required to provide the requested capacities.

For example, in general customers seeking less than 216 kVA are supplied from the *low voltage* street *network*, customers seeking demand between 216 kVA and 630 kVA require installation of a new transformer and may require the transformer to be installed on their lot, and in almost all circumstances customers seeking *loads* in excess of 630 kVA will require direct connection to a new transformer on their lot.

Consequently, the tranche thresholds are as follows:

- (a) Tranche 1 less than 216 kVA of incremental capacity requirement;
- (b) Tranche 2 between 216 kVA and 630 kVA of incremental capacity requirement; and
- (c) Tranche 3 greater than 630 kVA of incremental capacity requirement.

#### **5.2** Price Setting

Prices are set within each tranche to recover Western Power's costs over the long term, when applied across all *distribution low voltage connection scheme applicants*.

## 5.3 Separate Prices for Transformer Direct Connection and Low Voltage Street Connection

Direct connection to transformers avoids the cost of connection to the *low voltage* street *network*. Therefore, the prices for these connections reflect this lower cost. Connection to the *low voltage* street *network* involves increased cost and consequently separate prices are put in place.

The difference between the two sets of prices is based on the average cost of the *low voltage* street *network*. The price tranches are applied to both *relevant distribution transformer* direct connections and *low voltage* street *network* connections.



#### **5.4** Price Structure

Two sets of prices are provided in block structure that reflects the separate price tranches for direct transformer connections and *low voltage* street *network* connections. Prices are illustrative only. Actual prices will be published on Western Power's website as detailed in this document.

**Table 5.1:** Price Structure

	Load tranche for incremental capacity	Fixed price	Variable price for incremental kVA in excess of tranche lower threshold
Direct transformer connection	0 to 216 kVA	\$0	\$500/kVA
Direct transformer connection	216 to 630 kVA	\$108,000	\$250/kVA
Direct transformer connection	Greater than 630 kVA	\$211,500	\$125/kVA
Low voltage street connection	0 to 216 kVA	\$0	\$600/kVA
Low voltage street connection	216 to 630 kVA	\$129,600	\$350/kVA



### 6. Exclusion

A distribution low voltage connection scheme application is excluded from the provisions of the distribution low voltage connection scheme where the distribution low voltage connection scheme base charge plus the exclusion threshold is less than the forecast costs of works as determined under clause 5.4 of the contributions policy.

The methodology for determining the exclusion threshold is as follows:

- (a) For all works in the last 12 months Western Power will:
  - (i) determine the amount of the *forecast costs* of the *works* applied to the *applicants* as per section 5.4 of the *contributions policy*; and
  - (ii) subtract from the amount in section (a) the *distribution low voltage connection scheme base charge*.
- (b) The exclusion threshold is equal to two standard deviations of all instances where the value in section (ii) is positive.

Western Power will publish the amount of the exclusion threshold as detailed in this document.



## 7. Publishing and Review of Prices and Exclusion Threshold

Western Power publishes the *distribution low voltage connection scheme* prices as a price list and the exclusion threshold on its website. The price list is as illustrated in section 5.4.

Prices and the exclusion threshold will be reviewed at least once every 12 months to reflect changes in the cost of provision of *network* assets. Any adjustments will apply for a minimum of six months.



## **Appendix D**

## **Multi-function Asset Policy**

Revised proposed access arrangement

15 November 2022



## **Multi-function Asset Policy**

1 July 2023



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## 1. Defined Terms and Interpretation

#### 1.1 Defined Terms

In this *multi-function asset policy*, unless the contrary intention is apparent:

"access arrangement" means the current access arrangement approved in respect of the network under the Code.

"access contract" has the same meaning given to it in the Code.

{Note: Under the Code "access contract" has the same meaning as 'access agreement' does in Part 8 of the Act, and under section 13.4(d) includes a deemed access contract. The definition of "access agreement" under the Act is "an agreement under the Code between a network service provider and another person (a "network user") for that person to have access to services".}

"Act" means the Electricity Industry Act 2004.

"additional revenue" has the same meaning as given to it in the Code.

{Note: Under the Code "additional revenue" has the meaning given to it in section 6.42 of the *Code* when used in section 6.41 of the *Code*.}

"alternative options" means alternatives to part or all of a *network* enhancement, including demand-side management and *generation* solutions (such as distributed *generation*) either instead of or in combination with a *network* enhancement.

"alternative option contribution" means a contribution made, or to be made, by an applicant in respect of an alternative option.

"alternative option test", in respect of the *network*, means the test set out in section 6.41 of the *Code*.

"anticipated incremental revenue" has the same meaning given to it in the Code.

{Note: Under the Code "anticipated incremental revenue" for a new facility means "the present value (calculated at the rate of return over a reasonable period) of the increased income from charges (excluding any contributions) reasonably anticipated to arise from the increased sale of covered services on the network to one or more users (where "increased sale of covered services" means sale of covered services which would not have occurred had the new facility not been commissioned),

the present value (calculated at the *rate of return* over the same period) of the best reasonable forecast of the increase in *non-capital costs* directly attributable to the increased sale of the *covered services* (being the *covered services* referred to in the expression "increased sale of *covered services*" in paragraph (a) of this definition)".}

"Appendix 8 work" has the same meaning given to it in the Code.

{Note: Under the Code "Appendix 8 work" means "work in connection with the Western Power Network of a type specified in clause A8.2 of Appendix 8".}

"applicant" means a person (who may be a *user*, a *customer* or a *developer*) who has lodged, or intends to lodge, a *connection application*, and includes a person who does so on behalf of another person.

"augmentation" has the same meaning as given to it in the Code.

{Note: Under the Code "augmentation" in relation to a covered network, means "an increase in the capability of the covered network to provide covered services".}

"Authority" has the same meaning as given to it in the Code.



{Note: Under the Code "Authority" means "the Economic Regulation Authority established by the Economic Regulation Authority Act 2003".}

"capital contribution" has the same meaning given to it in the Code.

{Note: Under the Code "capital contribution" means "a payment or provision in kind made, or to be made, by a user in respect of any new facilities investment in required work".}

"Code" means the Electricity Networks Access Code 2004 (as amended).

"connect" has the same meaning given to it in the Code.

{Note: Under the Code "connect" means "to form a physical link to or through a network".}

"connection assets" has the same meaning given to it in the Code.

{Note: Under the Code "connection assets" for a connection point, means "all of the network assets that are used only in order to provide covered services at the connection point".}

"connection point" means an exit point or an entry point or a bidirectional point identified or to be identified as such in an access contract.

"consume" has the same meaning given to it in the Code.

{Note: Under the Code "consume" means "to consume electricity".}

"consumption", for a connection point, means the amount of electricity consumed at the connection point, and is measured in Watt-hours.

"contracted capacity" means the maximum rate at which a *user* is permitted to transfer electricity at a *connection point* under the *user's access contract*.

"covered service" has the same meaning given to it in the Code.

{Note: Under the Code "covered service" means "a service provided by means of a covered network, including:

- (a) a connection service; or
- (b) an entry service, exit service or bidirectional service; or
- (c) a network use of system service; or
- (d) a common service; or
- (e) a service ancillary to a service listed in paragraph (a) to (d) above,

but does not include an excluded service".}

"cpi" means the "all capitals consumer price index" as defined by the Australian Bureau of Statistics.

"customer" has the meaning given to it in the Act.

"distribution system" has the same meaning given to it in the *Code*, but excludes equipment within zone substations used for the transportation of electricity at nominal voltage of less than 66 kV.

{Note: Under the *Code* "distribution system" means "any apparatus, equipment, plant or buildings used, or to be used, for, or in connection with, the transportation of electricity at nominal voltages of less than 66 kV".}

"entry point" has the same meaning given to it in the applications and queuing policy.

{Note: Under the applications and queuing policy "entry point" means "a single, indivisible (except as allowed under this applications and queuing policy) point, that for purposes under the access arrangement involving the transfer of electricity, is deemed to consist of a single attachment point, connected or to be connected to a user's connection point, with a single meter



(regardless of the actual configuration of *network assets* making up the *entry point*), at which electricity is more likely to be transferred into the *network* than out of the *network*".}

"entry service" has the same meaning given to it in the applications and queuing policy.

{Note: Under the applications and queuing policy "entry service" means "a covered service provided by Western Power at a connection point under which the user may transfer electricity into the network at the connection point".}

"exit point" has the same meaning given to it in the applications and queuing policy.

{Note: Under the applications and queuing policy "exit point" means "a single, indivisible (except as allowed under this applications and queuing policy) point, that for purposes under the access arrangement involving the transfer of electricity, is deemed to consist of a single attachment point, connected or to be connected to a user's connection point, with a single meter (regardless of the actual configuration of network assets making up the exit point), at which electricity is more likely to be transferred out of the network than into the network".}

"exit service" has the same meaning given to it in the applications and queuing policy.

{Note: Under the applications and queuing policy "exit service" means "a covered service provided by Western Power at a connection point under which the user may transfer electricity out of the network at the connection point".}

"facilities and equipment" has the same meaning given to it in the Code.

{Note: Under the Code, "facilities and equipment" in relation to a connection point, means "the apparatus, equipment, plant and buildings used for or in connection with generating, consuming and transporting electricity at the connection point".}

"forecast costs" means any or all of the forecast new facilities investment or the forecast alternative option costs, as applicable, to be incurred by Western Power with regards to works.

"forecast new facilities investment" has the same meaning given to it in the Code.

{Note: Under the Code "forecast new facilities investment" for a covered network means "the capital costs forecast to be incurred in developing, constructing and acquiring new network assets for the covered network".}

"generation", for a connection point, means the amount of electricity generated at the connection point, and is measured in kilowatts.

"good electricity industry practice" has the same meaning given to it in the Code.

{Note: Under the Code "good electricity industry practice" means "the exercise of that degree of skill, diligence, prudence and foresight that a skilled and experienced person would reasonably and ordinarily exercise under comparable conditions and circumstances consistent with applicable written laws and statutory instruments and applicable recognised codes, standards and guidelines".}

"GST" means Goods and Services Tax.

"HV" means the high voltage level of the distribution *network* where the voltage is greater than 6 kV and less than 66 kV.

"low voltage" means the low voltage level of the *distribution system network* where the voltage is less than 1 kV.

"minimum practical works" with regard to covered services sought by an applicant, means the minimum works Western Power must undertake, acting efficiently in accordance with good electricity industry practice, to provide only those covered services required by that applicant.

"multi-function asset" has the meaning given in the Code.

"multi-function asset guideline" means the guideline published by the Authority under the Code.

"multi-function asset policy" means a policy in an access arrangement under the Code.



"multi-function asset principles" means the principles under the Code.

"net benefit" means a net benefit (measured in present value terms to the extent that it is possible to do so) to those who generate, transport and consume electricity in (as the case may be):

- (a) the covered network; or
- (b) the covered network and any interconnected system.

"net benefit after considering alternative options" is defined in the Code.

"net incremental revenue" means, in relation to a multi-function asset, the revenue from all payments received by a service provider in excess of the revenue it would receive if the asset only provided covered services, for a pricing year.

"network" has the meaning given to "Western Power Network" in the Code.

{Note: Under the *Code* "Western Power Network" means "the *covered network* that is *covered* under section 3.1". The "Western Power Network" is the portion of the SWIN that is owned by the Electricity Networks Corporation.}

"network assets" has the same meaning given to it in the Code.

{Note: Under the Code "network assets", in relation to a network means "the apparatus, equipment, plant and buildings used to provide or in connection with providing covered services on the network, which assets are either connection assets or shared assets".}

"new facilities investment" has the same meaning as given to it in the Code.

{Note: Under the Code "new facilities investment" means, for a new facility, "the capital costs incurred in developing, constructing and acquiring the new facility".}

"new facilities investment test" has the same meaning as given to it in the Code.

{Note: Under the Code "new facilities investment test" means, in respect of a covered network, "the test set out in section 6.52".}

"new revenue" means the *anticipated incremental revenue* or *additional revenue* or both, as applicable, with respect to *works*.

"non-capital contribution" means a payment or provision in kind made, or to be made, by a *user* in respect of any *non-capital costs* (or forecast *non-capital costs*) of *required work*.

"non-capital costs" means the non-capital costs (as defined in the Code), but excluding alternative option costs, to be incurred by Western Power with regards to works.

"price control" has the same meaning as given to it in the Code.

{Note: Under the Code "price control" means "the provisions in an access arrangement under section 5.1(d) and Chapter 6 of the Code which determine target revenue.}

"reasonable and prudent person" means a person acting in good faith and in accordance with good electricity industry practice.

"required work" means work which is necessary in order to provide a covered service sought in a connection application.

"retailer" has the meaning given to it in the Act.

"scheme" has the same meaning as given to it in Appendix 8 of the Code.



"services" has the meaning given to that term in Part 8 of the Act, and "service" has a corresponding meaning.

{Note: At the time the *Electricity Networks Access Code Amendments (No 2) 2008* were made, the definition in section 103 of the Act was:

- "services" means -
- (a) the conveyance of electricity and other *services* provided by means of network infrastructure facilities; and
- (b) services ancillary to such services'.}

"service provider" has the same meaning given to it in the Code.

{Note: Under the Code "service provider" in relation to a network means "a person who owns or operates the network".}

"shared assets" has the same meaning given to it in the Code.

{Note: Under the Code "shared assets" means "those network assets which are not connection assets".}

"SWIS" is the South West Interconnected System and it has the meaning given to it in the Code.

{Note: Under the Code "SWIS" has the meaning as given to it in the Act, being "the interconnected transmission and distribution systems, generating works and associated works -

- (a) located in the South West of the State and extending generally between Kalbarri, Albany and Kalgoorlie; and
- (b) into which electricity is supplied by -
  - (i) one or more of the electricity *generation* plants at Kwinana, Muja, Collie and Pinjar; or
  - (ii) any prescribed electricity generation plant".}

"technical rules" means the technical rules (as defined in the Code) applying from time to time to the network under Chapter 12 of the Code, as modified in accordance with the Code.

"transmission system" has the same meaning given to it in the Code, but also includes equipment within zone substations used for the transportation of electricity at nominal voltage of less than 66 kV.

"user" has the same meaning given to it in the Code.

{Note: Under the Code "user" means "a person, including a generator or a consumer, who is a party to a contract for services with a service provider, and under section 13.4(e) includes an other business as a party to a deemed access contract".}

"WEM rules" means the 'market rules' referred to in section 123(1) of the *Act*, and includes all rules, policies or other subordinate documents developed under the WEM Rules.

"works" includes distribution low voltage connection headworks scheme works and all works required to be undertaken to provide an applicant with the covered services sought by the applicant in a connection application, including works associated with:

- (a) augmentation of connection assets;
- (b) augmentation of shared assets;
- (c) alternative options; and
- (d) other non-capital works.



### 1.2 Interpretation

- (a) Unless the contrary intention is apparent:
  - (i) a rule of interpretation in the Code; and
  - (ii) the Interpretation Act 1984

apply to the interpretation of this contributions policy.

- (b) Unless:
  - (i) the *contrary* intention is apparent; or
  - (ii) the term has been redefined in clause 1.1,

a term with a defined meaning in the Code has the same meaning in this multi-function asset policy.



## 2. Application of the Multi-function Asset Policy

Western Power's *Multi-function asset policy* ("MFA Policy") sets out the approach to sharing incremental revenue earned where regulated assets are used for the provision of non-covered services. Non-covered services refer to services that are not covered services.

Covered services relate to the provision of electricity network services that are paid for by the broad customer base, and subject to price regulation by the ERA under the Access Code. Non covered services are also not excluded services. An example of a non-covered service is rental payments for use of Western Power buildings.

Western Power's MFA Policy provides:

- the details for identification of the applicable non-covered services that use multi-function assets:
- the methodology used to calculate net incremental revenue; and
- the methodology for calculating the deduction to target revenue.

This MFA Policy is accompanied by a MFA Policy Explanatory Statement, which sets out the reasons for the methodologies used in this policy.

Under this policy, a proportion of the incremental revenue earned by Western Power in such situations is transferred to regulated customers subject to the conditions set out in the MFA Policy. Customers using Western Power's network will benefit from the MFA Policy by receiving reductions to future network charges.

The multi-function asset framework was added to the Electricity Networks Access Code 2004 ("Access Code in September 2020 and the Multi-function Asset guideline ("Guideline") was finalised in October 2021. The MFA Policy starts upon commencement of the fifth access arrangement on 1 July 2023.

The objective of the revenue sharing arrangement between Western Power and the users of covered services is to account for circumstances where Western Power is over-recovering the costs of regulated network assets that supply covered services by supplying non-covered services to third parties. As the regulated assets are being paid for by electricity customers through Western Power tariffs, it is appropriate that there is some sharing of revenue while also maintaining commercial incentives for Western Power to utilise those assets.

The Access Code contains the high-level arrangements for the MFA framework. It contains the following components:

- the multi-function asset principles;
- objectives that the policy should achieve, the level of detail expected, the broad content and a requirement for consistency with the Guideline;
- the operation of the revenue sharing mechanism, as a reduction to target revenue equal to 30 per cent of material net incremental revenue, where the net incremental revenue is material in a pricing year if it is greater than \$1 million (CPI adjusted).

The MFA Policy Explanatory Statement sets out the details about the regulatory arrangements of the MFA framework, which is comprised of the sections in the Access Code and the Economic Regulation Authority's Guideline. The Explanatory Statement also sets out how the MFA Policy meets the regulatory requirements.

<sup>&</sup>lt;sup>2</sup> Section 5.1 (m) Access Code requires the service provider to include a multi-function asset policy in its access arrangement.



<sup>&</sup>lt;sup>1</sup> ERA (Oct 2021) Multi-function asset guideline- Decision

## 3. Multi-function Asset Policy

This section addresses the Guideline requirement below:

A service provider must include a MFA Policy in its access arrangement. The policy must:

- Set out how the service provider will identify any services that are not covered services that use assets included in the regulated asset base over the access arrangement period.
- Set out how the service provider will identify and report all payments received for services that are not covered services that use assets included in the regulated asset based.
- Set out how the service provider will ensure the use of assets included in the regulated asset base to provide services that are not covered services does not materially prejudice the provision of covered services.

## **3.1** Overview of the Decision-making Framework for Identifying Non-covered Services

The Guideline explains that there are a wide range of network assets that may be able to provide unregulated services and the Guideline does not specifically identify the types of assets that will be captured by the multifunction asset provisions.<sup>3</sup> It is role of this MFA Policy to explain the approach for identifying the types of assets that are within scope of the MFA arrangements.

The Guideline states that the regulated asset base includes all assets that provide covered services that have been, or are being, paid for by customers.<sup>4</sup> However, not all the assets in the regulated asset are relevant for the MFA Policy. This section sets out the decision-making framework that is used to identify the relevant non-covered services.

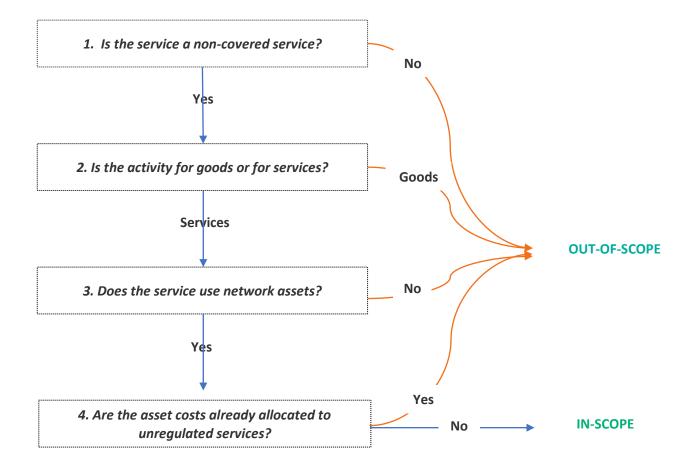
A decision-making tool comprised of five-steps which accurately identify the applicable services that use MFAs is applied. Figure 1 below illustrates the steps in the process as a decision tree.

<sup>&</sup>lt;sup>4</sup> ERA (October 2021) Multi-function asset guideline p.5



<sup>&</sup>lt;sup>3</sup> ERA (October 2021) Multi-function asset guideline p.5

Figure 1 Decision tree for the process of identifying applicable non-covered services



#### 3.2 Explanation of the Decision-making Framework

This section describes each of the steps in the decision-making framework in more detail.

#### Step 1. Is the service a non-covered service?

This step separates non-covered services from covered services and excluded services. Non-covered services are the services supplied by Western Power that are not covered services. If a service is not a covered service, it is a 'non-covered service'. Non-covered services are within scope of the MFA Policy.

- Covered services are not included in this policy because the policy is for multi-function assets
  which is defined in the singular as a network asset used to provide services other than covered
  services.
  - Covered services are listed in the Access Arrangement and they are regulated through either the price control target revenue, have fixed fees or are priced on application.
- Excluded services are a type of covered service that is supplied in a contestable market. The
  capital costs are outside the regulated business and are not included in Western Power's
  regulated asset base.
  - Excluded services are determined by the ERA and listed on the ERA website as part of the Framework and Approach process. At the time of developing this MFA Policy, there is one excluded service, which is the service provided by batteries owned by Western Power to other parties.<sup>5</sup>

#### Step 2: Is this activity for goods or for services?

This step distinguishes between goods and services. For an activity to be a service it must meet the definition of "services" in the Electricity Industry Act 2004.<sup>6</sup> An activity must be used for the conveyance of electricity and other services provided by means of network infrastructure facilities or ancillary to such a service for it to be classified as a service.

Goods are not included in the MFA Policy.

An example of an activity that earns revenue and is not a service, is material sales. These are not part of the MFA policy because a material, on its own, is not part of the network and it cannot convey electricity or provide other services. In addition, material sales are not listed as ancillary services in Western Power's Access Arrangement.<sup>7</sup> The ERA concluded this during the consultation process on the Guideline.

"Materials are a good rather than a service. The materials sold are not network assets and are not paid for by network users. On that basis, the ERA considers that material sales would not be captured under the multi-function asset provisions."

#### Step 3: Does the service use network assets?

This step identifies non-covered services that use network assets. The definition in the Access Code for a multi-function asset requires the asset to be a network asset. The MFA Policy does not include any services that do not use network assets.

<sup>&</sup>lt;sup>8</sup> ERA (October 2021) Multi-function asset guideline- Decision p.6



<sup>&</sup>lt;sup>5</sup> ERA (October 2021) Excluded service determination for services provided by batteries owned by Western Power – Determination p.1

<sup>&</sup>lt;sup>6</sup> Electricity Industry Act 2004, Western Australia s3 Preliminary p. 5. The definition is cross referenced in the Electricity Networks Access Code 2004

<sup>&</sup>lt;sup>7</sup> Western Power (10 May 2019) Amended Proposed Access Arrangement for the Western Power Network February 2019 Table 4 p.9

Transitory or incidental use of an asset would not be sufficient usage for this policy to apply to the network asset. The assets included in this policy are integral to the delivery of the non-covered service.

There are several non-covered services supplied by Western Power that do not use network assets. The services that do not use network assets generally use operational resources, such as labour. Western Power uses the service description combined with accounting and engineering knowledge to identify the network assets used to supply each non-covered service.

#### Step 4: Are the asset costs already allocated to unregulated services?

#### This step:

- identifies business activities beyond the regulated electricity transmission and distribution sectors;
- recognises that network costs have already been allocated to another business or other services under Western Power's cost allocation methodology; and
- is conducted by reviewing the application of the Cost and Revenue Allocation Methodology in a pricing year to non-covered services.

If part of the costs is already allocated to the regulated asset base to supply non-covered services, there is no over-recovery of costs to be addressed through this policy. Services using these assets are not included in the MFA Policy.

#### 3.3 Description of the Recording, Reporting Systems and Control Framework

Western Power upgraded its accounting system *Ellipse* in 2020 from a previous version of the same system. The accounting system was purchased as a stand-alone system with customisation for Western Power's business requirements. Access controls are embedded to ensure appropriate segregation of duties for different roles.

All payments received by Western Power for any service are recorded in the information technology accounting system. The financial records are updated regularly as payments are received into Western Power's bank account. The financial system records the revenue payments by account code.

- The first set of four digits of the accounting code indicate the responsible centre for the
  payment. This separates payments for unregulated services from payments for regulated
  services.
- The second set of four digits of the accounting code set out the activity type, which is the service name.
- The third set of four digits of the accounting code set out the asset category, whether it is transmission business, distribution business or corporate services.

The account codes are used to identify applicable payments in the accounting system after applying the MFA policy decision-making framework. The account codes are used to identify the payments that are included in the calculation of net incremental revenue.

The executive manager responsible for financial reporting reviews and approves the annual report detailing the amount of the applicable payments for the year and provides to senior management for acceptance. Reporting of applicable payments is included within standard internal management accounting practices, including internal audit and internal monthly management accounting reports.



Western Power engages an external auditor to conduct an audit of the financial and regulatory accounts to ensure they meet Australian accounting standards. Financial statements are prepared and externally audited annually.

#### 3.4 No Material Impact on Covered Services

Western Power will continue to prevent any material impact to the supply of covered services arising from the supply of non-covered services.

Material impact refers to a discernible negative impact on the volume or quality of supply of covered services to electricity customers caused by the supply of non-covered services. If a situation arises where provision of the non-covered service may negatively impact on the covered service, Western Power will adjust the terms and conditions of the non-covered service to mitigate the material impact on the covered service.

#### 3.4.1 New non-covered services

During the research and development of each new service, Western Power will conduct a market assessment to review the potential for impact on covered services. The assessment will include the expertise of managers across network asset planning and management, business development and regulatory services. The results of the impact assessment are documented and retained with product development materials. A successful outcome of the impact assessment, with a low likelihood of material prejudice, is required prior to the service being offered to customers.

The purpose of the assessment is to identify potential material negative impacts that the use of multifunction assets for the supply of non-covered services may have on the supply of covered services. Some assets may be operating at full capacity during peak periods and may not have available capacity to operate additional non-covered services, whereas other assets may not be impacted by capacity factors of the network and can readily accommodate non-covered services. Expected levels of demand for covered and non-covered services are considered as part of the assessment process.

#### 3.4.2 Existing non-covered services

Non-covered services currently supplied have been assessed for impacts on the delivery of covered services. No material prejudice from the sale of current levels of non-covered services has been identified from the provision of covered services.

Confirmation of the rights of Western Power to undertake activities that protect the supply of covered services is written into customer contracts for the supply of non-covered services. There are typically standard contractual provisions that allow Western Power at any time to conduct any operational activities on network facilities that take precedence over the works that the other contractual party wishes to undertake, as well as clauses requiring the contracted party to remove, reattach or relocate their equipment if required to meet customer and regulatory requirements.

#### 3.4.3 Ongoing monitoring

Western Power will use existing processes for performance monitoring to identify instances of material prejudice arising from the supply of non-covered services.

The service standards for quality and reliability are specified in the Access Arrangement. This is a requirement of the *Electricity Industry Act 2004*. Penalties may apply for breach of service standards. Performance against service standards is routinely monitored and enquiries/root cause analysis are undertaken.



#### 3.4.4 Rectification measures

Where monitoring identifies that the supply of non-covered services has materially prejudiced the supply of covered services, Western Power will treat the issue as a high priority to be resolved. Western Power will put in place corrective measures to restore service supply and quality of services as soon as practicable, according to the circumstances of the situation. Western Power also will implement preventative measures to reduce the risks of re-occurrence of any issues such as modification of the service description, implementation of contractual changes, completion of repair or upgrade works or termination of the non-covered service.



#### 4. Process for Identifying Payments Received

This section addresses the Guideline requirement below:

#### Guideline

#### Net incremental revenue

- For each pricing year during the access arrangement period the service provider must record all payments received for services that are not covered services.
- The service provider must provide detailed descriptions of each service that is not a covered service and categorise them between those that use assets in the regulated asset base and those that do not. Evidence to support these categorisations will be required.
- The service provider must document the process and any supporting accounting information it has used to derive payments received for services that are not covered services.
- The process must include a reconciliation with total payments received by the service provider to
  ensure that all payments received are accounted for as either payments for covered services or
  services that are not covered services.

#### 4.1 Record of Payments for Each Pricing Year

There are two processes for recording payments: (i) an annual process and (ii) an end of Access Arrangement period process.

For the annual process, Western Power totals all payments received for each applicable non-covered service supplied during the financial year, as determined using the decision-making and accounting frameworks described above. The total annual payments for non-covered services are included as a line item in the Annual Financial Statements reported in the Annual Reports.

For the end of the Access Arrangement period process, Western Power calculates the annual payments across the Access Arrangement in net present value terms and obtains a total value for payments in the Access Arrangement period. The methodology for calculating the net present value is to apply the CPI to each year's annual payments.

#### 4.2 One Year Lag to Record Actual Payments

The revenue sharing arrangement in the MFA Policy uses actual payments, rather than forecast with ex post adjustments. To use actual data the financial year must be completed. The MFA Policy applies a one-year time lag to the payment data included in Access Arrangement annual payments.

The application of the policy is as follows:

- The first payment year is the final year of the previous Access Arrangement (Year 0).
- The following payment years are each year in the Access Arrangement except for the final year, typically Year 1,2,3 and 4. If the applicable access period is longer, additional years are included. If the applicable access period is shorter, fewer years are included.
- The payments for the final year of the Access Arrangement are included in the calculations of deductions in the subsequent Access Arrangement period.

Using this approach, the aggregated payment will reflect the revenue obtained for the number of years in the access period, without requiring the complexity of ex post adjustments to a target revenue adjustment



that would be disproportionate effort for the value of revenue to be shared. This approach ensures that customers will receive the actual revenue allowed in this policy, within a short timeframe of one year after the annual reporting of revenue received.

#### 4.3 Service Descriptions

As the list of non-covered services will change from time to time over the course of an Access Arrangement, the list of non-covered services to which the policy applies is provided in Western Power's Initial Proposed Access Arrangement and updated in the Revised Proposed Access Arrangement. Providing the information in the Access Arrangement documentation will mean that the MFA Policy will not need to be updated when new non-covered services are introduced or removed.

#### 4.4 Process for Asset Categorisation and Payments

The process to categorise non-covered services by their use of the network assets in the regulated asset base is set out below. The process will utilise the decision-making framework set out in Section 3 of this MFA Policy.

- During the business development process, expertise from network engineering will assess the service description and customer requirements to determine which networks assets are used for the supply of each non-covered services and therefore whether the MFA arrangements apply.
- A field is included in the regulatory asset database to identify that an asset is a multi-function
- New non-covered services introduced within the year will be added with a code to the
  accounting system and payments received for supply of the non-covered service will be
  recorded.

This review has been undertaken in the MFA Policy Explanatory Statement for current non-covered services to be supplied in fifth Access Arrangement.

In subsequent Access Arrangements it will be contained in the Access Arrangement Information. The process and supporting accounting information to derive payments for non-covered services are described in Section 3 of this policy.

#### 4.5 Payment Reconciliation

Annually, Western Power reconciles the payments received for applicable non-covered services, the payments received for non-applicable non-covered services and covered services against the general ledger to ensure that all payments are recorded, in a table similar to Table 1. The payments for each year are CPI-adjusted to bring the values to net present value.



#### **Table 1 Payments Reconciliation**

Non-covered Service Payments	Year 0	Year 1	Year 2	Year 3	Year 4	TOTAL
Payments for Applicable Non-covered Services						
Payments for other Non-covered services						
Payments for covered services						
Total Payments for all services						



#### 5. Net Incremental Revenue Methodology

This section addresses the Guideline requirement below:

#### Guideline

#### Net incremental revenue

Net incremental revenue for each unregulated service is calculated by identifying total payments received and deducting any payments that relate to recovery of the cost of additional assets, or modifications to existing assets, required to provide the unregulated service or for materials supplied.

The service provider must include the information above in its next access arrangement proposal to the ERA.

#### 5.1 Meaning of Net Incremental Revenue

The net incremental revenue is defined in the Access Code "in relation to a *multi-function assets*, the revenue from all payments received by a *service provider* in excess of the revenue it would receive if the asset only provided *covered services* for a pricing year."<sup>9</sup>

The Guideline provides a broad description for the methodology of calculating the net incremental revenue. The methodology removes from total payments, which are identified using the approaches described in Sections 3 and 4 above, the costs associated with acquiring additional assets, modifying existing assets and the cost of materials supplied.

The reason for deducting these costs is that they are costs incurred to supply non-covered services that are not paid for by customers using network assets in the regulated asset base. There is no over payment for these assets. The costs of these assets are fully recovered directly from the customers receiving non-covered services and therefore it is appropriate for such costs to be considered prior to any revenue adjustment.

Deductions for these payments is consistent with the objectives and principles of the MFA policy. The Access Code specifies that:

"A multi-function asset policy must:

to the extent reasonably practicable, accommodate the interests of the service provider and of users and applicants;" <sup>10</sup>

and

A multi-function asset principle is:

"the service provider should be encouraged to use assets that provide covered services for the provision of other kinds of services where that use is efficient and does not materially prejudice the provision of covered services" 11

<sup>&</sup>lt;sup>11</sup> Access Code section 6.86



<sup>&</sup>lt;sup>9</sup> Electricity Networks Access Code 2004 p.30

<sup>&</sup>lt;sup>10</sup> Access Code section 5.37

This objective and principle of the MFA arrangements in the Code noted above are satisfied by the deduction of costs directly and wholly paid for by the customers of non-covered services. The interests of Western Power are met by ensuring the appropriate deductions are made to ensure that the pool of payments is not inflated by including costs that are not recovered through tariffs on covered services. At the same time the interests of users of covered services are protected through the additional revenue they receive (as lower tariffs) from Western Power maximising the use of spare capacity in network assets.

By applying the approach developed in the MFA Policy, Western Power is enabled to use assets efficiently in a way that does not materially prejudice the provision of covered services. Without deductions for costs, Western Power would be cross-subsidising electricity users to receive lower network prices than the value that the ERA determines as efficient. This could result in over consumption of electricity relative to the efficient level of demand. The cost deductions in the Guideline promote the efficient use of network assets.

#### **5.2** Calculation of Net Incremental Revenue

The MFA Policy presents the description for the calculation of the Net Incremental Revenue in the Guideline, in the form of an equation.

The equation below is consistent with the Guideline because it represents the value of the payments for the use of multi-function assets that electricity customers are already paying for through the network charges component of their electricity bills. This is the revenue that is additionally recovered by Western Power and that end customers of electricity will receive a share of under this policy.

Applicable payments are calculated using the process described in Chapters 3 and 4. After the payments are obtained, deductions to the payments are made for the cost of additional assets, modifications to existing assets, required to provide the unregulated service and for materials supplied. Net incremental revenue for each non-covered service and for each year is summed.

#### **Equation 1**

$$\sum NIR_t^n = \sum P_t^n - \sum A_t^n - \sum M_t^n - \sum Q_t^n$$

Where,

NIR = net incremental revenue

n = applicable non-covered services identified using the decision-making framework set out in Section 3 of this policy

t= a year of the access arrangement

P = payments for applicable non-covered services recorded in accounting systems for the years as set out in Section 4 of this policy and resulting from using the decision-making framework set out in Section 3 of this policy;

A = cost of additional assets;

M = cost of modifications to existing assets;



Q = cost of materials used to supply the services;

Each component of the equation that is a deduction from payments is described below.

<u>Cost of additional assets (A)</u> refers to payments made by customers for installation of new assets that are owned by the customer. It would also include assets that are paid for and owned by Western Power that are necessary for the delivery of the non-covered service and are not multi-function assets. Payments made by customers for additional assets are not added to the regulated asset base at a value.

Cost of modifications to existing assets (M) refers to direct payments from customers for the cost of Western Power undertaking alterations to assets that are already installed to supply covered services. The alteration to the asset is not required for the supply of covered services to electricity customers. Rather it addresses the specific need of the customer of uncovered services. Whilst the cost of the original asset is being paid for by electricity used via covered tariffs, the cost of the alteration is recovered outside the tariff framework directly from the customer requesting the non-covered service.

Cost for materials supplied (Q) refers to the payments from a customer of non-covered services for the material inputs required to provide the non-covered service, without which the service could not be supplied. These materials are not already included in the regulated asset base because they are not required for the provision of covered services. These materials are specific to the supply of non-covered services to that customer. This category may include capitalised labour charges, such as for the undertaking the installation work associated with customer requested assets.

Deductions are externally audited as part of the Regulated Accounts to ensure they comply with the regulatory requirements of this and related regulatory policies. The audit process provides the ERA with assurance of the accuracy of allocations of payments and costs to non-covered services.

#### **5.3** Example Calculation of Net Incremental Revenue

This section sets out an example for a scenario where costs are deducted from payments to derive the net incremental revenue. The scenario and costs are for illustrative purposes only.

A customer applies to site a telecommunications satellite dish to be installed on a Western Power transmission tower. This requires the following project scope:

- Re-grading of access road to the transmission tower for logistical and construction purposes by Western Power.
- Reinforcement of transmission tower by Western Power.
- Installation of telecommunications dish with associated cables by customer in conjunction with Western Power crew.

The customer supplies the telecommunications dish and purchases cables from Western Power.

The costs involved for a 10-year contract are:

- \$50,000 rental of tower space for telecommunications dish
- \$5,500 (M) depreciation charge for the cost of the modified tower reinforcement of \$25,000 and charge for road upgrade costing \$30,000; and
- \$12,000 (Q) depreciation charge for cable materials costing \$120,000;

Payments received from telecommunications firm in Year 1 is \$100,000(P).



The net incremental revenue is calculated as: NIR (year 1) = P - M - Q\$82,500 = \$100,000 - \$5,500 - \$12,000



#### 5.4 Total Net Incremental Revenue

The net incremental revenue is calculated for each non-covered service and summed for each price year. It is comprised of the applicable payments calculated using the methodology described in Section 4 less the deductions described in Section 5.2 above. The annual values are adjusted by Consumer Price Index (CPI) to current value for year 4.

Consistent with the calculation of payments in Section 4 of this policy, a one-year lag is required to use actual payments in the calculation of net incremental revenue. The relevant years are from Years 1 to 4 of an Access Arrangement period, and the final year from the previous Access Arrangement (Year 0). This is set out in Table 2.

Table 2 Total Net Incremental Revenue for each pricing year

	Year 0	Year 1	Year 2	Year 3	Year 4	TOTAL
Total Applicable Payments for All Non- covered Services						
Less Deductions						
Total Net Incremental Revenue						

#### 5.5 Material Payments

Applicable payments that are in aggregate below the value of \$1 million (Consumer Price Index (CPI) adjusted) in a pricing year will not be included in the total net incremental revenue for the Access Arrangement period. Both the payments, as described in Section 4, and the costs to be deducted, as described in Section 5 of this policy, for those years when applicable payments are immaterial, are omitted for the calculations for the MFA Policy for the Access Arrangement period.

Actual applicable payments are used for each year to compare to the materiality threshold of \$1 million. The materiality assessment will take place in the final year of the Access Arrangement period.



#### 6. General Provisions

#### 6.1 Implementation

This MFA Policy commences on 1 July 2023 which is the start date for the next Access Arrangement and concludes when the Access Code so determines it concludes or the ERA in consultation with Western Power decide that the policy concludes.

The calculation of the net incremental revenue with adjustments for the net present value and calculation of the revenue deductions is undertaken in the final year of the Access Arrangement.

# **6.2** Exemption for Payments Related to Emergencies and Government Directions

Payments are exempt from revenue sharing under this MFA Policy where payments are received for supply of non-covered services that are provided in response to emergency situations for example to other utilities. It is likely that Western Power would charge based on incremental cost recovery and not include a margin that would accommodate a 30 per cent revenue sharing arrangement, as this would be a reciprocal arrangement under circumstances where Western Power requires emergency assistance.

Similarly, governments may direct Western Power to undertake certain activities for which fees apply for payment by recipients of the services. These payments are also exempt for the application of the MFA Policy.



#### 7. Obligation to Provide Information

In respect to a multi-function asset, Western Power will provide the information described below to the ERA. Reporting on net incremental revenue is provided to the ERA on an annual basis and in the proposed Access Arrangement for the subsequent period.

#### **7.1** Reporting Timeline

Annual payments will be reported for each year of the Access Arrangement and net incremental revenue is reported in year 4 and updated in year 5 of the Access Arrangement as shown in Figure 2.

**Figure 2 Reporting Timeline** 



#### 7.2 Annual Financial Statements Reporting

Western Power will report the total annual payment across applicable services after the end of each reporting period. The data that is provided is an additional line item in the annual reporting of financial statements in Western Power's Annual Reports.

#### 7.3 End of Period Reporting

Western Power will include in the proposed Access Arrangement information for the subsequent Access Arrangement calculations for:

- applicable payments for non-covered services for each year (see Table 1);
- reconciled payments for each year between covered and non-covered services (see Table 1);
- net incremental revenue adjusted for time value of money (see Table 2); and
- in the Access Arrangement Information, the additional service descriptions for new noncovered services that are expected to be supplied in the subsequent Access Arrangement period. The Access Arrangement Information includes
  - o evidence of categorisation of the services for use of RAB network assets or not; and
  - description of any rectification measures that were introduced to ameliorate material prejudice to the supply of covered services, should it occur.



# **Appendix E**

# **Reference Services**

Revised proposed access arrangement



# **Appendix E - Reference Services**

1 July 2023

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#### 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 1 July 2019.

"5MS meter" has the meaning given to it in the Metering Code.

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

"AA5 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.

"activated device" means a device connected to a communications network, with capability for two-way communication between the device and Western Power's management systems operating and able to be used to support remote services.

"additional reference service (metering)" means a reference service (metering) that is additional to the standard metering service for the applicable reference service exit service, entry service or bi-directional service as described in clause E.1.2 and Table E.1.2 of Annexure 1.

"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.

"business day" means a day that is not a Saturday, Sunday or public holiday in Western Australia.

"capital-related costs" has the meaning given to it in the Code.

"charge" has the meaning given to it in the Code.

"Code" means the Electricity Networks Access Code 2004 (WA).

"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.

"date for a scheduled meter reading" has the meaning given to it in the Electricity Industry (Metering)
Code 2012

"distributed generating plant" has the meaning given to it in the Code.

"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.

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

"five-minute settlement commencement" has the meaning given to it in the Metering Code. "good electricity industry practice" has the meaning given to it in the 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 AA5 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 AA5 effective date is the version dated 30 September 2020).

"non-capital costs" has the meaning given to it in the Code.

"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) from the options set out in clause E.1.2 and Table E.1.2 of Annexure 1.

"price list" has the meaning given to it in the Code.

"reasonable and prudent person" has the meaning given to it in the Code.

"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).

#### "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 100MWh 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 as described in clause E.1.2 and Table E.1.2 of Annexure 1.

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

"storage activity" has the meaning given to it in the Electricity Industry Act 2004 (WA).

"storage works" has the meaning given to it in the Electricity Industry Act 2004 (WA).

"system management" means the entity conferred the functions in respect of 'System Management' under the Wholesale Electricity Marker Rules which, as at AA5 effective date, is the Australian Energy Market Operator Limited.

"Technical Rules" has the meaning given to it in the Code.

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

"Type 4 metering installation" 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.

"weekly settlement commencement" has the meaning given to it in the Metering Code.

"WEM Rules" has the meaning given to it in the Code.

#### 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 Metering Services

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 Code* and the *MSLA*.

For exit services A1 to A23, entry services B1 to B3, and bi-directional services C1 to C24, the service includes a reference service (metering).

Reference services (metering) are described in clause E.1.1 of Annexure 1.

Details of the *reference services (metering)* that are available to be selected by the *user* are set out in clause E.1.2 of Annexure 1.

Annexure 1 includes a designation of a permissible reference service (metering) for each reference service.



The "standard" reference service (metering) identified in clause E.1.2 of Annexure 1 is the standard metering service for the relevant exit service, entry service or bi-directional service.<sup>1</sup>

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 service (metering) reference tariff recovers the cost of the standard metering service for the relevant exit service, entry service or bi-directional service.

The reference tariffs (including the reference service (metering) reference tariffs for standard metering services) 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.

Users who select an *additional reference service (metering)* for the relevant *exit service, entry service* or *bi-directional service,* may be required to pay an additional charge for the capital and non-capital costs that are incremental to the related *standard metering service*.

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 Code* - 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 Code and MSLA.}

- 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*.

The non-price terms and conditions under which *reference services (metering)* are provided are set out in the *MSLA*.

#### 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.

The reference service (metering) denoted \* is the standard reference service (metering) for connection points with throughput lower than 50MWh/a, and the reference service (metering) denoted \*\* is the standard reference service (metering) for connection points with throughput equal to or greater than 50 MWh/a, prior to weekly settlement commencement. The reference service (metering) denoted \*\*\* in Table E.1.2 below is the "standard" reference service (metering) for connection points with throughput equal to or greater than 50 MWh/a, after weekly settlement commencement.



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#### **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 short name for a *reference service* is the number and letter used to describe that *reference service* (being A1 to A23, B1 to B3, C1 to C24, D1 to D10 and M1 to M20).

Reference services (A1 to A17, B1 to B3 and C1 to C15) 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 A17, B1 to B3 and C1 to C15) described in parts 2, 3 and 4 of Appendix E of the previous access arrangement which has the same reference number as that AA5 reference service.



## 2. Reference Services (Exit Services)

Western Power offers 23 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 and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.		
Eligibility Criteria:	Users are eligible to use this service if:		
	1. The <i>exit point</i> is located at <i>residential premises</i> or premises occupied by a <i>voluntary/charitable organisation</i> ; and		
	2. The <i>meter</i> is configured to measure the transfer of electricity out of the <i>Western Power Network</i> ; and		
	3. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and		
	4. Each of the following does not apply under an agreement with Western Power:		
	<ul> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> </ul>		
	<ul> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>		
	"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 and a reference service (metering) at an exit point on the distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The exit point is located at non-residential premises; and
	2. One of the following applies:
	<ul> <li>it is a low voltage (415 volts or less) connection point and the maximum demand at the exit point is less than 1,500 kVA based on historic metering data; or</li> </ul>
	b. it is a low voltage (415 volts or less) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; or
	c. it is a high voltage (6.6kV or higher) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA for a period of no greater than six months; 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/NZS 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 <i>Reference</i> 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:	"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 exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The exit point is located at residential premises or premises occupied by a voluntary/charitable organisation; and
	2. 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 time bands set out in the <i>Price List</i> for RT3; and
	3. This A3 – Time of Use Energy (Residential) Exit Service:
	a. was provided at the connection point as at the AA4 effective date; and
	<ul> <li>b. has continued to be provided at the connection point from the AA4 effective date; and</li> </ul>
	4. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 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 <i>Reference Tariff</i> 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:	"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 and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The exit point is located at non-residential premises; and</li> <li>The maximum demand at the exit point is:</li></ol></li></ol>
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 and a reference service (metering) at an exit point on the high voltage (6.6 kV or higher) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The maximum demand at the exit point is:</li></ol></li></ol>
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 and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The maximum demand at the exit point is:</li></ol></li></ol>
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 exit service combined with a connection service and a reference service (metering) at an exit point on the high voltage (6.6 kV or higher) distribution system.			
Eligibility Criteria:	Users are eligible to use this service if:			
	1. The contracted maximum demand at the <i>exit point</i> is greater than 1,000 kVA; and			
	2. The <i>meter</i> is configured to measure the transfer of electricity out of the <i>Western Power Network</i> ; and			
	3. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and			
	4. 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 <i>Reference Tariff</i> 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 A8 – Low Voltage Contract Maximum Demand Exit Service		
Reference Service Description:	An exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.		
Eligibility Criteria:	Users are eligible to use this service if:		
	1. The contracted maximum demand at the <i>exit point</i> is greater than 1,000 kVA; and		
	2. The <i>meter</i> is configured to measure the transfer of electricity out of the <i>Western Power Network</i> ; and		
	3. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and		
	4. 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 <i>Reference Tariff</i> 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 <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 exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system for the purpose of public streetlighting, plus the service of the provision and maintenance of the streetlighting assets.
	These streetlighting assets are designed for the environment they will operate in with input from the <i>user's</i> customer of this <i>service</i> . 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.
	Western Power will maintain the streetlighting assets to ensure that the streetlighting exit service continues to be provided to original design levels. Western Power will:
	• Inspect the streetlighting poles for structural and electrical integrity consistent with <i>good electricity industry practice</i> and relevant standards.
	Replace and reinforce the streetlighting poles consistent with good electricity industry practice and relevant standards.
	Repair the streetlighting assets including where damage occurs by third parties.
	Provide emergency response to incidents involving the streetlighting assets.
	Replace or repair the streetlighting lamps, luminaires, control equipment and supply wiring upon failure or damage.
	Replace or repair the underground streetlighting supply cables and overhead conductors upon failure, damage or at the end of their serviceable life.
	Replace or repair the lamps and luminaires where upon investigation the lumen output no longer meets original minimum design levels.
	• Provide a call centre and online facility to receive streetlighting fault information from the public and the <i>user's</i> customer of the <i>exit service</i> (typically the relevant local government authority).
	<ul> <li>Maintain an inventory of the streetlighting assets to which the exit service applies including the date of installation of each asset, the type of asset, rated power and the location of the asset.</li> </ul>
	• Respond to questions from the <i>user's</i> customer of the <i>exit service</i> (typically the relevant local government authority) about in-service inventory within 20 working days.
Eligibility Criteria:	Users are eligible to use this service if:
	The streetlight is a Western Power streetlight; and
	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 <i>Reference</i> 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:	"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 <i>access</i> 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 exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
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, except in the case of streetlights with smart control systems; and
	3. Western Power, as a <i>reasonable and prudent person</i> , forecasts the maximum <i>load</i> at the <i>exit point</i> to be less than 1 kW single-phase except for streetlights, traffic lights, rail crossings, and pedestrian lighting where the <i>consumer</i> is a road or local government authority, then the maximum <i>load</i> at the <i>exit point</i> 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/NZS 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 <i>Reference</i> 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:	"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 <i>access</i> 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 and a reference service (metering) at an exit point on the transmission system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>The meter is configured to measure the transfer of electricity out of the Western Power Network; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and</li> <li>Each of the following does not apply under an agreement with Western Power:         <ul> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul> </li> </ol>
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 <i>access</i> 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 exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The exit point is located at residential premises or premises occupied by a voluntary/charitable organisation; and
	2. 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 time bands set out in the <i>Price List</i> for RT17; and
	3. This A12 – 3 Part Time of Use Energy (Residential) Exit Service:
	a. was provided at the connection point as at the AA5 effective date; and
	b. has continued to be provided at the <i>connection point</i> from the <i>AA5 effective</i> date; and
	4. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 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 <i>Reference</i> 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:	"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 access arrangement.
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the access arrangement.



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 and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The exit point is located at non-residential premises; and</li> <li>The maximum demand at the exit point is:</li></ol></li></ol>
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.



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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 and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
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
	2. 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 time bands set out in the <i>Price List</i> for RT19; and
	3. This A14 – 3 Part Time of Use Demand (Residential) Exit Service:
	a. was provided at the connection point as at the AA5 effective date; and
	b. has continued to be provided at the <i>connection point</i> from the <i>AA5 effective date</i> ; and
	4. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 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 <i>Reference</i> 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:	"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 and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>The exit point is located at non-residential premises; and</li> <li>The maximum demand at the exit point is:         <ol> <li>less than 1,500 kVA based on historic metering data; or</li> <li>Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; and</li> </ol> </li> <li>The meter is configured to measure the transfer of electricity out of the Western Power Network and if it is an accumulation meter, it is configured for time bands set out in the Price List for RT20; and</li> <li>This A15 – 3 Part Time of Use Demand (Business) Exit Service:         <ol> <li>was provided at the connection point as at the AA5 effective date; and</li> <li>has continued to be provided at the connection point from the AA5 effective date; and</li> </ol> </li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and</li> <li>Each of the following does not apply under an agreement with Western Power:         <ol> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>The user is to receive delivered electricity at a service standard different to</li> </ol> </li></ol>
Applicable Reference Tariff:	the Applicable Service Standard Benchmarks for this <i>service</i> .  "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 access 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 exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
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
	2. 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 time bands set out in the <i>Price List</i> for RT21; and
	3. This A16 - Multi Part Time of Use Energy (Residential) Exit Service:
	a. was provided at the connection point as at the AA5 effective date; and
	<ul> <li>has continued to be provided at the connection point from the AA5 effective date; and</li> </ul>
	4. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and
	5. Each of the following does not apply under an agreement with Western Power:
	<ul> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> </ul>
	<ul> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>
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 exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The exit point is located at non-residential premises; and</li> <li>The maximum demand at the exit point is:</li></ol></li></ol>
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 A18 – Super Off-peak Energy (Residential) Exit Service
Reference Service Description:	An exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	<ol> <li>The exit point is located at residential premises or premises occupied by a voluntary/charitable organisation; and</li> </ol>
	2. The <i>meter</i> is a <i>Type 4 metering installation</i> configured to measure the transfer of electricity out of the <i>Western Power Network</i> and it is configured for time bands set out in the <i>Price List</i> for RT35; and
	3. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements, and AS/NZS 3000; and
	4. Each of the following does not apply under an agreement with Western Power:
	<ul> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> </ul>
	<ul> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>
Applicable Reference Tariff:	"RT35" 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 A19 – Super Off-peak Energy (Business) Exit Service
Reference Service Description:	An exit service combined with a connection service and a reference service (metering) at an exit point on the distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>The exit point is located at non-residential premises; and</li> <li>One of the following applies:         <ol> <li>it is a low voltage (415 volts or less) connection point and the maximum demand at the exit point is less than 1,500 kVA based on historic metering data; or</li> <li>it is a low voltage (415 volts or less) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; or</li> <li>it is a high voltage (6.6kV or higher) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA for a period of no greater than six months; and</li> </ol> </li> </ol>
	<ol> <li>The meter is a Type 4 metering installation configured to measure the transfer of electricity out of the Western Power Network and it is configured for time bands set out in the Price List for RT34; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements, and AS/NZS 3000; and</li> </ol>
	<ul> <li>5. Each of the following does not apply under an agreement with Western Power:</li> <li>a. The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>b. The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>
Applicable Reference Tariff:	"RT34" 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 A20 – Super Off-Peak Time of Use Demand (Residential) Exit Service
Reference Service Description:	An exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The exit point is located at residential premises or premises occupied by a voluntary/charitable organisation; and</li> <li>The meter is a Type 4 metering installation configured to measure the transfer of electricity out of the Western Power Network and is configured for time bands set out in the Price List for RT37 and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and</li> </ol> </li> <li>Each of the following does not apply under an agreement with Western Power:         <ol> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ol> </li> </ol>
Applicable Reference Tariff:	"RT37" 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 A21 – Super Off-Peak Time of Use Demand (Business) Exit Service
Reference Service Description:	An exit service combined with a connection service and a reference service (metering) at an exit point on the distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The exit point is located at non-residential premises; and
	2. 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; or
	<ul> <li>it is a high voltage (6.6kV or higher) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA for a period of no greater than six months; and</li> </ul>
	3. The <i>meter</i> is a <i>Type 4 metering installation</i> configured to measure the transfer of electricity out of the Western Power Network and it is configured for time bands set out in the <i>Price List</i> for RT36 and
	4. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and
	5. Each of the following does not apply under an agreement with Western Power:
	<ul> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> </ul>
	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:	"RT36" 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 A22 – Low Voltage Electric Vehicle Charging Exit Service
Reference Service Description:	An exit service combined with a connection service and a reference service (metering) at an exit point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The exit point is located at non-residential premises; and
	<ol> <li>The connection point will be used for the primary purpose of charging electric vehicles and may also be used for other purposes ancillary to an electric vehicle charging activity; and</li> </ol>
	3. The maximum demand at the <i>bi-directional point</i> is less than 1,500 kVA based on historic metering data or 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. The <i>meter</i> is a <i>Type 4 metering installation</i> configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> and it is configured for the time bands set out in the Price List for RT40; and
	5. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and
	6. The premises have an inverter system rated up to a total of 2 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
	8. 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 <i>Reference</i> <i>Tariff</i> for this <i>service</i> ; or
	<ul> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>
Applicable Reference Tariff:	"RT40" 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 A23 – High Voltage Electric Vehicle Charging Exit Service
Reference Service Description:	An exit service combined with a connection service and a reference service (metering) at an exit point on the high voltage (6.6 kV or higher) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The exit point is located at non-residential premises; and
	2. The <i>connection point</i> will be used for the primary purpose of charging electric vehicles and may also be used for other purposes ancillary to an electric vehicle charging activity; and
	3. The contracted maximum demand at the <i>bi-directional point</i> is greater than 1,000 kVA; and
	4. The <i>meter</i> is a <i>Type 4 metering installation</i> configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> and it is configured for the time bands set out in the Price List for RT41; and
	5. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements, WA Service and Installation Requirements and AS/NZS 3000; and
	6. The <i>consumer's</i> inverter system complies with the requirements of AS 4777 and the <i>Technical Rules</i> ; 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 <i>Reference Tariff</i> 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:	"RT41" 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 and a reference service (metering) on the distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>The meter is configured to measure the transfer of electricity into the Western Power Network; and</li> <li>Operation of the generator's facilities and equipment comply with the Technical Rules, sections 2.4C and 2.8A of the Access Code, the WA Electrical Requirements and AS/NZS 3000; and</li> <li>Each of the following does not apply under an agreement with Western Power:         <ul> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul> </li> </ol>
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 <i>access arrangement</i> .  As from 18 September 2020 an Electricity Transfer Access Contract may only be entered into on terms consistent with section 2.4C of the Access Code.
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 and a reference service (metering) at an entry point on the transmission system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>The meter is configured to measure the transfer of electricity into the Western Power Network; and</li> <li>Operation of the generator's facilities and equipment comply with the Technical Rules, sections 2.4C and 2.8A of the Access Code, the WA Electrical Requirements and AS/NZS 3000; and</li> <li>Each of the following does not apply under an agreement with Western Power:         <ul> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul> </li> </ol>
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 <i>access arrangement</i> .  As from 18 September 2020 an Electricity Transfer Access Contract may only be entered into on terms consistent with section 2.4C of the Access Code.
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 entry service provided on the same basis as entry service B1 in circumstances where this service provides for facilities and equipment comprising distributed generating plant or other non-network solutions connected at a connection point that results in Western Power's capital-related costs or non-capital costs reducing
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>All of the eligibility criteria for entry service B1 are met: and</li> <li>The user has submitted an electricity transfer application for this service.</li> </ol>
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 Sections 4.2 and 4.3 of the <i>access arrangement</i> as appropriate.



## 4. Reference Services (Bi-directional Services)

Western Power offers 23 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 and a reference service (metering) at a bi-directional point on the distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The bi-directional point is located at residential premises or premises occupied by a voluntary/charitable organisation; and
	2. One of the following applies:
	<ul> <li>it is a low voltage (415 volts or less) connection point and the maximum demand at the exit point is less than 1,500 kVA based on historic metering data; or</li> </ul>
	<ul> <li>it is a low voltage (415 volts or less) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; or</li> </ul>
	<ul> <li>it is a high voltage (6.6kV or higher) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA for a period of no greater than six months; and</li> </ul>
	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/NZS 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/NZS 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 <i>Reference Tariff</i> 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:	"RT13" in the applicable <i>Price List</i> published in Appendix F of the <i>access</i> 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 C2 – Anytime Energy (Business) Bi-directional Service
Reference Service Description:	A bi-directional service combined with a connection service and a reference service (metering) at a bi-directional point on the distribution system .
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>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</li> <li>One of the following applies:         <ol> <li>it is a low voltage (415 volts or less) connection point and the maximum demand at the bi-directional point is less than 1,500 kVA based on historic metering data; or</li> <li>it is a low voltage (415 volts or less) connection point and Western Power</li> </ol> </li> </ol>
	<ul> <li>determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; or</li> <li>c. it is a high voltage (6.6kV or higher) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500kVA for a period of no greater than six months; and</li> <li>3. The meter is configured to measure the transfer of electricity into and out of the Western Power Network; and</li> </ul>
	<ol> <li>The consumer's inverter system complies with the requirements of AS/NZS 4777 and the Technical Rules; and</li> </ol>
	5. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and
	<ul> <li>6. Each of the following does not apply under an agreement with Western Power:</li> <li>a. The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>b. The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>
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 and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>The bi-directional point is located at residential premises or premises occupied by a voluntary/charitable organisation; and</li> <li>The meter is configured to measure the transfer of electricity into and out of the Western Power Network for the time bands set out in the Price List for RT15; and</li> <li>This C3 – Time of Use Energy (Residential) – Bi-directional Service:         <ul> <li>a. was provided at the connection point as at the AA4 effective date; and</li> <li>b. has continued to be provided at the connection point from the AA4 effective date; and</li> </ul> </li> <li>The consumer's inverter system complies with the requirements of AS/NZS 4777 and the Technical Rules; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and</li> <li>Each of the following does not apply under an agreement with Western Power:         <ul> <li>a. The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>b. The user is to receive delivered electricity at a service standard different to</li> </ul> </li> </ol>
Applicable Reference Tariff:	the Applicable Service Standard Benchmarks for this <i>service</i> .  "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 access 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 and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
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. 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
	3. 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
	4. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 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/NZS 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 <i>Reference Tariff</i> 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</i> 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.



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 and a reference service (metering) at a bi-directional point on the high voltage (6.6 kV or higher) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The bi-directional point is located at non-residential premises; and</li> </ol> </li> <li>The maximum demand at the bi-directional point is:         <ol> <li>less than 1,500 kVA based on historic metering data; or</li> <li>Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; and</li> </ol> </li> <li>The meter is configured to measure the transfer of electricity into and out of the Western Power Network; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and</li> <li>The premises have an inverter system rated up to a total of 1 MVA for single or three-phase connections; and</li> <li>The consumer's inverter system complies with the requirements of AS/NZS 4777 and the Technical Rules; and</li> <li>Each of the following does not apply under an agreement with Western Power:         <ol> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ol> </li> </ol>
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 C6 – Low Voltage Metered Demand Bi-directional Service
Reference Service Description:	A bi-directional service combined with a connection service and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
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 <i>reasonable and prudent person</i> , that the <i>user's</i> forecast maximum demand will be less than 1,500 kVA; 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 consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and
	5. The premises have an inverter system rated up to a total of 1 MVA for single or three-phase connections; and
	6. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 4777 and the <i>Technical Rules</i> ; 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 <i>Reference</i> 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:	"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 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 and a reference service (metering) at a bi-directional point on the high voltage (6.6 kV or higher) distribution system.
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. 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 consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and
	5. The premises have an inverter system rated up to a total of 1 MVA for single or three-phase connections; and
	6. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 4777 and the <i>Technical Rules</i> ; 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 <i>Reference Tariff</i> 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 and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
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. 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 consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and
	5. The premises have an inverter system rated up to a total of 1 MVA for single or three-phase connections; and
	6. The consumer's inverter system complies with the requirements of AS/NZS 4777 and the <i>Technical Rules</i> ; 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 <i>Reference Tariff</i> 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 <i>access</i> 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 and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The bi-directional point is located at 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. The <i>meter</i> is configured to measure the transfer of electricity into and out of the Western Power Network for the time bands set out in the <i>price list</i> for RT17; and
	3. This C9 – 3 Part Time of Use Energy (Residential) – Bi-directional Service:
	a. was provided at the connection point as at the AA5 effective date; and
	b. has continued to be provided at the <i>connection point</i> from the <i>AA5 effective</i> date; and
	4. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 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/NZS 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 <i>Reference Tariff</i> 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 and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>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</li> <li>The meter is configured to measure the transfer of electricity into and out of the Western Power Network for the time bands set out in the Price List for RT18; and</li> <li>This C10 – 3 Part Time of Use Energy (Business) – Bi-directional Service:         <ul> <li>a. was provided at the connection point as at the AA5 effective date; and</li> <li>b. has continued to be provided at the connection point from the AA5 effective date; and</li> </ul> </li> <li>The consumer's inverter system complies with the requirements of AS/NZS 4777 and the Technical Rules; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and</li> <li>Each of the following does not apply under an agreement with Western Power:         <ul> <li>a. The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>b. The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul> </li> </ol>
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 and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The bi-directional point is located at residential premises or premises occupied by a voluntary/charitable organisation; and
	2. 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 RT19; and
	3. This C11 – 3 Part Time of Use Demand (Residential) Bi-directional Service:
	a. was provided at the connection point as at the AA5 effective date; and
	b. has continued to be provided at the <i>connection point</i> from the <i>AA5 effective</i> date; and
	4. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 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/NZS 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 <i>Reference Tariff</i> 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.



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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 and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
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. 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 RT20; and
	3. This C12 – 3 Part Time of Use Demand (Business) Bi-directional Service:
	a. was provided at the connection point as at the AA5 effective date; and
	b. has continued to be provided at the <i>connection point</i> from the <i>AA5 effective</i> date; and
	4. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 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/NZS 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 <i>Reference</i> Tariff for this service; or
	<ul> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>
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 Energy (Residential) Bi-directional Service
Reference Service Description:	A bi-directional service combined with a connection service and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The bi-directional point is located at residential premises or premises occupied by a voluntary/charitable organisation; and
	2. 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 RT21; and
	3. This C13 – Multi Part Time of Use Energy (Residential) Bi-directional Service:
	a. was provided at the connection point as at the AA5 effective date; and
	b. has continued to be provided at the <i>connection point</i> from the <i>AA5 effective</i> date; and
	4. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 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/NZS 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 <i>Reference Tariff</i> 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 C14 – Multi Part Time of Use Energy (Business) Bi-directional Service
Reference Service Description:	A bi-directional service combined with a connection service and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
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. 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 RT22; and
	5. This C14 – Multi Part Time of Use Energy (Business) Bi-directional Service:
	a. was provided at the connection point as at the AA5 effective date; and
	b. has continued to be provided at the <i>connection point</i> from the <i>AA5 effective</i> date; and
	3. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 4777 and the <i>Technical Rules</i> ; and
	4. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 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 <i>Reference Tariff</i> 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.



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 and C16 to C22 (selected by the user) which provides for facilities and equipment comprising distributed generating plant or other non-network solutions connected at a connection point that results in Western Power's capital-related costs or non-capital costs reducing
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>All of the eligibility criteria for bi-directional services C1 to C14 and C16 to C22 (as applicable) are met.</li> <li>The user has submitted an electricity transfer application for this service.</li> </ol>
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 <i>access</i> arrangement.
Applicable Service Standard Benchmarks:	As set out in Section 4.2 of the access arrangement.



Reference Service Name:	Reference Service C16 –Super Off-peak Energy (Residential) Bi-directional Service
Reference Service Description:	A bi-directional service combined with a connection service and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The bi-directional point is located at residential premises or premises occupied by a voluntary/charitable organisation; and
	2. The <i>meter</i> is a type 4 metering installation and configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> and it is configured for the time bands set out in the <i>Price List</i> for RT35; and
	3. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 4777 and the <i>Technical Rules</i> ; and
	4. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and
	5. Each of the following does not apply under an agreement with Western Power:
	<ul> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> </ul>
	<ul> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>
Applicable Reference Tariff:	"RT35" 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 C17 – Super Off-peak Energy (Business) Bi-directional Service
Reference Service Description:	A bi-directional service combined with a connection service and a reference service (metering) at a bi-directional point on the distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>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</li> <li>One of the following applies:         <ol> <li>it is a low voltage (415 volts or less) connection point and the maximum demand at the exit point is less than 1,500 kVA based on historic metering data; or</li> <li>it is a low voltage (415 volts or less) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; or</li> <li>it is a high voltage (6.6kV or higher) connection point and Western Power</li> </ol> </li> </ol>
	<ul> <li>determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA for a period of no greater than six months; and</li> <li>The meter is a type 4 metering installation configured to measure the transfer of electricity into and out of the Western Power Network and it is configured for the time bands set out in the Price List for RT34; and</li> </ul>
	<ol> <li>The consumer's inverter system complies with the requirements of AS/NZS 4777 and the Technical Rules; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and</li> </ol>
	<ul> <li>6. Each of the following does not apply under an agreement with Western Power:</li> <li>a. The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>b. The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>
Applicable Reference Tariff:	"RT34" 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 C18–Super Off-Peak Time of Use Demand (Residential) Bidirectional Service
Reference Service Description:	A bi-directional service combined with a connection service and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The <i>bi-directional point</i> is located at <i>residential premises</i> or premises occupied by a <i>voluntary/charitable organisation</i> ; and
	2. The <i>meter</i> is a <i>Type 4 metering installation</i> configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> and it is configured for the time bands set out in the <i>Price List</i> for RT37 and
	3. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 4777 and the <i>Technical Rules</i> ; and
	4. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 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 <i>Reference</i> 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:	"RT37 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 C19 – Super Off-Peak Time of Use Demand (Business) Bidirectional Service
Reference Service Description:	A bi-directional service combined with a connection service and a reference service (metering) at a bi-directional point on the distribution system.
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. One of the following applies:
	<ul> <li>a. it is a low voltage (415 volts or less) connection point and the maximum demand at the bi-directional point is less than 1,500 kVA based on historic metering data; or</li> </ul>
	<ul> <li>it is a low voltage (415 volts or less) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500 kVA; or</li> </ul>
	<ul> <li>it is a high voltage (6.6kV or higher) connection point and Western Power determines, as a reasonable and prudent person, that the user's forecast maximum demand will be less than 1,500kVA for a period of no greater than six months; and</li> </ul>
	3. The <i>meter</i> is a <i>Type 4 metering installation</i> configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> and it is configured for the time bands set out in the <i>Price List</i> for RT36 and
	4. The <i>consumer's</i> inverter system complies with the requirements of AS/NZS 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/NZS 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 <i>Reference Tariff</i> 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:	"RT36 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 C20 – Low Voltage Electric Vehicle Charging Bi-directional CMD Service
Reference Service Description:	A bi-directional service combined with a connection service and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The bi-directional point is located at non-residential premises; and
	2. The <i>connection point</i> will be used for the primary purpose of charging electric vehicles and may also be used for other purposes ancillary to the charging of electric vehicles; and
	3. The contracted maximum demand at the <i>bi-directional point</i> is greater than 1,000 kVA; and
	4. The <i>meter</i> is a <i>Type 4 metering installation</i> 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/NZS 3000; and
	6. The premises have an inverter system rated up to a total of 2 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
	8. Each of the following does not apply under an agreement with Western Power:
	9. The tariff that determines the charge is different to the Applicable <i>Reference Tariff</i> for this <i>service</i> ; or
	<ul> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>
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 C21 – High Voltage Electric Vehicle Charging Bi-directional CMD Service
Reference Service Description:	A bi-directional service combined with a connection service and a reference service (metering) at a bi-directional point on the high voltage (6.6 kV or higher) distribution system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The bi-directional point is located at non-residential premises; and
	2. The <i>connection point</i> will be used for the primary purpose of charging electric vehicles and may also be used for other purposes ancillary to the charging of electric vehicles; and
	3. The contracted maximum demand at the <i>bi-directional point</i> is greater than 1,000 kVA; and
	4. The <i>meter</i> is a <i>Type 4 metering installation</i> 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, WA Service and Installation Requirements and AS/NZS 3000; and
	6. The premises have an inverter system rated up to a total of 2 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
	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 <i>Reference</i> Tariff for this service; or
	a. 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 C22 – Transmission Storage Bi-directional Service
Reference Service Description:	A bi-directional service for a storage activity combined with a connection service and a reference service (metering) at a bi-directional point on the transmission system.
Eligibility Criteria:	Users are eligible to use this service if:
	1. The <i>meter</i> is configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> ; and
	2. The connection point will use storage works for the primary purpose of a storage activity and may also be used for other purposes ancillary to a storage activity; and
	3. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and
	4. Each of the following does not apply under an agreement with Western Power:
	a. The tariff that determines the <i>charge</i> is different to the Applicable <i>Reference</i> 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 <i>Tariff</i> :	"TRT3" 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.



Reference Service Name:	Reference Service C23 – Low Voltage Distribution Storage Bi-directional Service
Reference Service Description:	A bi-directional service for a storage activity combined with a connection service and a reference service (metering) at a bi-directional point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The bi-directional point is located at non-residential premises; and</li> </ol> </li> <li>The maximum demand at the bi-directional 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</li> <li>The meter is a Type 4 metering installation configured to measure the transfer of electricity into and out of the Western Power Network and it is configured for the time bands set out in the Price List for RT38; and</li> </ol> <li>The connection point will use storage works for the primary purpose of a storage activity and may also be used for other purposes ancillary to a storage activity; and</li> <li>The consumer's inverter system complies with the requirements of AS/NZS 4777 and the Technical Rules; and</li> <li>The premises have an inverter system rated up to a total of 3 MVA for single or three-phase connections; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and</li> <li>Each of the following does not apply under an agreement with Western Power:         <ol> <li>The tariff that determines the charge is different to the Applicable Reference Tariff for this service; or</li> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ol> </li>
Applicable Reference Tariff:	"RT38" 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 C24 – High Voltage Distribution Storage Bi-directional Service
Reference Service Description:	A bi-directional service for a storage activity combined with a connection service and a reference service (metering) at a bi-directional point on the high voltage (6.6 kV or higher) distribution system.
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. The <i>meter</i> is a <i>Type 4 metering installation</i> configured to measure the transfer of electricity into and out of the <i>Western Power Network</i> and it is configured for the price bands in the <i>Price List</i> for RT39; and
	4. The connection point will use storage works for the primary purpose of a storage activity and may also be used for other purposes ancillary to a storage activity; and
	5. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000; and
	6. The consumer's inverter system complies with the requirements of AS 4777 and the <i>Technical Rules</i> ; 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 <i>Reference</i> Tariff for this service; or
	<ul> <li>The user is to receive delivered electricity at a service standard different to the Applicable Service Standard Benchmarks for this service.</li> </ul>
Applicable Reference Tariff:	"RT39" 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 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:	<ol> <li>Users are eligible to use this service if:</li> <li>The user has submitted an electricity transfer application to abolish an existing connection point in accordance with the Applications and Queuing Policy and in accordance with the provisions of its access contract; and</li> <li>The user has an exit service, entry service or bi-directional service at the connection point; and</li> <li>The user has an access contract and the Supply Abolishment Service is required at a connection point specified in that access contract; and</li> <li>The consumer's facilities and equipment can be safely disconnected in accordance with good electricity industry practice.</li> </ol>
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 4.5 of the access arrangement.



Reference Service Name:	Reference Service D2 –Capacity Allocation Service
Reference Service Description:	<ul> <li>exit services A7, A8 and A11; and</li> <li>bi-directional services C7, C8, C19, C20, and C22,</li> <li>under which a user's contracted capacity is decreased at one or more connection points under its access contract and there is a corresponding increase in contracted capacity at one or more connection points under its own access contracts or connection points under another user's access contract for one or more intraday periods for a clearly specified period of time nominated by the user following which the contracted capacity under the user's access contract is reinstated, or under which a user's contracted capacity at a connection point is decreased under its access contract (expressed as a percentage of that contracted capacity (CMD)) for a clearly specified period of time and there is a corresponding increase in contracted capacity to another user at the same connection point under its access contract.</li> <li>The allocated capacity is not further transferable or otherwise delegable.</li> <li>At the end of the specified period the contracted capacity under the user's access contract is reinstated.</li> </ul>
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The user has submitted an electricity transfer application to transfer its contracted capacity at one or more connection points by an equivalent amount and that application is approved; and</li> <li>All of the eligibility criteria for the reference services at the connection points are met; and</li> <li>The increase and decrease of contracted capacity relate to contracted maximum demand (CMD); and</li> <li>The same reference service is provided at the connection point to each user; and</li> <li>The user has an access contract and the Capacity Allocation Service is required at a connection point specified in that access contract; and</li> <li>The Western Power Network has the technical capability to give effect to the increase and decrease of contracted capacity; and</li> </ol> </li> <li>The service does not include any material modification of the facilities and equipment connected at an existing connection point; and</li> <li>No further augmentation of the Western Power Network is required to facilitate the capacity allocation arrangements; and</li> <li>Terms and conditions, incorporating an operating document setting out the practical, technical, and other operational details of the capacity allocation (swap) arrangements have been agreed between the user(s) at the relevant connection points and Western Power; and</li> <li>Where it is at the same connection point:         <ol> <li>Each user at the connection point enters into a deed 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</li> <li>Each user at the connection point 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 respe</li></ol></li></ol>
Applicable Reference Tariff:	Any applicable lodgement fees payable in accordance with the <i>Applications and Queuing Policy</i> .



Reference Service Name:	Reference Service D2 –Capacity Allocation Service
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 Sections 4.2 and 4.3 of the <i>access arrangement</i> as appropriate) that apply to:
	exit services A7, A8 and A11;
	entry services B1 and B2; and
	bi-directional services C7, C8, C19, C20 and C22.
	(as applicable).



Reference Service Name:	Reference Service D6 – Remote Load/Inverter Control Service
Reference Service Description:	<ul> <li>A service ancillary to:</li> <li>exit services A1 to A8 and A12 to A19; and</li> <li>bi-directional services C1 to C18, and C21,</li> <li>to send a command to an activated device for the variable or binary control of a load or inverter at a connection point from a remote locality. The service does not include any site visits by Western Power.</li> </ul>
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>The user is receiving an exit service or bi-directional service at the connection point; and</li> <li>The user has an access contract and the Remote Load/Inverter Control Service is required at a connection point specified in that access contract; and</li> <li>The user has submitted an electricity transfer application for a Remote Load/Inverter Control Service and that application is approved; and</li> <li>Communication equipment with capability for two-way communication between an activated device and Western Power's management systems has been installed and is operating and able to be used to support remote services; and</li> <li>There is a supply voltage present at the activated device; and</li> <li>The user has the contractual authority to control the load/inverter at the connection point; and</li> <li>An activated device is installed at the connection point; and</li> <li>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/NZS 3000; and</li> <li>The activated device has capability enabled for the variable or binary control of electricity transferred through the connection point.</li> </ol>
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.
Applicable Service Standard Benchmarks:	The service standard benchmarks (set out in Section 4.2 of the access arrangement) that apply to:  1. exit services A1 to A8 and A12 to A17A19; and  2. bi-directional services C1 to C15, C18 and C21, (as applicable)



Reference Service Name:	Reference Service D8 – Remote De-energise Service
Reference Service Description:	<ul> <li>A service ancillary to:</li> <li>exit services A1 to A8 and A12 to A19;</li> <li>entry service B1; and</li> <li>bi-directional services C1 to C18, and C21,</li> <li>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 does not include any site visits by Western Power.</li> <li>To commence the flow of electricity following completion of a Remote De-energise Service (D8), the user should submit an electricity transfer application for a Remote Re-energise Service (D9). Following completion of a Remote Re-energise Service (D9) the user or end-use customer may commence the flow of electricity by pressing a button on the meter in accordance with instructions provided by Western Power. If required, the user may submit an electricity transfer application for a Site Visit to Support Remote Re-energise Service (D11).</li> </ul>
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The user is receiving an exit service, entry service or bi-directional service at the connection point; and</li> <li>The user has an access contract and the Remote De-energise Service is required at a connection point specified in that access contract; and</li> <li>The user has submitted an electricity transfer application for a Remote Deenergise Service and that application is approved; and</li> <li>Communication equipment with capability for two-way communication between a meter and Western Power's management systems has been installed, is operating and is able to be used to support remote services; and</li> </ol> </li> <li>There is a supply voltage present at the meter; and</li> <li>A whole current meter (being a meter that does not have a transformer) is installed at the metering point; and</li> <li>The meter is configured to receive and provide commands for this service from a remote locality; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000.</li> </ol>
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.
Applicable Service Standard Benchmarks:	As set out in Section 4.6 of the access arrangement.



Reference Service Name:	Reference Service D9 – Remote Re-energise Service
Reference Service Description:	<ul> <li>A service ancillary to:</li> <li>exit services A1 to A8 and A12 to A19;</li> <li>entry service B1; and</li> <li>bi-directional services C1 to C18, and C21.</li> <li>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.</li> <li>Following completion of a Remote Re-energise Service (D9) the user or end-use customer may commence the flow of electricity by pressing a button on the meter in accordance with instructions provided by Western Power. If required, the user may submit an electricity transfer application for a Site Visit to Support Remote Re-energise Service (D11).</li> </ul>
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>The meter is de-energised following the completion of a remote de-energise service D8; and</li> <li>The user is receiving an exit service, entry service or bi-directional service at the connection point; and</li> <li>The user has an access contract and the Remote Re-energise Services is required at a connection point specified in that access contract; and</li> <li>The user has submitted an electricity transfer application for a Remote Reenergise Service and that application is approved; and</li> <li>Communication equipment with capability for two-way communication between a meter and Western Power's management systems has been installed, is operating and able to be used to support remote services; and</li> <li>There is a supply voltage present at the meter; and</li> <li>A whole current meter (being a meter that does not have a transformer) is installed at the metering point; and</li> <li>The meter is configured to receive and provide commands for this service from a remote locality; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000.</li> </ol>
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.
Applicable Service Standard Benchmarks:	As set out in Section 4.6 of the access arrangement.



Reference Service Name:	Reference Service D10 – Streetlight LED Replacement Service
Reference Service Description:	A service ancillary to:  • Reference Service A9 – Streetlighting Exit Service to replace an existing streetlight luminaire with one of the LED luminaires specified in the Price List.
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>The user has submitted an electricity transfer application for an LED replacement in accordance with Western Power's requirements; and</li> <li>The user is receiving an A9 exit service at the connection point; and</li> <li>The user has an access contract and the Streetlight LED Replacement Service is required at a connection point specified in that access contract; and</li> <li>The existing streetlighting asset is compatible with the chosen LED luminaire.</li> </ol>
Applicable Reference Tariff:  Applicable Standard Access Contract:	"RT30" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> .  "Electricity Transfer Access Contract" published in Appendix A of the <i>access arrangement</i> .
Applicable Service Standard Benchmarks:	As set out in Section 4.4.4 of the access arrangement.



Reference Service Name:	Reference Service D11 – Site Visit to Support Remote Re-energise Service					
Reference Service Description:	A service ancillary to:  • exit services A1 to A8 and A12 to A19;					
	• entry service B1; and					
	• bi-directional services C1 to C18, and C21,					
	to provide a site visit in-conjunction with a Remote Re-energise Service (D9) for end-customer support to press a button on a <i>meter</i> in accordance with instructions provided by Western Power.					
Eligibility Criteria:	Users are eligible to use this service if:					
	1. A related Remote Re-energise Service (D9) has been completed at the <i>connection point</i> , or the <i>user</i> has submitted a corresponding <i>electricity transfer application</i> for a Remote Re-energise Service (D9) and that application is approved; and					
	2. The <i>user</i> is receiving an <i>exit service</i> , <i>entry service</i> or <i>bi-directional service</i> at the <i>connection point</i> ; and					
	3. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements, and AS/NZS 3000.					
Applicable Reference Tariff:	"RT31" 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 4.7 of the access arrangement.					



Reference Service Name:	Reference Service D12 – Manual De-energise Service
Reference Service Description:	<ul> <li>A service ancillary to:</li> <li>exit services A1 to A8 and A12 to A19;</li> <li>entry service B1; and</li> <li>bi-directional services C1 to C19, and C21 to C22,</li> <li>to de-energise a meter by removing supply voltage from all outgoing circuits on a non-permanent basis by attending to the meter premises.</li> </ul>
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:</li> <li>The user is receiving an exit service, entry service or bi-directional service at the connection point; and</li> <li>The user has an access contract and the Manual De-energise Service is required at a connection point specified in that access contract; and</li> <li>The user has submitted an electricity transfer application for a Manual De-energise Service and that application is approved; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000.</li> <li>This service will only be performed by Western Power on the following days and times:         <ul> <li>Monday to Thursday (excluding public holidays); and</li> <li>between 7:30am and 2:00pm (WST).</li> </ul> </li> <li>This service will not be performed by Western Power on the business day before a public holiday.</li> <li>The user may request this service to be provided:         <ul> <li>without a 'preferred date' or 'appointment time';</li> <li>with a 'preferred date' but without an 'appointment time'.</li> <li>The timeframe specified in the applicable service standard benchmark will be the minimum notice period for the 'preferred date';</li> <li>with a 'preferred date' and an 'appointment time' of either between 7.00a.m. and 11.59a.m. (WST) on any business day or noon and 2.00p.m. (WST) on any business day.</li> </ul> </li> <li>The timeframe specified in the applicable service standard benchmark will be the minimum notice period for the 'preferred date'.</li> </ol>
Applicable Reference Tariff:	"RT32" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> .  Due to the complex and variable requirements associated with high voltage <i>connection points, charges</i> for provision of the Manual Re-energise Service for high voltage <i>connection points</i> will be priced on application.
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 4.8 of the access arrangement.



Reference Service Name:	Reference Service D13 – Manual Re-energise Service
Reference Service Description:	<ul> <li>A service ancillary to:</li> <li>exit services A1 to A8 and A12 to A19;</li> <li>entry service B1; and</li> <li>bi-directional services C1 to C19 and C21 to C22,</li> <li>to re-energise a previously de-energised meter by attending to the meter premises.</li> </ul>
Eligibility Criteria:	<ol> <li>Users are eligible to use this service if:         <ol> <li>The meter is de-energised following the completion of a Manual De-energise Service D13; and</li> <li>The user is receiving an exit service, entry service or bi-directional service at the connection point; and</li> <li>The user has an access contract and the Manual Re-energise Services is required at a connection point specified in that access contract; and</li> <li>The user has submitted an electricity transfer application for a Manual Re-energise Service and that application is approved; and</li> <li>The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000.</li> </ol> </li> <li>The user may request this service to be provided:         <ol> <li>without a 'preferred date' or 'appointment time';</li> <li>with a 'preferred date' but without an 'appointment time'.</li> <li>The timeframe specified in the applicable service standard benchmark will be the minimum notice period for the 'preferred date';</li> <li>with a 'preferred date' and an 'appointment time' of either between 7.00a.m. and 11.59a.m. on any business day or noon and 5.00p.m. on any business day.</li> </ol> </li> <li>The timeframe specified in the applicable service standard benchmark will be the minimum notice period for the 'preferred date'.</li> </ol>
Applicable Reference Tariff:	"RT33" in the applicable <i>Price List</i> published in Appendix F of the <i>access arrangement</i> .  Due to the complex and variable requirements associated with high voltage <i>connection points, charges</i> for provision of the Manual Re-energise Service for high voltage <i>connection points</i> will be priced on application.
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 4.8 of the access arrangement.



## **Annexure 1: 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

A description of each reference service (metering) provided is set out in Table E.1.1.

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) or interval meter 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) or interval meter 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 (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.
M17	Unidirectional, interval, weekly, manual	Provision of <i>interval energy data</i> from an <i>interval meter (uni-directional)</i> derived by way of a <i>manual read</i> on a weekly basis.
M5	Unidirectional, interval, bi-monthly, remote	Provision of <i>interval energy data</i> from an <i>interval meter</i> (unidirectional) 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.
M18	Unidirectional, interval, weekly, 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 weekly basis.
M7	Unidirectional, interval, daily, remote	Provision of <i>interval energy data</i> from an <i>interval meter</i> (unidirectional) derived following the collection of the <i>interval energy data</i> via a <i>communications network</i> on a daily basis.
M8	Bidirectional, accumulation, bi-monthly, manual	Provision of accumulated energy data from an accumulation meter (bi-directional) or interval 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) or interval meter (bi-directional) derived by way of a manual read on a bimonthly basis.



Reference number	Service name	Service description
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.
M19	Bidirectional, interval, weekly, 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 weekly basis.
M12	Bidirectional interval, bi-monthly, remote	Provision of <i>interval energy data</i> from an <i>interval meter (bi-directional)</i> derived following the collection of the <i>interval energy data</i> via a <i>communications network</i> 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.
M20	Bidirectional, interval, weekly, 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 weekly 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 and M17 to M20 include the following:

a. upgrade or replacement of the *meter* to align with the requirements of the Metering Code and MSLA 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.

A *user* and Western Power may agree the *date for a scheduled meter reading* in accordance with Metering Code clause 5.3.

#### **E.1.2** Permissible reference services (metering)

The permissible reference services (metering) that are available for each reference service are identified as ticked ( $\checkmark$ ) 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 *standard metering service* for the *reference services* will vary depending on whether the throughput at the *connection point* is greater or lower than 50 MWh/a.

The reference service (metering) denoted \* in table E.1.2 below is the "standard" reference service (metering) for connection points with throughput lower than 50 MWh/a.

The reference service (metering) denoted \*\* in table E.1.2 below is the "standard" reference service (metering) for connection points with throughput equal to or greater than 50 MWh/a, prior to weekly settlement commencement.

The reference service (metering) denoted \*\*\* in table E.1.2 below is the "standard" reference service (metering) for *connection points* with throughput equal to or greater than 50 MWh/a, after *weekly settlement commencement*.



Table E.1.2: Compatibility of permissible reference services (metering) with reference service A1 to A23, B1 and B2, and C1 to C24

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20
Exit Services																				
A1 - Anytime Energy (Resi) Exit	<b>√</b> *		✓	<b>√</b> **	✓	✓	✓									✓	<b>√</b> ***	✓		
A2 - Anytime Energy (Busi) Exit	<b>√</b> *		✓	<b>√</b> **	✓	✓	✓									<b>✓</b>	<b>√</b> ***	✓		
A3 - TOU Energy (Resi) Exit		<b>√</b> *	✓	<b>√</b> **	✓	✓	✓									<b>✓</b>	<b>√</b> ***	✓		
A4 - TOU Energy (Busi) Exit		<b>√</b> *	✓	<b>√</b> **	✓	✓	✓									✓	<b>√</b> ***	✓		
A5 - HV Demand Exit					<b>√</b> *	<b>√</b> **	✓											<b>√</b> ***		
A6 - LV Demand Exit			<b>√</b> *	<b>√</b> **	✓	✓	✓										<b>√</b> ***	✓		
A7 - HV CMD Exit					<b>√</b> *	<b>√</b> **	✓										<b>√</b> ***	✓		
A8 - LV CMD Exit			<b>√</b> *	<b>√</b> **	✓	<b>✓</b>	✓										<b>√</b> ***	<b>✓</b>		
A9 – Streetlight															<b>√</b> *					
A10 – Unmetered															<b>√</b> *					
A11 - Transmission Exit				<b>√</b> **		✓	✓										<b>√</b> ***	✓		
A12 - 3 Part TOU (Resi) Exit		<b>√</b> *	✓	<b>√</b> **	✓	✓	✓									✓	<b>√</b> ***	✓		
A13 - 3 Part TOU (Busi) Exit		<b>√</b> *	✓	<b>√</b> **	✓	✓	✓									✓	<b>√</b> ***	✓		
A14 - 3 Part TOU Demand (Resi) Exit		<b>√</b> *	✓	<b>√</b> **	<b>✓</b>	✓	✓									<b>✓</b>	<b>√</b> ***	<b>✓</b>		
A15 - 3 Part TOU Demand (Busi) Exit		<b>√</b> *	✓	<b>√</b> **	✓	✓	✓									✓	<b>√</b> ***	✓		
A16 – Multi Part TOU (Resi) Exit		<b>√</b> *	✓	<b>√</b> **	✓	✓	✓									✓	<b>√</b> ***	✓		
A17 – Multi Part TOU (Busi) Exit		<b>√</b> *	✓	<b>√</b> **	✓	✓	✓									✓	<b>√</b> ***	<b>✓</b>		
A18 – Super Off-peak (Resi) Exit					<b>√</b> *	<b>√</b> **	✓									✓		<b>√</b> ***		
A19 – Super Off-peak (Busi) Exit					<b>√</b> *	<b>√</b> **	<b>✓</b>									<b>✓</b>		<b>√</b> ***		
A20 – Super Off peak Demand (Resi) Exit					<b>√</b> *	<b>√</b> **	<b>✓</b>									<b>✓</b>		<b>√</b> ***		

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20
A21 – Super Off peak Demand (Busi) Exit					<b>√</b> *	<b>√</b> **	✓									✓		<b>√</b> ***		
A22 – LV EV Charging Exit					<b>√</b> *	<b>√</b> **	✓									✓		<b>√</b> ***		
A23 – HV EV Charging Exit					<b>√</b> *	<b>√</b> **	✓									✓		<b>√</b> ***		
Entry Services																				
B1 - Distribution Entry				<b>√</b> **		✓	✓										<b>√</b> ***	✓		
B2 - Transmission Entry						<b>√</b> **	✓											<b>√</b> ***		
Bi-Directional Services																				
C1 - Anytime Energy (Resi) Bi- Directional								<b>√</b> *		✓	<b>√</b> **	✓	✓	✓		<b>✓</b>			<b>√</b> ***	✓
C2 - Anytime Energy (Busi) Bi- Directional								<b>√</b> *		✓	<b>√</b> **	✓	✓	✓		<b>√</b>			<b>√</b> ***	✓
C3 - TOU (Resi) Bi-Directional									<b>√</b> *	✓	<b>√</b> **	✓	✓	✓		✓			<b>√</b> ***	✓
C4 - TOU (Busi) Bi-Directional									<b>√</b> *	✓	<b>√</b> **	✓	✓	✓		✓			<b>√</b> ***	✓
C5 - HV Metered Demand Bi- Directional												<b>√</b> *	<b>√</b> **	✓						<b>√</b> ***
C6 - LV Metered Demand Bi- Directional										<b>√</b> *	<b>√</b> **	✓	✓	✓					<b>√</b> ***	
C7 - HV CMD Bi-Directional												<b>√</b> *	<b>√</b> **	✓						<b>√</b> ***
C8 - LV CMD Bi-Directional										<b>√</b> *	<b>√</b> **	✓	✓	✓					<b>√</b> ***	✓
C9 - 3 Part TOU (Resi) Bi- Directional									<b>√</b> *	✓	<b>√</b> **	✓	✓	✓		✓			<b>\</b> ***	✓
C10 - 3 Part TOU (Busi) Bi- Directional									<b>√</b> *	✓	<b>√</b> **	✓	✓	<b>√</b>		<b>✓</b>			<b>√</b> ***	✓
C11 - 3 Part TOU Demand (Resi) Bi-Directional									<b>√</b> *	✓	<b>√</b> **	✓	✓	✓		✓			<b>√</b> ***	✓
C12 - 3 Part TOU Demand (Busi) Bi-Directional									<b>√</b> *	✓	<b>√</b> **	<b>√</b>	<b>√</b>	<b>✓</b>		<b>✓</b>			<b>√</b> ***	✓

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20
C13 – Multi Part TOU (Resi) Bi- Directional									<b>√</b> *	✓	<b>√</b> **	✓	✓	✓		✓			<b>√</b> ***	✓
C14 – Multi Part TOU (Busi) Bi- Directional									<b>√</b> *	✓	<b>√</b> **	✓	✓	✓		✓			<b>√</b> ***	✓
C16 – Super Off-peak (Resi) Bi- directional												<b>√</b> *	<b>√</b> **	<b>✓</b>						<b>√</b> ***
C17 – Super Off-peak (Busi) Bi- directional												<b>√</b> *	<b>√</b> **	<b>✓</b>						<b>√</b> ***
C18 – Super Off-peak Demand (Resi) Bi-directional												<b>√</b> *	<b>√</b> **	✓						<b>√</b> ***
C19 – Super Off-peak Demand (Busi) Bi-directional												<b>√</b> *	<b>√</b> **	✓						<b>√</b> ***
C20 – LV EV Charging CMB Bi- directional												<b>√</b> *	<b>√</b> **	✓						<b>√</b> ***
C21 – HV EV Charging CMD Bidirectional												<b>√</b> *	<b>√</b> **	✓						<b>√</b> ***
C22 – Transmission Connected Storage Bi-directional												<b>√</b> *	<b>√</b> **	<b>✓</b>						<b>√</b> ***
C23 – LV Distribution Connected Storage Bi-directional												<b>√</b> *	<b>√</b> **	<b>✓</b>						<b>√</b> ***
C22 – HV Distribution Connected Storage Bi-directional												<b>√</b> *	<b>√</b> **	<b>✓</b>						<b>√</b> ***

#### **E.1.3** 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.1.3 below.

Each eligibility criterion that is ticked ( $\checkmark$ ) 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 MSLA.

Following *five-minute settlement commencement*, if capability is enabled for the provision of *five-minute interval energy data* for a *connection point*, for a meter that is not a *5MS meter*, the user may request the provision of either *30-minute interval energy data* or *five-minute interval energy data*, for reference services (metering) that include the provision of *interval energy data*.



Table E.1.3: Eligibility Criteria Services

	M1	M2	М3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20
T (1																√		<b>1</b> √	\(\sigma\)	
The <i>User</i> receives a compatible <i>Network</i> access service at the <i>connection point</i> .	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	•	<b>✓</b>	•	•	<b>~</b>										
The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS/NZS 3000.	<b>✓</b>	<b>\</b>	<b>✓</b>	<b>✓</b>	<b>√</b>															
An accumulation meter or interval meter is installed at the metering point.	✓	✓						✓	<b>√</b>											
An interval meter is installed at the metering point.			<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			✓	<b>✓</b>	✓	✓	✓			<b>✓</b>	<b>✓</b>	✓	✓
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.	<b>V</b>	<b>~</b>						<b>~</b>	~											

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20
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.			<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>✓</b>			<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
The connection point is located on the low voltage (415V or less) distribution system.	<b>✓</b>	<b>√</b>	<b>✓</b>		<b>✓</b>			<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>✓</b>								
The meter is configured with registers to measure and record accumulated energy data for the time bands for the underlying Network access service.		<b>✓</b>							<b>✓</b>											
The meter is configured with registers to measure and record interval energy data for the underlying Network access service (if applicable).			<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
The <i>meter</i> is connected to a communications network supported by <i>Western Power</i> .					<b>✓</b>	•	<b>√</b>					✓	<b>✓</b>	✓				✓		✓

	M1	M2	МЗ	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20
The meter is capable of storing interval energy data.																✓				
The user receives a reference service (metering) (M1 to M15 or M17 to M20) in respect to the connection point.																<b>✓</b>				

# E.1.4 Selection of reference service (metering) for exit service, entry service and bi-directional service.

Each exit service (A1 to A19), entry service (B1 and B2) and bi-directional service (C1 to C22) includes a reference service (metering) that is selected by the user from the permissible reference services (metering) (M1 to M20).

The reference service (metering) denoted \* in table E.1.2 is the "standard" reference service (metering) for connection points with throughput lower than 50 MWh/a.

The reference service (metering) denoted \*\* in table E.1.2 is the "standard" reference service (metering) for connection points with throughput equal to or greater than 50 MWh/a, prior to weekly settlement commencement.

The reference service (metering) denoted \*\*\* in table E.1.2 is the "standard" reference service (metering) for connection points with throughput equal to or greater than 50 MWh/a, after weekly settlement commencement.

New *metering installations* will be allocated to the "standard" *reference service (metering),* unless the *user* has entered into an agreement with Western Power to obtain an *additional reference service (metering)*.

Upon selection of the *reference service (metering)* to be included as a component of the *exit service, entry service* or *bi-directional service* will be numbered as a combination of the *exit service* (A1 to A19), *entry service* (B1 and B2) or *exit service* (C1 to C22) number and the *reference service (metering)* (M1 to M20) number.

#### **E.1.5** Availability of Reference Services

Exit services A3 and A4 and bi-directional services C3, C4 and C9 to C14 are not available for new metering installations.



# **Appendix F.1**

## **Tariff Structure Statement Overview**

Revised proposed access arrangement



# **Tariff Structure Statement Overview**

To apply from 1 July 2023

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#### 1. Introduction

Western Power has prepared this revised Tariff Structure Statement (**TSS**) for application in the fifth access arrangement for the period from 1 July 2022 to 30 June 2027 (**AA5**). It incorporates feedback received from our stakeholders, and from the Economic Regulation Authority (**ERA**) in its draft decision published on 9 September 2022 (**Draft Decision**) in relation to the TSS included in our AA5 initial proposal.

The requirement to prepare a TSS was introduced into the *Electricity Networks Access Code 2004* (**Code**) in 2020, along with a two-stage pricing process where:

- as part of our AA5 proposal, we submit to the ERA our proposed pricing methodology in the TSS for approval; and
- at least three months before 1 July of each year of the AA5 period, we submit to the ERA an annual price list for that year, which must comply with the approved TSS.

Under the Code we must submit our initial price list for the AA5 period within 15 days of the ERA's final decision on our access arrangement and, prior to that, include in our TSS a forecast of the weighted average price change for each reference tariff over the AA5 period.

Our TSS provides transparent information on how we will set network distribution and transmission reference tariffs (tariffs) for the AA5 period.

This TSS is accompanied by a separate technical summary, which provides further detail in relation to Western Power's proposed approach to setting tariffs throughout the AA5 period.

Our tariffs make up 45 per cent of the average electricity bill, as illustrated in Figure 1.1 below.

Generation

Network

Customers

Substation

Transmission network

Substation

Distribution network

Retail costs

Figure 1.1: Western Power's role as distribution and transmission service provider

The ERA approves the total revenue that we expect to recover from our retailer and large transmission connected customers, and we then set tariffs that enable us to recover that revenue.

Electricity users consuming less than 50MWh per annum, which include residential and small to medium sized business connections, are subject to separate regulated retails tariffs which are set by the Western Australian Government annually.

As a responsible provider of network services we design our tariffs to:



- meet the pricing principles in the Code, in particular how the approved target revenue is shared between different groups of network users;
- recover our target revenue in a way that minimises our future costs and supports the transition to renewable sources of energy, for example through facilitating the uptake and efficient operation of distributed energy resources (DER); and
- provide price signals to encourage user behaviour that drives the efficient use of the network and promotes equity.

The commencement of AA5 is delayed until 1 July 2023. The methodology set out in the TSS will therefore apply from the second year of AA5 (FY24). As published in the ERA's framework and approach,<sup>2</sup> Western Power's current price list will apply until the revised access arrangement comes into effect.

#### 1.1 A new efficiency-based framework for reference tariffs

The changes to the Code also require us to apply a new framework for tariffs that is explicitly modelled on changes introduced in 2014 to the National Electricity Rules (**NER**), which apply to the Australian electricity market outside of Western Australia.

The Code pricing objective is that, subject to certain requirements, reference tariffs:<sup>3</sup>

...should reflect the service provider's [Western Power's] efficient costs of providing those reference services.

The achievement of this objective is guided by a range of pricing principles,<sup>4</sup> which in turn reflect widely accepted economic principles of pricing, along with other important considerations.

A key role of the pricing principles – in both the Code and the NER – is to guide the tension that arises between:

- the characteristics of strictly efficient reference tariffs; and
- end-user related considerations, such as their preferences and ability to interpret potentially complex tariff structures.

We have engaged closely with users and end-use customers throughout the development of our TSS to balance these considerations and incorporate their feedback. Western Power is deeply grateful for the feedback we received from users and end-use customers throughout the development of our TSS.

#### 1.2 How do tariffs promote economic efficiency?

Our reference tariffs promote economic efficiency by signalling to endusers the future network costs that can be avoided through their decisions. Economic efficiency is focused squarely on future costs because it is only future network costs that can be avoided.

Signalling to end-users our future network costs will:

 encourage end-users to use our network more when it does not increase our costs; The objective of network pricing is economic efficiency. It is achieved by sending price signals that are based on future network costs.

<sup>&</sup>lt;sup>4</sup> Electricity Networks Access Code, clauses 7.3D to 7.3J.



<sup>&</sup>lt;sup>1</sup> Electricity Networks Access Code, clauses 7.3D to 7.3J.

<sup>&</sup>lt;sup>2</sup> ERA, Framework and approach for Western Power's fifth access arrangement review – Final decision, 9 August 2021, p 38.

<sup>&</sup>lt;sup>3</sup> Electricity Networks Access Code, clause 7.3.

- empower end-users to decide whether an installation behind their meter (eg, solar panels, storage or more efficient appliances), participation in community battery schemes or some other change in their behaviour will better meet their energy needs, or the needs of other end-users, at a lower cost;
- promote the role of our network as a platform for sharing and accessing electricity, while meeting end-users' evolving needs;
- promote fairness between adopters and non-adopters of new technologies; and
- indicate to Western Power the areas where end-users value further investment in network capacity or capability, ie, where there is not a lower cost non-network solution.

We explain how our tariffs achieve these outcomes in more detail in section 4.

Achieving these outcomes through efficient tariffs has never been more important than now, reflecting that:

- end-users have more control over their electricity use, sources and bills than ever before;
- the way end-users use our network is changing, as they support the transition to renewable energy by adopting DER;
- in turn, the drivers of our future efficient costs are changing; and
- the services and technology mix that will best meet end-users' needs in the future, and the dynamics that will arise between new technologies, are not fully known.

It is therefore imperative that our tariffs reflect our role as a network service provider, while also best meeting end-users' evolving needs and facilitating government's evolving renewable energy policy.

This promotes equity and fairness by empowering all end-users to take control of their network bills and to play a role in reducing our network costs, irrespective of what technology is behind their electricity meter.

Having administered the very similar requirements in the NER since 2014, the Australian Energy Regulator (AER) similarly concluded that:<sup>5</sup>

Future network tariffs should further enhance opportunities for consumers to optimise their own consumption and asset use, while getting the most out of shared network assets financed by all consumers. They should also be technologically neutral, simply signalling the costs (and benefits) arising from serving the consumers' use of the network.

#### 1.3 Key changes to our reference tariffs in AA5

The principal focus of our tariff proposal is to reflect the ever-increasing role of our network as a platform for sharing and accessing renewable energy, while supporting the evolving needs of our end-users, particularly as they relate to the increasing role of solar PV in the electricity system. We achieve this by using a very low, 'super off-peak' energy price to encourage more use of the network during periods when solar panels are exporting renewable energy to the grid.

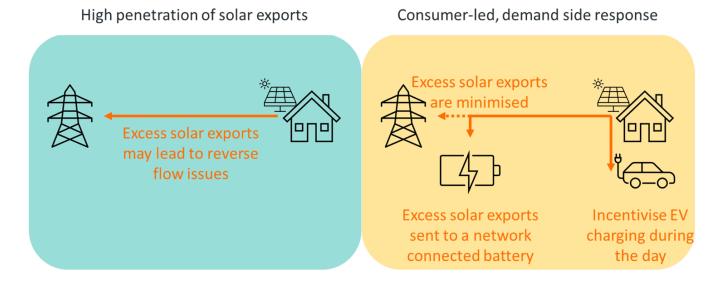
This reflects our preference for a consumer-led, demand side response to solar PV, rather than the alternative of using export prices to discourage exports from small-scale solar PV (as is currently being implemented in the National Electricity Market (**NEM**)). We anticipate that this approach will increase the reliability of supply and stability of our network through more active participation and network use by our end-users.

<sup>&</sup>lt;sup>5</sup> AER, Final Decision – AusNet Services, CitiPower, Jemena, Powercor, and United Energy Distribution Determination 2021 to 2026 Attachment 19 Tariff structure statement, April 2021, p 5.



An indicative example of a consumer-led, demand side response to solar PV is presented in Figure 1.2.

Figure 1.2: An indicative example of a consumer-led, demand side response to solar PV



Our other tariff reforms include:

- introducing new super off-peak energy and demand tariffs for residential and small business endusers;
- introducing new reference tariffs for storage that connect directly to our transmission or distribution network;
- introducing a new reference tariff for dedicated electric vehicle (EV) fast-charging stations;
- setting our variable charges at a level that reflects the future cost of using our network at that time;
- aligning the revenue recovered from each reference tariff with the total efficient cost of providing that reference service, while managing end-user bill impacts by limiting increases in our network charges to less than inflation: and
- making these changes gradually to reflect the feedback from our customers and end-users.

We explain our key reforms to our tariff structures in section 3.

Tariff reform forms part of our broader strategy for the AA5 period. A summary of our strategic direction for AA5 is provided in Figure 1.3.

Figure 1.3: Overview of broad strategic direction for AA5



#### **Our customers**

Residents, generators, retailers, local government, large, small & medium businesses, land development & industry, electrical service industry

#### 1.4 The structure of our TSS

We have structured our TSS to provide clear and intuitive information for our users and end-users, with technical information confined to a separate technical summary that accompanies this TSS overview.

We summarise the structure of our TSS overview below.

Section	Title	Description
Section 2	Background to our TSS	Explains key background information relevant to our TSS, including the importance of tariff reform and feedback from our customers, end-users and the ERA in its Draft Decision.
Section 3	Our tariff structures	Summarises the definition of the charging components for key reference tariffs (the tariff structure) and introduces our new reference tariffs.
Section 4	How we set prices	Describes the methodology we apply to set the price levels for each reference tariff.
Section 5	Reference tariff change forecast	Presents our indicative forecast of the weighted average annual price change for each reference tariff over the AA5 period.

Our separate, TSS technical summary document contains:

- a description of our estimation process for forward-looking efficient costs;
- an explanation of our methodology for calculating the efficient cost target and allocating target revenue for each reference tariff;
- our approach to estimating stand-alone and avoidable costs as the bounds for revenue recovery of each reference tariff;
- the detailed structure of each reference tariff;
- a summary of the price setting process for transmission connections, including our policy for new transmission nodes;
- our methodology for calculating the reference tariff change forecast; and
- a compliance checklist of the requirements in the Code relating to the TSS.

Unless otherwise stated, all dollar amounts are expressed in dollars of the day, as of 30 June 2022.



#### 2. Context to our TSS

Our TSS applies a new tariff framework that places a greater emphasis on economic efficiency and the role of end-users in the development of our tariffs. We highlight below why these changes are imperative at this stage of the transition to renewable sources of energy.

Most residential and small to medium sized business customers are assigned to a network tariff and service by a user or their retailer, rather than Western Power. Further, the extent to which our efficient tariff structures are passed through to end users is at the retailer's discretion. The effectiveness of our tariff reform therefore significantly depends on the assignment of customers to efficient tariffs by their retailer, as well as retailers passing those efficient tariff structures through to end users.

We design our network tariffs with the intent that they provide the right pricing signals and encourage the right consumptive behavioural patterns from end-use customers in order to: drive the efficient use of; and ensure equitable participation in, the SWIS network.

#### 2.1 Customers are changing the way they use our network

The current and expected future rate of change in the electricity market is without precedent. These changes are driven by:

- a societal focus on the adoption of renewable sources of energy to mitigate the risks associated with climate change;
- a focus on end-use consumer involvement in electricity regulation and decision making; and
- technological changes that enable renewable sources of electricity and DER to compete with traditional, carbon-intensive sources.

Furthermore, end-users have more control over their electricity use and bills than ever before. This reflects, among other things:

- the adoption of advanced meters and our implementation of more efficient time of use tariff structures;
- the falling cost of solar PV and battery technology; and
- the increased availability of smarter and more energy efficient appliances, as well as home energy management systems.

These forces for change are empowering end-users to change the way they use our network. For example, end-users can:

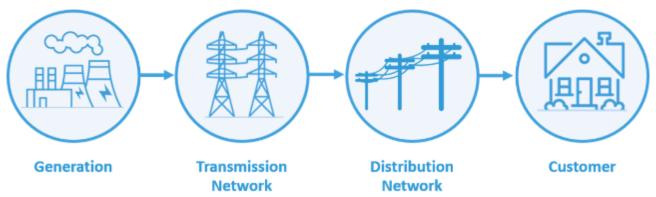
- generate renewable energy to consume or share with other end-users, which can mitigate congestion
  on other parts of our network and displace non-renewable forms of generation;
- store locally generated energy in a battery for consumption or sharing later, when doing so may be of more value to the end-user, our network and the electricity system; and
- co-ordinate appliances and DER to minimise their electricity bills.

These accelerating trends are changing Western Power's role in the electricity system. Our role is shifting towards a platform for new technologies, energy sharing and consumer choice whereas, in contrast, our historical role was facilitating the one-way transportation of electricity to end-users.

Figure 2.1 and Figure 2.2 illustrate the distinction between our historical and current/future role in the electricity supply chain.

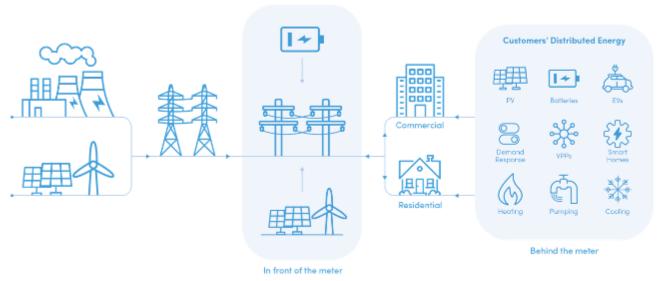


Figure 2.1: Historical electricity supply chain



Source: EPWA, Energy Transformation Strategy.

Figure 2.2: Current and future electricity supply chain



Source: EPWA, Energy Transformation Strategy.

#### 2.2 The drivers of our network costs are changing

Historically, the one-way transportation of electricity to end-users meant that peak demand was the traditional, primary driver of network costs, that is, additional costs were caused by end-users using the network in the same way, at the same time, in the same place.

More recently, the high penetration of solar PV installations has meant that end-users now share local generation by exporting energy into our network for other end-users to consume. When other parts of the network are constrained, end-user's exports can avoid network costs by freeing up network capacity elsewhere, thereby avoiding the need to expand the network.

These network benefits do not arise when end-user exports coincide with periods of low demand. However, because of the broader, non-network benefits of solar PV, we want to encourage end-users to export electricity when we have spare capacity to facilitate those exports.

The challenge inherent in this objective is that solar irradiance is highest during the middle of the day, when demand typically is low.

The resulting imbalance between supply and demand at these times can:



- increase the voltage on the network and lead to voltage management and system security challenges; and/or
- reverse the flow of energy at particular assets (substations), which lead to technical and operational challenges.

Managing these contemporary network challenges increases our costs. In extreme cases, these costs can lead to the curtailment of an end-user's ability to share electricity. This is inefficient if the benefit of sharing local generation exceeds the network costs that is causes. It follows that, as end-users change the way they use our network, so too are the drivers of our costs changing.

End-user decisions that can increase our costs include:

- withdrawing (or importing) electricity from our network when demand is very high (peak demand events); and
- injecting (or exporting) electricity when demand is very low and exports are high (low load events).

Importantly, there are now also a wider range of end-user decisions that can help to lower our costs, such as:

- withdrawing electricity during low load events;
- storing local generation during low load events;
- injecting electricity during peak demand events; and
- using stored energy during peak demand events.

Customers are changing the way they use our network, which presents an opportunity to use tariff to promote decisions by consumers that lower our network costs.

We therefore want to encourage end-users to make decisions that unlock value for them and lower our network costs, which benefits all network users because it reduces our approved revenue target in future years.

Encouraging customers to shift their load to the middle of the day, when solar PV exports are highest and residential demand is lowest, is the principal way that we will achieve this outcome in AA5. We will encourage end-users to shift their load to the middle of the day by including in new tariffs with a super off-peak period with a very low price on imports (see section 3).

#### 2.3 A technology neutral approach

There is at present uncertainty as to how the electricity system, in aggregate, can be structured to best meet our end-users' evolving future needs.

By way of example, a key driver of uncertainty for residential end-users is the development, uptake and operation of new technologies, and the dynamics that will arise between those technologies, such as between solar PV, storage, EVs, home energy management systems and controlled load.

Due to this uncertainty, it is imperative that our reference tariffs reflect our role as a platform for sharing and accessing electricity, while also best meeting end-users' evolving future needs.

This necessitates a technology neutral approach to tariffs, where we signal to end-users the network benefits and costs that arise from their decisions, irrespective of which technology is leading to those network benefits or costs.



This is consistent with the approach adopted in the NEM. The AER has recently stated that:<sup>6</sup>

Future network tariffs should further enhance opportunities for consumers to optimise their own consumption and asset use, while getting the most out of shared network assets financed by all consumers. They should also be technologically neutral, simply signalling the costs (and benefits) arising from serving the consumers' use of the network.

There may be temporary exceptions to the principle of technological neutrality during the early stages of the energy market transformation to support the early adoption of new technologies (such as EVs and fast-charging stations) to mitigate uncertainty around new business models (such as for grid-connected storage) and/or to fast-track the implementation of efficient tariffs for certain end-users.

Therefore, in line with the ERA's final decision on the framework and approach and its Draft Decision, we have developed specific tariffs for grid-connected storage and dedicated electric vehicle fast-chargers.<sup>7</sup>

#### 2.4 Early feedback from our users and end-use customers

We conducted consultation with our users and end-use customers in the preparation of our initial TSS and the feedback we received played a central role in our TSS. Stakeholder engagement was designed in two phases to ensure details of the TSS were first explained and the opportunity for feedback provided, before delving into further detail about the possible applications of the TSS.

Figure 2.3: Consultation with users and end-use customers



<sup>&</sup>lt;sup>7</sup> ERA, Framework and approach for Western Power's fifth access arrangement review – Final decision, 9 August 2021, p 20.



<sup>&</sup>lt;sup>6</sup> AER, Final Decision – AusNet Services, CitiPower, Jemena, Powercor, and United Energy Distribution Determination 2021 to 2026 Attachment 19 Tariff structure statement, April 2021, p 5.

Our users and end-use customers told us the matters that are most important to them and these are outlined in Table 2.1.

Table 2.1: What our users and end-use customers told us and how we responded in our initial TSS

Key theme	What our users and end-use customers told us	How we responded
Efficiency	Users and end-use customers recognise the advantages of more efficient tariffs, particularly as they relate to transitioning to renewable sources of generation, and support efficiency-based tariff reform.	<ul> <li>New tariff structures that encourage solar soaking<sup>8</sup> to facilitate more generation from solar PV.</li> <li>Not introducing export charges.</li> <li>Signalling our future costs to customers through variable charges.</li> </ul>
Transition	It is important to manage the effects of tariff reform on customers in a fair and equitable way.	<ul> <li>We are grandfathering a number of pre-existing time of use reference tariffs by transitioning variable charges upwards to encourage our more efficient time of use reference tariffs or the flat energy tariff.</li> <li>Consistency of fixed charges across all residential reference tariffs.</li> <li>We are transitioning our allocation of costs to reference tariffs slowly, since these changes do not improve efficiency and can have material effects on customer's network bills.</li> <li>More efficient tariffs ensure that customer bills are based on the costs and benefits they provide the network.</li> </ul>
Clarity	Users and end-use customers would like to understand how their tariffs are set, the reasons why they might be changing and how those changes support a transition to renewable energy.	Our TSS provides transparent information to users and end-use customers on how we set tariffs, with more technical information included in appendices for interested parties.

Our adoption of a transition to more efficient tariffs balances the tension that arises between the efficiency-based requirements of pricing principles 7.3G and 7.3H and the requirement to accommodate the reasonable requirements of users and end-use customers in pricing principle 7.3F under the Access Code.<sup>9</sup>

#### 2.5 Feedback on our initial TSS

We received a range of helpful feedback on our initial TSS from the ERA and stakeholders and on the additional information we provided thereafter. We continued our engagement throughout the

<sup>&</sup>lt;sup>9</sup> In other words, compliance with clause 7.3F necessitates a slight departure from clauses 7.3G and 7.3H during our transition to more efficient tariffs. This is consistent with the approach adopted in the NEM.



 $<sup>^{\</sup>rm 8}$  Solar soaking is when consumers use more solar power in their home than they export to the grid.

development of our revised TSS and summarise the key feedback we received, and our responses, in Table 2.2.

Table 2.2: Summary of key feedback on our initial TSS and how we responded

	Feedback	How we have responded in this TSS	Relevant sections of the TSS
Super off-peak demand tariffs	We received feedback to include a demand-based version of our super offpeak energy tariffs for residential and small business customers. <sup>10</sup>	We have developed super off-peak demand tariffs for small business (RT36) and residential (RT37) customers, which sit alongside our super off-peak energy tariffs for those customers.	Overview, section 3.2.
Tariffs for EV charging stations	Customers indicated that the demand charges in the initial EV tariff may render EV charging stations uneconomic during the initial uptake of EVs, when utilisation is low. <sup>11</sup>	We engaged with customers to develop a sliding scale of demand and energy charges that increase with the level of utilisation.  We have adopted a measure of utilisation that was very favourable to EV charging stations.	Overview, section 3.4
Tariffs for Storage services	Some retailers requested the provision of export rewards or no export charges, and that storage services have access to a range of tariff options. <sup>12</sup>	We have structured our distribution storage tariffs to reflect our super offpeak energy structure and minimise export charges outside of the super offpeak period.  We have restructured our transmission-connected storage tariff to reflect the more favourable structure that applies to transmission-connected generators.  Storage customers can enter separate agreements to provide network support.	Overview, section 3.3
Update prices and present bill impact analyses	Customers asked us to update our indicative prices based on the most recent revenue, customer numbers and volume forecasts. <sup>13</sup>	We have derived an updated forecast of the forecast weighted average price change and included a new section with detailed customer bill impacts.	Overview, section 5

<sup>&</sup>lt;sup>13</sup> See also: ERA, *Draft decision on proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27*, September 2022, p 7.



<sup>&</sup>lt;sup>10</sup> See also: ERA, *Draft decision on proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27*, September 2022, p 9.

<sup>&</sup>lt;sup>11</sup> See also: ERA, *Draft decision on proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27*, September 2022, p 10.

<sup>&</sup>lt;sup>12</sup> See also: ERA, *Draft decision on proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27*, September 2022, p 11.

	Feedback	How we have responded in this TSS	Relevant sections of the TSS
Fixed charges	Customers suggested that increases in fixed charges were out of balance with community expectations on equitable access to essential services, eg, through their effects on low energy users. <sup>14</sup>	We have moderated the extent of rebalancing over the AA5 period so that the increase in residential fixed charges is no more than two per cent above the weighted average change in revenue to be recovered from distribution reference services each year.	Overview, section 5
Cost allocation methodology	In its Draft Decision the ERA requested that we provide more detailed information on the application of our cost allocation methodology. <sup>15</sup>	We have provided additional information how we propose to allocate costs by transitioning to more efficient allocations, while managing customer bill impacts.  We also include more information on the indictive results of our methodology.	Technical Summary, section 4

 $<sup>^{15}\,\</sup>text{ERA}, \textit{Draft decision on proposed revisions to the access arrangement for the Western Power Network 2022/23 - 2026/27, September 2022, p~7.}$ 



<sup>&</sup>lt;sup>14</sup> See also: ERA, *Draft decision on proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27*, September 2022, pp 7-9.

# 3. Our tariff structures

The 'structure' of a tariff refers to the design of its charging components. This includes:

- the form of the charging components: fixed charges, variable energy charges, variable demand charges and/or capacity-based charging components; and
- the particular specification of those charging components, such as whether or not different variable charges apply at different times of the day.

We explain the structure of each of our reference tariffs in detail in section 5 of the accompanying technical summary.

Most of our end-users are on a tariff that comprises:

- a fixed use of system charge and a fixed metering charge; and
- one or more variable charges, calculated by reference to a measure of their:
  - energy use, ie, the volume of energy they transport through the network; and/or
  - maximum demand, ie, the maximum rate at which they transport energy through the network.

The concepts of demand and energy have parallels with a household water tap, where the rate of flow through a tap is akin to maximum demand and the volume of water that goes through the tap is akin to energy use.

A tariff structure that incorporates a 'time of use' dimension applies different prices at different times of the day. The principal benefit of time of use tariff structures is that they signal to end-users how the future costs caused by their energy use change throughout the day, which encourages them to shift their use to when it does not increase our network costs.

Importantly, this is typically during the day when renewable sources of energy are more prevalent.

We explain key changes to our tariff structures in the remainder of this section, ie, our:

- four new super-off peak tariffs for residential and small business customers RT34 to RT37;
- three new tariff for distribution and transmission connected storage RT38, RT39 and TRT3; and
- two new tariffs for dedicated EV charging stations connected to the distribution network RT40 and RT41.

#### 3.1 Tariff structures

The following table details which reference tariff is applicable to each of the reference services.

Table 3.1: Reference services and applicable tariffs

Reference service	Reference tariff
A1 – Anytime Energy (Residential) Exit Service	RT1
A2 – Anytime Energy (Business) Exit Service	RT2
A3 – Time of Use Energy (Residential) Exit Service	RT3
A4 – Time of Use Energy (Business) Exit Service	RT4



Reference service	Reference tariff
A5 – High Voltage Metered Demand Exit Service C5 – High Voltage Metered Demand Bi-directional Service	RT5
A6 – Low Voltage Metered Demand Exit Service C6 – Low Voltage Metered Demand Bi-directional Service	RT6
A7 – High Voltage Contract Maximum Demand Exit Service C7 – High Voltage Contract Maximum Demand Bi-directional Service	RT7
A8 – Low Voltage Contract Maximum Demand Exit Service C8 – Low Voltage Contract Maximum Demand Bi-directional Service	RT8
A9 – Streetlighting Exit Service	RT9
A10 – Unmetered Supplies Exit Service	RT10
A11 – Transmission Exit Service	TRT1
B1 – Distribution Entry Service	RT11
B2 – Transmission Entry Service	TRT2
B3 – Entry Service Facilitating a Distributed Generation or Other Non-NetworkSolution	RT23
C1 – Anytime Energy (Residential) Bi-directional Service	RT13
C2 – Anytime Energy (Business) Bi-directional Service	RT14
C3 – Time of Use (Residential) Bi-directional Service	RT15
C4 – Time of Use (Business) Bi-directional Service	RT16
A12 – 3 Part Time of Use Energy (Residential) Exit Service C9 – 3 Part Time of Use Energy (Residential) Bi-directional Service	RT17
A13 – 3 Part Time of Use Energy (Business) Exit Service C10 – 3 Part Time of Use Energy (Business) Bi-directional Service	RT18
A14 – 3 Part Time of Use Demand (Residential) Exit Service C11 – 3 Part Time of Use Demand (Residential) Bi-directional Service	RT19
A15 – 3 Part Time of Use Demand (Business) Exit Service C12 – 3 Part Time of Use Demand (Business) Bi-directional Service	RT20
A16 – Multi Part Time of Use Energy (Residential) Exit Service C13 – Multi Part Time of Use Energy (Residential) Bi-directional Service	RT21
A17 – Multi Part Time of Use Energy (Business) Exit Service C14 – Multi Part Time of Use Energy (Business) Bi-directional Service	RT22
C15 – Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution	RT24



Reference service	Reference tariff
D1 – Supply Abolishment Service	RT25
D2 – Capacity Allocation Service	NA <sup>16</sup>
D6 – Remote Load / Inverter Control Service	RT26
D8 – Remote De-energise Service	RT28
D9 – Remote Re-energise Service	RT29
D10 – Streetlight LED Replacement Service	RT30
D11 – Site Visit to Support Remote Re-energise Service	RT31
D12 – Manual De-energise Service	RT32
D13 – Manual Re-energise Service	RT33
A19 – Super Off-peak Energy (Business) Exit Service C17 – Super Off-peak Energy (Business) Bi-directional Service	RT34
A18 – Super Off-peak Energy (Residential) Exit Service C16 – Super Off-peak Energy (Residential) Exit Service	RT35
A21 – Super Off-peak Demand (Business) Exit Service C19 – Super Off-peak Demand (Business) Bi-directional Service	RT36
A20 – Super Off-peak Demand (Residential) Exit Service C18 – Super Off-peak Demand (Residential) Bi-directional Service	RT37
C22 – Transmission Storage Service	TRT3
C23 – Low Voltage Distribution Storage Service	RT38
C24 – High Voltage Distribution Storage Service	RT39
A22 – Low Voltage Electric Vehicle Charging Exit Service C20 – Low Voltage Electric Vehicle Charging CMD Service	RT40
A23 – High Voltage Electric Vehicle Charging Exit Service C21 – High Voltage Electric Vehicle Charging CMD Service	RT41

# 3.2 New residential and small business tariffs with a super off-peak period

We propose to introduce four new super off-peak tariffs for residential and small business customers using either an exit or bi-directional reference service in AA5.

We present in Table 3.2 the tariff codes for the time of use energy and demand versions of our new super off-peak services for residential and business customers. We explain the structure of these tariffs in detail in section 6 of the technical summary.

<sup>&</sup>lt;sup>16</sup> Applicable Reference Tariff: Any applicable lodgement fees payable in accordance with the Applications and Queuing Policy.



Table 3.2: Super off-peak reference tariffs for residential and business customers

	<b>Business code</b> (Exit and bi-directional service)	Residential code (Exit and bi-directional service)
Time of use energy	RT34	RT35
Demand	RT36	RT37

We summarise the structure of these tariffs in Table 3.3.

Table 3.3: Structure of super off-peak reference tariffs for residential and business customers

	Business and residential energy tariffs (RT34 and RT35)	Business and residential demand tariffs (RT36 and RT37)
Fixed use of system charge	<b>✓</b>	<b>✓</b>
Fixed metering charge	<b>✓</b>	<b>✓</b>
On-peak demand 3pm-9pm daily	N/A	<b>✓</b>
On-peak energy 3pm-9pm daily	<b>✓</b>	<b>✓</b>
Shoulder energy 6am-9am and 9pm-11pm daily	<b>✓</b>	<b>✓</b>
Off-peak energy 11pm-6am daily	<b>✓</b>	<b>✓</b>
Super off-peak energy 9am-3pm daily	<b>✓</b>	<b>✓</b>

Each of these tariffs has a super off-peak period each day between 9am and 3pm with a variable energy price that is significantly lower than our other variable energy charges. This very low price is aimed to encourage end-users to shift load to times when supply significantly exceeds demand on our network.

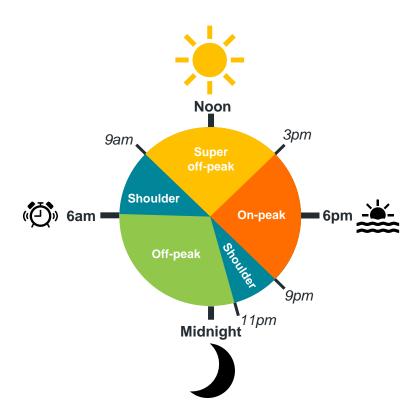
These tariffs are designed to enable a consumer-led, demand-side solution to address the changing drivers of our network costs.

Our view is that, at this stage in the energy market transformation, we should endeavour first to address the future costs caused by low load events through a consumer-led, demand side solution.<sup>17</sup> This solution is preferable in the first instance to the alternative of using some form of export price to discourage supply from small-scale solar PV.

Further, a super off-peak period empowers all end-users to play a role in increasing the use of renewable energy on our network, not just those customers who can afford to make investments in DER.

We illustrate the definition of our charging windows for these tariffs in Figure 3.1.

Figure 3.1: Charging windows for new residential and small business tariffs



The on-peak charging window for current time of use reference tariffs only apply during weekdays, however as seen in Figure 3.2, there has been an increase in the number of very high demand days on weekends in recent years. <sup>18</sup> This indicates that the charging windows intended to signal efficient network use should apply on all days of the week. We have therefore defined the charging windows in our new time of use reference tariffs over both weekdays and weekends.

We define a 'very high demand day' as the top five per cent of maximum daily demand each year at each zone substations.



A 'low load event', or 'minimum system load' is where energy demand is low, but rooftop solar PV continues to push electricity into the network, displacing large synchronous generating units (coal, gas, and hydro) that are required to be on to provide essential system services.

Dubortion of days above the 950%

Percentile for maximum demand d

Figure 3.2: Proportion of very high demand days that occur on the weekend

To provide a broad indication of the relativities between the various prices that comprise super off-peak tariffs, we illustrate indicative prices for our Super Off-peak Energy (Residential) Exits Service tariff in Figure 3.3.

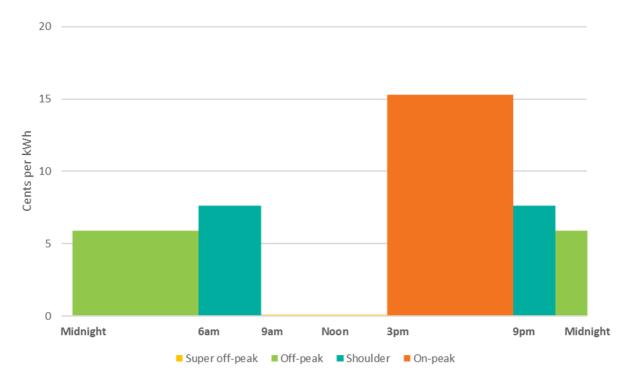


Figure 3.3: Indicative variable prices for super off-peak energy (residential) tariff

One consequence of recovering much less of our costs in the middle of the day – due to a near-zero super off-peak price – is that the off-peak, shoulder, and on-peak prices are slightly higher, when compared to similar tariffs that do not have a super off-peak period.

This is to ensure that we still recover our total efficient cost of providing services to end-users on our super off-peak tariffs. In addition to promoting the equitable treatment of end-users on super off-peak and non-



super off-peak tariffs, it assists in retaining a sufficiently strong price differential between the super off-peak period and other variable prices.<sup>19</sup> It also avoids the need for further increases in fixed charges.

We will continue providing end-users with our existing time of use or demand reference services, with their existing charging windows, if:

- the services were provided at the relevant connection points at the date the AA5 period takes effect;
   and
- those services continue from the AA5 period effective date.

From year two of the AA5 period, the current (or transitional) time of use and demand services will be closed for new customer nominations. Existing end-users on these time of use or demand services will transition over time to the new time of use or demand services and tariffs (as discussed above) as end-users transition to alternative reference services.

We also include super off-peak periods in our new tariffs for storage connected to the distribution network, as discussed below.

#### 3.3 New tariffs for grid-connected storage

Grid-connected storage can play a key role in the energy market transformation, since they can provide a range of services to the wholesale market and assist in avoiding network costs, eg, by:

- exporting during periods of peak demand; and
- importing during periods of peak exports.

We have introduced three new tariffs specifically for gridconnected storage so that they face incentives to operate efficiently on our network, ie:

- a distribution storage service tariffs for low voltage connections – RT38;
- a distribution storage service tariffs for high voltage connections – RT39; and
- a transmission storage service tariff TRT3.

It is important to recognise that efficiency is promoted by a battery (or any end-user) providing the service that is most highly valued by the electricity supply chain, which may not necessarily be network services.

The role of our tariffs is therefore to provide a battery with a price signal that reflects the additional costs imposed on our network at different times, so that it can decide whether the provision of network services or other services will produce the highest net benefit to the electricity market, ie, after accounting for all additional costs.

The potential for grid-connected storage to provide non-network services also means that the battery owners should contribute to the cost of maintaining and operating our network, just as other business endusers do.

<sup>19</sup> Western Power, Feedback on issue paper – Framework and approach for Western Power's fifth access arrangement review, May 2021, p 15.



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Grid-connected storage can provide a

range of services to the market and

assist in avoiding network costs.

Cost reflective tariffs play a key role in

aligning the commercial incentives of the battery with the needs of the

network.

### 3.3.1 Distribution connected storage services

In response to user and end-use customer feedback on our initial TSS, we have agreed to depart from our preferred technology-neutral approach to network tariffs for distribution-connected storage services that we put forward in our initial TSS.

We have therefore developed bespoke tariff structures for our two distribution-connected storage services, ie:

- a distribution storage service tariffs for low voltage connections RT38; and
- a distribution storage service tariffs for high voltage connections RT39.

We summarise the structure of these tariffs in Table 3.4.



Table 3.4: Structure of distribution storage service tariffs for low and high voltage customers

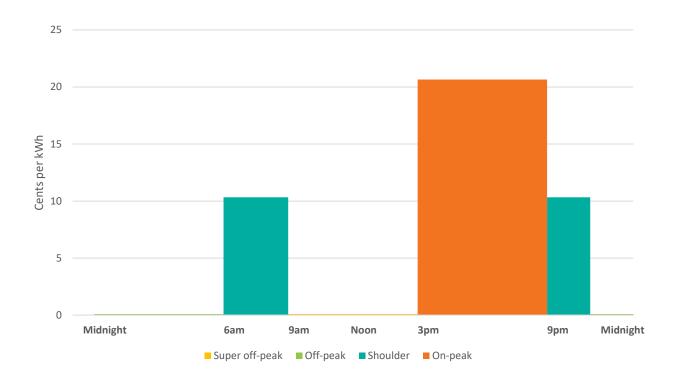
	Low voltage distribution storage service tariff (RT38)	High voltage distribution storage service tariff (RT39)
Fixed use of system charge	Increases with the size of installed storage capacity	Increases with the size of installed storage capacity
Fixed metering charge	<b>✓</b>	<b>✓</b>
On-peak demand 3pm-9pm daily	N/A	N/A
On-peak energy 3pm-9pm daily	<b>✓</b>	<b>✓</b>
Shoulder energy 6am-9am and 9pm-11pm daily	<b>✓</b>	<b>✓</b>
Off-peak energy 11pm-6am daily	<b>✓</b>	<b>✓</b>
Super off-peak energy 9am-3pm daily	<b>✓</b>	<b>✓</b>
Solar soak export charge 9am-3pm daily	With a lower price applied to the first 3kWh and a higher price for exports above 3kWh.	With a lower price applied to the first 3kWh and a higher price for exports above 3kWh.
Off-peak export charge 12am-9am and 3pm-12am daily	Near zero	Near zero

Each our two distribution connected storage tariffs have the same charging windows that are applied to our super off-peak tariffs. Specifically, our distribution-connected battery tariffs have the same structure as our super off-peak time of use energy tariffs.

To provide an indication as to the relativities between the variable import prices that apply in these charging windows, we illustrate indicative prices for our low voltage distribution storage service tariff (RT38) in Figure 3.4.

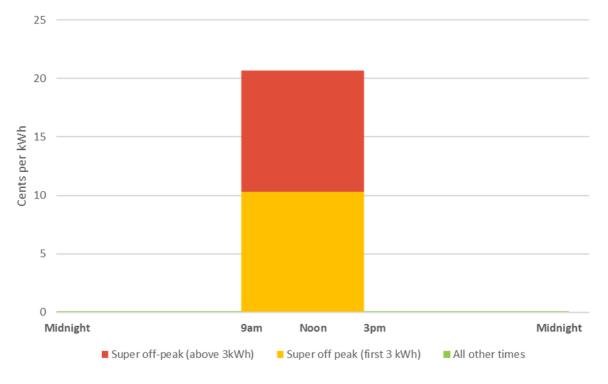


Figure 3.4: Indicative variable import prices for low voltage storage tariff



To provide a broad indication as to the magnitude of the export prices we will apply in these charging windows, we illustrate indicative export prices for our low voltage distribution storage service tariff (RT38) below.

Figure 3.5: Indicative export prices for low voltage storage tariff



Note: For the avoidance of doubt, the export price that applies to all exports above 3kWh in this indicative example is just above 20 cents per kWh, ie, not the difference between that amount and 10 cents per kWh (which applies to the first 3kWh of exports).



We apply the same approach for the high voltage distribution connected storage tariff.

We have not included default rewards for distribution connected storage services that export energy during the evening peak, as requested by Synergy. This is because of the very low level of avoidable costs in the evening peak period, as reflected in our very low estimate of long run marginal cost (**LRMC**) - see section 4.1. The conversion of our import LRMC into a peak export reward would result in a reward of only \$0.01 per kWh for exports during the on-peak period.<sup>20</sup>

In our view the provision of an export reward of this magnitude is unlikely to precipitate a change in a distribution-connected battery's behaviour, which is the objective of any export reward, and will outweigh the transaction costs of implementing such an arrangement.

In our opinion, a significantly more efficient outcome is for distribution connected storage to enter a separate network support arrangement with Western Power where they connect to a particular part of our distribution network where material costs that can be avoided by exporting at a certain time of the day. Network support arrangements will also enable us to provide more-efficient rewards, ie, that reflect the particular level and timing of benefits from additional exports in a given part of our network.

A detailed description of the structure of our two distribution-connected storage service tariffs is contained in section 6 of the technical summary that accompanies this TSS overview.

#### 3.3.2 Transmission connected storage services

Following feedback on our initial TSS, we developed and engaged with stakeholders on a revised tariff structure for transmission connected storage that is similar to the tariff applying to transmission-connected generators (rather than transmission-connected loads).

Our tariff for transmission-connected storage therefore comprises multiple, location specific and cost-reflective prices, and is individually calculated for each connection.

It consists of:

- a fixed, daily charge for use of our network that reflects the costs of providing connection assets;
- a fixed, daily metering charge per meter;
- variable charges that apply to the declared sent out capacity (DSOC) of the individual connection,
   which reflects their use of system and use of control system services; and
- excess network usage charge (ENUC) calculated in accordance with our ENUC principles for transmission connections.

This tariff structure is distinct from that applying to distribution-connected storage because of the fundamentally different circumstances that apply on our transmission network, ie:

- low load events do not occur on our transmission-network, such that additional imports in the middle of the day do not avoid future network costs, which negates the need for a solar soak period; and
- transmission-connected generators are connected upstream from the distribution assets that can become constrained during times of peak demand.

The absence of the various charging windows that apply to distribution-connected storage also provide more flexibility for transmission-connected storage providers to enter contracts with AEMO to provide essential system services and to respond freely to those wholesale market signals.

<sup>&</sup>lt;sup>20</sup> Calculated equal to \$22.7 per kW per annum divided by 2,190, being the number of hours in the peak period each year.



Against this backdrop, Western Power encourages transmission-connected storage service providers to provide network support services in accordance with the Wholesale Electricity Market (WEM) Rules for any non co-optimised essential system services (NCESS).

Western Power also has obligations under the WEM Rules with respect to the NCESS framework, where either the Transmission Network Plan or Network Opportunities Map identify opportunities for proponents to offer non-network solutions. Where a non-network solution results in the least cost solution to address a network need under the NCESS, Western Power can enter into a Network Support Services contract with the non-network solution provider. Storage proponents are encouraged to follow these annual publications (around 1 October each year) and any subsequent EOI processes for specific opportunities to address network constraints and/or needs.

# Consistency with approach in the National Electricity Market

Our approach for transmission-connected storage is consistent with the Australian Energy Market Commission's (**AEMC**) final decision on integrating storage in the NEM, which did not exempt transmission-connected storage from transmission charges. The AEMC concluded that:<sup>21</sup>

...a change to the current framework that would exempt storage would not promote the NEO [National Electricity Objective] as it would not send storage proponents and operators price signals that reflect:

- the efficient cost of providing network services; and
- the benefit storage may have on the network (where a cost-reflective charge may result in storage being paid for the benefits they provide at certain times).

One key distinction is that in the NEM transmission-connected customers can select whether to use:

- a prescribed transmission service where a price is set in accordance with the transmission network service provider's (TNSP) approved pricing methodology – which is akin to our reference tariff for transmission-connected storage; or
- a negotiated transmission service, where a customer elects to receive a different service-level and negotiates prices with the transmission network subject to certain negotiation principles the outworking of which is like providing network support to Western Power.

Our approach to setting the tariff for transmission-connected storage devices is consistent with the Code and results in a tariff that is consistent with the transmission negotiation principles in the NER, which include that the price:<sup>22</sup>

- ...should be based on the costs incurred in providing that service...
- ...must be the same for all Transmission Network Users unless there is a material difference in the costs of providing the negotiated transmission service...
- ...should be at least equal to the avoided cost of providing it but no more than the cost of providing it on a stand-alone basis...

<sup>&</sup>lt;sup>22</sup> NER, schedule 5.11, Negotiating principles for negotiated transmission services (clause 5.2A.6).



 $<sup>^{21}\,</sup>AEMC, \textit{Rule Determination National Electricity Amendment (Integrating energy storge systems into the NEM))}\,\textit{Rule 2021}, \textit{December 2021}, \textit{p 51-52}.$ 

#### 3.4 New tariffs for dedicated electric vehicle charging stations

In line with the ERA's final decision on the framework and approach<sup>23</sup> and its Draft Decision, we are also including two new, technology specific tariffs for dedicated EV charging stations that are intended to support the public charging of EVs in Western Australia. These include:

- a tariff for dedicated EV charging stations connected to the low voltage network RT40; and
- a tariff for dedicated EV charging stations connected to the high voltage network RT41.

#### Sliding scale of variable charges

A key consideration in the design of a tariff applicable to dedicated public EV charging stations is to strike a balance between:

- their potential to cause significant future network costs, due to their very high demand, which has the potential to be exacerbated in a small, isolated electricity network like the SWIS, in comparison to a large integrated electricity network like the NEM; and
- their low utilisation during the initial uptake of EVs, which can inhibit their ability to pay for the additional costs they impose on the network, while also making a fair contribution to the cost of our existing network.

Our initial TSS proposed tariff structures for dedicated EV charging stations that were consistent with our existing metered demand tariffs (RT5 and RT6). We received feedback from stakeholders that those tariffs would make dedicated EV charging stations uneconomic at this stage in the uptake of EVs, namely due to the costs imposed by the demand charges contained therein.

Specifically, stakeholders emphasised that demand charges applied to the highest level of demand measured in the previous 12 months, combined with very high but infrequent load at EV charging stations, gave rise to network charges that were disproportionate to the revenue they derive at this early stage in the uptake of EVs, thereby potentially introducing a disincentive to early adopters of the technology.

In response, we developed and engaged with stakeholders on a revised EV tariff with a sliding scale of variable charges, which increase with the extent to which EV charging stations draw on the network (their network use).

Western Power's view is that a sliding scale of demand charges strikes an appropriate balance between:

- supporting EV charging stations during the initial uptake of EVs, when their utilisation is low; and
- ensuring that EV charging stations make a fair contribution to the recovery of our costs as their utilisation increases, ie, a contribution that is commensurate with that of other end-users that impose similar costs on our network.

During development of the sliding scale to apply to the EV tariff, some stakeholders expressed concern about the early introduction of demand charges as they had the potential to greatly increase network costs while EV numbers and the resultant network draw were low. Some stakeholders suggested that rather than a stepped increase in the demand charges above a threshold, a more gradual increase in these charges for every one or two percentage point increase in the utilisation would result in less risk for retailers and a more equitable outcome. While Western Power understands these concerns, we have not implemented these changes for the following reasons:

<sup>&</sup>lt;sup>23</sup> ERA, Framework and approach for Western Power's fifth access arrangement review – Final decision, 9 August 2021, p 20.



- the intent of the tariff structure is to signal the efficient utilisation of the network, with the demand charges only to apply during the on peak period after a baseline level of network utilisation has been achieved;
- our proposal strikes an appropriate balance that allows retailers the flexibility to manage their exposure to variations in end user consumption without an unnecessarily burdensome tariff structure;
- the added complexity and cost required for both Western Power and retailers' billing systems to
  accommodate tariff structures with multiple charging parameters and prices would outweigh the
  benefits particularly given the expected forecast demand for these services is expected to be low
  over the AA5 period.

Further, Western Power has designed the measure of network use to provide strong support to EV charging stations during this access period, ie, the calculation of network use by an EV charging site:

- excludes the twelve 30-minute intervals between 9am and 3pm (being the solar soak period in other tariffs); and
- excludes the first 10kW of demand in any 30-minute interval.

It follows that, for the purpose of selecting the applicable sliding demand charge, an EV charging station's draw on the network is measured as:

30 minute intervals with demand above 10kW outside of 9am to 3pm total 30-minute intervals in a billing period

To further incentivise the deployment of EV charging infrastructure over AA5, Western Power proposes to exempt users from paying for capacity charges when their use of the network is low.

Capacity charges will only be incurred after a charging sites' use of the network exceeds 15% (with reference to the above calculation). For context, this would equate to exceeding 7.2 intervals (30-minute periods) of charging (equivalent to an average of 6 cars per day) outside the super off-peak charging window (9am to 3pm).

Western Power is forecasting a total of 50 dedicated EV charging stations over the AA5 period. In the context of publicly available EV charging, Western Power is also aware of announcements from traditional fuel distributors, such as Ampol and BP, on the co-location of EV charging infrastructure with their traditional petrol fuelling stations.<sup>24</sup>

Western Power considers the dedicated EV charging tariff developed and introduced in AA5 needs to be commensurate with the expected demand for this service, while remaining cognisant of the potential future network costs these facilities can impose with high coincident demand during the network peak period. Western Power will continue to monitor the uptake of EVs and the use the network by dedicated EV charging stations over AA5 and beyond and will revise the tariff structure appropriately when EV charging stations no longer require the same level of support, ie, because their utilisation is much higher.

#### Tariff structure

Both our dedicated EV charging station tariffs comprise:

• a fixed, daily charge for access to our network that reflects the costs of providing connection assets;

Western Power expects these existing end-users are likely to accommodate any increased electricity consumption within the envelope of their existing tariffs, or to instead increase their existing maximum metered demand and/or contracted maximum demand – rather than using Western Power's dedicated EV tariff.



- a fixed, daily metering charge per meter;
- a sliding scale of demand charges that increase with utilisation, and remain at zero until 15 per cent utilisation<sup>25</sup>;
- a sliding scale of off-peak and on-peak energy charges that decrease with utilisation.

By way of context to this sliding scale of charges, we illustrate indicative variable charges for our low voltage EV tariff in Figure 3.6 below. We note that the sliding scale of variable charges are constant from a utilisation measure above 30 per cent.

Western Power also proposes to introduce EV tariffs with a contract maximum demand reference tariff for those sites with high network use that require access to this type of tariff.

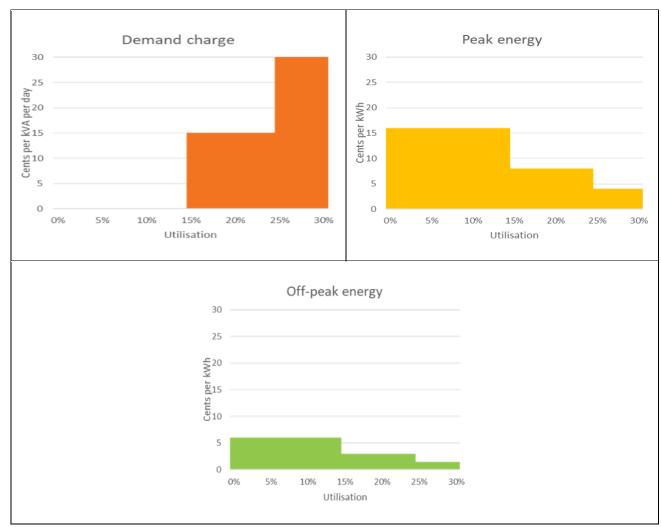


Figure 3.6: Indicative variable prices for low voltage EV tariff

We describe the structure of our tariffs for dedicated EV fast-charging stations in more detail in section 6 of the technical summary that accompanies this TSS overview.

<sup>&</sup>lt;sup>25</sup> We will continually review and revise this utilisation threshold over time as dedicated EV charging stations start connecting to our network.



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### 4. How do we set prices?

The amount of revenue we can recover from our end-users is capped by the ERA at the start of our AA5 period. The prices we set through our tariffs are designed to recover that amount of revenue and approved by the ERA annually.

Setting prices is important for our end-users because it is how we:

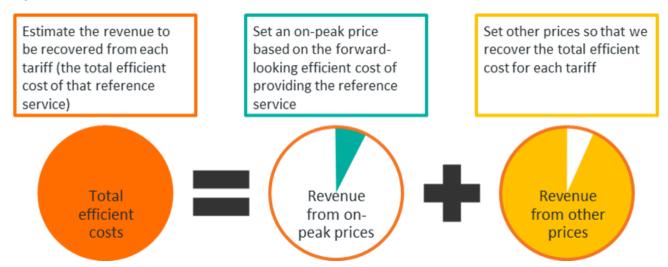
- promote the efficient use of our network and the transition to renewable sources of generation, which benefits all our end-users; and
- determine the share of our efficient costs to be recovered from different end-users.

At a very high level, our approach involves:

- setting a price for each reference tariff typically the on-peak price<sup>26</sup> based on the future network
  costs that can be avoided (or caused) by changing their use of our network during the on-peak period;
  and
- setting the remaining prices for a reference tariff eg, fixed and other variable charges so that we can recover the total efficient cost of providing the applicable reference service.

We illustrate this framework and the relationship between these steps, in Figure 4.1.

Figure 4.1: Illustration of new tariff framework



We describe our application of this framework below, ie:

- how we set prices based on forward looking efficient costs; and
- then set other prices so that, in aggregate, we recover the total efficient cost of providing each reference service.

<sup>&</sup>lt;sup>26</sup> Outside of periods of very high demand, additional demand typically does not cause an increase in our future costs, because it can be served by existing, excess capacity.



#### 4.1 Prices based on forward-looking efficient cost

It is well accepted that economic efficiency is promoted by prices based on the *future costs* that can be caused or avoided by an end-user decision. For instance, a key figure in the history of efficient pricing, Alfred E. Kahn, explained that efficiency:<sup>27</sup>

...looks to the future, not to the past: it is only future costs for which additional production can be causally responsible; it is only future costs that can be saved if that production is not undertaken.

It is for this reason that the overwhelming focus of recent tariff reform in Australia has been on signalling to end-users the effect of their decisions on future network costs, rather than on the allocation of the historical, sunk cost of the existing network.

This inherent focus on future costs is reflected in the efficiency-based pricing objective in the Code and the more specific requirement that:<sup>28</sup>

Each reference tariff must be based on the forward-looking efficient costs of providing the reference service to which it relates to the customers [end-users] currently on that reference tariff.

The Code also specifies that the calculation of these forward-looking efficient costs must have regard to the additional costs of meeting demand at times of greatest utilisation of the relevant part of our network, and how long run marginal costs (LRMC) may vary across our network.

Prices based on future costs promote economic efficiency because they:

- encourage end-users to use our network when it does not cause additional future costs;
- ensure that end-users that do use the network when it imposes future costs are willing to pay for those costs;
- enable end-users to decide whether an installation on their premises (eg, solar PV, storage or more efficient appliances) or a change in their behaviour can better meet their needs (or other end-users' needs) at a lower cost; and
- indicate to Western Power where end-users value investments in additional network capacity, ie, where there is not a lower cost non-network solution.

LRMC can vary according to:

- the time of day;
- the network levels used to provide services;
- whether network use increases or decreases; and
- the geographic area within the network.

We estimated the forward-looking efficient cost (or future cost) of providing each reference service by grouping together those reference services for which the future cost is likely to be very similar. We estimate that the forward-looking efficient cost during the on-peak period is:

- \$22.70 per kW for residential customers connected to the low voltage network;
- \$23.65 per kW for business customers connected to the low voltage network; and
- \$24.70 per kW for all customers connected to the high voltage network.

We explain in detail how we derived these estimates and converted them into efficient price signals (typically on-peak prices) in section 2 of the technical summary that accompanies this TSS overview.

<sup>&</sup>lt;sup>28</sup> Electricity Networks Access Code , clause 7.3G.



<sup>&</sup>lt;sup>27</sup> Kahn, A, The economics of regulation: Principles and institutions, Massachusetts Institute of Technology, volume one, p 98.

Our relatively low estimates of forward-looking efficient cost reflect the availability of excess capacity on our network and, as a result, the limited future costs required to meet expected demand. There has also been a general decline in forward-looking efficient costs in the NEM in recent years, as end-users change the way they use the network and demand growth slows.

Further, our similar estimates of LRMC on the high and low voltage network reflect that the majority of growth-related expenditure relates to the high voltage network, with the consequence that an incremental unit of demand on either the high or low voltage network results in a similar level of future costs.

#### 4.1.1 We can improve efficiency by reducing on-peak prices

The key insight from our estimates of future costs is that the efficient on-peak prices – which are derived from our estimates of future costs – are well below our existing on-peak prices.

We can therefore increase efficiency by reducing our on-peak prices.

This is because it is efficient for an end-user to use our network when the benefit they derive outweighs the additional costs that they cause.<sup>29</sup> If an end-user is willing to pay the efficient on-peak price, then the benefit they derive must be higher than the additional costs they cause.

If peak prices are too high, then we are discouraging end-users from using the network even when the benefits outweigh the costs – which is not an efficient outcome.

However, to ensure that we still recover the total efficient cost of providing a reference service, a strong reduction in peak prices would require offsetting:

- increases in non-peak variable prices, which would:
  - reduce the differential between peak and non-peak prices and therefore weaken the incentive for end-users to shift load out of the peak period; and
  - shift non-peak prices further from their efficient level, which is at or very close to zero; and/or
- an increase in the fixed price, which can have adverse effects on certain end-users.

We are therefore transitioning our peak prices to the efficient level through time, which also assists in managing the potential effects on our end-users, consistent with the feedback we received from users and end-use customers.

Further, estimates of future costs vary considerably through time, depending on current expectations as to future demand and the future cost of meeting that demand. This means that the periodic resetting of prices at efficient levels, with no transition, can lead to price shocks for end-users. A transition to efficient on-peak prices is consistent with the approach that is generally applied in the NEM. This is particularly relevant in the current, dynamic state of the electricity market, and it also reflects our end-users' preferences for price stability.

### 4.2 How do we set other prices in a reference tariff?

Providing electricity network services requires a significant, upfront cost to build the network.

 $<sup>^{\</sup>rm 29}$  Provided there is no cheaper alternative option that can better meet their needs .



Cost of building and maintaining the network

The cost of building and maintaining our network, as it stands today, is much greater than the future cost required to provide new reference services, facilitate growth, and replace existing assets at the end of their economic life.

An important consequence is that prices based on future costs – which promote efficiency but therefore reflect only future costs – are not sufficient to recover the total efficient cost of providing reference services using our existing network.

We therefore need to include other prices (not based on future costs) in each tariff to recover in aggregate our total efficient costs, as approved by the ERA.

#### 4.2.1 Our overarching framework

When combined with prices based on future costs (typically on-peak prices), these other prices should:

- recover the total efficient cost of providing the applicable reference service; and
- across all reference services, recover our revenue target approved by the ERA.

These outcomes are also a requirement of the Code.<sup>30</sup>

We achieve these outcomes by:

- allocating our efficient costs (target revenue approved by the ERA) across our reference services, while improving efficiency and managing bill impacts; and
- setting the price of fixed and other variable charges so that we expect to recover the total efficient cost of each reference service.

We explain our approach to addressing these two essential steps below.

#### 4.2.2 How do we calculate the total efficient cost of providing each reference service?

We explain the methodology we apply to allocate target revenue to each distribution reference service in further detail in sections 3 and 4 of the technical summary that accompanies this TSS overview. We include below a high-level description of how we calculate the total efficient cost of providing each reference service and set prices, which involves:

- 1. Determining an upper and lower bound on the efficient cost of providing each reference service, ie, the stand alone and avoidable cost.
- 2. Applying our cost allocation methodology to allocate costs to each reference service, subject to those bounds.
- 3. Determining the price level for each charge in a reference tariff to promote the efficient use of our network and recover the costs allocated to that reference service.
- 4. Considering the need for transitional arrangements to manage the effects of improving the efficiency of our tariffs on our end users' network bills.

### An upper and lower bound

Economic principles and the Code<sup>31</sup> require that the total efficient cost of providing each reference service – being the level of revenue recovered from each reference service – is:

<sup>&</sup>lt;sup>31</sup> Electricity Networks Access Code, clause 7.3D.



<sup>&</sup>lt;sup>30</sup> Electricity Networks Access Code, clause 7.3G and 7.3H.

- no more than the efficient cost of providing that service alone (the stand-alone cost) if those endusers are charged more than the stand-alone cost, then it would be hypothetically possible for them to pay an alternative provider to provide the service at a lower cost; and
- no less than the additional costs directly incurred to provide the service (the avoidable cost) if those end-users were charged less than the avoidable cost then the business would not be recovering the costs incurred to supply the end-users, and the shortfall in revenue would have to be recovered from other end-users.

For more detail, we explain how we estimate stand-alone and avoidable cost in section 5 of the technical summary that accompanies this TSS overview. Having established these bounds for each tariff, we determine the allocation between those bounds based on the methodology we describe below.

#### Our cost allocation methodology

Although economic principles establish this upper and lower bound on the level of revenue to be recovered from each reference tariff (the total efficient cost), they do not identify a unique, efficient allocation for each reference tariff.

This is reflected in the significantly different approaches adopted by networks in the NEM. For example, the approved approach of the electricity network provider in the Australian Capital Territory, Evoenergy, is based on the allocation of costs in the previous year,<sup>32</sup> whereas Ausgrid (a network service provider in New South Wales) approved approach is:<sup>33</sup>

...based on their relative contribution to maximum demand, a key driver of our efficient costs.

These allocation methodologies have not been an area of focus for tariff reform in the NEM, reflecting that the promotion of economic efficiency relies on signalling future costs to end-users.

Our overarching approach to allocating costs is:

- to calculate the strictly efficient cost of providing each reference service to end-users based on the value of the assets they use and the extent to which they use those assets, relative to customers using other reference services; and
- to then transition the revenue recovered from each reference tariff towards that efficient reference point (or target) over time, while managing end-user bill impacts.

We consider these foundational principles to be a fair and reasonable basis for the allocation of our efficient costs.

#### Efficient reference point

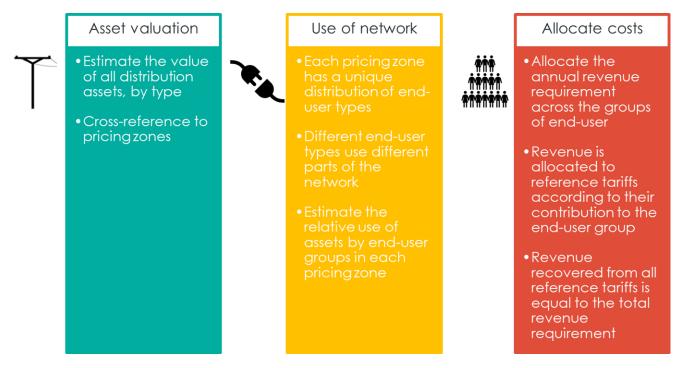
We describe in detail the calculation of the efficient reference point, or target, for each reference tariff in section 3 of the technical summary that accompanies this TSS overview and summarise its key elements in Figure 4.2 below.

<sup>&</sup>lt;sup>33</sup> Ausgrid, *Revised Proposal Attachment 10.01 Tariff Structure Statement*, January 2019, p 69.



<sup>&</sup>lt;sup>32</sup> Evoenergy, Attachment 1: Revised Proposed Tariff Structure Statement, November 2018, p 35.

Figure 4.2: Overview of calculation of efficient cost target

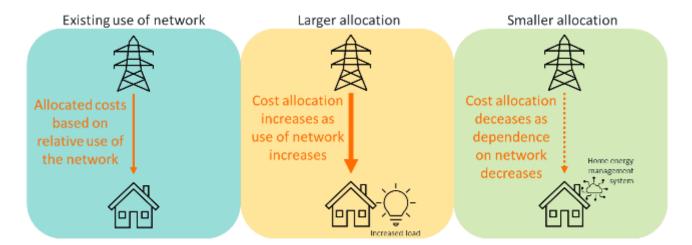


Importantly, our methodology ensures that our efficient reference point, or target, reflects the changing way that end-users use our network. For example, if end-users using a particular reference service change their behaviour to reduce their maximum demand (eg, by shifting their load or investing in energy efficient appliances and DER), this will in turn be reflected in a lower efficient cost target.

Similarly, if in the future managing residential exports leads to investments in new assets, then there will be a commensurate increase in the share of our costs allocated to residential end-users.

Indicative examples of how the calculation of the efficient reference point for each reference tariff may change in respond to shifts in end-user behaviour are presented in Figure 4.3.

Figure 4.3: Network use is a key driver of our cost allocation methodology



#### A transition to manage bill impacts and data improvements

The allocation of our revenue target to each reference tariff is a key driver of end-users' network bills. For this reason, we carefully consider the extent to which there is any difference between the level of revenue we currently recover from each reference tariff and the efficient target for that reference tariff.

Such differences may arise from:

- the more prescriptive application of a cost allocation methodology required by the new pricing framework in the Code;
- using updated asset valuation data in the calculation of the efficient cost target; and/or
- historical differences between the current allocation of costs and the efficient cost target.

Feedback from stakeholders emphasised the need to manage the effects of tariff changes on our end-users.

In our view, end-users' preferences would best be met by transitioning to the efficient allocation of costs through time. This will avoid price shocks and provide end-users and stakeholders an opportunity to prepare for arriving at the efficient cost allocation in the future.

A transition is particularly appropriate in the context where these changes have no incremental effect on efficiency. It follows that there are limited benefits to weigh against the potential effects on our end-users.

Continual improvements in the quality of our asset data are key to this transition, since updated estimates of the efficient allocation in the future may well lead to a different allocation.

In light of these considerations, we will gradually transition the level of revenue recovered from each reference tariff to the total efficient cost of providing the applicable reference tariff, while managing enduser bill impacts.

The forecast weighted average price change in section 5.4 reflects the result of our allocation of target revenue to each reference tariff.

#### 4.2.3 How do we set the remaining prices?

Having determined the total level of revenue to be recovered from each reference tariff, the last step in the price-setting process is to set other prices to recover the difference between:

- the revenue that we expect to recover from prices based on future costs (typically on-peak prices);<sup>34</sup>
   and
- the total efficient cost of providing that reference service (the total revenue to be recovered from that tariff).

The result of this process is that the combination of these other prices and our prices based on future costs enable us to recover the total efficient cost of providing the relevant reference service.

<sup>&</sup>lt;sup>34</sup> By way of reference only, we note that the difference between the total level of revenue to be recovered from a reference tariff and the level of revenue from the LRMC-based prices is typically referred to as the 'residual cost' in the NEM.



#### Rebalancing away from non-LRMC variable charges

The Code requires us to achieve this outcome in a way that minimises distortions to the price signals for efficient use that arise from our LRMC-based prices.<sup>35</sup>

It is well accepted in economics that distortions to efficient prices signals are minimised by prices that are independent from use of the network, ie, fixed charges.<sup>36</sup>

We are reducing variable charges to improve utilisation when there is excess capacity and to reduce distortions to our efficient price signals.

Upon the introduction of an equivalent requirement to minimise distortions in the NER, the AEMC observed that:<sup>37</sup>

The AER considered that mark-ups above marginal cost should be assigned to fixed charges as this would result in the least distortion to efficient patterns of consumption as consumers are least responsive to changes in fixed charges.

...The AER noted that the firm requirement of the underlying principle of minimising distortions combined with discretion for DNSPs to apply it in the way that best suits their network and consumer characteristics, achieves the appropriate balance of flexibility and prescription

There is also a further, related requirement in the Code that, unless another approach better meets the Code objective:<sup>38</sup>

...any amount in excess of the incremental cost of service provision should be recovered by tariff components that do not vary with usage or demand.

Under the pricing framework in the Code,<sup>39</sup> any increase in fixed charges would be offset by a commensurate reduction in variable charges, such that the total level of revenue we expect to recover from each reference tariff remains unchanged.

The principal benefit of a rebalancing away from non-LRMC based variable charges is that it:

- encourages end-users to shift their load outside of the on-peak period, when there is excess capacity available and additional demand causes no future costs; and
- encourages end-users to make efficient investments that reduce their demand during the on-peak period, rather than at other times when no network costs are avoided, eg, to couple solar PV with storage or participate in community battery initiatives.

On the other hand, rebalancing away from variable charges generally:

- has disproportionate, adverse effects on low energy users, since they benefit relatively less from the reduction in variable charges;
- inhibits the ability of end-users to control the network component of their bills; and
- alters the economics of past investments in solar PV installations, although this is already the case with the super off-peak period.

<sup>&</sup>lt;sup>39</sup> Electricity Networks Access Code, clause 7.6.



<sup>&</sup>lt;sup>35</sup> Electricity Networks Access Code, clause 7.3H(c).

<sup>&</sup>lt;sup>36</sup> Ramsey (1927) first solved the problem of maximising welfare subject to a profitability constraint in the context of optimal taxation, and the result was later applied to natural monopolies by Baumol and Bradford (1970), as well as in an earlier paper (in French) by Boiteux (1956). See: Ramsey, F., 1927, A Contribution to the Theory of Taxation, Economic Journal, Vol 37 No. 145, page 47 to 61; Baumol, W. and D. Bradford. 1970, Optimal departures from marginal cost pricing, American Economic Review, 60, 265-283.

<sup>&</sup>lt;sup>37</sup> AEMC, Rule Determination | National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014, 27 November 2014, p 154.

<sup>&</sup>lt;sup>38</sup> Electricity Networks Access Code, clause 7.6(b).

Since we are also required to accommodate the reasonable requirements, or preferences, of users and end-use customers, <sup>40</sup> we propose to apply a gradual transition away from variable charges. We provide further information on this transition in section 5.3.

We consider this approach strikes the best balance between the efficiency-based requirements of the Code and our end-users' preferences.

<sup>&</sup>lt;sup>40</sup> Electricity Networks Access Code, clause 7.3F.



# 5. Price forecast and bill impacts over AA5

In this section we provide information on the effects of our tariffs over AA5, including:

- an explanation of how holding prices constant in the first year of AA5 (FY23) contributes to a price change in year two;
- a forecast of the weighted average annual price change for each tariff over AA5, consistent with clause 7.1D of the Code; and
- additional information as to how the split between fixed and variable charges is likely to change over AA5 for each reference tariff.

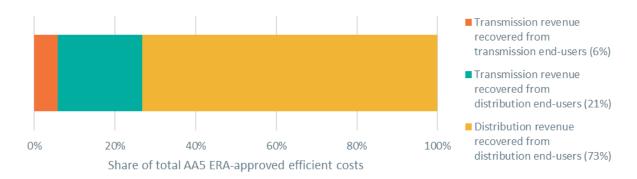
#### 5.1 Combined distribution and transmission prices in AA5

Although our network comprises an electricity transmission and distribution network, we publish bundled (combined transmission and distribution) prices for our distribution connected end-users in AA5.<sup>41</sup>

Since the vast majority of our customers are connected to our distribution network, we recover approximately 94 per cent of our efficient cost (or revenue), as approved by the ERA, from distribution customers.

The cost recovered from distribution end-users comprises the cost of our distribution network and a share of the cost of our transmission network, which is also required to serve distribution connected end-users. The remaining cost of our transmission network is recovered from end-users that use our transmission network only. Figure 5.1 presents a break-down of the share of distribution and transmission revenue recovered from different end-users over AA5.

Figure 5.1: Share of total revenue recovered over AA5 by reference service



#### 5.2 Our transition path for prices in AA5

Changes in the prices that comprise each tariff are generally driven by:

- the total efficient cost of operating our network (our target revenue), as approved by the ERA;
- our forecast of connection numbers, energy and demand; and
- improving the efficiency of our tariffs, which we propose to implement gradually to manage the effects on end-users.

<sup>&</sup>lt;sup>41</sup> ERA, Framework and approach for Western Power's fifth access arrangement review – Final decision, 9 August 2021, p 38.



To manage the potential effects on end-users of moving to more efficient tariffs, we endeavour to limit the increase in the average price of a tariff to no more than two per cent above the change that is required to recover our ERA-approved efficient costs (or revenue target).

This target cap on the increase to the average price of tariffs will limit the extent to which we can reduce the average price of tariffs that need to reduce in price. It is important to highlight that the target maximum caps above would apply only to tariffs that need to increase in price relative to other tariffs, and that not all tariffs that need to increase in price will increase up to the cap.

As published in the ERA's final decision on the framework and approach, <sup>42</sup> Western Power's current price list will apply until the revised access arrangement comes into effect, hence the methodology in our TSS will only be applied in the second year of AA5 (FY24).

Due to holding prices constant in year one of AA5 is that we are less likely to recover our revenue target in that year. The price control formula under our access arrangement allows us to recover a revenue adjustment (being the difference between our target revenue and the actual revenue recovered in the first year of AA5 (FY23)) in the third pricing year of AA5 (FY25).

Since our ERA-approved efficient costs in AA5 have increased in comparison to AA4<sup>43</sup> and we cannot adjust prices in year one of AA5 there is more upwards pressure on prices in years two to five of AA5 to recover these increased ERA-approved efficient costs. In other words, the absence of any price change in year one necessitates a relatively bigger price change than would otherwise have been the case in subsequent years.

We have dedicated significant effort to smoothing the resulting effects on our customers by spreading price changes over multiple years.

In Figure 5.2 we illustrate that over AA5 the average annual change in revenue per residential end-user is equal to only 0.5 per cent per annum in nominal terms, which represents a material expected decrease in real terms.

<sup>&</sup>lt;sup>43</sup> This is due to a range of factors, including (but not limited to) an increased cost of capital and inflation expectation.



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<sup>&</sup>lt;sup>42</sup> ERA, Framework and approach for Western Power's fifth access arrangement review – Final decision, 9 August 2021, p 38.

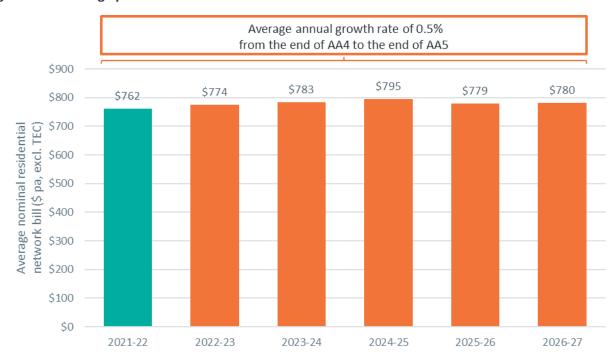


Figure 5.2: Average price outcomes for residential end-users over AA5

#### 5.3 Allocation of revenue recovered from fixed charges and variable charges

Our price setting process consists of two simple, distinct stages, ie:

- allocate our ERA-approved efficient costs (or revenue target) into an amount to be recovered from each reference tariff that:
  - recovers our aggregate revenue target each year;
  - follows our proposed price path, as described in section 5.2; and
  - improves the efficiency of our cost allocation between reference tariffs, where possible; and
- set individual charging components of each reference tariff to recover this allocated revenue, based on our expected connection numbers, energy and demand forecasts.

Under this approach, the total revenue we intend to recover from each reference tariff is independent from the structure of the tariff itself.

The allocation of our ERA-approved revenue target to individual reference tariffs has been undertaken with end-user equity front of mind in order to minimise potential customer impacts.

In response to the ERA's Draft Decision and stakeholder feedback we have moderated the extent of rebalancing towards fixed charges that we will implement in AA5. This assists in managing bill impacts for relatively smaller energy consumers. More detailed consideration of the bill impacts for smaller energy consumers from our proposed tariff structures is presented in section 5.5.

In Table 5.1 we present the annual change in fixed charges for residential end-users over AA5. We propose to improve equity between our residential end-users by applying the same fixed charge to all our residential end-users. Fixed charges for residential end-users increase in FY24 and FY25 – broadly in line with the increase in our revenue target in those years – and then remain relatively flat in nominal terms for the remainder of AA5, which represents an expected decrease in fixed charges in real terms.



Table 5.1: Indicative annual change in fixed charges for residential end-users

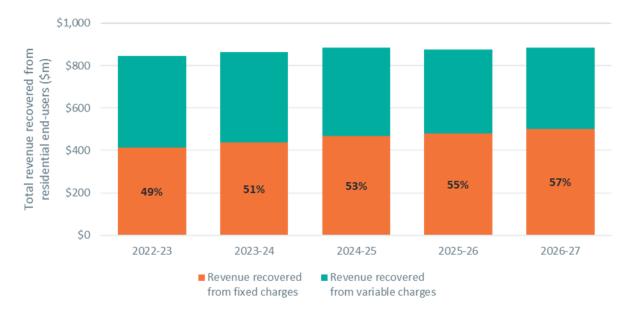
	FY23	FY24	FY25	FY26	FY27
Change in fixed charge	0 per cent	3.2 per cent*	5.2 per cent	3.0 per cent	3.9 per cent

<sup>\*</sup> RT17 has a lower increase in fixed charge

In Figure 5.3 we present the indicative share of revenue that we expect to recover from fixed and variable charges over AA5 from residential customers. In line with the 2022 demand forecasts, the proportion of the fixed component is increasing because of forecast customer demand falling over the AA5 period. As noted in section 5.1.2 of the Revised Proposal, this trend could be offset by changes in customer behaviour or technological change. For example, prospects for EV adoption have been considered; however, they have been excluded as a specific driver for the 2022 demand forecasts as adoption rates are expected to remain relatively low until 2027. Future adoption of EVs in Western Australia has the potential to put upward pressure on customer demand over AA5 and beyond.

We present detailed assessments of end-user bill impacts in section 5.5, including for smaller energy consumers.

Figure 5.3: Indicative share of revenue target recovered from fixed and variable charges



In Figure 5.2 we present the annual change in fixed charges for small business end-users over AA5. Our small business reference tariffs are designed for different connection sizes, which is reflected in the magnitude of the fixed charge for each small business reference tariff. Western Power has applied a consistent common annual increase in the fixed charge for each of our small business reference tariffs over AA5.

Table 5.2: Indicative annual change in fixed charges for small business end-users

	FY23	FY24	FY25	FY26	FY27
Change in fixed charge	0 per cent	5.75 per cent	5.24 per cent	3.0 per cent	3.9 per cent

### 5.4 Forecast weighted average price change for each reference tariff

We summarise in Table 5.3 our forecast weighted average price change for each reference tariff in the AA5 period. We explain the methodology that we apply to derive this forecast in section 8 of the technical summary that accompanies this TSS overview.

The weighted average price change for a reference tariff is calculated using the indicative prices for each year of the AA5 period and a volume estimate for the first pricing year of AA5 (FY23). The reason for using a common set of volume inputs is to ensure the calculated change in revenue between years is attributed solely to the change in the price of individual tariff components between years. As a result, the weighted average price change below is likely to overestimate the average bill impacts for residential end-users. This is because, we expect residential energy use per end-user to decrease over AA5, which requires higher unit rates to recover a similar level of revenue from each residential end-user year-to-year.

While the analysis below holds end-users' energy use constant over AA5, and so is likely to overestimate the effect of higher variable prices, Western Power considers the effect of those higher variable prices will be partially offset by decreases in energy consumption.

We will be able to further refine our forecast of weighted average annual price changes over the course of the 2022-23 financial year, as we gain access to a larger sample of interval data for residential end-users. This forecast is based on a limited sample comprising the 2.5 per cent of residential end-users with advanced metering infrastructure, whereas this sample will increase to represent approximately 20 per cent of residential customers by July 2023.

The weighted average price change for the new storage and EV tariffs being introduced in the AA5 period will be developed as customer data is collected over AA5 and included in the weighted average price change forecasts published as part of our annual pricing proposals.

Table 5.3: Forecast weighted average price change for each year of AA5

Tariff	Service	Average price change 22/23	Average price change 23/24	Average price change 24/25 %	Average price change 25/26 %	Average price change 26/27 %
RT1	A1 – Anytime Energy (Residential) Exit Service	0%	-0.1%	2.5%	1.5%	1.7%
RT2	A2 – Anytime Energy (Business) Exit Service	0%	-0.2%	3.8%	5.3%	4.8%
RT3	A3 – Time of Use Energy (Residential) Exit Service	0%	2.9%	5.2%	5.3%	1.5%
RT4	A4 – Time of Use Energy (Business) Exit Service	0%	5.3%	5.2%	5.3%	5.5%



RT5	A5 – High Voltage Metered Demand Exit Service or C5 Bi- directional Service	0%	-1.9%	3.7%	2.1%	1.7%
RT6	A6 – Low Voltage Metered Demand Exit Service or Bi- directional Service	0%	-0.4%	4.0%	4.1%	3.1%
RT7	A7 – High Voltage Contract Maximum Demand Exit Service or C7 Bi-directional Service	0%	-1.8%	3.3%	2.1%	2.5%
RT8	A8 – Low Voltage Contract Maximum Demand Exit Service or Bi-directional Service	0%	-1.6%	4.2%	3.1%	1.4%
RT9	A9 – Streetlighting Exit Service	0%	0.0%	0.6%	2.1%	0.0%
RT10	A10 – Unmetered Supplies Exit Service	0%	4.0%	2.0%	1.0%	1.8%
RT11	B1 – Distribution Entry Service	0%	5.4%	1.3%	3.3%	1.6%
RT13	C1 – Anytime Energy (Residential) Bi-directional Service	0%	-0.3%	2.4%	1.2%	1.5%
RT14	C2 – Anytime Energy (Business) Bi-directional Service	0%	-2.2%	3.1%	3.2%	4.9%
RT15	C3 – Time of Use (Residential) Bi-directional Service	0%	3.7%	5.2%	5.3%	2.1%
RT16	C4 – Time of Use (Business) Bi-directional Service RT16	0%	5.3%	5.2%	5.3%	5.5%
RT17	A12 – 3 Part Time of Use Energy (Residential) Exit Service or C9 Bi-directional Service	0%	4.0%	5.2%	5.3%	2.7%
RT18	A13 – 3 Part Time of Use Energy (Business) Exit Service or C10 Bi-directional Service	0%	4.1%	5.2%	5.3%	5.4%
RT19	A14 – 3 Part Time of Use Demand (Residential) Exit Service or C11 Bi-directional Service	0%	1.0%	5.2%	5.3%	0.4%
RT20	A15 – 3 Part Time of Use Demand (Business) Exit Service or C12 Bi-directional Service	0%	1.6%	5.2%	5.3%	5.5%



RT21	A16 – Multi Part Time of Use Energy (Residential) Exit Service or C13 Bi-directional Service	0%	5.4%	5.2%	5.3%	2.7%
RT22	A17 – Multi Part Time of Use Energy (Business) Exit Service C14 or Bi-directional Service	0%	5.4%	5.2%	5.3%	5.5%
RT34	A19 – Super Off-peak Energy (Business) Exit Service or – C17 Bidirectional service	0%	0%	4.0%	5.3%	5.5%
RT35	A18 – Super Off-peak Energy (Residential) Exit Service or C16 – Bidirectional Service	0%	0%	4.4%	2.1%	2.0%
RT36	A21 – Super Off-peak Demand (Business) Exit Service or C19 – Bidirectional Service	0%	0%	3.1%	4.6%	2.5%
RT37	A20 - Super Off-peak Demand (Residential) Exit Service or C18 - Bidirectional Service	0%	0%	3.4%	1.7%	2.0%
RT38	C23 – LV Distribution Storage Bidirectional Service	0%	0%	5.2%	5.3%	5.4%
RT39	C24 – LV Distribution Storage Bidirectional Service	0%	0%	5.2%	5.3%	5.4%
RT40	A22 – LV EV Charging Exit Service	0%	0%	5.2%	5.3%	5.4%
RT41	A23 – HV EV Charging Exit Service	0%	0%	5.2%	5.3%	5.4%
TRT1	A11 - Transmission Exit Service	0%	5.4%	5.2%	5.3%	5.4%
TRT2	B2 - Transmission Entry Service	0%	5.4%	5.2%	5.3%	5.4%
TRT3	C22 - Transmission Storage Service	0%	0%	5.2%	5.3%	5.4%

# 5.5 Customer bill impacts (network component of reference tariffs only)

Our desired price path for AA5, as explained in section 5.2, applies to the average network revenue recovered from our customers. While this approach ensures that, on average, end-users network bill impacts are limited, some end-users may experience different outcomes due to the particular characteristics of their energy use.

In this section, we provide context to the potential network bill impacts on different types of end-users on each reference tariff. We present our network bill impacts as the rate of bill change, as a percentage, in nominal terms and have worked to remain within the constraints of our pricing strategy.



#### 5.5.1 Residential end-users

Since we have no control over the assignment of end-users from one tariff to another, our network bill impact analysis focuses on the price impact between years for end-users on a particular reference tariff.

Our bill impact analysis is performed on five distinct, representative residential end-users, including:

- a low consumption residential end-user the 25<sup>th</sup> percentile of total annual energy consumption from our residential end-user sample;
- a medium consumption residential end-user the median of total annual energy consumption from our residential end-user sample;
- a high consumption residential end-user the 75<sup>th</sup> percentile of total annual energy consumption from our residential end-user sample;
- a typical residential end-user with solar the median of total annual energy consumption from our residential end-user sample for end-users with solar installations only; and
- a typical residential end-user without solar the median of total annual energy consumption from our residential end-user sample for end-users without solar installations.

# RT1/RT13 – Anytime energy residential tariffs

The customer network bill impacts for RT1 and RT13 over AA5 is shown in Table 5.4.

Table 5.4: Annual network bill impacts over AA5 for RT1/RT13

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	3%	541	4%	2%	3%	3%
Medium consumption end-user	0%	1%	665	3%	2%	2%	2%
High consumption end-user	0%	0%	806	3%	1%	2%	2%
Typical solar end-user	0%	1%	724	3%	1%	2%	2%
Typical non- solar end-user	0%	1%	656	4%	2%	2%	2%

#### RT3/RT15 - Time of use residential tariffs

The customer network bill impacts for RT3 and RT15 over AA5 is shown in Table 5.5.



Table 5.5: Annual network bill impacts over AA5 for RT3/RT15

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	4%	558	6%	1%	3%	3%
Medium consumption end- user	0%	4%	695	5%	0%	2%	3%
High consumption end-user	0%	3%	847	5%	-1%	2%	2%
Typical solar end- user	0%	3%	741	5%	-1%	2%	3%
Typical non-solar end-user	0%	4%	684	5%	0%	2%	3%

# RT17 – 3 part time of use energy residential tariff

The customer network bill impacts for RT17 over AA5 is shown in Table 5.6.

Table 5.6: Annual network bill impacts over AA5 for RT17

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	3%	530	6%	1%	3%	3%
Medium consumption end- user	0%	4%	630	5%	-1%	3%	3%
High consumption end-user	0%	4%	742	5%	-2%	2%	2%
Typical solar end- user	0%	4%	678	5%	-1%	3%	3%
Typical non-solar end-user	0%	4%	623	5%	0%	3%	3%



# RT19 – 3 part time of use demand tariff (residential)

The customer network bill impacts for RT19 over AA5 is shown in Table 5.7.

Table 5.7: Annual network bill impacts over AA5 for RT19

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	6%	537	6%	2%	3%	4%
Medium consumption end- user	0%	6%	632	6%	2%	3%	4%
High consumption end-user	0%	6%	736	6%	1%	2%	4%
Typical solar end- user	0%	6%	675	6%	2%	3%	4%
Typical non-solar end-user	0%	6%	624	6%	2%	3%	4%

# RT21 – Multi part time of use energy residential

The customer network bill impacts for RT21 over AA5 is shown in Table 5.8.

Table 5.8: Annual network bill impacts over AA5 for RT21

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	5%	545	6%	0%	3%	3%
Medium consumption end- user	0%	5%	656	5%	-2%	3%	3%
High consumption end-user	0%	5%	781	5%	-3%	2%	2%
Typical solar end- user	0%	5%	707	5%	-2%	3%	3%
Typical non-solar end-user	0%	5%	647	5%	-2%	3%	3%

### RT35 – Super off-peak energy residential

The customer network bill impacts for RT35 over AA5 is shown in Table 5.9.

Table 5.9: Annual network bill impacts over AA5 for RT35

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	-2%	519	5%	2%	3%	2%
Medium consumption end- user	0%	-2%	626	5%	2%	2%	2%
High consumption end-user	0%	-1%	747	4%	1%	2%	2%
Typical solar end- user	0%	-1%	703	4%	1%	2%	2%
Typical non-solar end-user	0%	-2%	618	5%	2%	2%	2%



#### RT37 – Super off-peak demand residential

The customer network bill impacts for RT37 over AA5 is shown in Table 5.10.

Table 5.10: Annual network bill impacts over AA5 for RT37

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	-2%	509	5%	2%	3%	2%
Medium consumption end- user	0%	-2%	600	5%	2%	2%	2%
High consumption end-user	0%	-1%	698	4%	1%	2%	2%
Typical solar end- user	0%	-1%	658	4%	2%	2%	2%
Typical non-solar end-user	0%	-2%	592	5%	2%	2%	2%

#### 5.5.2 Small business end-user

As with our residential end-users, our network bill impact analysis is performed on five distinct, representative small business end-users, including:

- a low consumption small business end-user the 25<sup>th</sup> percentile of total annual energy consumption from our small business end-user customer sample;
- a medium consumption small business end-user the median of total annual energy consumption from our small business end-user customer sample;
- a high consumption small business end-user the 75<sup>th</sup> percentile of total annual energy consumption from our small business end-user customer sample;
- a typical small business end-user with solar the median of total annual energy consumption from our small business end-user sample for end-users with solar installations only; and
- a typical small business end-user without solar the median of total annual energy consumption from our small business end-user sample for end-users without solar installations.



# RT2/RT14 - Anytime energy business tariffs

The customer network bill impacts for RT2 and RT14 over AA5 is shown in Table 5.11.

Table 5.11: Annual network bill impacts over AA5 for RT2/RT14

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	8%	891	5%	1%	5%	5%
Medium consumption end-user	0%	4%	1,276	4%	2%	5%	4%
High consumption end-user	0%	1%	1,937	4%	2%	5%	3%
Typical solar end-user	0%	2%	1,872	4%	2%	5%	3%
Typical non- solar end-user	0%	1%	2,214	3%	2%	5%	3%

# RT4/RT16 – Time of use business tariffs

The customer network bill impacts for RT4 and RT16 over AA5 is shown in Table 5.12.



Table 5.12: Annual network bill impacts over AA5 for RT4/RT16

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	10%	1,453	6%	0%	5%	5%
Medium consumption end-user	0%	9%	1,862	5%	-2%	5%	4%
High consumption end-user	0%	8%	2,614	5%	-3%	5%	4%
Typical solar end-user	0%	8%	2,263	5%	-3%	5%	4%
Typical non- solar end-user	0%	8%	2,825	5%	-3%	5%	4%

# RT18 – 3 part time of use energy business tariff

The customer network bill impacts for RT18 over AA5 is shown in Table 5.13.

Table 5.13: Annual network bill impacts over AA5 for RT18

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	12%	899	6%	0%	5%	6%
Medium consumption end- user	0%	10%	1,265	6%	-1%	5%	5%
High consumption end-user	0%	8%	1,910	5%	-2%	5%	4%
Typical solar end- user	0%	8%	1,827	5%	-2%	5%	4%



Typical non-solar end-user	0%	7%	2,148	5%	-3%	5%	4%
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# RT20 – 3 part time of use demand tariff (business)

The customer network bill impacts for RT20 over AA5 is shown in Table 5.14.

Table 5.14: Annual network bill impacts over AA5 for RT20

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	11%	1,066	6%	0%	5%	5%
Medium consumption end-user	0%	9%	1,422	6%	0%	5%	5%
High consumption end-user	0%	8%	2,042	5%	0%	5%	4%
Typical solar end-user	0%	8%	1,945	5%	0%	5%	5%
Typical non- solar end-user	0%	7%	2,258	5%	-1%	5%	4%

# RT22 – Multi part time of use energy business

The customer network bill impacts for RT22 over AA5 is shown in Table 5.15.



Table 5.15: Annual network bill impacts over AA5 for RT22

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	12%	910	6%	0%	5%	6%
Medium consumption end-user	0%	10%	1,299	5%	-2%	5%	5%
High consumption end-user	0%	9%	1,989	5%	-3%	5%	4%
Typical solar end-user	0%	9%	1,856	6%	-3%	5%	4%
Typical non- solar end-user	0%	8%	2,233	5%	-4%	5%	4%

# RT34 – Super off-peak energy business

The customer network bill impacts for RT34 over AA5 is shown in Table 5.16.

Table 5.16: Annual network bill impacts over AA5 for RT34

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	9%	855	5%	0%	5%	5%
Medium consumption end-user	0%	6%	1,173	4%	0%	5%	4%
High consumption end-user	0%	4%	1,718	4%	-1%	6%	3%



Typical solar end-user	0%	4%	1,787	4%	-1%	6%	3%
Typical non- solar end-user	0%	4%	1,950	4%	-1%	6%	3%

# RT36 – Super off-peak demand business

The customer network bill impacts for RT36 over AA5 is shown in Table 5.17.

Table 5.17: Annual network bill impacts over AA5 for RT36

Representative end-user	Annual change FY22 to FY23	Annual change FY23 to FY24	Baseline \$/year FY24	Annual change FY24 to FY25	Annual change FY25 to FY26	Annual change FY23 to FY27	Annualised change over AA5
Low consumption end-user	0%	4%	984	5%	1%	4%	3%
Medium consumption end-user	0%	3%	1,303	4%	1%	3%	3%
High consumption end-user	0%	2%	1,842	4%	1%	3%	3%
Typical solar end-user	0%	2%	1,868	4%	1%	3%	3%
Typical non- solar end-user	0%	2%	2,057	4%	1%	3%	2%



# **Appendix F.2**

# **Tariff Structure Statement Technical summary**

Revised proposed access arrangement



# Tariff Structure Statement Technical summary

To apply from 1 July 2023

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#### 1. Introduction

Western Power has prepared this technical summary to accompany its Tariff Structure Statement (**TSS**) Overview for the fifth access arrangement period (**AA5**) which covers 1 July 2022 to 30 June 2027. It is intended to be read in conjunction with the TSS Overview attached as Appendix F.1.

#### 1.1 Summary of our new pricing framework

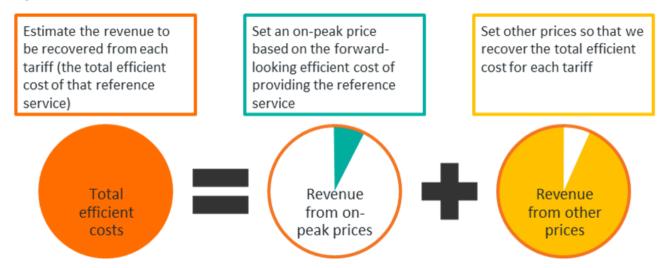
Recent changes to the *Electricity Networks Access Code 2004* (**Code**) require Western Power to apply a new framework for tariffs. The Code specifies a pricing objective that Western Power's reference tariffs:<sup>1</sup>

...should reflect the service provider's efficient costs of providing those reference services.

We achieve this objective through the use of the range of pricing principles presented in the Code,<sup>2</sup> which reflect widely accepted economic principles, and the insights and preferences collected from users and end-use customers.

We illustrate the essence of the overarching framework for setting efficient tariffs in Figure 1.1. The remainder of this section explains this process at a high level. A more detailed explanation is contained in section 4 of the TSS Overview.

Figure 1.1: Illustration of new tariff framework



A key focus of tariff reform is setting tariffs that reflect the forward-looking efficient cost of providing the relevant service. Section 2 explains how we estimate the forward-looking efficient cost for each tariff and convert that estimate into a price signal.

It is then necessary to set other variable and fixed charges for each tariff such that, when combined with prices based on forward-looking efficient costs, they:

- recover the total efficient cost (or target revenue) of providing the applicable reference service; and
- recover our target revenue approved by the ERA across all reference services.

These outcomes are achieved by allocating our efficient costs, as approved by the Economic Regulation Authority (ERA), across our reference services, while ensuring that the efficient costs allocated to each

 $<sup>^{\</sup>rm 2}$  Electricity Networks Access Code, clause 7.3A-J.



<sup>&</sup>lt;sup>1</sup> Electricity Networks Access Code, clause 7.3.

tariff falls between the stand-alone and avoidable cost of providing that service.<sup>3</sup> This approach is explained in further detail in this TSS technical summary.

The requirement in the Code to prepare a TSS relates to distribution reference tariffs.<sup>4</sup> However, we also include a description of the structure of transmission reference tariffs and our approach to setting those tariffs in sections 6 and 7, respectively.

## 1.2 The structure of the TSS technical summary

The below table summarises the structure of this TSS technical summary:

Table 1.2: Structure of TSS technical summary

Section	Title	Description
Section 2	Forward-looking efficient cost	Describes how we estimate long run marginal cost and convert our estimates into an efficient price signal.
Section 3	Efficient cost target	Explains how we estimate the efficient target that guides the allocation of our revenue target to each reference tariff.
Section 4	Allocation of target revenue	Explains how we allocate our target revenue (or efficient costs) to each reference tariff.
Section 5	Stand-alone and avoidable cost	Describes how we estimate the upper and lower bound of revenue to be recovered from each reference tariff.
Section 6	Tariff structures	Presents a detailed description of the structure of each reference tariff.
Section 7	Price setting for new transmission reference tariffs	Describes how we the estimate the efficient target that guides the allocation of our target revenue to transmission reference tariffs and summarises the price setting policy for new transmission nodes.
Section 8	Reference tariff change forecast	Presents our methodology for calculating the weighted average annual price change for each reference tariff over the AA5 period.
Section 9	Compliance checklist	Confirms our compliance with the requirements in the Code relating to the TSS.

Unless otherwise stated, all financial values in this document are expressed dollars of the day as of 30 June 2022.

<sup>&</sup>lt;sup>4</sup> The Code, clause 7.1A.



<sup>&</sup>lt;sup>3</sup> Electricity Networks Access Code, clause 7.3D.

### 2. Forward-looking efficient cost

In this section we explain in more detail the approach that we apply to comply with the requirement that:5

Each reference tariff must be based on the forward-looking efficient costs of providing the reference service to which it relates to the customers currently on that reference tariff.

Signalling to end-users the future network costs that can be avoided by changes in the way they use the network is the foundation to efficient network pricing.

The forward-looking efficient cost of providing a service is reflected in the economic concept of marginal cost. In economics, the marginal cost of a service is the additional cost caused or avoided by a small change in the production of a service.

By way of example, the application of a price based on marginal cost in the on-peak period indicates to end-users the additional network costs caused by further use of the network during the on-peak period. The efficient outcomes may then include:

- an end-user shifting their load outside of the on-peak period, which results in a cost saving for them and all other end-users;
- an end-user identifying that a behind-the-meter investment, e.g., in a battery or more energy efficient appliances, can provide the same amenity at a lower cost; and
- an end-user that values their use of the network during the on-peak period, which signals to Western Power that they are willing to pay for the future costs they are causing and that they value further investment in the network.

#### 2.1 Long run or short run marginal cost?

Marginal cost can be evaluated over a short or long horizon, i.e., short run marginal cost (**SRMC**) and long run marginal cost (**LRMC**).

SRMC includes all costs caused by further use of the network, except the costs of additional network capacity. This means that SRMC includes the cost of congestion such that, when demand approaches network capacity, SRMC will increase to a level that is high enough to reduce demand to a level that can be served by existing network capacity.

Although prices based on SRMC are therefore effective at managing existing capacity, they give rise to extremely volatile price signals for end-users.

In contrast to SRMC, LRMC reflects only the cost of additional network capacity that is required or avoided by a change in demand, evaluated over an extended horizon. This evaluation of network costs and demand over an extended horizon produces estimates of LRMC that are much more stable than SRMC.

It follows that prices based on LRMC are relatively more stable and are therefore more effective at promoting efficient network use and investment decisions by end-users over the medium to long term, as well as in managing any bill impacts during the transition to more efficient pricing.

Accordingly, Western Power proposes to set prices based on LRMC, rather than SRMC. This is a commonly accepted approach to setting prices and is consistent with the approach applied by all other electricity network businesses in Australia.



<sup>5</sup> The Code, clause 7.3G.

#### 2.2 Consideration of how long run marginal cost varies across the network

The LRMC of providing our reference services varies by location, depending on the availability of network capacity, whether demand is increasing or decreasing and expected future costs.

Consistent with our current approach, we are not implementing locational pricing for end-users using less than 1MVA of electricity. This also reflects the requirement in the Code that:<sup>6</sup>

The tariff applying to a standard tariff user in respect of a standard tariff exit point must not differ from the tariff applying to any other standard tariff user in respect of a standard tariff exit point as a result of differences in the geographic locations of the standard tariff exit points.

We have therefore not derived location-specific estimates of LRMC.

#### 2.3 Deriving an estimate for each reference tariff

Clause 7.3G of the Code requires each reference tariff be based on the LRMC of providing the relevant reference service to the end-users currently on that reference tariff.

For similar end-users, the future costs caused by further use of the network will be the same, irrespective of the reference tariff they are on. For the purpose of estimating LRMC, we have therefore grouped together reference tariffs that apply to end-users whose decisions are likely to result in similar, if not the same, future costs. This is consistent with the approach applied in the National Electricity Market (**NEM**), since attempting to derive more granular estimates of LRMC would not elicit any further information.

For example, further use of the network by residential end-users during periods of peak demand is likely to result in a similar level of future costs, regardless of which residential reference service they use.

In the context of prices that are not locational, the principal determinant of the LRMC applying during the on-peak period is the level of the network voltage to which an end-user is connected. By way of example:

- further use of the network by an end-user connected to the high voltage network may increase the
  future cost of the high voltage network, but leaves unchanged the future cost of the low voltage
  network; whereas
- further use of the network by an end-user connected to low voltage network during periods of peak demand will typically contribute to future costs on both the low and high voltage networks.

For the purpose of estimating LRMC, we therefore group together reference tariffs by reference to the level of the network voltage to which those end-users connect, i.e., high voltage and low voltage. We also estimate LRMC for residential and business end-users separately at the low voltage level.

This reflects that further use of the network by residential end-users (as an example) during periods of peak demand is likely to result in a similar level of future costs, regardless of what reference tariff they are on.

Our approach is consistent with that applied by all network businesses in the NEM, which estimate LRMC by grouping together tariffs based on the relevant level of the network (sometimes with further distinctions depending on the network's circumstances).



<sup>6</sup> The Code, clause 7.7.

Table 2.1: Grouping of reference tariffs for estimating LRMC

Low voltage residential	Low voltage business	High voltage
RT1	RT2	RT5
RT3	RT4	RT7
RT13	RT6	RT39
RT15	RT8	RT41
RT17	RT14	
RT19	RT16	
RT21	RT18	
RT35	RT20	
RT37	RT22	
	RT34	
	RT36	
	RT38	
	RT40	

#### 2.4 Estimation methodology

There are two commonly considered economic approaches for the estimation of LRMC:

- the perturbation approach, which is also known as the Turvey approach; and
- the average incremental cost (AIC) approach.

The AIC approach is adopted by almost all network businesses in the NEM. It involves estimating LRMC equal to the average change in projected operating and capital expenditure attributable to future changes in demand.

The perturbation approach is more theoretically pure but comes with a significant implementational burden since its application necessitates engineering assessments of how future network costs would change if demand was altered (or perturbed) by a fixed, permanent increment.

Consistent with the approach applied in the NEM, we estimate LRMC based on the AIC approach.

#### 2.4.1 Implementation of average incremental cost approach

For the purpose of setting our on-peak prices, we estimate LRMC as follows:

Net present value of network costs caused by growth in demand Net present value of demand growth

We calculate the net present value of future growth-related network costs by:

• evaluating future capital programs over a ten-year period to determine those caused, in whole or part, by growth in demand;



- calculating the value of growth-related capital expenditure annualised over the expected life of the asset;<sup>7</sup>
- calculating the cumulative value of annualised growth-related capital expenditure in each of the ten vears:
- evaluating the value of operating expenditure associated with those growth-related capital projects;
- estimating the extent to which growth-related capital and operating expenditure are driven by each group of end-users; and
- calculating the present value of future growth-related expenditure caused by that group of end-users.

We calculate the net present value of demand growth by:

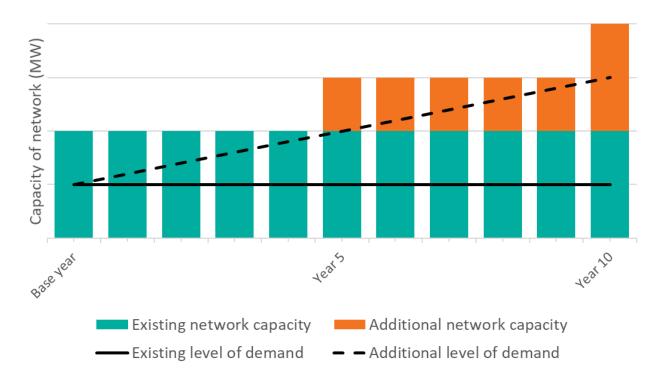
- evaluating the additional demand met by Western Power's network over the ten-year period;
- estimating the cumulative increase of demand for each group of end-users; and
- calculating the present value of additional demand caused by that group of end-users.

We calculate the LRMC for each group of end-users by dividing the present value of growth-related expenditure by the present value of additional demand.

We calculate the present value of expenditure and demand (as well as annualised capital expenditure) based on our proposed regulatory weighted average cost of capital (WACC).

Figure 2.1 presents an illustrative example of the application of the AIC approach.

Figure 2.1: Illustrative example of the AIC approach for LRMC estimation



<sup>&</sup>lt;sup>7</sup> This accounts for the end-effects that arise from the use of a ten year estimation period, where asset lives extend far beyond ten years, ie, each dollar of capital expenditure serves demand over a period much longer than ten years. Failing to account for these end effects would overestimate LRMC.



In this illustrative example, the growth-related capital and operating expenditure is the network expenditure that is associated with the increase in network capacity, indicated by the orange bars. Demand growth is represented by the difference between the dashed black line, being forecast demand, and the solid black line, being a reference point for the level of demand in the base year.

The AIC approach divides the present value of the expenditure associated with the orange bars by the present value of the increase in the dashed black line above the solid black line.

#### 2.4.2 Results of our analysis

We present below our estimates of LRMC by reference to the voltage level to which end-users using each reference service connect.

Table 2.2: Estimates of LRMC

Applicable reference tariffs	LRMC estimate
Low voltage residential	\$22.70 per kW
Low voltage business	\$23.65 per kW
High voltage	\$24.70 per kW

Our reasonably similar estimates of LRMC on the high and low voltage network reflect that the majority of growth-related expenditure relates to the high voltage network, with the consequence that an incremental unit of demand on either the high or low voltage network results in a similar level of future costs.

#### 2.5 Conversion of LRMC to prices

The LRMC of providing reference services will vary considerably throughout the day. Therefore, efficiency is promoted by aligning our LRMC based price signal with the times of greatest network utilisation.

Outside of periods of very high demand, additional demand typically does not cause an increase in our future costs, as it can be served by existing excess capacity. At these times, LRMC is very close to zero.

On the other hand, when the network is at or approaching a constraint, additional demand increases future costs. For example, to continue to provide safe and reliable network services we may need to undertake new investment in network capacity or bring forward the timing of a pre-planned expansion.

Since our estimate of LRMC is based on meeting demand at times of greatest network utilisation, we signal LRMC to end-users by applying a LRMC-based price during the on-peak period.

It is also relevant to note that some of our reference tariffs do not include an on-peak energy or on-peak demand price. For example, this is the case for our residential anytime energy tariff.

For these tariffs, the efficiency benefits of a LRMC-based price, smoothed across the entire day, is minimal. Consistent with the approach applied by other networks in the NEM, we therefore add a mark-up to the LRMC-based price to assist in recovering our total efficient cost. This is also the case for our low and high voltage metered demand and low and high voltage contracted maximum demand reference tariffs.

The LRMC-based price for an anytime energy price is calculated as:

LRMC anytime energy price (
$$\frac{kWh}{Number of hours in a year}$$

The LRMC-based price for on-peak energy prices is calculated as:



On-peak energy price (
$$kWh$$
) = 
$$\frac{LRMC(kW)}{Number of hours defined as 'on-peak' in a year}$$

The LRMC-based price for on-peak demand prices is calculated as:

On-peak demand price (
$$kW$$
) = 
$$\frac{LRMC(kW)}{Number of billing periods in a year}$$

Section 4.1 of the TSS Overview explains the considerations that we apply to derive our final on-peak prices.



## 3. Efficient cost target for distribution reference services

In this section we explain how we estimate the efficient cost of providing each distribution reference service,<sup>8</sup> which we refer to as the efficient cost target for a distribution reference service.

In section 4 we then explain how we allocate our target revenue to each reference tariff, and set prices, so that the revenue recovered from each tariff transitions towards that strictly efficient reference point, while managing bill impacts.

Although economic principles establish an upper and lower bound on the total efficient cost for the provision of network services – being the stand-alone and avoidable costs<sup>9</sup> – there is no economic principle that identifies a unique, efficient level of costs.

This is reflected in the significantly different approaches adopted by networks in the NEM. For example, the approved approach of the electricity network provider in the Australian Capital Territory, Evoenergy, is based on the allocation and recovery of costs in the previous year, whereas Ausgrid (a network service provider in New South Wales) approved approach is:<sup>11</sup>

...based on their relative contribution to maximum demand, a key driver of our efficient costs.

We calculate the efficient cost of providing each reference service based on the value of the assets used in the provision of that service and the extent to which those assets are used, relative to its use by other reference services. The aggregation of the efficient cost target for all reference services is equal to our total efficient costs each year.

We consider this approach to be a fair and reasonable basis for estimating the efficient cost of providing each reference service.

We operate both a distribution and transmission network. Connections to the transmission network use only the transmission network, whereas providing services to connections to the distribution network requires the use of both the transmission and distribution networks.

Distribution costs are therefore shared across distribution reference services only, whereas transmission costs are shared between distribution and transmission reference services.

Table 3.1 indicates how our total efficient network costs are allocated between distribution and transmission reference services and the role played by the methodology by which we estimate the efficient contribution.

<sup>&</sup>lt;sup>11</sup> Ausgrid, Revised Proposal Attachment 10.01 Tariff Structure Statement, January 2019, p 69.



 $<sup>^{\</sup>rm 8}$  The corresponding explanation for transmission reference services is contained in section 7.1.

<sup>&</sup>lt;sup>9</sup> See section 5 for a detailed explanation of stand-alone and avoidable costs.

 $<sup>^{10}</sup>$  Evoenergy, Attachment 1: Revised Proposed Tariff Structure Statement, November 2018, p 35.

Table 3.1: Efficient disaggregation of distribution and transmission costs to reference services

	Distribution reference services	Transmission reference services
Distribution costs	Determined by the efficient cost estimation methodology for distribution reference services.	Not relevant
Transmission costs	The transmission costs that are not allocated to transmission connections by the efficient cost estimation methodology for transmission reference services (section 7.1) are recovered from distribution reference services.	Determined by the efficient cost estimation methodology for transmission reference services (section 7.1).
	These costs are shared across distribution connections as determined by the efficient cost estimation methodology for distribution reference services.	

The process by which we estimate the efficient cost target, ie, the efficient cost estimation methodology, for distribution reference services is explained below.

#### 3.1 Contribution of total network costs to distribution reference tariffs

Clause 7.3 of the Code presents a pricing objective: 12

...that the reference tariffs that a service provider charges in respect of its provision of reference services should reflect the service provider's efficient costs of providing those reference services.

We calculate the total efficient cost of providing each reference service based on the value of the assets and services used by those end-users and the extent to which they use those assets and services, relative to end-users using other reference services.

The total efficient cost for each reference service, or the efficient cost target, is the efficient reference point towards which we transition the revenue recovered from our reference tariffs, consistent with the pricing objective of the Code, while managing bill impacts.

This process by which we estimate the efficient cost target for our distribution reference services is summarised in Figure 3.1.

<sup>&</sup>lt;sup>12</sup> The Code, clause 7.3.



Figure 3.1: Efficient cost target estimation methodology for distribution reference services



Estimate the value of distribution asset types and cost pools across distinct geographic zones



2

Estimate the extent to which each reference service uses each type of asset in each geographic zone



3

Assign the distribution revenue target to each reference service based on the relative value of the assets and cost pools that reference service uses across the entire network

Fundamental to our methodology is the segmenting of Western Power's distribution network by reference to:

- six distribution asset types and 'cost pools', 13 relating to function and voltage level; and
- five geographic zones.

We describe our cost pools and geographic zones in section 3.1.1. In the sections that follow we describe each of the three steps illustrated in Figure 3.1 above.

#### 3.1.1 Step 1 – estimating values for distribution asset types and cost pools across geographic areas

The first step of our methodology considers the relative value of each distribution cost pool or asset in the distribution network and the classification of these assets and cost pools into types and geographic area.

#### Distribution asset types and cost pools

Each distribution network asset can be classified to an asset type by reference to its function and the level of the network to which it relates. Similarly, the cost of providing administrative services for distribution reference services can be classified into a unique cost pool. The six distribution asset types and cost pools used in the distribution services cost allocation methodology are:

- distribution network transformers which connects the high voltage distribution network to the low voltage distribution network;
- the high voltage distribution network;
- the low voltage distribution network;
- streetlight assets and services;
- · metering assets and services; and

<sup>&</sup>lt;sup>13</sup> We use the term 'cost pool' to refer to the cost of service or supply that is associated with providing a particular service or collection of services that provide similar functions or have similar characteristics.



the administrative services cost pool.

#### **Geographic zones**

In a separate and distinct manner to the categorisation of assets by type, assets can also be categorised by the geographical area in which they are located. This is practically achieved by associating each network asset, regardless of asset type, to a particular zone substation.

We divided our network into five geographic zones in which the cost of providing references services is similar, due to their geographic location and/or the types of connections in these areas. In particular, each zone substation in the distribution network is assigned a unique geographic zone that reflects the cost structures of providing network services to the particular zone substation and to connections below the zone substation.

The five geographic zones defined for the distribution system are:

- the CBD zone which is defined as an intense business area:
- the urban zone which is defined as the uniformly and continuously settled areas of Perth that contain a mix of urban domestic, commercial, and industrial users;
- the rural zone which is defined as those areas with a predominately rural or farming characteristics;
- the mining zone which is defined as significant mining areas and are typically supplied with 33 kV feeders. Mining zones do not include the nearby towns or urban centres, which are either included in the rural or mixed zones: and
- the mixed zone which is defined to capture areas that have a mixed user base that results in more than one dominant load base, e.g., mining, and rural loads or urban and rural loads.

In addition to unique cost structures, each geographic zone has a different mix of downstream connections and therefore provides a different combination of reference services to reflect these end-user mixes.

The categorisation of both network assets and reference services within each geographic zone therefore forms an integral part of understanding the efficient cost to serve each end-user.

#### Asset valuation

We have estimated the value of the distribution network by identifying the replacement value, mean replacement life and current equipment age for all assets across Western Power's distribution network in an asset register.

This asset register also provides information regarding the characteristics of the asset including, for example, the voltage level at which the asset is connected and the type of asset, i.e., poles, underground or overhead cabling. This information provides the basis by which the distribution network is broken down into the transformer, high voltage, and low voltage distribution asset types. 14

There are two main assumptions that were used in the allocation of network assets to asset types, namely:

- the threshold between the low voltage and high voltage levels of the distribution network is 415 V, consistent with internal approaches to network planning; and
- assets that are allocated to multiple asset types, i.e., poles that support both low voltage and high voltage cables, are assumed to be split evenly between these two asset types.

<sup>&</sup>lt;sup>14</sup> The asset valuation for streetlight and metering assets follows a different methodology described below.



Further, we have used the replacement value of assets in the distribution cost allocation methodology. An alternate option would be to use the depreciated value of these assets. This approach has also been undertaken and had very little effect on the resulting valuations.

Importantly, each network asset is assigned an applicable zone substation determined by its location in the network. Across the entire distribution asset register, only five percent of the total value of assets have an indeterminate geographic location while all assets can be categorised into an asset type. As a result, we have a high degree of visibility over the segmentation of the distribution network by asset type and geographic zone.

Table 3.2 presents the relative share of our total network value by asset type (excluding streetlight, metering, and admin assets) and geographic location.

Table 3.2: Relative value of assets by asset type (excluding streetlight, metering, and admin assets) and geographic zone

Geographic zone	Low voltage assets	High voltage assets	Transformers	All assets
CBD	0.5%	0.4%	0.2%	1.0%
Urban	23.8%	13.5%	2.8%	40.1%
Rural	4.0%	25.6%	1.3%	30.9%
Mining	0.0%	0.7%	0.0%	0.7%
Mixed	8.6%	17.0%	1.6%	27.3%
All areas	5.9%	57.3%	36.9%	100%

#### Streetlight, metering, and admin

Streetlight, metering, and admin assets are not included in the asset types listed in Table 3.2. Their share of our efficient cost is calculated separately and then the relative shares in Table 3.2 are adjusted downwards such that, when all asset types are combined, their relative shares sum to 100 per cent. The result of this process is presented in the next section in Table 3.4, which includes all asset types.

The total efficient costs of providing streetlight, metering and admin services are based on the share of the distribution revenue target that is directly attributable to each of these cost pools. That is, the cost allocation for streetlight, metering and admin services is not defined by determining the value of the types of assets in particular locations and then assigning a share of these costs to the streetlight and metering reference services relative to their use of those assets, as described in Table 3.2.

Rather, the cost allocation for streetlight, metering and admin reference services is determined using the building block approach, similar to that used in establishing target revenue for distribution and transmission services. The components to this building block approach for streetlight, metering and admin reference services are:

- return on assets the product of the rate of return with the Regulated Asset Base (RAB);
- depreciation based on the regulated value of the assets and the expected life of the assets;
- approved operating expenditure; and
- any indirect cost allocation including a portion of overall tax and the recovery of deferred revenue.

The total efficient costs, or annual revenue requirement, of providing streetlight, metering and admin services is presented in Table 3.3.



Table 3.3: Streetlight, metering and admin cost of service (\$m Real as at 30 June 2022)

Cost pool	2023	2024	2025	2026	2027
Streetlight services					
Annual revenue requirement	\$33	\$35	\$36	\$39	\$41
Portion of distribution annual revenue requirement	2%	2%	2%	3%	3%
Metering services					
Annual revenue requirement	\$54	\$61	\$68	\$76	\$83
Portion of distribution annual revenue requirement	3%	4%	4%	5%	6%
Non-network related expenditure (admin services)					
Annual revenue requirement	\$161	\$172	\$188	\$203	\$215
Portion of distribution annual revenue requirement	10%	11%	12%	13%	15%

The annual revenue requirement for streetlight, metering and admin services is not disaggregated by geographic zone in the building block approach. We distribute these cost pools among geographic zones using the relative allocation of the total value of our assets across these zones, as presented in Table 3.2.

#### Disaggregation of the annual revenue requirement by asset type and cost pool

The entire process of step 1 results in a disaggregation of our total annual revenue requirement into distinct asset types and cost pools, and subsequently, by geographic area within these categories.

In practice this involves removing the contribution of streetlight, metering and admin services from our total annual revenue requirement, before apportioning the remaining revenue requirement amongst the transformer, high voltage and low voltage asset classes by reference to their relative value of our total asset base. That is, the relative share of total asset value attributed to those assets determines the relative share of total revenue recovery attributed to the use of these assets.

We present the relative share of our total annual revenue requirement by asset type and cost pool over each year in AA5, and in total, in Table 3.4.

Table 3.4: Relative contribution of Western Power's annual revenue requirement by asset type and cost pool

Asset type/cost pool	2023	2024	2025	2026	2027	AA5 total
High voltage	48%	48%	47%	46%	46%	47%
Low voltage	31%	31%	30%	30%	29%	30%
Transformers	5%	5%	5%	5%	5%	5%
Metering	3%	4%	4%	4%	5%	4%
Streetlights	2%	2%	2%	2%	2%	2%
Admin	10%	10%	11%	12%	13%	11%

Note: Some columns do not add to 100 per cent due to rounding.



By way of illustration, the 48 per cent share for high voltage assets in 2023 in Table 3.4 reflects the share for high voltage assets in Table 3.2 (57.3 per cent), adjusted down by 15 per cent in relative terms (ie, 57.3 per cent multiplied by 0.85) to account for the fact that streetlight, metering and admin assets are not included in Table 3.2, but are estimated to account for 15 per cent of efficient costs in 2023, as per Table 3.3.

#### 3.1.2 Step 2 – estimating each reference service's relative use of asset types across geographic areas

In step 1, the relative value of each asset or cost pool for the distribution network is determined. In step 2, these relative values are translated from assets and cost pools to reference services using estimates for the use of system by end-users using each reference service in each geographic zone.

As mentioned above, zone substations in a particular geographic zone experience similar cost structures due to the similar load characteristics for the downstream connections. Conversely, zone substations in different geographic zones have a different combination of end-user types that make use of the network below that asset.

This implies that the assets in each geographic area make a unique contribution to total costs due to:

- the nature of the assets used in connecting that geographic area to the rest of the distribution network as captured in step 1; and
- the mix of end-users using different distribution reference services in that geographic area as captured in step 2.

Practically, step 2 involves breaking down the use of the network in each geographic area by the end-users for each reference service. There are three ways in which the relative use of the distribution network by a group of end-users can be calculated, namely the:

- contribution of end-users using each reference service to system-wide maximum demand, which incorporates the diversity in maximum demand for different types of reference services;<sup>15</sup>
- contribution of end-users using each reference service to total energy consumption; and
- total number of connections for each reference service.

We allow for the relative use of each distribution asset type and cost pool by end-users using each reference service to be determined differently for different types of assets and different types of reference services. By way of example, the relative use of the administrative service cost pool is determined by the total number of connections for each reference service whereas the relative use of network assets, such as transformers and the high or low voltage networks, uses the contribution to system-wide maximum demand. This ensures that costs with different characteristics are allocated in a manner that best suits these characteristics.

The use of network metrics for the distribution asset types and cost pools are:

• the contribution to system-wide maximum demand for transformers and high voltage distribution network assets;

We are only able to observe the contribution to system-wide maximum demand for customers with interval meters, which is currently only a modest proportion of our total customer base. Using the collection of customers with interval meters we are able to devise an average diversity factor for maximum demand for each reference service and apply this to the entire customer base using that reference service. This diversity factor captures the difference in the timing of maximum demand for different customers and facilitates our estimate for the contribution to maximum demand from the collection of customers using each reference service. We envision that this methodology will become more precise over time as the rollout of interval meters increases.



- a combination of the contribution to system-wide maximum demand and total energy for low voltage distribution network assets, which is only applicable for low voltage connected reference services; and
- the total number of end-users for streetlight, metering and administrative services.

In step 1, the asset valuation occurs for transformers, high voltage and low voltage asset types. In order to establish the relative use of these assets by each reference service, adjustments are made to the relative maximum demand measurement for each reference service to reflect the different use of the levels of the network. By way of example:

- high voltage connections do not use the low voltage network and hence have zero contribution to maximum demand for these assets; and
- larger low voltage connections typically use less of the low voltage network because they are connected closer to transformers and so the contribution of larger low voltage business connections is weighted downwards relative to smaller low voltage residential connections.

To be consistent with the asset valuation data used in step 1, the use of system data is taken as the best estimate for the year in which the asset values were obtained, i.e., the 2021-22 financial year. This consistency ensures that the asset value register reflects the use of the network that is driving this network composition.

The relative contribution towards the use of the network for each of our customer classes, <sup>16</sup> from the 2021-22 financial year, is presented in Table 3.5.

Table 3.5: Relative contribution to total network usage – 2021-22 financial year

Customer class	Number of connections	Maximum demand	Total energy consumed
Residential	74%	42%	39%
LV business - small	6%	26%	17%
Industrial	0%	32%	42%
Streetlights	19%	0%	1%
Unmetered	1%	0%	0%
Generators	0%	0%	0%
Grid-connected batteries	0%	0%	0%

Note: Some columns do not add to 100 per cent due to rounding.

By using actual use of system estimates that reflect the conditions at the time of the cost allocation calculation, the allocation of total efficient costs to each distribution reference service will capture the changing behaviour of different types of end-users. For instance, load shifting of residential end-users away from the traditional demand peak in the evening through use of distributed energy resources (**DER**) would result in a lower contribution to system maximum demand for these end-users. As a result, the allocation of costs to these end-users will decline to reflect their reduced contribution to the incursion of costs.

This relative use of system allocation between our customer classes is used in conjunction with the disaggregation of our annual revenue requirement from step 1 (as shown in Table 3.4) to disaggregate our total efficient costs to an efficient target revenue for each customer class. We note that both of these

<sup>&</sup>lt;sup>16</sup> We previously disaggregated all distribution connected end-users into ten 'customer groups'. For AA5, we have refined this categorisation so that all distribution connected end-users are classified into seven 'customer classes'.



processes incorporate the geographic dimension of our network to the efficient target revenue to endusers.

The combination of step 1 and step 2 is presented in Table 3.6, which shows the relative contribution of total target revenue over the entirety of AA5 by asset type and cost pools for all customer classes.

Table 3.6: Relative allocation of total efficient costs for AA5 across customer classes and cost pools

Cost pool	Residential	LV business - small	Industrial	Streetlights	Unmetered	Generators	Share of total AA5 revenue
High voltage asset costs	20%	12%	15%	0%	0%	0%	47%
Low voltage asset costs	13%	7%	11%	0%	0%	0%	30%
Transformer asset costs	2%	1%	2%	0%	0%	0%	5%
Metering cost of service	3%	0%	0%	1%	0%	0%	4%
Streetlight cost of service	0%	0%	0%	2%	0%	0%	2%
Admin cost of service	8%	1%	0%	2%	0%	0%	11%
Share of total efficient costs	46%	21%	27%	5%	0%	0%	100%

#### 3.1.3 Step 3 – assign the distribution revenue target to distribution reference service

As stated above, this methodology calculates the total efficient cost of providing each reference service based on the value of the assets and services used by those end-users and the extent to which they use those assets and services, relative to end-users of other reference services.

The value of distribution assets and cost pools is determined in step 1 and the relative use of these assets and cost pools by each reference service is determined in step 2. In step 3, the total distribution revenue target is assigned to each distribution reference service to calculate the efficient cost target.

Because streetlight assets and services are only used by the streetlight distribution reference service, the entire streetlight cost of service is assigned to the streetlight reference service. This apportioning of total costs occurs separately to the assignment of the other costs to the other reference services.

The process by which total distribution target revenue is disaggregated to the efficient cost target for distribution reference services proceeds as follows:

• annual total distribution target revenue is determined, as approved by the ERA;



- non-reference service distribution revenue and the cost of service for streetlights are removed from the total distribution target revenue;
- this net distribution revenue is assigned to reference services using the relative allocation methodology described above; and
- the streetlight cost of service is assigned entirely to the streetlight reference service.

The result of this cost allocation methodology is for metering and administrative costs to be allocated on a per connection basis, consistent with their cost of service, and for the remaining distribution network costs to be allocated to each reference tariff based upon the relative value and use of each distribution network asset by end-users of each distribution reference service.

#### 3.1.4 Transmission revenue recovered from distribution end-users

The cost allocation for transmission reference services, as discussed in the subsequent part of this section, details how a significant portion of transmission service revenue is to be recovered from distribution connections. This is because connections within the distribution network use the transmission network in order to consume electricity generated outside of the distribution network.

The pass through of transmission service revenue to distribution end-users is detailed at the zone substation level. That is, the result of the transmission cost allocation methodology is a value of transmission revenue to be recovered from distribution end-users located below each zone substation.

In a similar manner to how distribution network asset values are allocated across geographic zones in step 1, the pass through of transmission service revenue can be aggregated from the zone substation level to the geographic zone level. Table 3.7 presents an indicative breakdown of transmission service revenue by geographic zone.

Table 3.7: Relative value of transmission service revenue to be recovered from distribution end-users

Geographic zone	Proportion of total transmission service revenue
CBD	5.0%
Urban	67.0%
Rural	8.5%
Mining	3.7%
Mixed	15.8%

The disaggregation of the pass through of transmission service revenue among customer classes is consistent with the disaggregation of total distribution revenue to customer classes. That is, while distribution revenue is assigned to cost pools that are disaggregated by different measures of the relative use of the network, the combination of all cost pools gives rise to a relative share of total distribution revenue for each customer class (see the bottom row of Table 3.8).

This results in an allocation of transmission service revenue to distribution reference services that is consistent with the cost allocation methodology for distribution service revenue to distribution reference services. Therefore, the bundled (combined transmission and distribution) prices sent to distribution endusers is reflective of this new cost allocation methodology.



#### 3.1.5 Resulting efficient cost target estimation

The efficient contribution of each reference service to our total network costs can be prone to variation over time as use of the network changes relative to other reference services.

By way of example, residential end-users that install solar PV systems may reduce their reliance on current network assets by self-consuming their own generated electricity, and hence reduce their efficient cost target over time. However, we may invest in new network assets that support two-way flows from these residential end-users that cause an offsetting increase in the efficient cost target for these end-users.

In order to combat these variations, we undertake our detailed estimation of efficient costs for each distribution reference service using historical network usage and network asset valuation data once at the start of AA5. This calculation of the efficient cost target then guides any transition of our customer classes, or reference tariffs, over time.

We present the main determinants of our efficient cost target across customer classes and different network cost pools in Table 3.8.

Table 3.8: Efficient cost target for AA5 across customer classes and cost pools (\$m)

	Share of total AA5 revenue (as per Table 3.7)	Allocation to customer class	Residential	LV business - small	Industrial	Streetlights	Unmetered	Generators	Grid-connected batteries
High voltage asset costs	47% of distribution revenue	Contribution to maximum demand	\$1,303	\$804	\$973	\$0	\$3	\$0	\$0
Low voltage asset costs	30% of distribution revenue	Even split between contribution to maximum demand and total energy consumption	\$828	\$431	\$710	\$11	\$3	\$0	\$0
Transformer asset costs	5% of distribution revenue	Contribution to maximum demand	\$134	\$83	\$100	\$0	<i>\$0</i>	\$0	\$0
Metering cost of service	4% of distribution revenue	Share of total number of connections	\$194	\$17	\$1	\$51	\$3	\$0	\$0
Streetlight cost of service	2% of distribution revenue	To streetlight connections only	\$0	\$0	\$0	\$143	\$0	\$0	\$0
Admin cost of service	11% of distribution revenue	Share of total number of connections	\$534	\$46	\$3	\$140	\$8	\$0	\$0
Transmission revenue pass-through	All transmission revenue not recovered from transmission reference services	Assigned in the same proportion of total distribution revenue across customer classes	\$791	\$488	\$591	\$0	\$2	\$0	\$0



Total revenue recovered from distribution connections over AA5			\$3,783	\$1,869	\$2,378	\$345	\$19	\$0	\$0	
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# 4. Allocation of target revenue to reference tariffs

In the previous section we describe how we estimate the efficient cost of providing each reference service.

In this section we describe how we allocate our target revenue to each reference tariff and set prices so that the level of revenue we expect to recover from each tariff:

- moves closer to the efficient cost target (as determined using the methodology in section 3);
- avoids unacceptable bill impacts on our end-users; and
- is higher than the avoidable cost and lower than the standalone cost of providing the service.

We also explain how we set the prices that comprise each reference tariff so that we expect to recover the revenue allocated to each tariff, while avoiding unacceptable bill impacts.

Although our cost allocation methodology is applied at the reference tariff level, in practice we allocate revenue based on customer classes for which the total efficient cost of providing reference services is similar. These are:

- residential end-users;
- low voltage small business end-users;
- industrial end-users;
- streetlights and unmetered end-users; and
- generator end-users.

The efficient allocation for each of these customer classes is estimated as the sum of the efficient allocation of each reference tariff that comprises the customer class.

We allocate revenue in this manner to manage interactions between our cost allocation methodology, the need to transition to efficient revenue allocations and historical pricing relationships. Specifically, our cost allocation methodology assumes that each reference tariff imposes different historical costs on the network and therefore has a unique efficient cost allocation.

However, our long-standing price approach has been to equivalently price exit and bi-directional reference services. It follows that reference tariffs that are intended to have the same prices may, according to the efficient allocations, require revenue allocations that move in opposite directions – breaking the nexus between their prices.

Allocating revenue instead to customer classes that have similar network use characteristics and tariff structures enables these pricing relationships to be preserved, while maintaining the ability, at an aggregate level, to transition the end-users in a customer class to their efficient revenue allocation (consistent with the requirements of the Code).

#### 4.1 Three step allocation

Western Power has developed a revenue allocation methodology that is used to gradually transition each customer class to its efficient allocation throughout AA5 and beyond in a manner that proactively manages bill impacts. It comprises three steps:

• **step one – determine the baseline adjustment to revenue allocations.** This step involves changing the previous year's revenue per end-user (at the customer class level) by the percentage change in aggregate revenue per end-user. We refer to this step as the 'baseline adjustment' to revenue



allocations because it holds constant the relative position of the current and efficient cost allocation, taking account of the changes in total revenue, number of connections and volume. It therefore reflects no incremental effort to transition towards a more efficient allocation.

- **step two transition to the efficient revenue allocation.** This step involves applying a further change to revenue per end-user on top of the baseline adjustment to transition the customer class towards its efficient allocation. The direction and scale of the change required to meet the efficient revenue allocation is determined by comparing the baseline adjustment revenue allocation with the efficient revenue allocation (as determined through our cost allocation methodology).
- **step three set prices to recover allocated revenue.** This step involves deriving prices for various components of each reference tariff such that the revenue allocated to the relevant customer class is recovered. We apply a pricing approach that seeks to rebalance our recovered revenue from variable charges to fixed charges, while managing bill impacts and promoting the uptake of our new, efficiently priced reference tariffs.

We note that the requirement for our reference tariffs to reflect the efficient costs of providing those reference service is a new addition to the Code. A consequence of this is that the baseline adjustment revenue allocations may differ substantially from the efficient allocation in each year, meaning significant price changes would be required to transition each customer class directly to its efficient allocation. When an increase in the revenue allocation is required for a customer class to transition to its efficient allocation, to manage bill impacts, we endeavour to limit the increase in revenue per end-user to two per cent on top of the baseline adjustment.

Due to the delay in the commencement of AA5, prices in the first year (FY23) were held constant, ie, they were left unchanged from the final year of AA4. This meant that the revenue implied by our prices and forecast number of connections and volumes in the first year of AA5 (FY23) did not reconcile with our target revenue in that year.

This created significant challenges for the application of our cost methodology in the second year of AA5 (FY24), since it has a strong intertemporal dimension, ie, it is linked from year-to-year. The second year of AA5 (FY24) could therefore be characterised as a transitional year for our cost allocation methodology, since its focus was predominantly on managing bill impacts, rather than on transitioning to more efficient cost allocations using our three-step methodology, while also managing bill impacts.

We explain our three-stage revenue allocation methodology in further detail below.

#### 4.2 Step 1: Baseline adjustment

The first step in our cost allocation methodology is to calculate the change in average revenue per end-user in the previous year that is required – across all end-users – to account for:

- changes in Western Power's ERA-approved revenue target; and
- changes in the number of connections from year-to-year.

We refer to this adjustment as the 'baseline adjustment', ie, it is a baseline, average change in price that will allow us to recover our ERA-approved revenue target, without any consideration given to improving the efficiency of our cost allocation.

Adjusting the average revenue recovered from each customer class by this percentage will allow us to recover our approved revenue target. This is an equitable first step, since it applies to all end-users evenly and creates a common baseline from which to apply transitional considerations, ie, to transition revenue



recovered from each group of end-users towards an efficient level and manage bill impacts, which we address in step two.

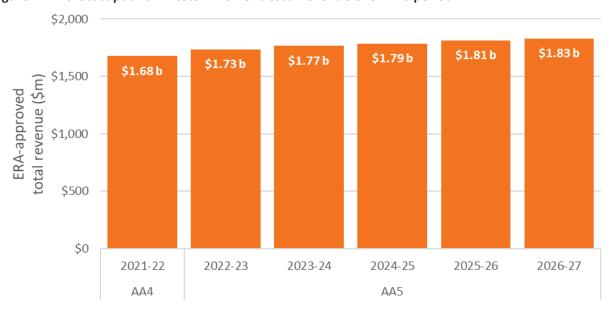
In Table 4.1 we present the forecast number of connections in each customer class over AA5, which shows that the number of connections is growing across nearly all customer classes.

Table 4.1: Forecast distribution connection numbers by customer class over AA5

Customer class	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	Annualised growth rate over AA5
Residential	1,085,063	1,093,903	1,103,159	1,112,494	1,122,457	1,133,184	0.87%
LV business – small	89,805	94,989	100,641	107,211	113,779	119,963	5.96%
Industrial	4,223	4,386	4,434	4,485	4,537	4,590	1.68%
Streetlights	278,067	288,636	293,180	297,685	302,467	307,357	2.02%
Unmetered	18,698	19,460	19,811	20,162	20,513	20,864	2.22%
Generators	25	25	25	25	25	25	0.00%

In figure 4.1 we present our forecast approved revenue, which gradually increases over AA5.

Figure 4.1: Forecast path of Western Power's total revenue over AA5 period



Our expected growth in the number of connections partially, but not fully, offsets the effects of increasing approved revenue over AA5.



In Figure 4.2 we show that the average annualised change in revenue per end-user is 1.8 per cent per annum over AA5, in nominal terms. However, as noted above, holding prices constant in the first year of AA5 (FY23) requires a transitional year of price changes in FY24 to make up for foregone revenue, while managing and smoothing bill impacts over AA5. Without this transitional approach in FY24, some end-users would experience strong volatility in price changes over AA5, ie, sharp increase and then sharp decreases in bills.

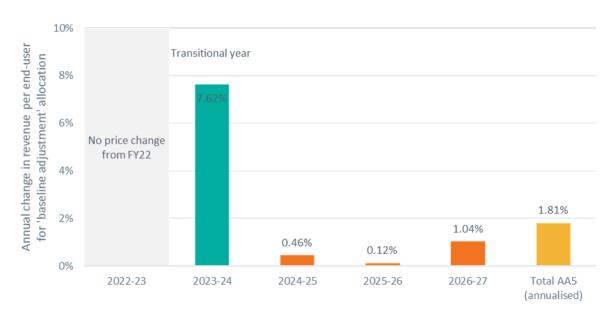


Figure 4.2: Forecast change in revenue per end-user for all end-users over AA5 (before improvements in efficiency)

It follows that the outcome of this first step in our cost allocation methodology is a baseline, average change in price that will allow Western Power to recover its approved revenue target, without any consideration given to improving the efficiency of our cost recovery (for example, actual demand being greater than forecast demand in a year).

In other words, the application of this change in average revenue per end-user would hold constant the relative efficiency of our cost allocation from the previous year.

#### 4.3 Step 2: Transitioning to a more efficient allocation

Having established the change in average revenue per end-user that will enable Western Power to recover its approved revenue target – with no incremental improvements in efficiency – the second step is to transition the revenue recovered from each customer class towards the efficient level (as estimated using the methodology described in section 3), while managing bill impacts on our end-users.

We evaluate these transitional decisions relative to the outcome of the baseline adjustment in step one. This means that, in the context of a downwards baseline adjustment, a customer class from which more revenue needs to be recovered may experience a slower decline in average prices, rather than a total increase, ie, the net effect of a downwards baseline adjustment and an upwards efficiency adjustment may still be a total decrease in prices.

In Table 4.2 we illustrate the direction in which the revenue recovered from each customer class needs to shift over AA5 to move closer to the efficient cost target that we describe in section 3, after the baseline adjustment.



Table 4.2: Direction of required transition towards efficient cost allocation over AA5

Customer class	Direction of transition to efficient level of cost recovery, after baseline adjustment in step one
Residential	Decrease
LV business – small	Increase
Industrial	Decrease
Streetlights and unmetered	Increase
Generators	Decrease

In practice, we evaluate the change in average revenue per end-user that would be required to achieve the efficient cost target, and then transition towards that efficient allocation while managing the effects on our end-users' bills.

There are strong interrelationships between the transitional decisions for each customer class, ie, a decrease in the revenue allocation for a customer class from which we recover a lot of revenue (eg, residential end-users), can require larger increase in revenue allocation for smaller customer classes to ensure that we still expect to recover our approved revenue target in aggregate.

We allocate revenue between our customer classes so that the average revenue per end-user recovered from each customer class so that, after the baseline adjustment, the revenue recovered (or the cost allocation) moves closer to the efficient cost target.

In Table 4.3 we present the change in revenue per end-user for each customer class in FY25 to FY27 as a result of the baseline adjustment in step one and transitional adjustment to improve efficiency in step two.<sup>17</sup>

<sup>&</sup>lt;sup>17</sup> We explain in section 4.1 that holding prices constant in the first year of AA5 (FY23) necessitated a transitional year in the second year of AA5 (FY24).



Table 4.3: Annualised change in revenue per end-user over AA5

Customer class	Baseline adjustment (annualised)	Direction of incremental efficiency adjustment in step two
Residential	1.81%	Decrease
LV business – small	1.81%	Increase
Industrial	1.81%	Increase
Streetlights	1.81%	Increase
Unmetered	1.81%	Increase
Generators	1.81%	Decrease

Having allocated target revenue to each customer class, we then allocate target revenue to the individual reference tariffs that comprise each customer class. Since each customer class comprises end-users that impose similar costs on our network, we allocate revenue to each reference tariff to ensure that we recover a similar level of revenue from end-users that impose similar costs on our network.

This reflects that Western Power does not have control over the assignment of end-users to reference services and reference tariffs, and that retailers/customers can choose the reference tariff that minimises their network bill. It is inefficient and inequitable for certain end-users to reduce their network bill simply by changing tariff, while making no change in their use of the network – leaving more revenue to be recovered from other end-users. In other words, residential end-users should be allocated network costs based on their individual network usage, regardless of which reference tariff they have selected.

Managing this dynamic is also a key consideration in setting individual prices, in step three of our cost allocation methodology.

As required by the Code, we also ensure that the level of revenue that we expect to recover from each reference tariff lies on or between:<sup>18</sup>

- a) an upper bound representing the stand-alone cost of service provision for customers to whom or in respect of whom that reference tariff applies; and
- b) a lower bound representing the avoidable cost of not serving the customers to whom or in respect of whom that reference tariff applies:

We explain how we estimate standalone and avoidable cost in section 5, and illustrate in Table 4.4 below how the level of revenue we expect to recover from each reference tariff falls between standalone and avoidable cost.

<sup>&</sup>lt;sup>18</sup> The Code, clause 7.3(d).



We also illustrate in Table 4.4 that the level of revenue/cost we recover from tariff components that vary with usage (variable charges) is higher than the avoidable/incremental cost of providing each service. This demonstrates partial compliance with the requirements of clause 7.6 of the Code, which requires that variable charges recover *only* the avoidable/incremental cost of providing each reference service (subpart a), with the remainder of our costs to be recovered by fixed charges (subpart b).

Full compliance with this provision would give rise to significant increases in our fixed charges. In light of feedback from users and end-use customers, we limited the increases in fixed charges and therefore recover more costs from variable charges than is required by clause 7.6 of the Code. As described in section 4.4, Western Power will endeavour to more fully comply with this requirement in the future, while managing bill impacts.

Table 4.4: Indicative allocation of revenue lies between avoidable and standalone cost - FY25

Reference tariff	Avoidable cost (\$m)	Revenue recovered from tariff components that vary with usage (\$m)	Indicative revenue recovered (\$m)	Standalone cost (\$m)
RT1	32.91	106.94	186.72	788.17
RT2	9.53	27.07	45.64	706.67
RT3	0.84	2.87	4.55	678.77
RT4	6.95	9.68	13.93	698.22
RT5	8.82	17.24	40.31	500.30
RT6	23.62	88.79	120.91	754.14
RT7	32.93	86.21	147.49	580.57
RT8	3.52	6.96	21.20	687.66
RT9	14.97	7.21	51.85	720.60
RT10	1.90	2.31	6.73	682.92
RT11	1.58	3.96	3.97	679.65
RT13	18.96	60.82	102.26	739.96
RT14	0.80	5.17	6.22	678.54

Reference tariff	Avoidable cost (\$m)	Revenue recovered from tariff components that vary with usage (\$m)	Indicative revenue recovered (\$m)	Standalone cost (\$m)
RT15	1.93	2.77	6.14	682.35
RT16	3.20	2.55	3.43	686.22
RT17	41.30	55.38	141.45	813.76
RT18	78.43	150.11	182.42	927.03
RT19	0.42	1.19	1.30	677.25
RT20	22.02	72.61	78.76	746.42
RT21	40.08	89.81	227.28	817.82
RT22	0.23	1.01	1.24	676.70
RT34	0.00	0.00	0.00	675.97
RT35	0.00	0.00	0.00	675.97
RT36	0.00	0.00	0.00	470.97
RT37	0.00	0.00	0.00	470.97
RT38	0.00	0.00	0.00	470.97
RT39	0.00	0.00	0.00	470.97
RT40	0.00	0.00	0.00	470.97
RT41	0.00	0.00	0.00	470.97

# 4.4 Step 3: Setting prices to recover allocated revenue

Once the revenue allocation is set for each customer class using the baseline adjustment and efficiency transition in step one and two, we then derive prices for each charging component that comprises each individual tariff, such that we expect to recover the target revenue (or costs) allocated to each customer class. Our price setting process is guided by four overarching objectives:



- rebalance our revenue recovery towards fixed charges and away from variable charges to improve the efficiency of our tariffs, and consistent with clauses 7.3H(c) and 7.6 of the Code;
- encourage the uptake of our new reference tariffs to promote efficient use of our network;
- achieve and retain specific, relative relationships between time-of-use charges, eg:
  - to set the shoulder price equal to approximately 1.3 times the off-peak price; and
  - to set the peak price equal to approximately two times the shoulder price; and
- manage bill impacts in the pursuit of the above objectives.

The practical application of this approach is that for reference tariffs:

- with reducing revenue per end-user, we decrease variable charges in the first instance by a constant proportion to retain the relative relationship between those prices; and
- with increasing revenue per end-user, we increase fixed charges and then increase variable charges thereafter.

By way of illustration, for the residential customer class, we have increased fixed charges in FY24 by only two per cent above the increase required by our revenue (3.2 per cent in total)<sup>19</sup> broadly in line with the in our target revenue for this year.

As discussed above, we also set prices to avoid arbitrage opportunities between our residential reference tariffs for end-users with similar usage patterns. This reflects the fact that residential end-users should contribute to recovering our network costs based on their network usage, irrespective of which reference tariff they are assigned to by their retailer.

Table 4.5 demonstrates for each residential reference tariff the revenue recovered from each charging component in FY24.

Table 4.5: Indicative forecast revenue recovered from residential reference tariffs in FY24 (\$m)

Reference tariff	Fixed charge	Flat energy	Demand charge	On-peak energy	Shoulder energy	Off-peak energy	Overnight energy	Super off- peak energy
RT1	99.86	151.34	0.00	0.00	0.00	0.00	0.00	0.00
RT3	1.40	0.00	0.00	2.02	0.00	0.65	0.00	0.00
RT13	50.31	82.93	0.00	0.00	0.00	0.00	0.00	0.00
RT15	2.86	0.00	0.00	1.89	0.00	0.66	0.00	0.00
RT17	68.22	0.00	0.00	20.69	3.70	27.36	0.00	0.00
RT19	0.09	0.00	1.04	0.03	0.01	0.05	0.00	0.00
RT21	113.86	0.00	0.00	38.34	16.38	24.62	8.17	0.00
RT35	41.17	0.00	0.00	24.19	0.00	11.06	0.00	0.08
RT37	5.38	0.00	7.80	2.35	0.00	1.07	0.00	0.01

<sup>19</sup> With the exception of RT17, which has received a lower increase to bring the fixed charge into line with all other residential reference tariffs.



# 5. Stand-alone and avoidable cost

Clause 7.3D of the Code requires that the revenue expected to be recovered from each reference tariff must lie on or between:

- a) an upper bound representing the stand-alone cost of service provision for customers to whom or in respect of whom the reference tariff applies; and
- b) a lower bound representing the avoidable cost of not serving the customers to whom or in respect of whom the reference tariff applies.

# **5.1** Economic concepts

The economic concepts of stand-alone and avoidable cost reflect the principle that the amount recovered from users of any one service in a group of services using shared assets should be:

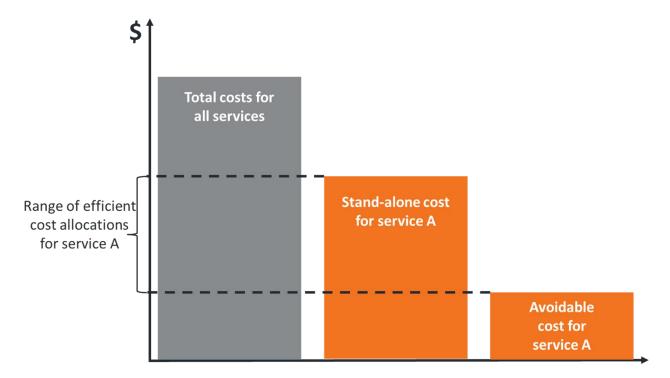
- no more than the efficient cost of providing that service alone (the stand-alone cost) if those endusers were charged more than the stand-alone cost, then it would be hypothetically possible for them to pay an alternative provider to provide the service at a lower cost; and
- no less than the additional costs directly incurred to provide the service (the avoidable cost) if those
  end-users were charged less than the avoidable cost then the business would not be recovering the
  costs incurred to supply the end-users, and the shortfall in revenue would have to be recovered from
  other end-users.

The recovery of costs within these bounds will ensure that each reference service is priced no higher than the level at which it may be profitable for end-users to bypass the service, and no less than the level at which one service is subsidising the provision of any others.

It follows that any allocation of costs within these bounds is efficient, as shown in the indicative example provided in Figure 5.1. The ultimate allocation of costs within these bounds involves a matter of equity between end-users and a degree of judgement by subject matter experts.



Figure 5.1: The range of efficient cost allocations for a particular service



Importantly, a cross-subsidy arises only when the costs recovered from users of a particular service fall outside the bounds established by the stand-alone cost (upper bound) and avoidable cost (lower bound) of that particular service.

#### 5.2 Estimation

Both stand-alone and avoidable costs, as defined in the Code, relate to a specific portion of the 'approved total costs' as part of the annual revenue requirement. This implies that the estimation of these concepts involves apportioning approved total costs, rather than determining or calculating specific costs or values.

We note that as each reference service is allocated both distribution and transmission costs, stand-alone and avoidable costs also contain both distribution and transmission components.

The estimation process for stand-alone and avoidable costs are discussed separately, commencing with the process for avoidable cost.

# 5.2.1 Avoidable cost

The terms 'incremental cost' and 'avoidable cost' are often interchangeable in the context of network pricing principles. In fact, the Code refers to 'avoidable cost' in clause 7.3D(b) yet defines the 'incremental cost of service provision' as the costs that would be 'avoided' if the services were not provided. It follows that the interpretation of avoidable cost in clause 7.3D(b) should remain consistent with definition of incremental cost from the Code.

The process for estimating avoidable cost for distribution reference services is presented in Figure 5.2.



Figure 5.2: Estimation of avoidable costs for distribution reference services

Allocate total distribution operating expenditure across all distribution reference services consistent with the distribution cost allocation methodology

Allocate 60 per cent of total transmission service cost pass through to each distribution reference service

As defined in the Code, the incremental cost of a network service considers the portion of approved total costs that would be avoided during the specified period of time if that particular network service was not provided. In any particular year, the only cost that would be avoided from not providing a network service is the operating expenditure allocated to that network service. This is because the majority of approved total costs are fixed and related to the RAB, in which case they are not avoided when only a single service is not provided. Therefore, operating expenditure is the only component of total cost that is apportioned to avoidable cost.

As described in sections 3 and 4, we have developed a methodology for allocating total distribution costs to distribution reference services. Our avoidable cost methodology assumes that operating expenditure is allocated to distribution reference services in the same proportion that total distribution costs are allocated. Allocating total operating expenditure for distribution services provides an estimate for the distribution component to the avoidable cost for distribution reference services.

Avoidable costs for distribution reference services must also consider the transmission component to the service. Consistent with the approved approach used in previous Access Arrangements, we assume that 60 per cent of the transmission revenue recovered from each distribution reference service is associated with variable costs on the transmission network and are hence avoidable if the service is not provided.

With regards to transmission connections, many components of total operating expenditure will still be necessary if certain services are not provided. In particular, the only component of total transmission operating expenditure that is avoidable is operating expenditure associated with network operations activities.

The forecast of total network operations expenditure each year is split evenly between loads and generators to obtain the avoided cost for each transmission reference tariff. This methodology is consistent with the approved approach used in previous Access Arrangements.

# 5.2.2 Stand-alone cost

The process for estimating stand-alone cost for distribution reference services is presented in Figure 5.3.

Figure 5.3: Estimation of stand-alone costs for distribution reference services

Allocate total fixed costs

across all relevant asset types relative to the use of system for each distribution reference service

Allocate all relevant variable costs associated with the distribution reference service

Allocate total transmission service cost pass through to each distribution reference service service

As described in sections 3 and 4, we have developed a cost allocation methodology for distribution reference services that allocates the total distribution service cost across distribution asset types and



distribution reference services. In addition, the transmission costs that are passed through to distribution reference services also follows a similar allocation methodology.

The distribution asset types in the distribution cost allocation methodology are assumed to have a further allocation of fixed and variable components. The proportion of fixed and variable costs for each asset type is presented in Table 5.1.

Table 5.1: Fixed and variable relative components to total costs for distribution system assets

Distribution asset type	Relative fixed cost component	Relative variable cost component
Transformers	100%	0%
High voltage assets	40%	60%
Low voltage assets	40%	60%
Streetlights	100%	0%
Metering	0%	100%

To determine the component of stand-alone cost attributable to distribution services, each distribution reference service is allocated:

- a share of all fixed costs for all relevant distribution asset types, determined by the relative use of system by end-users of that reference service; and
- the variable costs for all relevant distribution asset types allocated to that particular distribution reference service only.

The transmission service component to stand-alone costs for distribution reference services is the total pass through of transmission revenue allocated to that particular reference service.

With regards to transmission connections, the stand-alone cost of service is equal to total transmission costs less the costs that are avoided when the service is not provided. This allocation applies to both loads and generators on the transmission system.

As such, the stand-alone cost for all transmission reference services is total transmission costs less the avoidable cost for that transmission reference service. This methodology is consistent with the approved approach used in previous Access Arrangements.



# **6.** Tariff structures

The following table details which reference tariff is applicable to each of the reference services.

 Table 6.1:
 Reference services and applicable tariffs

··	
Reference service	Reference tariff
A1 – Anytime Energy (Residential) Exit Service	RT1
A2 – Anytime Energy (Business) Exit Service	RT2
A3 – Time of Use Energy (Residential) Exit Service	RT3
A4 – Time of Use Energy (Business) Exit Service	RT4
A5 – High Voltage Metered Demand Exit Service C5 – High Voltage Metered Demand Bi-directional Service	RT5
A6 – Low Voltage Metered Demand Exit Service C6 – Low Voltage Metered Demand Bi-directional Service	RT6
A7 – High Voltage Contract Maximum Demand Exit Service C7 – High Voltage Contract Maximum Demand Bi-directional Service	RT7
A8 – Low Voltage Contract Maximum Demand Exit Service C8 – Low Voltage Contract Maximum Demand Bi-directional Service	RT8
A9 – Streetlighting Exit Service	RT9
A10 – Unmetered Supplies Exit Service	RT10
A11 – Transmission Exit Service	TRT1
B1 – Distribution Entry Service	RT11
B2 – Transmission Entry Service	TRT2
B3 – Entry Service Facilitating a Distributed Generation or Other Non-NetworkSolution	RT23
C1 – Anytime Energy (Residential) Bi-directional Service	RT13
C2 – Anytime Energy (Business) Bi-directional Service	RT14
C3 – Time of Use (Residential) Bi-directional Service	RT15
C4 – Time of Use (Business) Bi-directional Service	RT16
A12 – 3 Part Time of Use Energy (Residential) Exit Service C9 – 3 Part Time of Use Energy (Residential) Bi-directional Service	RT17
A13 – 3 Part Time of Use Energy (Business) Exit Service C10 – 3 Part Time of Use Energy (Business) Bi-directional Service	RT18



Reference service	Reference tariff
A14 – 3 Part Time of Use Demand (Residential) Exit Service C11 – 3 Part Time of Use Demand (Residential) Bi-directional Service	RT19
A15 – 3 Part Time of Use Demand (Business) Exit Service C12 – 3 Part Time of Use Demand (Business) Bi-directional Service	RT20
A16 – Multi Part Time of Use Energy (Residential) Exit Service C13 – Multi Part Time of Use Energy (Residential) Bi-directional Service	RT21
A17 – Multi Part Time of Use Energy (Business) Exit Service C14 – Multi Part Time of Use Energy (Business) Bi-directional Service	RT22
C15 – Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution	RT24
D1 – Supply Abolishment Service	RT25
D2 – Capacity Allocation Service	NA <sup>20</sup>
D6 – Remote Load / Inverter Control Service	RT26
D8 – Remote De-energise Service	RT28
D9 – Remote Re-energise Service	RT29
D10 – Streetlight LED Replacement Service	RT30
D11 – Site Visit to Support Remote Re-energise Service	RT31
D12 – Manual De-energise Service	RT32
D13 – Manual Re-energise Service	RT33
A19 – Super Off-peak Energy (Business) Exit Service C17 – Super Off-peak Energy (Business) Bi-directional Service	RT34
A18 – Super Off-peak Energy (Residential) Exit Service C16 – Super Off-peak Energy (Residential) Exit Service	RT35
A21 – Super Off-peak Demand (Business) Exit Service C19 – Super Off-peak Demand (Business) Bi-directional Service	RT36
A20 – Super Off-peak Demand (Residential) Exit Service C18 – Super Off-peak Demand (Residential) Bi-directional Service	RT37
C22 – Transmission Storage Service	TRT3
C23 – Low Voltage Distribution Storage Service	RT38
C24 – High Voltage Distribution Storage Service	RT39

<sup>&</sup>lt;sup>20</sup> Applicable Reference Tariff: Any applicable lodgement fees payable in accordance with the Applications and Queuing Policy.



Reference service	Reference tariff
A22 – Low Voltage Electric Vehicle Charging Exit Service C20 – Low Voltage Electric Vehicle Charging CMD Service	RT40
A23 – High Voltage Electric Vehicle Charging Exit Service C21 – High Voltage Electric Vehicle Charging CMD Service	RT41

As stated in section 3 of the TSS Overview, the structure of a reference tariff refers to the design of its charging components, which principally includes:

- the form of the charging components, e.g., fixed charges, variable energy charges, variable demand charges and/or capacity-based charging components; and
- the particular specification of those charging components, e.g., whether or not different variable charges apply at different times of the day.

We acknowledge that the structure of some existing tariffs is different to the structure of new tariffs to be included in AA5. This is primarily the case for the new time of use energy tariffs, which contain a super off-peak period that is not a defined charging window in most existing time of use energy tariffs. Any existing reference tariff that is superseded by a new reference tariff is classified as a 'transitional' reference tariff.

Accordingly, we will provide the existing end-users with the transitional reference tariff if and only if:

- the services were provided at the relevant connection points at the commencement of AA5, and
- those services continue from the commencement of AA5.

However, from the commencement of AA5, the transitional reference tariff will be closed for new nominations. Existing connection points under those reference tariffs will transition to the new time of use reference tariffs over the course of AA5. This is consistent with our approach from previous access arrangements.

Table 6.2 provides a high level indication for the structure of each reference tariff offered by Western Power.



 Table 6.2:
 Summary of tariff structures

TARIFF	TARIFF COMPONENTS																					
	Closed to New Entrants	Tx and Dx Component	Fixed Component (c/day)	Anytime Energy (c/kWh)	On-Peak Energy (c/kWh)	Shoulder Energy (c/kWh)	Off-Peak Energy (c/kWh)	Overnight Energy (c/kWh)	Super Off-Peak Energy (c/kWh)	Metered Demand (c/kVA/day)	Export charge (c/kWh)	Annual Metered Demand	Off-Peak Discount Factor (%)	CMD/DSOC	Demand/ Length for ATMD > 1,000 kVA	Connection Component (c/kW/day)	Use of System Component (c/kW/day)	Common Service Component (c/kW/day)	Excess Network Usage	Fixed Metering Component (c/day)	Administration Component (c/day)	Charge Per Request (\$)
RT1 – Anytime Energy (Residential)	No	<b>✓</b>	<b>✓</b>	<b>√</b>																✓		
RT2 – Anytime Energy (Business)	No	✓	✓	✓																✓		
RT3 - Time of Use Energy (Residential)	Yes	<b>✓</b>	✓		✓		✓													✓		
RT4 - Time of Use Energy (Business)	Yes	<b>✓</b>	✓		✓		✓													✓		
RT5 - HV Metered Demand	No	<b>✓</b>	<b>✓</b>							✓		✓	✓		✓					<b>✓</b>		
RT6 - LV Metered Demand	No	✓	✓							✓		✓	✓		✓					✓		
RT7 - HV CMD	No	<b>✓</b>	<b>✓</b>											<b>✓</b>	✓				✓	<b>✓</b>	✓	
RT8 - LV CMD	No	<b>✓</b>	✓											✓	✓				✓	✓	✓	
RT9 - Streetlighting	No	<b>√</b>	<b>✓</b>	<b>✓</b>																		
RT10 – Unmetered Supplies	No	<b>√</b>	<b>✓</b>	✓																		
RT11 - Distribution Entry	No	<b>✓</b>												<b>✓</b>	✓	✓	<b>✓</b>		✓	<b>✓</b>		
RT13 – Anytime Energy (Residential) Bi-directional	No	<b>✓</b>	✓	✓																✓		



TARIFF	TARIFF COMPONENTS																					
	Closed to New Entrants	Tx and Dx Component	Fixed Component (c/day)	Anytime Energy (c/kWh)	On-Peak Energy (c/kWh)	Shoulder Energy (c/kWh)	Off-Peak Energy (c/kWh)	Overnight Energy (c/kWh)	Super Off-Peak Energy (c/kWh)	Metered Demand (c/kVA/day)	Export charge (c/kWh)	Annual Metered Demand	Off-Peak Discount Factor (%)	CMD/DSOC	Demand/ Length for ATMD > 1,000 kVA	Connection Component (c/kW/day)	Use of System Component (c/kW/day)	Common Service Component (c/kW/day)	Excess Network Usage	Fixed Metering Component (c/day)	Administration Component (c/day)	Charge Per Request (\$)
RT14 – Anytime Energy (Business) Bi-directional	No	<b>✓</b>	<b>✓</b>	<b>✓</b>																✓		
RT15 – Time of Use (Residential) Bi-directional	Yes	<b>√</b>	<b>√</b>		✓		<b>√</b>													✓		
RT16 – Time of Use (Business) Bi-directional	Yes	<b>✓</b>	<b>√</b>		<b>√</b>		<b>√</b>													✓		
RT17 –Time of Use Energy (Residential)	Yes	<b>√</b>	<b>√</b>		✓	✓	✓													✓		
RT18 –Time of Use Energy (Business)	Yes	<b>✓</b>	<b>✓</b>		✓	✓	✓													✓		
RT19 –Time of Use Demand (Residential)	Yes	<b>✓</b>	<b>✓</b>		✓	✓	✓			✓										✓		
RT20 –Time of Use Demand (Business)	Yes	<b>✓</b>	<b>√</b>		✓	✓	✓			✓										✓		
RT21 – Multi Part Time of Use Energy (Residential)	Yes	<b>√</b>	<b>√</b>		✓	✓	✓	<b>√</b>												✓		
RT22 – Multi Part Time of Use Energy (Business)	Yes	<b>√</b>	<b>✓</b>		✓	✓	<b>√</b>	<b>✓</b>												✓		
RT34 – Super Off-peak Energy (Business) – new	No	<b>✓</b>	<b>✓</b>		✓	✓	✓		✓											✓		
RT35 – Super Off-peak Energy (Residential) – new	No	<b>✓</b>	<b>✓</b>		✓	✓	✓		✓											✓		



TARIFF	TARIFF COMPONENTS																					
	Closed to New Entrants	Tx and Dx Component	Fixed Component (c/day)	Anytime Energy (c/kWh)	On-Peak Energy (c/kWh)	Shoulder Energy (c/kWh)	Off-Peak Energy (c/kWh)	Overnight Energy (c/kWh)	Super Off-Peak Energy (c/kWh)	Metered Demand (c/kVA/day)	Export charge (c/kWh)	Annual Metered Demand	Off-Peak Discount Factor (%)	CMD/DSOC	Demand/ Length for ATMD > 1,000 kVA	Connection Component (c/kW/day)	Use of System Component (c/kW/day)	Common Service Component (c/kW/day)	Excess Network Usage	Fixed Metering Component (c/day)	Administration Component (c/day)	Charge Per Request (\$)
RT36 – Super Off-peak Demand (Business) – new	No	✓	✓		✓	✓	✓		<b>✓</b>	✓										✓		
RT37 – Super Off-peak Demand (Residential) - new	No	<b>√</b>	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>		<b>✓</b>	<b>√</b>										✓		
RT38 – Low Voltage Distribution Storage - new	No	<b>✓</b>	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>		<b>✓</b>		<b>✓</b>									✓		
RT39 – High Voltage Distribution Storage - new	No	<b>✓</b>	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>		<b>✓</b>		<b>✓</b>									✓		
RT40 – Low Voltage Electric Vehicle - new	No	<b>✓</b>	<b>√</b>		<b>√</b> *		<b>√</b> *			<b>√</b> *										✓		
RT41 – High Voltage Electric Vehicle - new	No	<b>✓</b>	✓		<b>√</b> *		<b>√</b> *			<b>√</b> *										✓		
RT23 – Entry Service Facilitating a Distributed Generation or Other Non-Network Solution	No																					✓
RT24 – Bi-directional Service Facilitating a Distributed Generation or Other Non- Network Solution	No																					✓
RT25 – Supply Abolishment	No																					✓
RT26 – Remote Load/Inverter Control	No																					<b>✓</b>



TARIFF								TA	ARIF	F CC	OMF	PON	EN	ΓS								
	Closed to New Entrants	Tx and Dx Component	Fixed Component (c/day)	Anytime Energy (c/kWh)	On-Peak Energy (c/kWh)	Shoulder Energy (c/kWh)	Off-Peak Energy (c/kWh)	Overnight Energy (c/kWh)	Super Off-Peak Energy (c/kWh)	Metered Demand (c/kVA/day)	Export charge (c/kWh)	Annual Metered Demand	Off-Peak Discount Factor (%)	CMD/DSOC	Demand/ Length for ATMD > 1,000 kVA	Connection Component (c/kW/day)	Use of System Component (c/kW/day)	Common Service Component (c/kW/day)	Excess Network Usage	Fixed Metering Component (c/day)	Administration Component (c/day)	Charge Per Request (\$)
RT28 – Remote De-energise	No																					✓
RT29 – Remote Re-energise	No																					✓
RT30 – Streetlight LED Replacement	No																					✓
RT31 – Site Visit to support Remote Re-energise - new	No																					✓
RT32 – Manual De-energise - new	No																					✓
RT33 – Manual Re-energise - new	Yes																					✓
TRT1 – Transmission Exit	Yes		✓											✓			✓	✓	✓	✓		

<sup>\*</sup>Indicates a sliding scale of charges, based on utilisation

We present a detailed explanation of the structure of each transmission and distribution reference tariff below. For the purpose of this description, we have grouped reference tariffs for:

- transmission reference services;
- distribution reference services for residential end-users;
- distribution reference services for small and medium business end-users;
- distribution reference services for large business end-users; and
- other distribution reference services.



#### 6.1 Transmission reference services

# 6.1.1 Transmission load tariff (TRT1)

Our load tariff for transmission connections consists of multiple location specific, cost-reflective prices. This tariff is individually calculated for each transmission connected load and so can differ in structure between end-users.

In general, the transmission load reference tariff consists of:

- a fixed, daily charge for access to our network that reflects the costs of providing connection assets;
- a fixed, daily metering charge per meter;
- variable charges that apply to the contracted maximum demand (CMD)<sup>21</sup> of the individual end-user that reflect their use of system, contribution to common services and use of control system services; and
- excess network usage charges (ENUC) calculated in accordance with our ENUC principles for transmission connections.

# **6.1.2** Transmission generator tariff (TRT2)

Similar to our transmission load tariff, our generator tariff for transmission connections consists of multiple location specific, cost-reflective prices. This tariff is individually calculated for each transmission connected generator and so can differ in structure between end-users.

In general, the transmission generator reference tariff consists of:

- a fixed, daily charge for access to our network that reflects the costs of providing connection assets;
- a fixed, daily metering charge per meter;
- variable charges that apply to the declared sent our capacity (**DSOC**) of the individual end-user that reflect their use of system and use of control system services;<sup>22</sup> and
- ENUC calculated in accordance with our ENUC principles for transmission connections.

# **6.1.3** Transmission storage service tariff (TRT3)

We are introducing a new tariff for transmission-connected storage systems in AA5 that, like our existing transmission reference tariffs, is individually calculated for each transmission connected storage device and consists of location specific, cost-reflective prices. Transmission storage devices will be treated similar to existing generators connected to the transmission network.

This tariff comprises:

- a fixed, daily charge for access to our network that reflects the costs of providing connection assets;
- a fixed, daily metering charge per meter;
- variable charges that apply to the DSOC of the individual end-user that reflect their use of system and use of control system services;<sup>23</sup> and
- ENUC calculated in accordance with our ENUC principles for transmission connections.

<sup>&</sup>lt;sup>23</sup> The control system services variable charge for transmission generators is applied to their nameplate capacity, rather than their DSOC.



<sup>&</sup>lt;sup>21</sup> An end-user nominates a CMD that reasonably reflects their expected annual peak demand. There is a monthly penalty for any demand excursion above the CMD.

<sup>&</sup>lt;sup>22</sup> The control system services variable charge for transmission generators is applied to their nameplate capacity, rather than their DSOC.

#### **6.1.4 ENUC** principles

An additional charge applies to transmission connections, both loads and generators, where the peak half-hourly demand exceeds the nominated CMD, for loads, or DSOC, for generators, during the billing period except where Western Power deems the power in excess of CMD or DSOC was required for power system reliability and security purposes.

# 6.2 Distribution reference services – residential end-users

#### 6.2.1 Anytime energy tariffs (RT1 and RT13)

Our anytime energy tariffs are distinct from the other tariff options for residential end-users in that they include a single variable charge that does not change throughout the day.

We offer two anytime energy tariffs, one for residential end-users that only import energy from our network (RT1) and another for residential end-users that both import and export energy from our network (RT13), i.e., that use a bi-directional service. The structure of these two tariffs is the same.

These reference tariffs comprise:

- a fixed, daily charge for access to our network;
- a variable charge that applies to each kWh of energy imported from our network; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

# 6.2.2 Time of use energy tariffs (RT3 and RT15)

The structure of our time of use energy tariffs are similar to our anytime energy tariffs, with one important distinction, the applicable variable charge varies throughout the day.

We offer two time of use energy tariffs for residential end-users, one for residential end-users that only import energy from our network (RT3) and another for residential end-users that both import and export energy from our network (RT15). The structure of these two tariffs is the same.

These reference tariffs comprise:

- a fixed, daily charge for access to our network;
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on- and off-peak periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on- and off-peak periods applicable to the residential time of use energy charges (RT3 and RT15) are presented in Table 6.3.

Table 6.3: Definition of charging windows for RT3 and RT15

Monday – Friday (includ	Saturday – Sunday (excludes public holidays)		
Off-peak	Off-Peak	Off-Peak	
12:00am – 7:00am	7:00am – 9:00pm	9:00pm – 12:00am	All times



#### 6.2.3 Three part time of use energy tariff (RT17)

The structure of our three part time of use energy tariff is similar to our time of use energy tariffs, with an additional charging period defined during the day, i.e., the shoulder period.

We offer a single three part time of use energy tariff for residential end-users, available to residential end-users that only import energy from our network and to those that both import and export energy from our network. The structure of the tariff is the same for both types of residential end-users.

This reference tariff comprises:

- a fixed, daily charge for access to our network;
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on-peak, shoulder and off-peak periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on-peak, shoulder and off-peak periods applicable to the residential three part time of use energy tariff (RT17) are presented in Table 6.4.

Table 6.4: Definition of charging windows for RT17

Monday – Friday (ex	Saturday – Sunday (includes public holidays)					
Off-peak	Shoulder	On-Peak	Off-Peak	Off-Peak		
12:00am – 12:00pm	12:00am - 12:00pm   12:00pm - 3:00pm   3:00pm - 9:00pm   9:00pm - 12:00am					

# 6.2.4 Three part time of use demand tariff (RT19)

The structure of our three part time of use demand tariff is similar to our three part time of use energy tariff, with an additional tariff component that applies to the end-user's maximum demand in a half-hour period during the on-peak period.

We offer a single three part time of use demand tariff for residential end-users, available to residential end-users that only import energy from our network and to those that both import and export energy from our network. The structure of the tariff is the same for both types of residential end-users.

This reference tariff comprises:

- a fixed, daily charge for access to our network;
- a variable demand based charge that applies to the maximum demand in a half-hour period within the on-peak period measured over a billing period (expressed in kW);<sup>24</sup>
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on-peak, shoulder and off-peak periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

<sup>&</sup>lt;sup>24</sup> The demand charge is applied to each day of the billing period over which it is measured.



The on-peak, shoulder and off-peak periods applicable to the residential three part time of use demand tariff (RT19) are presented in Table 6.5. We note that the same on-peak period applies to both the energy and demand components of this tariff.

Table 6.5: Definition of charging windows for RT19

Monday – Friday (ex	Saturday – Sunday (includes public holidays)				
Off-peak	Shoulder	On-Peak	Off-Peak	Off-Peak	
12:00am – 12:00pm	12:00am – 12:00pm   12:00pm – 3:00pm   3:00pm – 9:00pm   9:00pm – 12:00am				

# 6.2.5 Multi part time of use energy tariff (RT21)

The structure of our multi part time of use energy tariff is similar to our three part time of use energy tariff, with an additional charging period defined during the day, i.e., the overnight period.

We offer a single multi part time of use energy tariff for residential end-users, available to residential end-users that only import energy from our network and to those that both import and export energy from our network. The structure of the tariff is the same for both types of residential end-users.

This reference tariff comprises:

- a fixed, daily charge for access to our network;
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on-peak, shoulder, off-peak and overnight periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on-peak, shoulder, off-peak and overnight periods applicable to the residential multi part time of use energy tariff (RT21) are presented in Table 6.6.

Table 6.6: Definition of charging windows for RT21

				Saturday – Sund public holidays)	ay (includes	
Off-Peak	Shoulder	On-Peak	Off-Peak	Overnight	Off-Peak	Overnight
4:00am – 7:00am	7:00am – 3:00 pm	3:00pm – 9:00pm	9:00pm – 11:00pm	11:00pm – 4:00am	4:00am – 11:00pm	11:00pm – 4:00am

### 6.2.6 Super off-peak energy tariff (RT35)

The structure of our new super off-peak energy tariff is similar to our existing/transitional multi part time of use energy tariff (RT21), with the 'overnight' period replaced with a 'super off-peak' period in the middle of the day and with different time definitions for the on-peak, shoulder and off-peak periods.

It applies to residential end-users that only import energy from our network (exit services) and to those that both import and export energy from our network (bidirectional services).

These reference tariffs comprise:



- a fixed, daily charge for access to our network;
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on-peak, shoulder, off-peak and super off-peak periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on-peak, shoulder, off-peak and super off-peak periods are presented in Table 6.7.

**Table 6.7: Definition of charging windows for RT35** 

Everyday					
Off-Peak	Shoulder	Super off-peak	On-Peak	Shoulder	
11:00am – 6:00am	6:00am – 9:00 am	9:00am – 3:00pm	3:00pm – 9:00pm	9:00pm – 11:00pm	

# 6.2.7 Super off-peak demand tariff (RT37)

The structure of our new super off-peak demand tariff is similar to the super-off peak energy tariff that we describe in the preceding section, but with the addition of a demand charge that applies in the on-peak period.

It applies to residential end-users that only import energy from our network (exit services) and to those that both import and export energy from our network (bidirectional services).

These reference tariffs comprise:

- a fixed, daily charge for access to our network;
- a variable demand based charge that applies to the maximum demand in a half-hour period within the on-peak period measured over a billing period (expressed in kW);<sup>25</sup>
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on-peak, shoulder, off-peak and super off-peak periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on-peak, shoulder, off-peak and super off-peak periods applicable to the residential multi part time of use energy tariff (RT37) are presented in Table 6.7.

Table 6.8: Definition of charging windows for RT37

Everyday					
Off-Peak	Shoulder	Super off-peak	On-Peak	Shoulder	
11:00am – 6:00am	6:00am – 9:00 am	9:00am – 3:00pm	3:00pm – 9:00pm	9:00pm – 11:00pm	

 $<sup>^{\</sup>rm 25}$  The demand charge is applied to each day of the billing period over which it is measured.



#### 6.3 Distribution reference services – small and medium business end-users

# 6.3.1 Anytime energy tariffs (RT2 and RT14)

Our anytime energy tariffs are distinct from the other tariff options for business end-users in that they include a single variable charge that does not change throughout the day.

We offer two anytime energy tariffs, one for business end-users that only import energy from our network (RT2) and another for business end-users that both import and export energy from our network (RT14), i.e., that use a bi-directional service. The structure of these two tariffs is the same.

These reference tariffs comprise:

- a fixed, daily charge for access to our network;
- a variable charge that applies to each kWh of energy imported from our network; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

# 6.3.2 Time of use energy tariffs (RT4 and RT16)

The structure of our time of use energy tariffs are similar to our anytime energy tariffs, with one important distinction, the applicable variable charge varies throughout the day.

We offer two time of use energy tariffs for business end-users, one for business end-users that only import energy from our network (RT4) and another for business end-users that both import and export energy from our network (RT16). The structure of these two tariffs is the same.

These reference tariffs comprise:

- a fixed, daily charge for access to our network;
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on- and off-peak periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on- and off-peak periods applicable to the business time of use energy charges (RT4 and RT16) are presented in Table 6.9.

Table 6.9: Definition of charging windows for RT4 and RT16

Monday – Friday (includ	Saturday – Sunday (excludes public holidays)		
Off-peak	On-Peak	Off-Peak	Off-Peak
12:00am – 8:00am	8:00am – 10:00pm	10:00pm – 12:00am	All times

### 6.3.3 Three part time of use energy tariff (RT18)

The structure of our three part time of use energy tariff is similar to our time of use energy tariffs, with an additional charging period defined during the day, i.e., the shoulder period.



We offer a single three part time of use energy tariff for business end-users, available to business end-users that only import energy from our network and to those that both import and export energy from our network. The structure of the tariff is the same for both types of business end-users.

This reference tariff comprises:

- a fixed, daily charge for access to our network;
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on-peak, shoulder and off-peak periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on-peak, shoulder and off-peak periods applicable to the business three part time of use energy tariff (RT18) are presented in Table 6.10.

Table 6.10: Definition of charging windows for RT18

Monday – Friday (ex	Saturday – Sunday (includes public holidays)			
Off-peak	Shoulder	On-Peak	Off-Peak	Off-Peak
12:00am – 12:00pm	All times			

#### 6.3.4 Three part time of use demand tariff (RT20)

The structure of our three part time of use demand tariff is similar to our three part time of use energy tariff, with an additional tariff component that applies to the end-user's maximum demand in a half-hour period during the on-peak period.

We offer a single three part time of use demand tariff for business end-users, available to business end-users that only import energy from our network and to those that both import and export energy from our network. The structure of the tariff is the same for both types of business end-users.

This reference tariff comprises:

- a fixed, daily charge for access to our network;
- a variable demand based charge that applies to the maximum demand in a half-hour period within the on-peak period measured over a billing period (expressed in kW);<sup>26</sup>
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on-peak, shoulder and off-peak periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on-peak, shoulder and off-peak periods applicable to the business three part time of use demand tariff (RT20) are presented in Table 6.11. We note that the same on-peak period applies to both the energy and demand components of this tariff.

 $<sup>^{\</sup>rm 26}$  The demand charge is applied to each day of the billing period over which it is measured.



Table 6.11: Definition of charging windows for RT20

Monday – Friday (ex	Saturday – Sunday (includes public holidays)				
Off-peak	Off-peak Shoulder On-Peak Off-Peak				
12:00am – 12:00pm	12:00am - 12:00pm   12:00pm - 3:00pm   3:00pm - 9:00pm   9:00pm - 12:00am				

# 6.3.5 Multi part time of use energy tariff (RT22)

The structure of our multi part time of use energy tariff is similar to our three part time of use energy tariff, with an additional charging period defined during the day, i.e., the overnight period.

We offer a single multi part time of use energy tariff for business end-users, available to business end-users that only import energy from our network and to those that both import and export energy from our network. The structure of the tariff is the same for both types of business end-users.

This reference tariff comprises:

- a fixed, daily charge for access to our network;
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on-peak, shoulder, off-peak and overnight periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on-peak, shoulder, off-peak and overnight periods applicable to the business multi part time of use energy tariff (RT22) are presented in Table 6.12.

Table 6.12: Definition of charging windows for RT22

				Saturday – Sund public holidays)	ay (includes	
Off-Peak	Shoulder	On-Peak	Off-Peak	Overnight	Off-Peak	Overnight
4:00am – 7:00am	7:00am – 3:00 pm	3:00pm – 9:00pm	9:00pm – 11:00pm	11:00pm – 4:00am	4:00am – 11:00pm	11:00pm – 4:00am

# 6.3.6 Super off-peak energy tariff (RT34)

The structure of our new super off-peak energy tariff is similar to our existing/transitional multi part time of use energy tariff (RT22), with the 'overnight' period replaced with a 'super off-peak' period in the middle of the day and with different time definitions for the on-peak, shoulder and off-peak periods.

It applies to small business end-users that only import energy from our network (exit services) and to those that both import and export energy from our network (bidirectional services).

These reference tariffs comprise:

- a fixed, daily charge for access to our network;
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on-peak, shoulder, off-peak and super off-peak periods; and



• a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on-peak, shoulder, off-peak and super off-peak periods are presented in Table 6.7.

Table 6.13: Definition of charging windows for RT34

Everyday					
Off-Peak	Shoulder	Super off-peak	On-Peak	Shoulder	
11:00am – 6:00am	6:00am – 9:00 am	9:00am – 3:00pm	3:00pm – 9:00pm	9:00pm – 11:00pm	

# 6.3.7 Super off-peak demand tariff (RT36)

The structure of our new super off-peak demand tariff is similar to the super-off peak energy tariff that we describe in the preceding section, but with the addition of a demand charge that applies in the on-peak period.

It applies to small business end-users that only import energy from our network (exit services) and to those that both import and export energy from our network (bidirectional services).

These reference tariffs comprise:

- a fixed, daily charge for access to our network;
- a variable demand based charge that applies to the maximum demand in a half-hour period within the on-peak period measured over a billing period (expressed in kW);<sup>27</sup>
- a distinct variable energy charge that applies to each kWh of energy imported from our network during each of the on-peak, shoulder, off-peak and super off-peak periods; and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

The on-peak, shoulder, off-peak and super off-peak periods applicable to the residential multi part time of use energy tariff (RT36) are presented in Table 6.7.

Table 6.14: Definition of charging windows for RT36

Everyday				
Off-Peak	Shoulder	Super off-peak	On-Peak	Shoulder
11:00am – 6:00am	6:00am – 9:00 am	9:00am – 3:00pm	3:00pm – 9:00pm	9:00pm – 11:00pm

 $<sup>^{27}</sup>$  The demand charge is applied to each day of the billing period over which it is measured.



# 6.4 Distribution reference services – large business end-users

# 6.4.1 High voltage metered demand tariff (RT5)

Our high voltage metered demand tariff is distinct from other business tariffs in that it does not include a variable charge that relates to energy usage, measured in kWh. Rather, our high voltage metered demand charge includes a variable charge that relates to the maximum half-hour demand of an end-user measured over a rolling 12-month period, measured in kVA.<sup>28</sup> However, these variable demand charges are subject to a discount that is calculated by reference to the energy usage of the end-user across on- and off-peak periods.

This reference tariff comprises:

- a fixed, daily charge for access to our network that is based on the rolling 12-month maximum half-hour demand (expressed in kVA), which is eligible for an energy use related discount;
- a variable demand-based charge that applies to the rolling 12 month maximum half-hour demand in excess of pre-determined demand thresholds (expressed in kVA), which is eligible for an energy use related discount;
- a variable charge applied to the electrical distance between the relevant connection point and the closest zone substation, which varies by the measured electrical distance and the rolling 12-month maximum half-hour demand;<sup>29</sup> and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

Our high voltage metered demand tariff contains two possible avenues to reduce the magnitude of the applicable charges, namely:

- reducing the rolling 12-month maximum half-hour demand in circumstances whereby an end-user is able to reduce this value; and
- a discount on the fixed, daily access charge and variable demand-based charge based on the proportion of total energy consumed during the off-peak period, capped at a maximum of 30 per cent.

The on-peak and off-peak periods applicable to the high voltage metered demand tariff (RT5) are presented in Table 6.15.

Table 6.15: Definition of charging windows for RT5

Monday – Friday (excludes public holidays)		Saturday – Sunday (includes public holidays)	
Off-peak	On-Peak	Off-Peak	Off-Peak
12:00am – 3:00pm	3:00pm – 9:00pm	9:00pm – 12:00am	All times

<sup>&</sup>lt;sup>29</sup> This charge is referred to as a 'demand length' charge. When a new distribution generator connects, this charge provides an incentive to choose a connection point as close as possible to the nearest zone substation.



<sup>&</sup>lt;sup>28</sup> Measuring demand in kVA, as distinct to kW, provides an incentive for customers to manage their power factor as close to unity as possible.

#### 6.4.2 Low voltage metered demand tariff (RT6)

Our low voltage metered demand tariff is similar to our high voltage metered demand tariff (RT5). This tariff is eligible for low voltage connections only and contains larger charges to reflect the additional cost of using the low voltage network in addition to the high voltage network.

This reference tariff comprises:

- a fixed, daily charge for access to our network that is based on the rolling 12-month maximum half-hour demand (expressed in kVA),<sup>30</sup> which is eligible for an energy use related discount;
- a variable demand-based charge that applies to the rolling 12 month maximum half-hour demand in excess of pre-determined demand thresholds (expressed in kVA), which is eligible for an energy use related discount;
- a variable charge applied to the electrical distance between the relevant connection point and the closest zone substation, which varies by the measured electrical distance and the rolling 12-month maximum half-hour demand;<sup>31</sup> and
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers.

Our low voltage metered demand tariff contains two possible avenues to reduce the magnitude of the applicable charges, namely:

- reducing the rolling 12-month maximum half-hour demand in circumstances whereby an end-user is able to reduce this value; and
- a discount on the fixed, daily access charge and variable demand-based charge based on the proportion of total energy consumed during the off-peak period, capped at a maximum of 30 per cent.

The on-peak and off-peak periods applicable to the low voltage metered demand tariff (RT6) are presented in Table 6.16.

Table 6.16: Definition of charging windows for RT6

Monday – Friday (excludes public holidays)			Saturday – Sunday (includes public holidays)
Off-peak	On-Peak	Off-Peak	Off-Peak
12:00am – 3:00pm	3:00pm – 9:00pm	9:00pm – 12:00am	All times

# 6.4.3 High voltage contract maximum demand tariff (RT7)

Our high voltage contract maximum demand tariff is distinct from other business tariffs in that the end-user must nominate a contracted maximum demand (CMD) that reasonably reflects their expected annual peak demand. Consistent with that seen for transmission loads (TRT1), any demand utilised in excess of CMD will incur a penalty.

In addition, charges for this tariff are applied to demand measured in kVA, as distinct to kW. This provides an incentive for end-users to manage their power factor as close to unity as possible.

<sup>&</sup>lt;sup>31</sup> This charge is referred to as a 'demand length' charge. When a new distribution generator connects, this charge provides an incentive to choose a connection point as close as possible to the nearest zone substation.



<sup>&</sup>lt;sup>30</sup> Measuring demand in kVA, as distinct to kW, provides an incentive for customers to manage their power factor as close to unity as possible.

This reference tariff comprises:

- a fixed, daily charge for access to our network, which is waived for end-users with CMD greater than 7MVA;
- a variable demand-based charge that applies to CMD in excess of pre-determined demand thresholds;
- a variable charge applied to the electrical distance between the relevant connection point and the closest zone substation, which varies by the measured electrical distance and CMD;
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers;
- a fixed, daily administration charge; and
- ENUC calculated in accordance with our ENUC principles.

This tariff also applies to the high voltage EV charging CMD bi-directional reference service under RT41.

### 6.4.4 Low voltage contract maximum demand tariff (RT8)

Our low voltage contract maximum demand tariff is similar to our high voltage contract maximum demand tariff (RT7).

Consistent with our high voltage contract maximum demand tariff, this tariff requires end-users to nominate a CMD, exceedance of which will result in penalty charges. Similarly, charges are applied per kVA to incentivise end-users to manage their power factor as close to unity as possible.

This reference tariff comprises:

- a fixed, daily charge for access to our network, which is waived for end-users with CMD greater than 7MVA;
- a variable demand-based charge that applies to CMD in excess of pre-determined demand thresholds;
- a variable charge applied to the electrical distance between the relevant connection point and the closest zone substation, which varies by the measured electrical distance and CMD;
- a fixed, daily metering charge that reflects the metering reference service we provide to these endusers;
- a fixed, daily administration charge; and
- ENUC calculated in accordance with our ENUC principles.

This tariff also applies to the low voltage EV charging CMD bi-directional reference service under RT40.

#### 6.5 Distribution reference services – other

# 6.5.1 Streetlight tariff (RT9)

Our streetlight tariff includes a single variable charge that does not change throughout the day, alongside other fixed charges.

The streetlight tariff comprises:

- a fixed, daily charge for access to our network;
- a variable charge that applies to each kWh of energy imported from our network, which is based on the lamp wattage and illumination period for each asset; and
- a fixed asset charge based on the type of streetlight asset supplied.



#### 6.5.2 Unmetered supplies tariff (RT10)

We provide a reference tariff for unmetered supply points. While this tariff is similar in design to the streetlight tariff, it is intended to be distinct to this tariff. That is, any unmetered supply point who connects with facilities and equipment deemed to be associated with streetlights will be placed on the streetlight tariff rather than this tariff.

The unmetered supplies tariff comprises:

- a fixed, daily charge for access to our network;
- a variable charge that applies to each kWh of energy imported from our network, which is calculated as the product of the nameplate rating of the connected equipment (expressed in kW) and the agreed hours of operation.

# 6.5.3 Distribution generator tariff (RT11)

The structure of our distribution generator tariff is similar to our transmission generator tariff (TRT2), in that it consists of multiple location specific, cost-reflective prices. This tariff is individually calculated for each distribution connected generator and so can differ in structure between end-users.

In general, the distribution generator tariff consists of:

- a fixed, daily charge for access to our network that reflects the costs of providing connection assets;
- a fixed, daily metering charge per meter;
- variable charges that apply to the DSOC of the individual end-user that reflect their use of system and use of control system services;<sup>32</sup>
- a variable charge applied to the electrical distance between the relevant connection point and the
  closest zone substation, which varies by the measured electrical distance, the DSOC of the individual
  end-user and the voltage level at which the connection is located; and
- ENUC calculated in accordance with our ENUC principles.

# 6.5.4 Services facilitating a distribution generation or other non-network solution (RT23 and RT24)

These services and tariffs are for situations where the connection of distributed generating plant or other equipment is connected that gives rise to a reduction in forecast costs for Western Power.

RT23 and RT24 consist of:

- the reference tariff applicable to the reference service upon which the connecting end-user is provided; less
- a discount that applies to the connection point as set out below.

Western Power will provide a discount to the applicable reference tariff in circumstances where the service allows for facilities and equipment connected behind the connection point (including distributed generating plant and other non-network solutions) that results in Western Power's capital-related costs or non-capital costs reducing as a result of the entry point for the distributed generating plant or other non-network solution being located in that particular part of the covered network.

In situations where a user connects facilities and equipment (including distributed generating plant) to the Western Power Network and has applied and been assessed as resulting in Western Power's capital-related

<sup>32</sup> The control system services variable charge for distribution generators is applied to their nameplate capacity, rather than their DSOC.



costs or non-capital costs reducing as a result of the entry point for the distributed generating plant or other non-network solution being located in that particular part of the covered network, the discount to be applied is an annualised discount amount (which can be no greater than the annual charge), calculated as the present value of FCp less FCn over a period of Y years using discount rate W.

#### Where:

- FCp is the present value of the Western Power committed forecast capital-related costs and non-capital costs that would be incurred over Y years if the facilities and equipment (including distributed generating plant) were not to connect to the Western Power Network.
- FCn is the present value of Western Power's forecast capital-related costs and non-capital costs over Y years that are anticipated to be incurred if the facilities and equipment (including distributed generating plant) were to connect to the Western Power Network.
- Y is the period over which the present value assessment is to occur which is 15 years unless otherwise agreed between Western Power and the user.
- W is the Weighted Average Cost of Capital as set out in section 5.4 of the Access Arrangement that applies in the pricing year.

# 6.5.5 Distribution storage service tariffs (RT38 and RT39)

We are introducing two new tariffs for distribution-connected storage services, ie:

- a distribution storage service tariffs for low voltage connections RT38; and
- a distribution storage service tariffs for high voltage connections RT39.

These tariff both have the same structure and comprise:

- a fixed, daily charge for access to our network that reflects the costs of providing connection assets;
- a fixed, daily metering charge per meter;
- a super-off-peak, off-peak, shoulder and on-peak energy charge; and
- an on-peak demand charge; and
- export charges (measured in cents per kWh) that are:
  - near-zero outside of the solar soak period;
  - low for the first 3kWh of exports during the solar soak period each day; and
  - then slightly higher for exports above 3 kWh in the solar soak period each day.

Our distribution storage service tariffs provide an incentive for storage systems to shift their load into the super off-peak period.

The on-peak, shoulder, off-peak and super off-peak periods applicable to our distribution storage service tariffs are presented in Table 6.17.

Table 6.17: Definition of charging windows for RT38 and RT39

Everyday				
Off-Peak	Shoulder	Super off-peak	On-Peak	Shoulder



11:00am –	6:00am –	9:00am –	3:00pm –	9:00pm –
6:00am	9:00 am	3:00pm	9:00pm	11:00pm

# 6.5.6 Electric vehicle charging service tariffs (RT40 and RT41)

We are introducing two new tariffs for dedicated EV charging stations, ie:

- a tariff for dedicated EV charging stations connected to the low voltage network RT40; and
- a tariff for dedicated EV charging stations connected to the high voltage network RT41.

These tariffs have the same structure and comprise:

- a fixed, daily charge for access to our network that reflects the costs of providing connection assets;
- a fixed, daily metering charge per meter;
- a sliding scale of demand charges that increase with utilisation, and remain at zero until 15 per cent utilisation is reached;
- a sliding scale of off-peak and on-peak energy charges that increase with utilisation.

The sliding scale of demand and energy charges increase by reference to 10 per cent increments in utilisation. The marginal price is constant from 30 per cent utilisation upwards.

Western Power has designed the measure of utilisation to provide strong support to EV charging stations during this access period, ie, the measure of network use:

- excludes demand in the twelve 30-minute intervals between 9am and 3pm (being the solar soak period in other tariffs); and
- excludes the first 10kW of demand in any 30-minute interval.

It follows that network utilisation is measured as:

30 minute intervals with demand above 10kW outside of 9am to 3pm 30 minute intervals in a billing period

The on-peak and off-peak periods applicable to the electric vehicle charging service tariffs (RT40 and RT41) are presented in Table 6.18.

Table 6.18: Definition of charging windows for RT40 and RT41

Everyday	
On-peak	Off-peak
3:00pm – 9:00pm	All other times

# 6.5.7 Other charging components (RT25 to RT33)

The following tariffs are provided on a fee for service basis and the revenue does not contribute towards the recovery of Western Power's revenue target as approved by the ERA, i.e.:

RT25 consists of a charge per connection point supply abolishment;



- RT26 consists of a charge per request to remotely control a load or inverter;
- RT28 consists of a charge per request for remote de-energisation;
- RT29 consists of a charge per request for remote re-energisation;
- RT30 consists of a user-specific charge that is to be an amount which reflects the costs to Western
  Power of replacing the existing streetlight with the LED streetlight replacement requested by the user
  which may consist of capital and non-capital costs;
- RT31 consists of a charge per request for a site visit to support remote re-energisation of a customer;
- RT32 consists of a charge per request for a site visit to support manual de-energisation of a customer;
   and
- RT33 consists of a charge per request for a site visit to support manual re-energisation of a customer.

Consistent with our historical approach, we set prices for supply abolishment (RT25), remote load / inverter control (RT26), remote de-energise (RT28) and remote re-energise (RT29) services using a bottom-up building block methodology, to recover expected input costs such as administration, field labour, materials, and fleet costs, as relevant to each service, seeking to achieve the lowest sustainable costs of providing the relevant service.



# 7. Price setting for transmission reference services

In this section, we explain the price setting process for end-users connected to our transmission network. Specifically, we present the methodology by which we set prices for:

- existing transmission connected end-users, including the estimation of total efficient costs for each transmission reference service and the bill impact considerations for the recovery of these efficient costs; and
- new nodes on our transmission network.

#### 7.1 Calculation of total efficient costs for transmission reference services

This section details the efficient cost estimation methodology as it pertains to our transmission system.

The efficient cost estimation methodology for the transmission system is a process by which the relative contribution to our total efficient costs for transmission system services is caused by:

- each individual transmission connection; and
- all distribution system connected end-users, as these end-users also use, and therefore must contribute to the cost of, the transmission system.

Similarly, to the distribution efficient cost estimation methodology, the efficient disaggregation of our transmission network costs is based on the relative value of assets and the relative use of these assets by end-users using each transmission reference service. This is achieved through the use of location specific and end-user specific prices for some components of transmission reference tariffs.

The estimation of the efficient contribution of transmission reference services to total transmission costs follows the high-level process detailed in Figure 7.1.

Figure 7.1: Transmission services efficient cost estimation flow chart

1

Disaggregate the total value of all transmission network assets by assigning each asset to a cost pool reflecting the function and purpose of the asset



2

Estimate the efficient share of transmission revenue target to each cost pool based on the relative value of these assets

The remainder of this section provides a detailed description and explanation of the steps presented in Figure 7.1 (including what our asset pools are).

# 7.1.1 Step 1 - definition of transmission service cost pools

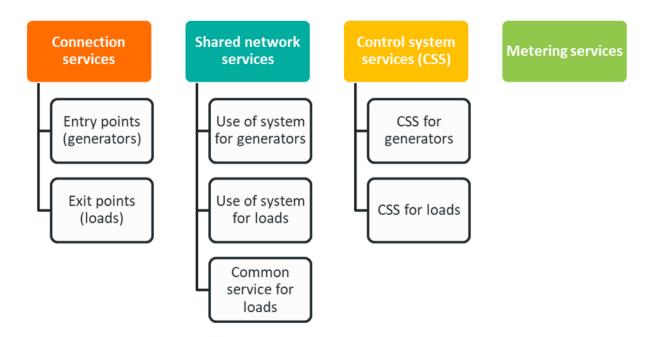
Fundamental to the efficient cost estimation methodology for transmission reference services is the establishment of cost pools to which transmission revenue is disaggregated. In the context of the transmission network efficient cost estimation methodology, these cost pools reflect the different functions performed by groups of assets in the transmission network. The functions of these assets include:



- providing connection services for end-users assigned to the connection services cost pool;
- voltage control services assigned to both the connection services and shared network services cost
  pools as voltage control is partly location specific, allocated to connection services, and partly whole of
  system related, allocated to shared network services;
- supporting the general functionality of the transmission network, such as transmission substations and poles and lines that are not directly attributable to the connection of a particular end-user assigned to the shared network services cost pool;
- providing control services across the transmission network, such as SCADA assets and SCADA control systems – assigned to the control system services (CSS) cost pool; and
- metering for transmission connected end-users assigned to the metering services cost pool.

The transmission service cost pools are presented in Figure 7.2.

Figure 7.2: Transmission service cost pools



The value of transmission network assets is estimated using a similar process to distribution network assets. That is, through the development of a transmission network asset register for the following relevant transmission network assets:

- connection assets at the entry point to the transmission network, for generators, and exit point, for loads;
- shared network assets, i.e., transmission substations, poles, and lines; and
- voltage control assets, i.e., capacitor and reactor banks.

This asset register, which also contains information regarding the geographic location of the asset, is supplemented by information regarding the cost of service for metering and CSS assets. The total efficient costs for the provision of metering and CSS assets and services are determined using the building block approach, similar to that used in establishing target revenue for distribution and transmission services.

In addition, the assignment of transmission network assets and transmission cost of service to cost pools is further segmented by an assignment between the two distinct transmission end-user types, generators,



and loads. Table 7.1 presents the nature by which the cost pools are further segmented to generators and loads.

Table 7.1: Assignment of transmission cost pools between loads and generators

Transmission cost pools	Loads (exit points)	Generators (entry points)
Connection services	<ul> <li>Specific exit connection assets</li> <li>33 per cent of the value of voltage control assets at exit connection points</li> </ul>	<ul> <li>Specific entry connection assets</li> <li>33 per cent of the value of voltage control assets at entry connection points</li> </ul>
Use of system (shared network services)	<ul> <li>50 per cent of the total value of shared network service assets</li> </ul>	20 per cent of the total value of shared network service assets
Common service (shared network services)	<ul> <li>30 per cent of the total value of shared network service assets</li> <li>67 per cent of the value of voltage control assets at both exit and entry connection points</li> </ul>	• None
CSS	<ul> <li>Total CSS costs proportioned based on the total number of load control points</li> </ul>	<ul> <li>Total CSS costs proportioned based on the total number of generator control points</li> </ul>
Metering	<ul> <li>Total metering costs proportioned based on the number of transmission network connected loads</li> </ul>	<ul> <li>Total metering costs proportioned based on the number of transmission network connected generators</li> </ul>

# 7.1.2 Step 2 – estimate the share of transmission target revenue from each transmission cost pool

The result of step 1 is a disaggregation of the combined value of all assets in the transmission network to each cost pool. In step 2, this cost pool disaggregation is used to estimate the efficient share of total transmission target revenue that is attributable to these same cost pools. This determines the efficient level of revenue to be recovered from each component of transmission reference tariffs.

In order to estimate the contribution towards total efficient costs for transmission reference services across cost pools, the following information is required:

- the total value of assets associated with each transmission cost pool, denoted as V<sub>Cost Pool</sub>, which is
  obtained in step 1 using the replacement value of assets, supplemented with the cost of supply
  estimated by a building block approach where required; and
- the transmission target revenue less the components directly attributable to CSS and metering services, denoted as Rev.

Table 7.2 presents the process by which we estimate the efficient contribution to total transmission target revenue from each cost pools. A key component to this process is the revenue rate of return, RR, which is the ratio of transmission target revenue to the sum of asset values for all cost pools excluding CSS and metering (which have a cost of service estimated from the revenue model). The sum of the efficient revenue of each cost pool will be equal to the transmission target revenue each year.



Table 7.2: Calculation of transmission cost allocation

Transmission cost pool	Cost pool asset value	Efficient revenue
Connection (exit)	$V_{\rm Exitconnection}$	$V_{\text{Exit connection}} \times RR$
Connection (entry)	$ m V_{Entry\ connection}$	$V_{Entry connection} \times RR$
Use of system (exit)	$ m V_{ExitUOS}$	$V_{\text{Exit UOS}} \times RR$
Use of system (entry)	$V_{ m Entry\ UOS}$	$V_{Entry\ UOS} \times RR$
Common service	$V_{CS}$	$V_{CS} \times RR$
CSS (exit)	$ m V_{ExitCSS}$	V <sub>Exit CSS</sub>
CSS (entry)	$ m V_{Entry\ CSS}$	V <sub>Entry CSS</sub>
Metering	$V_{ m Metering}$	$V_{ m Metering}$
Total asset valuation excluding CSS and metering	$V_{All} = \sum V_{CostPools} - V_{ExitCSS} - V_{EntryCSS} - V_{Metering}$	
Revenue rate of return	$RR = \frac{Rev - V_{Exit CSS} - V_{Entry CSS} - V_{Metering}}{V_{All}}$	

Table 7.3 presents the efficient contribution of total transmission revenue from each of the cost pools, which underpins the share of transmission target revenue assigned to each cost pool each year.

Table 7.3: Efficient share of transmission service revenue to cost pools over the AA5 period

Transmission cost pool	Efficient share of total transmission reference service revenue
Connection (exit)	26.5%
Connection (entry)	2.3%
Use of system (exit)	28.3%
Use of system (entry)	11.3%
Common service	21.1%
CSS (exit)	8.8%
CSS (entry)	1.6%
Metering	0.1%

# 7.1.3 Implementation considerations for efficient transmission service cost estimation

Given the small number of transmission connections relative to distribution end-users, moderate changes in target revenue or other inputs to the efficient cost estimation methodology may lead to larger effects for individual transmission connections relative to distribution end-users. Further, the location specific aspect of the transmission price methodology can introduce volatility to individual prices as some changes in network utilisation are beyond the control of an individual transmission connection.

For these reasons, we implement a form of price moderation within the transmission pricing model that can introduce a variance between the efficient cost estimation and the recovered revenue across the transmission cost pools. This variance may require a redistribution among the cost pools.



There are a number of prices that form part of the transmission reference tariffs, some of which are prone to the volatility explained above. The price components for transmission reference tariffs are:

- connection prices;
- CSS prices;
- metering prices;
- use of system prices; and
- common service prices.

Connection prices reflect the price for the utilisation of Western Power owned connection assets. These connection charges are individually calculated to reflect the actual connection assets that apply to that user. The connection price is based on achieving a regulated return on all relevant assets and an allocation of the transmission network operating costs.

CSS prices reflect the cost pool allocation for these services, which is derived using the building block approach in the revenue model. Western Power explicitly moderates changes in CSS prices to control for significant price changes between years for our transmission connections.

Similar to connection prices, Western Power sets metering prices for end-users connected to the transmission network each year to recover the costs of providing metering services to these end-users, ie, a mix of fixed asset costs and variable maintenance costs. The fixed costs reflect the historical value of these metering assets while the maintenance and operating costs are derived using the building block approach in the revenue model. In order to moderate prices for transmission reference services, we may deviate from the complete recovery of the metering cost pool from metering prices.

The use of system charges for the transmission network are obtained using a cost reflective network pricing methodology which, as described above, can introduce volatility in the resulting location specific prices. It is therefore appropriate to moderate any price fluctuations to mitigate price shock and improve certainty to end-users. We therefore include variations to the transmission use of system prices in order to moderate the annual changes in this price.

In order to handle the impact on recovered transmission revenue from the price moderation of transmission metering and use of system prices, the common services cost pool can be adjusted to balance any variation between recovered revenue and cost allocation in the other transmission cost pools. However, the common service price itself is also subject to a price moderation. Similar to the transmission use of system prices, we moderate the annual change in common service prices to ensure control over the stability of total prices for transmission connections.

However, with no balancing mechanism for the moderation of common service prices there is a possibility that transmission revenue may be under-recovered. In order to balance the total transmission revenue recovery each year, any under-recovery of transmission revenue is added to the pass through of transmission costs to distribution end-users.

As part of the transmission pricing methodology, the pass through to distribution end-users is allocated to each zone substation across the distribution network using a location specific use of network methodology. To allocate the under-recovery to this pass through, the revenue allocated to each zone substation is scaled by a uniform proportion so that the revised transmission revenue recovered from distribution end-users balances the under-recovery in transmission revenue as a result of the price moderation.



#### 7.2 Price setting for new transmission nodes

This policy applies when a new transmission node is established.

Transmission "use of system" prices for both entry and exit points are derived using the analysis tool T-Price, based on historical load flow information. In the case of new sites, historical data is not available.

However, there is a need for both Western Power and the prospective user to have a fairly accurate transmission use of system (**TUOS**) price and connection price. Western Power requires the prices to determine future revenues from the connection, and any associated capital contribution. The user requires the price and capital contribution for the purposes of project feasibility, and their internal approval processes.

This policy addresses this issue by providing a degree of price certainty over the medium term.

#### Policy Statement – Transmission Use of System Price (TUOS)

This policy will apply to new connection points on the transmission and distribution system where the prospect is that it will be a single connection point.

- 1. Western Power will nominate a TUOS price consistent with all the principles described in this document based on the best available knowledge of the network parameters including asset values and expected load flows. This would also include necessary assumptions for maximum demand and utilisation at the new connection and also any other new or forecast connections.
- 2. That nominated nodal TUOS price will then be adjusted annually in line with the CMD weighted average TUOS price adjustment for all other load or generator transmission nodes (as applicable).
- 3. Once that connection point is established the nominated TUOS price (adjusted in accordance with step 2) will apply at the commencement of the access contract, with annual price adjustments at the start of each financial year in line with the annual price adjustment of other, existing transmission connections. (Thus, the nominated TUOS price will be consistent between all transmission connections at the same location.)
- 4. The TUOS price will be published once the connection point is commissioned.
- 5. Where another user subsequently connects to such a connection point the price that will apply will be the price applying to that connection point at the time.
- 6. The common service, metering and control system prices that apply in this circumstance will be the standard published prices.

#### **Policy Statement – Transmission Connection Price**

The transmission connection price, for new connections where there was no previous connection point, is determined in accordance with the principles described below. There are two categories in which the new connection point can fit.

#### A connection that is unlikely to be shared by other users

In this case the connection asset would be dedicated to the single user. The asset can be constructed either by the user or by Western Power, and the user has the option to own the asset or to allow Western Power to own the asset.

Where Western Power will own the asset the capital contribution for the connection asset will be as determined by the Contributions Policy.



The annual connection price is calculated to recover to expected operations and maintenance costs for the connection asset and is currently set at 1.88% of the full capital cost. This percentage is based on the average of the ratio of the forecast Operations and Maintenance cost and the GODV of the transmission network over the *access arrangement* period. Once the annual connection price has been determined for a particular connection point, the price is adjusted annually by the capitals consumer price index (**CPI**).

#### A connection point where there is a high likelihood that other users will connect in the future

In this circumstance the user still retains the option of owning the connection asset. If the user prefers this option Western Power may require the ability to build connection assets for other users on the same site. Where the user selects this option the calculation of the capital contribution and the associated connection access price is on the same basis as the first option.

Where the user would prefer Western Power to own the connection asset, the connection access price would be the published price that applies to all multi-user substations within the Western Power Network. This published price would be used by Western Power to calculate the capital contribution for the connection asset.

Western Power will offer this option at its discretion depending on the likelihood of future users connecting to the connection point.



## 8. Method for estimating the weighted average price change for each reference tariff

Clause 7.1D of the Code requires the TSS to:

...be accompanied by a reference tariff change forecast which sets out, for each reference tariff, the service provider's forecast of the weighted average annual price change for that reference tariff for each pricing year of the access arrangement period.

In this section we describe our methodology for estimating an average price change forecast for each reference tariff. The results of this forecast are presented in section 5.4 of the TSS Overview.

Consistent with the cost allocation process described in sections 3 and 4, each reference service is allocated a portion of total costs that reflects the efficient costs of serving the end-users using that reference service.

This more prescriptive cost allocation process is being applied for the first time during this access arrangement period. We acknowledge that the current level of costs recovered from each reference tariff may be quite different from the efficient costs allocated by our new methodology. As such, we intend to transition the revenue recovered from each reference tariff towards their efficient level over the course of the AA5 period.

We calculate the weighted average price change for a reference tariff using:

- indicative prices for each year of AA5; and
- volume estimates for the first year of AA5 (FY23), ie, connection numbers, total energy consumption and maximum demand.

By calculating revenue using a common set of volume inputs, the calculated change in revenue between years is attributed solely to the change in the price of individual tariff components between years.



## 9. Compliance checklist

This section includes a checklist for the key requirements in the Code relating to the TSS and how they are addressed.

**Table 9.1: Compliance checklist** 

Requirement	Relevant sections				
Tariff structure statements					
A tariff structure statement of a service provider of a covered network must set out the service provider's pricing methods, and must include the following elements:  a) the structures for each proposed reference tariff;  b) the charging parameters for each proposed reference tariff; and  c) a description of the approach that the service provider will take in setting each reference tariff in each price list of the service provider during the relevant access arrangement period in accordance with sections 7.2 to 7.12.	(a) and (b) TSS Overview, section 3 Technical Summary, section 6				
A tariff structure statement must comply with:  a) the pricing principles; and b) any applicable framework and approach.	This compliance checklist				
A tariff structure statement must be accompanied by a reference tariff change forecast which sets out, for each reference tariff, the service provider's forecast of the weighted average annual price change for that reference tariff for each pricing year of the access arrangement period.	TSS Overview, section 5 Technical Summary, section 8				
Pricing objective					
Subject to sections 7.7 and 7.12, the pricing methods in a tariff structure statement must have the objective (the "pricing objective") that the reference tariffs that a service provider charges in respect of its provision of reference services should reflect the service provider's efficient costs of providing those reference services.	TSS Overview, 4.2				
tion of pricing principles					
A service provider's reference tariffs may not vary from the reference tariffs that would result from complying with the pricing principles set out in sections 7.3D to 7.3H, except to the extent necessary to give effect to the pricing principles set out in sections 7.3I to 7.3J.  Customer preferences (7.3I)  TSS Overview, section 2.4  Transition considerations  TSS Overview, section 4, and section 5					
	A tariff structure statement of a service provider of a covered network must set out the service provider's pricing methods, and must include the following elements:  a) the structures for each proposed reference tariff;  b) the charging parameters for each proposed reference tariff; and  c) a description of the approach that the service provider will take in setting each reference tariff in each price list of the service provider during the relevant access arrangement period in accordance with sections 7.2 to 7.12.  A tariff structure statement must comply with:  a) the pricing principles; and  b) any applicable framework and approach.  A tariff structure statement must be accompanied by a reference tariff change forecast which sets out, for each reference tariff, the service provider's forecast of the weighted average annual price change for that reference tariff for each pricing year of the access arrangement period.  objective  Subject to sections 7.7 and 7.12, the pricing methods in a tariff structure statement must have the objective (the "pricing objective") that the reference tariffs that a service provider charges in respect of its provision of reference services should reflect the service provider's efficient costs of providing those reference services.  tion of pricing principles  A service provider's reference tariffs may not vary from the reference tariffs that would result from complying with the pricing principles set out in sections 7.3D to 7.3H, except to the extent necessary to give effect to the				



Clause	Requirement	Relevant sections
	For each reference tariff, the revenue expected to be recovered must lie on or between:  a) an upper bound representing the stand-alone cost of service	
7.3D	<ul> <li>provision for customers to whom or in respect of whom that reference tariff applies; and</li> <li>b) a lower bound representing the avoidable cost of not serving the customers to whom or in respect of whom that reference tariff applies.</li> </ul>	Technical summary, section 5
7.3E	The charges paid by, or in respect of, different customers of a reference service may differ only to the extent necessary to reflect differences in the average cost of service provision to the customers.	TSS Overview, section 4 Technical Summary, section 3, and 4
7.3F	The structure of reference tariffs must, so far as is consistent with the Code objective, accommodate the reasonable requirements of users collectively and end-use customers collectively.	TSS Overview, section 2.4 Technical Summary, section 3 and 4
	Each reference tariff must be based on the forward-looking efficient costs of providing the reference service to which it relates to the customers currently on that reference tariff with the method of calculating such cost and the manner in which that method is applied to be determined having regard to:	
7.3G	<ul> <li>the additional costs likely to be associated with meeting demand from end-use customers that are currently on that reference tariff at times of greatest utilisation of the relevant part of the service provider's network; and</li> </ul>	TSS Overview, section 4 Technical Summary, section 2
	<ul> <li>the location of end-use customers that are currently on that reference tariff and the extent to which costs vary between different locations in the service provider's network.</li> </ul>	
	The revenue expected to be recovered from each reference tariff must:  a) reflect the service provider's total efficient costs of serving the customers that are currently on that reference tariff;	
7.3H	<ul> <li>when summed with the revenue expected to be received from all other reference tariffs, permit the service provider to recover the expected revenue for the reference services in accordance with the service provider's access arrangement; and</li> </ul>	TSS, section 4 Technical summary, section 3 and 4
	c) comply with sections 7.3H(a) and 7.3H(b) in a way that minimises distortions to the price signals for efficient usage that would result from reference tariffs that comply with the pricing principle set out in section 7.3G.	
7.31	The structure of each reference tariff must be reasonably capable of being understood by customers that are currently on that reference tariff, including enabling a customer to predict the likely annual changes in reference tariffs during the access arrangement period, having regard to:	Technical summary, section 5
	<ul><li>a) the type and nature of those customers;</li><li>b) the information provided to, and the consultation undertaken with, those customers.</li></ul>	TSS Overview, section 6
7.3J	A reference tariff must comply with this Code and all relevant written laws and statutory instruments.	Noted.



Clause	Require	ment	Relevant sections
Tariff co	omponer	ts	
		a tariff structure statement containing alternative pricing methods etter achieve the Code objective, for a reference service:	
7.6	a)	the incremental cost of service provision should be recovered by tariff components that vary with usage or demand; and	Technical summary, section 4
	b)	any amount in excess of the incremental cost of service provision should be recovered by tariff components that do not vary with usage or demand.	



## **Appendix F.3**

**2022/23** Price List

Revised proposed access arrangement

15 November 2022



# 2022/23 Price List

1 July 2022



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## 1. Introduction

This document details Western Power's Price List.

This Price List is for the pricing year commencing on 1 July 2022 and ending on 30 June 2023.

For the avoidance of doubt, the prices within this Price List will apply to all consumption during the pricing year. Where consumption is metered with an accumulation meter and the meter reading interval causes some of the metered consumption to lie within the period covered by this price list and the remainder within a previous or subsequent period not covered by this price list, the consumption covered by this price list will be determined by prorating the metered consumption uniformly on a daily basis.

Section 2 lists the reference tariffs for the reference services provided by Western Power as stated in the company's access arrangement.

Sections 5, 6 and 7 detail the reference tariffs, which are based on a number of components. The total charge payable by users under each reference tariff represents the sum of the amounts payable for each component within the relevant reference tariff.

Section 8 details the prices that are required to calculate the charges.



## 2. References services

The following table details which reference tariff is applicable to each of the reference services.

Table 1: Reference services and applicable tariffs

Reference service	Reference tariff
A1 – Anytime Energy (Residential) Exit Service	RT1
A2 – Anytime Energy (Business) Exit Service	RT2
A3 – Time of Use Energy (Residential) Exit Service	RT3
A4 – Time of Use Energy (Business) Exit Service	RT4
A5 – High Voltage Metered Demand Exit Service C5 – High Voltage Metered Demand Bi-directional Service	RT5
A6 – Low Voltage Metered Demand Exit Service C6 – Low Voltage Metered Demand Bi-directional Service	RT6
A7 – High Voltage Contract Maximum Demand Exit Service C7 – High Voltage Contract Maximum Demand Bi-directional Service	RT7
A8 – Low Voltage Contract Maximum Demand Exit Service C8 – Low Voltage Contract Maximum Demand Bi-directional Service	RT8
A9 – Streetlighting Exit Service	RT9
A10 – Unmetered Supplies Exit Service	RT10
A11 – Transmission Exit Service	TRT1
B1 – Distribution Entry Service	RT11
B2 – Transmission Entry Service	TRT2
B3 – Entry Service Facilitating a Distributed Generation or Other Non-Network Solution	RT23
C1 – Anytime Energy (Residential) Bi-directional Service	RT13
C2 – Anytime Energy (Business) Bi-directional Service	RT14
C3 – Time of Use (Residential) Bi-directional Service	RT15
C4 – Time of Use (Business) Bi-directional Service	RT16
A12 – 3 Part Time of Use Energy (Residential) Exit Service C9 – 3 Part Time of Use Energy (Residential) Bi-directional Service	RT17
A13 – 3 Part Time of Use Energy (Business) Exit Service C10 – 3 Part Time of Use Energy (Business) Bi-directional Service	RT18
A14 – 3 Part Time of Use Demand (Residential) Exit Service C11 – 3 Part Time of Use Demand (Residential) Bi-directional Service	RT19



Reference service	Reference tariff
A15 – 3 Part Time of Use Demand (Business) Exit Service C12 – 3 Part Time of Use Demand (Business) Bi-directional Service	RT20
A16 – Multi Part Time of Use Energy (Residential) Exit Service C13 – Multi Part Time of Use Energy (Residential) Bi-directional Service	RT21
A17 – Multi Part Time of Use Energy (Business) Exit Service C14 – Multi Part Time of Use Energy (Business) Bi-directional Service	RT22
C15 – Bi-directional Service Facilitating a Distributed Generation or Other Non- Network Solution	RT24
D1 – Supply Abolishment Service	RT25
D6 – Remote Direct Load Control Service	RT26
D7 – Remote Direct Load Limitation Service	RT27
D8 – Remote De-energise Service	RT28
D9 – Remote Re-energise Service	RT29
D10 – Streetlight LED Replacement Service	RT30

## 3. Non-reference services

Where Western Power is providing a user a non-reference service at a connection point, the tariff applicable to that non-reference service is the tariff agreed between the user and Western Power.

## 4. Application of tariffs

## 4.1 Bundled charges

Within this price list the transmission and distribution components of the bundled charges are published, where applicable. The bundled charge is applicable when calculating the charge for the reference tariff, unless otherwise indicated. For the avoidance of doubt, the bundled charge is the sum of the distribution and transmission components of the charge.

At Western Power's discretion, the charges detailed below may be discounted where there are multiple exit points on the same premises that are configured in a non-standard way. These discounts include, but are not limited to, only charging one administration charge per site.

## 4.2 Application of reference tariffs to exit and bi-directional points

Reference tariffs RT5 to RT8 and RT17 to RT24 are applicable to reference services at connection points that may be exit points or bi-directional points. The energy or demand charges are calculated based on energy being transferred out of the network only.



## 5. Distribution Tariffs

## 5.1 Reference tariffs 1 and 2 (RT1 and RT2)

RT1 and RT2 consist of:

- a. a fixed use of system charge (detailed in Table 11) which is payable each day;
- b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 11) by the quantity of electricity consumed at an exit point (expressed in kWh); and
- c. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

## 5.2 Reference tariffs 3 and 4 (RT3 and RT4)

RT3 and RT4 consist of:

- a. a fixed use of system charge (detailed in Table 11) which is payable each day;
- an on-peak use of system variable charge calculated by multiplying the on-peak energy price (detailed in Table 11) by the quantity of on-peak electricity consumed at an exit point (expressed in kWh);
- c. an off-peak use of system variable charge calculated by multiplying the off-peak energy price (detailed in Table 11) by the quantity of off-peak electricity consumed at an exit point (expressed in kWh); and
- d. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

#### Notes:

1. The on and off-peak periods for these tariffs are defined in the following table (all times are Western Standard Time (WST)):

Table 2: RT3 and RT4

	Monday – Friday (includes public holidays)			Saturday – Sunday (excludes public holidays)
	Off-peak	Off-Peak		
RT3	12:00am – 7:00am	7:00am – 9:00pm	9:00pm – 12:00am	All times
RT4	12:00am – 8:00am	8:00am – 10:00pm	10:00pm – 12:00am	All times

## 5.3 Reference tariff 5 (RT5)

#### 5.3.1 Tariff calculation

RT5 consists of:

 a fixed metered demand charge (detailed in Table 16) which is payable each day based on the rolling 12-month maximum half-hourly demand at a connection point (expressed in kVA) multiplied by (1-Discount);



- b. a variable metered demand charge calculated by multiplying the demand price (in excess of the lower threshold and detailed in Table 16) by the rolling 12-month maximum half-hourly demand at a connection point (expressed in kVA) minus the lower threshold with the result multiplied by (1-Discount);
- c. if the metered demand is greater than 1,000 kVA a variable demand length charge calculated by multiplying the demand length price (detailed in Table 19) by the electrical distance to the zone substation by the rolling 12-month maximum half-hourly demand (expressed in kVA) minus 1,000 kVA (Note: a different rate applies after 10 km); and
- d. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

#### Notes:

- If a user reduces its rolling 12-month maximum half-hourly demand at a connection point as set out in the process in the 2021/22 Price List Information<sup>1</sup> then for the purposes of calculating parts a, b and c of the RT5 tariff the 'rolling 12-month maximum half-hourly demand' shall be the reduced amount from the date approved by Western Power.
- 2. The on and off-peak periods for this tariff are defined in the following table (all times are WST):

Table 3: On and off-peak for RT5

Monday – Friday (exclude	Saturday – Sunday (includes public holidays)		
Off-peak	On-Peak	Off-Peak	Off-Peak
12:00am – 3:00pm	All times		

#### 5.3.2 Discount

A discount, based on the percentage of off-peak energy consumption (as a proportion of the total energy consumption), applies to this tariff.

The Discount is defined as:

For MD < 1,000 kVA  $(E_{Off-peak}/E_{Total}) * DF$ For 1,000 <= MD <1,500 kVA  $((1500 - MD)/500) * (E_{Off-peak}/E_{Total}) * DF$ 

For MD => 1,500 kVA 0

#### Where:

MD is the rolling 12-month maximum half-hourly demand at a connection point (expressed in kVA);

DF is the discount factor, which is set at 30%;

E<sub>Off-peak</sub> is the total off-peak energy for the billing period (expressed in kWh); and

E<sub>Total</sub> is the total energy (both on and off-peak) for the billing period (expressed in kWh).

https://www.erawa.com.au/cproot/21947/2/2021-22-Price-List-Information.PDF



EDM 62037082

#### Notes:

1. This discount does not apply to the demand-length portion of the charge.

## 5.4 Reference tariff 6 (RT6)

#### 5.4.1 Tariff calculation

#### RT6 consists of:

- a fixed metered demand charge (detailed in Table 17) which is payable each day based on the rolling 12-month maximum half-hourly demand at a connection point (expressed in kVA) multiplied by (1-Discount);
- a variable metered demand charge (detailed in Table 17) calculated by multiplying the demand price (in excess of lower threshold) by the rolling 12-month maximum half-hourly demand at a connection point(expressed in kVA) minus the lower threshold with the result multiplied by (1-Discount);
- c. if the metered demand is greater than 1,000 kVA a variable demand length charge calculated by multiplying the demand length price (detailed in Table 19) by the electrical distance to the zone substation by the rolling 12-month maximum half-hourly demand (expressed in kVA) minus 1,000 kVA (Note: a different rate applies after 10 km); and
- d. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

#### Notes:

- 1. This tariff is similar to RT5 in section 5.3 but for customers connected at low voltage. The higher tariff rates reflect the additional cost of using the low voltage network.
- 2. The on and off-peak periods for this tariff are defined in the following table (all times are WST):

Table 4: On and off-peak for RT6

Monday – Friday (excludes public holidays)			Saturday – Sunday (includes public holidays)
Off-peak	On-Peak	Off-Peak	Off-Peak
12:00am – 3:00pm	All times		

3. If a user reduces its rolling 12-month maximum half-hourly demand at a connection point as set out in the process in the 2021/22 Price List Information then for the purposes of calculating parts a, b and c of the RT6 tariff the 'rolling 12-month maximum half-hourly demand' shall be the reduced amount from the date approved by Western Power.

#### 5.4.2 Discount

The same formula detailed in section 5.3.2 also applies for RT6.



## 5.5 Reference tariff 7 (RT7)

#### 5.5.1 Tariff calculation

#### RT7 consists of:

- a. If the contracted maximum demand (CMD) is less than 7,000 kVA:
  - i. a fixed demand charge for the first 1,000 kVA (detailed in Table 18) which is payable each day; plus
  - ii. a variable demand charge calculated by multiplying the applicable demand price (detailed in Table 18) by the CMD (expressed in kVA) minus 1,000 kVA; plus
  - iii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 18) by the electrical distance to the zone substation by the CMD (expressed in kVA) minus 1,000 kVA (Note: a different rate applies after 10 km);
- b. If the CMD is equal to or greater than 7,000 kVA:
  - a variable demand charge calculated by multiplying the applicable demand price (detailed in Table 18) by the CMD (expressed in kVA); plus
  - ii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 20) by the electrical distance to the zone substation by the CMD (expressed in kVA) (Note: a different rate applies after 10 km);
- c. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day;
- d. a fixed administration charge (detailed in Table 23) which is payable each day; and
- e. excess network usage charges calculated in accordance with section 5.5.2 (if applicable).

#### Notes:

- 1. For connection points located at the zone substation the fixed and variable demand charge specified in sections 5.5.1(a)(i), (a)(ii) & (b)(i) is to be calculated using the transmission component only. In all other instances, the fixed and variable demand charge specified in sections 5.5.1 (a)(i), (a)(ii) & (b)(i) is to be calculated using the bundled charge.
- 2. If this tariff applies in relation to a connection point the subject of a capacity allocation arrangement pursuant to reference services D4 and D5 as set out in Appendix E of the Access Arrangement, then the charge to each user at this connection point for the duration of the capacity allocation arrangement is the sum of all tariff components a to d, multiplied by the percentage of the contracted capacity allocated to the user pursuant to the capacity allocation arrangement as compared to the total contracted capacity at the connection point.

#### 5.5.2 Excess network usage charges

An additional charge applies to this tariff where the peak half-hourly demand exceeds the nominated CMD during the billing period of the load.

The excess network usage charge (ENUC) is calculated by applying a factor to the excess usage as follows:

ENUC = ENUC Transmission + ENUC Distribution

Where



ENUC <sub>Transmission</sub> = ENUM \* (PD - CMD) \* DC <sub>Transmission</sub> / CMD;

ENUC Distribution = ENUM \* (PD - CMD) \* (DC Distribution + DLC) / CMD;

ENUM is the Excess network usage multiplier factor, which is defined in Table 31;

PD is the peak half-hourly demand during the billing period of the load

(expressed in kVA);

CMD is the nominated CMD for the billing period of the load (expressed in kVA);

DC <sub>Transmission</sub> are the applicable transmission components of the fixed and variable

demand charges for the billing period for the nominated CMD;

DC <sub>Distribution</sub> are the applicable distribution components of the fixed and variable

demand charges for the billing period for the nominated CMD; and

DLC are the applicable variable demand length charges for the billing period for

the nominated CMD.

#### Notes:

1. The ENUC does not include the metering or administration components of the tariff.

2. If the connection point is subject to the Capacity (Swap) Allocation (Business) Exit Service, for the purposes of the ENUC calculation above the CMD is the total contracted capacity allocated to the connection point from time to time pursuant to the capacity allocation arrangement.

## 5.6 Reference tariff 8 (RT8)

#### 5.6.1 Tariff calculation

#### RT8 consists of:

- a. If the contracted maximum demand (CMD) is less than 7,000 kVA:
  - i. a fixed demand charge for the first 1,000 kVA (detailed in Table 18) which is payable each day; plus
  - ii. a variable demand charge calculated by multiplying the applicable demand price (detailed in Table 18) by the CMD (expressed in kVA) minus 1,000 kVA; plus
  - iii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 19) by the electrical distance to the zone substation by the CMD (expressed in kVA) minus 1,000 kVA (Note: a different rate applies after 10 km);
- b. If the CMD is equal to or greater than 7,000 kVA:
  - i. a variable demand charge calculated by multiplying the applicable demand price (detailed in Table 18) by the CMD (expressed in kVA); plus
  - ii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 20) by the electrical distance to the zone substation by the CMD (expressed in kVA) (Note: a different rate applies after 10 km);
- c. a fixed low voltage charge (detailed in Table 24) which is payable each day;
- d. a variable low voltage charge calculated by multiplying the low voltage demand price (detailed in Table 24) by the CMD (expressed in kVA);



- e. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day;
- f. a fixed administration charge (detailed in Table 23) which is payable each day; and
- g. excess network usage charges calculated in accordance with section 5.6.2 (if applicable).

#### Notes:

- 1. This tariff is identical to RT7 in section 5.5, with an additional low voltage charge to cover the use of transformers and LV circuits.
- 2. If this tariff applies in relation to a connection point the subject of a capacity allocation arrangement pursuant to reference services D4 and D5 as set out in Appendix E of the Access Arrangement, then the charge to each user at this connection point for the duration of the capacity allocation arrangement is the sum of all tariff components a to d, multiplied by the percentage of the contracted capacity allocated to the user pursuant to the capacity allocation arrangement as compared to the total contracted capacity at the connection point.

## 5.6.2 Excess network usage charges

An additional charge applies to this tariff where the peak half-hourly demand exceeds the nominated CMD during the billing period of the load. The excess network usage charge (ENUC) is calculated by applying a factor to the excess usage as follows:

ENUC = ENUC Transmission + ENUC Distribution

#### Where

ENUC Transmission = ENUM \* (PD - CMD) \* DC Transmission / CMD; ENUC Distribution = ENUM \* (PD - CMD) \* (DC Distribution + DLC + LVC) / CMD; is the Excess network usage multiplier factor, which is defined in Table 31; **ENUM** is the peak half-hourly demand during the billing period of the load (expressed PD in kVA); CMD is the nominated CMD for the billing period of the load (expressed in kVA); DC <sub>Transmission</sub> are the applicable transmission components of the fixed and variable demand charges for the billing period for the nominated CMD; are the applicable distribution components of the fixed and variable demand DC Distribution charges for the billing period for the nominated CMD; DLC are the applicable variable demand length charges for the billing period for the nominated CMD; and LVC are the applicable additional fixed and additional demand (low voltage) charges for the billing period for the nominated CMD.

#### Notes:

1. The ENUC does not include the metering or administration components of the tariff.



2. If the connection point is subject to the Capacity (Swap) Allocation (Business) Exit Service, for the purposes of the ENUC calculation above the CMD is the total contracted capacity allocated to the connection point from time to time pursuant to the capacity allocation arrangement.

## 5.7 Reference tariff 9 (RT9)

RT9 consists of:

- a. a fixed use of system charge (detailed in Table 11) which is payable each day;
- b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 11) by the estimated quantity of electricity consumed at an exit point (expressed in kWh and is based on the lamp wattage and illumination period); and
- c. a fixed asset charge based on the type of streetlight asset supplied (detailed in Table 14 and Table 15)

## 5.8 Reference tariff 10 (RT10)

RT10 consists of:

- a. a fixed use of system charge (detailed in Table 11) which is payable each day; and
- b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 11 by the estimated quantity of electricity consumed at an exit point (expressed in kWh and based on the nameplate rating of the connected equipment and the hours of operation).

Except for where the consumer's facilities and equipment is a streetlight, then Reference Tariff RT10 consists of:

- a. the fixed use of system charge for RT9 (detailed in Table 11) which is payable each day; and
- the variable use of system charge for RT9 calculated by multiplying the energy price (detailed in Table 11 by the estimated quantity of electricity consumed at an exit point (expressed in kWh and based on the nameplate rating of the connected equipment and the hours of operation).

## 5.9 Reference tariff 11 (RT11)

#### 5.9.1 Tariff calculation

RT11 consists of:

- a variable connection charge calculated by multiplying the connection price (detailed in Table 25)
   by the loss-factor adjusted declared sent-out capacity (DSOC) at the entry point (expressed in kW);
- a variable control system service charge calculated by multiplying the control system service price (detailed in Table 29) by the nameplate output of the generator at the entry point (expressed in kW);
- c. a variable use of system charge calculated by multiplying the use of system price (based on the location of the electrically closest major generator and detailed in Table 27) by the loss-factor adjusted DSOC at the entry point (expressed in kW);
- d. if the DSOC is less than 7,000 kVA:



- i. if the entry point is connected at 415 V or less and the DSOC is equal to or greater than 1,000 kVA a variable demand length charge calculated by multiplying the applicable demand length price (detailed in Table 19) by the electrical distance between the relevant HV network connection point and the electrically closest zone substation by the DSOC (expressed in kVA) minus 1,000 kVA (Note: a different rate applies after 10 km); or
- ii. if the entry point is connected at greater than 415 V and the DSOC is equal to or greater than 1,000 kVA a variable demand length charge calculated by multiplying the applicable demand length price (detailed in Table 19) by the electrical distance between the entry point and the electrically closest zone substation by the DSOC (expressed in kVA) minus 1,000 kVA (Note: a different rate applies after 10 km);
- e. If the DSOC is equal to or greater than 7,000 kVA:
  - i. if the entry point is connected at 415 V or less a variable demand length charge calculated by multiplying the applicable demand length price (detailed in Table 20) by the electrical distance between the relevant HV network connection point and the electrically closest zone substation by the DSOC (expressed in kVA) (Note: a different rate applies after 10 km); or
  - ii. if the entry point is connected at greater than 415 V a variable demand length charge calculated by multiplying the applicable demand length price (detailed in Table 20) by the electrical distance between the entry point and the electrically closest zone substation by the DSOC (expressed in kVA) (Note: a different rate applies after 10 km);
- f. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day; and
- g. excess network usage charges calculated in accordance with section 5.9.2 (if applicable).

#### Notes:

- 1. The loss factor used to calculate the loss-factor adjusted DSOC is the relevant portion from the generator to the zone substation of the loss factor published by the AEMO for that generator.
- 2. For this reference tariff a unity power factor is assumed when converting between kW and kVA.
- 3. If this tariff applies in relation to a connection point the subject of a capacity allocation arrangement pursuant to reference services D4 and D5 as set out in Appendix E of the Access Arrangement, then the charge to each user at this connection point for the duration of the capacity allocation arrangement is the sum of all tariff components a to d, multiplied by the percentage of the contracted capacity allocated to the user pursuant to the capacity allocation arrangement as compared to the total contracted capacity at the connection point.

#### 5.9.2 Excess network usage charges

An additional charge applies to this tariff where the peak half-hourly demand exceeds the nominated DSOC during the billing period except where Western Power deems the export of power in excess of DSOC was required for power system reliability and security purposes.

The excess network usage charge (ENUC) is calculated by applying a factor to the excess usage as follows:

ENUC = ENUC Transmission + ENUC Distribution

Where

ENUC <sub>Transmission</sub> = ENUM \* (PD <sub>kW</sub> - DSOC <sub>kW</sub>) \* TEPC / DSOC <sub>kW</sub>;



ENUC Distribution = ENUM \* (PD kVA - DSOC kVA) \* (DLC) / DSOC kVA;

ENUM is the Excess network usage multiplier factor, which is defined in Table 31;

PD is the peak half-hourly demand during the billing period (expressed in kVA and

kW);

DSOC is the nominated DSOC for the billing period (expressed in kVA and kW);

TEPC is the sum of the variable connection charge, variable control system service

charge and variable use of system charge for the billing period for the

nominated DSOC; and

DLC is the applicable variable demand length charge for the billing period for the

nominated DSOC.

#### Notes:

1. The ENUC does not include the metering components of the tariff.

2. If the connection point is subject to the Capacity (Swap) Allocation (Business) Entry Service, for the purposes of the ENUC calculation above the CMD is the total contracted capacity allocated to the connection point from time to time pursuant to the capacity allocation arrangement.

## 5.10 Reference tariffs 13 and 14 (RT13 and RT14)

RT13 and RT14 consist of:

- a. a fixed use of system charge (detailed in Table 11) which is payable each day;
- b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 11) by the quantity of electricity consumed (expressed in kWh); and
- c. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

## 5.11 Reference tariffs 15 and 16 (RT15 and RT16)

RT15 and RT16 consist of:

- a. a fixed use of system charge (detailed in Table 11) which is payable each day;
- b. an on-peak use of system variable charge calculated by multiplying the on-peak energy price (detailed in Table 11) by the quantity of on-peak electricity consumed (expressed in kWh);
- c. an off-peak use of system variable charge calculated by multiplying the off-peak energy price (detailed in Table 11) by the quantity of off-peak electricity consumed (expressed in kWh); and
- d. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

#### Notes:

1. The on and off-peak periods for these tariffs are defined in the following table (all times are WST):



Table 5: On and off-peak for RT15 and RT16

	Monday – Friday (includes public holidays)			Saturday – Sunday (excludes public holidays)
	Off-peak On-Peak Off-Peak		Off-Peak	
RT15	12:00am – 7:00am	7:00am – 9:00pm	9:00pm – 12:00am	All times
RT16	12:00am – 8:00am	8:00am – 10:00pm	10:00pm – 12:00am	All times

## 5.12 Reference tariffs 17 and 18 (RT17 and RT18)

#### RT17 and RT18 consist of:

- a. a fixed use of system charge (detailed in Table 11) which is payable each day;
- an on-peak use of system variable charge calculated by multiplying the on-peak energy price (detailed in Table 11) by the quantity of on-peak electricity consumed at the connection point (expressed in kWh);
- c. a shoulder use of system variable charge calculated by multiplying the shoulder energy price (detailed in Table 11) by the quantity of shoulder period electricity consumed at the connection point (expressed in kWh);
- d. an off-peak use of system variable charge calculated by multiplying the off-peak energy price (detailed in Table 11) by the quantity of off-peak electricity consumed at the connection point (expressed in kWh); and
- e. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

#### Notes:

1. The on-peak, shoulder and off-peak periods for these tariffs are defined in the table below (all times are WST).

Table 6: On and off-peak for RT17 and RT18

Monday – Friday (ex	Saturday – Sunday (includes public holidays)						
Off-peak	Shoulder	On-Peak	Off-Peak	Off-Peak			
12:00am – 12:00pm	12:00am - 12:00pm   12:00pm - 3:00pm   3:00pm - 9:00pm   9:00pm - 12:00am						

#### 5.13 Reference tariff 19 (RT19)

#### RT19 consist of:

- a. a fixed use of system charge (detailed in Table 12) which is payable each day;
- b. a demand based charge calculated by multiplying the demand charge (detailed in Table 12) by the maximum demand in a 30 minute period within the on-peak period defined below at the connection point (expressed in kW) measured over a billing period which is payable each day;



- an on-peak use of system variable charge calculated by multiplying the on-peak energy price (detailed in Table 12) by the quantity of on-peak electricity consumed at the connection point (expressed in kWh);
- d. a shoulder use of system variable charge calculated by multiplying the shoulder energy price (detailed in Table 12) by the quantity of shoulder period electricity consumed at the connection point (expressed in kWh);
- e. an off-peak use of system variable charge calculated by multiplying the off-peak energy price (detailed in Table 12) by the quantity of off-peak electricity consumed at the connection point (expressed in kWh); and
- f. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

#### Notes:

1. The on-peak, off-peak and shoulder periods for these tariffs are defined in the following table (all times are WST):

Table 7: On shoulder and off-peak for RT19

Monday – Friday (exc	Saturday – Sunday (includes public holidays)			
Off-peak	Shoulder	On-Peak	Off-Peak	Off-Peak
12:00am – 12:00pm	All times			

## 5.14 Reference tariff 20 (RT20)

#### RT20 consist of:

- a. a fixed use of system charge (detailed in Table 12) which is payable each day;
- b. a demand based charge calculated by multiplying the demand charge (detailed in Table 12) by the maximum demand in a 30 minute period within the on-peak period defined below at the connection point (expressed in kVA) measured over a billing period which is payable each day;
- c. an on-peak use of system variable charge calculated by multiplying the on-peak energy price (detailed in Table 12) by the quantity of on-peak electricity consumed at the connection point (expressed in kWh);
- d. a shoulder use of system variable charge calculated by multiplying the shoulder energy price (detailed in Table 12) by the quantity of shoulder period electricity consumed at the connection point (expressed in kWh);
- e. an off-peak use of system variable charge calculated by multiplying the off-peak energy price (detailed in Table 12) by the quantity of off-peak electricity consumed at the connection point (expressed in kWh); and
- f. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

#### **Notes:**



1. The on-peak, off-peak and shoulder periods for these tariffs are defined in the following table (all times are WST):

Table 8: On, shoulder and off-peak for RT20

Monday – Friday (exc	Saturday – Sunday (includes public holidays)			
Off-peak	Shoulder	On-Peak	Off-Peak	Off-Peak
12:00am – 12:00pm	All times			

## 5.15 Reference tariff 21 (RT21)

#### RT21 consist of:

- a. a fixed use of system charge (detailed in Table 13) which is payable each day;
- an on-peak use of system variable charge calculated by multiplying the on-peak energy price (detailed in Table 13) by the quantity of on-peak electricity consumed at the connection point (expressed in kWh);
- c. a shoulder use of system variable charge calculated by multiplying the shoulder energy price (detailed in Table 13) by the quantity of shoulder period electricity consumed at the connection point (expressed in kWh);
- an off-peak use of system variable charge calculated by multiplying the off-peak energy price (detailed in Table 13) by the quantity of off-peak electricity consumed at the connection point (expressed in kWh);
- e. an overnight use of system variable charge calculated by multiplying the overnight energy price (detailed in Table 13) by the quantity of overnight electricity consumed at the connection point (expressed in kWh); and
- f. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

#### Notes:

1. The on-peak, off-peak, shoulder and overnight periods for this tariff are defined in the following table (all times are WST):

Table 9: On, shoulder, overnight and off-peak for RT21

				Saturday – Sund public holidays)	ay (includes	
Off-Peak	Off-Peak Shoulder On-Peak Off-Peak Overnight				Off-Peak	Overnight
4:00am – 7:00am	7:00am – 3:00 pm	3:00pm – 9:00pm	9:00pm – 11:00pm	11:00pm – 4:00am	4:00am – 11:00pm	11:00pm – 4:00am



## 5.16 Reference tariff 22 (RT22)

#### RT22 consist of:

- a. a fixed use of system charge (detailed in Table 13) which is payable each day;
- an on-peak use of system variable charge calculated by multiplying the on-peak energy price (detailed in Table 13) by the quantity of on-peak electricity consumed at the connection point (expressed in kWh);
- c. a shoulder use of system variable charge calculated by multiplying the shoulder energy price (detailed in Table 13) by the quantity of shoulder period electricity consumed at the connection point (expressed in kWh);
- d. an off-peak use of system variable charge calculated by multiplying the off-peak energy price (detailed in Table 13) by the quantity of off-peak electricity consumed at the connection point (expressed in kWh);
- e. a super off-peak use of system variable charge calculated by multiplying the super off-peak energy price (detailed in Table 13) by the quantity of super off-peak electricity consumed at the connection point (expressed in kWh);
- f. an overnight use of system variable charge calculated by multiplying the overnight energy price (detailed in Table 13) by the quantity of overnight electricity consumed at the connection point (expressed in kWh); and
- g. a fixed metering charge per revenue meter calculated in accordance with section 8.2.3 (detailed in Table 21 and Table 22) which is payable each day.

#### Notes:

1. The on-peak, off-peak, shoulder, super off-peak and overnight periods for these tariffs are defined in the following table (all times are WST):

Table 10: On, shoulder, off and super off peak for RT22

Monday – Friday (excludes public holidays)				Saturday – Sund public holidays)	ay (includes	
Off-peak	f-peak Shoulder On-Peak Off-Peak Overnight				Off-Peak	Super Off-Peak
4:00am – 7:00am	7:00am – 3:00 pm	3:00pm – 9:00pm	9:00pm – 11:00pm	11:00pm – 4:00am	4:00am – 11:00pm	11:00pm – 4:00am



## 6. Transmission tariffs

## 6.1 Transmission reference tariff 1 (TRT1)

#### 6.1.1 Tariff calculation

#### TRT1 consists of:

- a. a user-specific charge that is to be an amount per day which reflects the costs to Western Power of providing the Connection Assets under an Access Contract, which may consist of capital and non-capital costs;
- b. a variable use of system charge calculated by multiplying the applicable use of system price (detailed in Table 26) or where there is no applicable use of system price in Table 26 for the exit point, the price calculated by Western Power in accordance with Appendix A of the 2021/22 Price List Information) by the contracted maximum demand (CMD) at the exit point (expressed in kW);
- c. a variable common service charge calculated by multiplying the common service price (detailed in Table 28) by the CMD at the exit point (expressed in kW);
- d. a variable control system service charge calculated by multiplying the control system service price (detailed in Table 30) by the CMD at the exit point (expressed in kW);
- e. a fixed metering charge per revenue meter (detailed in Table 21) which is payable each day; and
- f. excess network usage charges calculated in accordance with section 6.1.2 (if applicable).

#### 6.1.2 Excess network usage charges

An additional charge applies to this tariff where the peak half-hourly demand exceeds the nominated CMD during the billing period of the load.

The excess network usage charge (ENUC) is calculated by applying a factor to the excess usage as follows:

$$ENUC = ENUM * (PD - CMD) * (UOS + CON + CS + CSS) / CMD$$

#### Where

ENUM	is the Excess network usage multiplier factor, which is defined in Table 31;
PD	is the peak half-hourly demand during the billing period of the load (expressed in $kW$ );
CMD	is the nominated CMD for the billing period of the load (expressed in kW);
UOS	is the applicable variable use of system charge for the billing period for the nominated CMD;
CON	is the applicable user-specific charge for the billing period;
CS	is the applicable variable common service charge for the billing period for the nominated CMD;
CSS	is the applicable variable control system service charge for the billing period for the nominated CMD;

#### Notes:



- 1. The ENUC does not include the metering components of the tariff.
- 2. If the connection point is subject to the Capacity (Swap) Allocation (Business) Exit Service, for the purposes of the ENUC calculation above the CMD is the total contracted capacity allocated to the connection point from time to time pursuant to the capacity allocation arrangement.
- 3. If this tariff applies in relation to a connection point the subject of a capacity allocation arrangement pursuant to reference services D4 and D5 as set out in Appendix E of the Access Arrangement, then the charge to each user at this connection point for the duration of the capacity allocation arrangement is the sum of all tariff components a to d, multiplied by the percentage of the contracted capacity allocated to the user pursuant to the capacity allocation arrangement as compared to the total contracted capacity at the connection point.

## 6.2 Transmission reference tariff 2 (TRT2)

#### 6.2.1 Tariff calculation

TRT2 consists of:

- a. a user-specific charge that is to be an amount per day which reflects the costs to Western Power of providing the Connection Assets under an Access Contract, which may consist of capital and non-capital costs;
- b. a variable use of system charge calculated by multiplying the applicable use of system price (detailed in Table 27) or where there is no applicable use of system price in Table 27 for the entry point, the price calculated by Western Power in accordance with Appendix A of the 2021/22 Price List Information) by the declared sent-out capacity (DSOC) at the entry point (expressed in kW);
- c. a variable control system service charge calculated by multiplying the control system service price (detailed in Table 29 by the nameplate output of the generator at the entry point (expressed in kW);
- d. a fixed metering charge per revenue meter (detailed in Table 21) which is payable each day; and
- e. excess network usage charges calculated in accordance with section 6.2.2 (if applicable).

#### **6.2.2** Excess network usage charges

An additional charge applies to this tariff where the peak half-hourly demand exceeds the nominated DSOC during the billing period except where Western Power deems the export of power in excess of DSOC was required for power system reliability and security purposes.

The excess network usage charge (ENUC) is calculated by applying a factor to the excess usage as follows:

Where

ENUM is the Excess network usage multiplier factor, which is defined in Table 31;

PD is the peak half-hourly demand during the billing period (expressed in kW);

DSOC is the nominated DSOC for the billing period (expressed in kW);

UOS is the applicable variable use of system charge for the billing period for the

nominated DSOC;



CON is the applicable user-specific charge for the billing period; and

is the applicable variable control system service charge for the billing period.

#### Notes:

- 1. The ENUC does not include the metering components of the tariff.
- 2. If the connection point is subject to the Capacity (Swap) Allocation (Business) Entry Service, for the purposes of the ENUC calculation above the CMD is the total contracted capacity allocated to the connection point from time to time pursuant to the capacity allocation arrangement.
- 3. If this tariff applies in relation to a connection point the subject of a capacity allocation arrangement pursuant to reference services D4 and D5 as set out in Appendix E of the Access Arrangement, then the charge to each user at this connection point for the duration of the capacity allocation arrangement is the sum of all tariff components a to d, multiplied by the percentage of the contracted capacity allocated to the user pursuant to the capacity allocation arrangement as compared to the total contracted capacity at the connection point.



## 7. Other tariffs

## 7.1 Reference Tariff 23 (RT23)

#### 7.1.1 Tariff calculation

#### RT23 consists of:

- a. the reference tariff (RT11) applicable to the entry reference service B1 upon which the B3 Entry Service Facilitating a Distributed Generation or Other Non-Network Solution is provided; less
- b. the discount that applies to the connection point as set out in clause 7.1.2 below.

#### 7.1.2 Discount

Western Power will provide a discount to RT11 in circumstances where the service allows for facilities and equipment connected behind the connection point (including distributed generating plant and other non-network solutions) that results in Western Power's capital-related costs or non-capital costs reducing as a result of the entry point for the distributed generating plant or other non-network solution being located in that particular part of the covered network.

In situations where a user connects facilities and equipment (including distributed generating plant) to the Western Power Network and has applied and been assessed as resulting in Western Power's capital-related costs or non-capital costs reducing as a result of the entry point for the distributed generating plant or other non-network solution being located in that particular part of the covered network, the discount to be applied is an annualised discount amount (which can be no greater than the annual charge), calculated as the present value of FCp less FCn over a period of Y years using discount rate W.

#### Where:

- FCp is the present value of the Western Power committed forecast capital-related costs and non-capital costs that would be incurred over Y years if the facilities and equipment (including distributed generating plant) were not to connect to the Western Power Network.
- FCn is the present value of Western Power's forecast capital-related costs and non-capital costs over Y years that are anticipated to be incurred if the facilities and equipment (including distributed generating plant) were to connect to the Western Power Network.
- Y is the period over which the present value assessment is to occur which is 15 years unless otherwise agreed between Western Power and the user.
- W is the Weighted Average Cost of Capital as set out in section 5.4 of the Access Arrangement that applies in the pricing year.

#### 7.2 Reference Tariff 24 (RT24)

#### 7.2.1 Tariff calculation

RT24 consists of:



- a. the reference tariff (RT5 RT8 and RT13 RT22) applicable to the bi-directional reference service identified from C1 to C14 upon which the C15 Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution is provided; less
- b. the discount that applies to the connection point as set out in clause 7.2.2 below.

#### 7.2.2 Discount

Western Power will provide a discount to (RT13 - RT22 and RT5 - RT8) in circumstances where the service allows for facilities and equipment connected behind the connection point (including distributed generating plant and other non-network solutions) that results in Western Power's capital-related costs or non-capital costs reducing as a result of the entry point for the distributed generating plant or other non-network solution being located in that particular part of the covered network.

In situations where a user connects facilities and equipment (including distributed generating plant) to the Western Power Network and has applied and been assessed as resulting in Western Power's capital-related costs or non-capital costs reducing as a result of the entry point for the distributed generating plant or other non-network solution being located in that particular part of the covered network, the discount to be applied is an annualised discount amount (which can be no greater than the annual charge), calculated as the present value of FCp less FCn over a period of Y years using discount rate W.

#### Where:

- FCp is the present value of the Western Power forecast capital-related costs and non-capital costs that would be incurred over Y years if the facilities and equipment (including distributed generating plant) were not to connect to the Western Power Network.
- FCn is the present value of Western Power's forecast capital-related costs and non-capital costs over Y years that are anticipated to be incurred if the facilities and equipment (including distributed generating plant) were to connect to the Western Power Network.
- Y is the period over which the present value assessment is to occur which is 15 years unless otherwise agreed between Western Power and the user.
- W is the Weighted Average Cost of Capital as set out in section 5.4 of the Access Arrangement that applies in the pricing year.

#### 7.3 Reference Tariff 25 (RT25)

#### 7.3.1 Tariff calculation

RT25 consists of a charge per connection point supply abolishment (detailed in Table 32).

#### 7.4 Reference Tariff 26 (RT26)

#### 7.4.1 Tariff calculation

RT26 consists of a charge per request to remotely control load (detailed in Table 33).



## 7.5 Reference Tariff 27 (RT27)

#### 7.5.1 Tariff calculation

RT27 consists of a charge per request to remotely limit load (detailed in Table 33).

## 7.6 Reference Tariff 28 (RT28)

#### 7.6.1 Tariff calculation

RT28 consists of a charge per request for de-energisation (detailed in Table 33).

## 7.7 Reference Tariff 29 (RT29)

#### 7.7.1 Tariff calculation

RT29 consists of a charge per request for re-energisation (detailed in Table 33).

## 7.8 Reference Tariff 30 (RT30)

#### 7.8.1 Tariff calculation

RT30 consists of a user-specific charge that is to be an amount which reflects the costs to Western Power of replacing the existing streetlight with the LED streetlight replacement requested by the user which may consist of capital and non-capital costs.



## 8. Price tables

The tables in the following sections must be used in conjunction with the details in the sections above.

Table 18, Table 26 and Table 27 include a Transmission Node Identity (TNI) to uniquely identify zone substations.

All prices quoted in this Price List are **GST exclusive**.

## 8.1 Prices for energy-based tariffs on the distribution network

#### 8.1.1 Use of system prices

The prices in the following tables are applicable for reference tariffs RT1, RT2, RT3, RT4, RT9, RT10, RT13, RT14, RT15, RT16, RT 17, RT18, RT19, RT20, RT21 and RT22.

Table 11: Reference tariffs prices for RT1, RT2, RT3, RT4, RT9, RT10, RT13, RT14, RT15, RT16, RT17 and RT18

	Fixed Price	Energy Rates			
	c/day	Anytime c/kWh	On-Peak c/kWh	Shoulder c/kWh	Off-peak c/kWh
Reference tariff 1 - RT1					
Transmission	0.000	3.633			
Distribution	89.738	5.336			
Bundled tariff	89.738	8.969			
Reference tariff 2 - RT2					
Transmission	0.000	4.362			
Distribution	168.457	7.528			
Bundled tariff	168.457	11.890			
Reference tariff 3 - RT3					
Transmission	0.000		6.633		1.431
Distribution	89.738		8.989		2.001
Bundled tariff	89.738		15.622		3.432
Reference tariff 4 - RT4					
Transmission	0.000		6.507		1.582
Distribution	308.393		10.418		2.333
Bundled tariff	308.393		16.925		3.915
Reference tariff 9 – RT9					



Transmission	0.000	2 171			
Transmission	0.000	2.171			
Distribution	7.482	2.875			
Bundled tariff	7.482	5.046			
Reference tariff 10 – RT10					
Transmission	0.000	1.447			
Distribution	57.724	3.215			
Bundled tariff	57.724	4.662			
Reference tariff 13 - RT13					
Transmission	0.000	3.633			
Distribution	89.738	5.336			
Bundled tariff	89.738	8.969			
Reference tariff 14 - RT14					
Transmission	0.000	4.362			
Distribution	168.457	7.528			
Bundled tariff	168.457	11.890			
Reference tariff 15 - RT15					
Transmission	0.000		6.633		1.431
Distribution	89.738		8.989		2.001
Bundled tariff	89.738		15.622		3.432
Reference tariff 16 - RT16					
Transmission	0.000		6.507		1.582
Distribution	308.393		10.418		2.333
Bundled tariff	308.393		16.925		3.915
Reference tariff 17 - RT17					
Transmission	0.000		3.595	3.173	2.985
Distribution	94.011		6.635	3.970	2.160
Bundled tariff	94.011		10.230	7.143	5.145
Reference tariff 18 - RT18					
Transmission	0.000		4.298	3.999	3.667
Distribution	168.457		12.122	7.724	4.644
Bundled tariff	168.457		16.420	11.723	8.311



Table 12: Reference tariffs for RT19 and RT20

	Fixed Price	Energy Rates					
	c/day	Demand RT19 – c/kW/day RT20 – c/kVA/day	On-Peak c/kWh	Shoulder c/kWh	Off-Peak c/kWh		
Reference tariff 19 - RT19							
Transmission	0.000	2.226	2.977	2.692	2.288		
Distribution	89.738	3.473	6.049	3.604	1.981		
Bundled tariff	89.738	5.699	9.026	6.296	4.269		
Reference tariff 20 - RT20							
Transmission	0.000	2.764	3.948	3.589	3.256		
Distribution	211.473	4.040	11.241	6.580	4.116		
Bundled tariff	211.473	6.804	15.189	10.169	7.372		

Table 13: Reference tariffs for RT21 and RT22

	Fixed Price	Energy Rates				
	c/day	On-Peak c/kWh	Shoulder c/kWh	Off-Peak c/kWh	Overnight c/kWh	Super Off- Peak c/kWh
Reference tariff 21 – RT21						
Transmission	0.000	3.238	2.943	2.676	2.676	
Distribution	89.738	6.954	4.160	2.341	2.341	
Bundled tariff	89.738	10.192	7.103	5.017	5.017	
Reference tariff 22 - RT22						
Transmission	0.000	3.910	3.554	3.231	3.231	3.231
Distribution	168.457	12.460	7.754	4.651	4.651	4.651
Bundled tariff	168.457	16.370	11.308	7.882	7.882	7.882



## 8.1.2 Streetlight asset prices

The prices in the following tables are applicable for reference tariff RT9.

**Table 14: Current light types** 

Light specification	Daily charge (No contribution) c/day	Daily charge (Full upfront contribution) c/day
42W CFL SE	25.645	n/a
42W CFL BH	27.254	n/a
42W CFL KN	30.713	n/a
70W MH	44.829	n/a
70W HPS	22.048	n/a
125W MV	26.687	n/a
150W MH	51.792	n/a
150W HPS	29.003	n/a
250W MH	51.792	n/a
250W HPS	29.003	n/a
Standard LED 20W	13.630	9.733
Standard LED 16W - 3000K	13.630	9.733
Standard LED 16W - 4000K	13.630	9.733
Standard LED 36W	13.630	9.733
Standard LED 28W - 3000K	13.630	9.733
Standard LED 27W - 4000K	13.630	9.733
Standard LED 53W	13.740	9.733
Standard LED 43W - 3000K	13.740	9.733
Standard LED 42W - 4000K	13.740	9.733
Standard LED 80W	13.608	9.733
Standard LED 70W - 3000K	13.608	9.733
Standard LED 68W - 4000K	13.608	9.733
Standard LED 160W	14.929	9.733
Standard LED 140W - 3000K	14.929	9.733
Standard LED 135W - 4000K	14.929	9.733
Standard LED 170W	14.929	9.733



Light specification	Daily charge (No contribution) c/day	Daily charge (Full upfront contribution) c/day		
Standard LED 165W - 3000K	14.929	9.733		
Standard LED 155W - 4000K	14.929	9.733		
Decorative BH LED 17W	25.372	9.733		
Decorative KN LED 17W	27.818	9.733		
Decorative LED 34W	27.752	9.733		
Decorative LED 42W	25.372	9.733		
Decorative LED 80W	29.140	9.733		
Decorative LED 100W	32.731	9.733		
Decorative LED 155W	32.731	9.733		



**Table 15: Obsolete light types** 

Light specification	Daily charge c/day
50W MV	16.413
70W MV	22.091
80W MV	22.091
150W MV	27.465
250W MV	35.827
400W MV	37.617
40W FLU	16.413
80W HPS	22.691
125W HPS	29.849
100W INC	16.413
80W MH	22.091
125W MH	53.304
22W LED	13.630

# 8.2 Prices for demand-based tariffs on the distribution network (RT5 to RT8 and RT11<sup>2</sup>)

## 8.2.1 Demand charges

The prices in the following table are applicable for reference tariff **RT5**.

**Table 16: Prices for reference tariff RT5** 

	Transmission		Dist	ribution	Bundled tariff		
Demand (kVA) (Lower to upper threshold)	Fixed c/day	Demand (in excess of lower threshold) c/kVA/day	Fixed c/day	Demand (in excess of lower threshold) c/kVA/day	Fixed c/day	Demand (in excess of lower threshold) c/kVA/day	
0 to 300	0.000	35.885	185.444	57.241	185.444	93.126	
300 to 1000	10,765.491	25.947	17,172.390	41.703	27,937.881	67.650	
1000 to 1500	28,928.559	14.398	46,364.560	18.020	75,293.119	32.417	

 $<sup>2 \ \</sup>text{Note that some components of RT11} \ \text{are in section } 8.3$ 



The prices in the following table are applicable for reference tariff RT6.

Table 17: Prices for reference tariff RT6

	Transmission		Dist	ribution	Bundled tariff		
Demand (kVA) (Lower to upper threshold)	Fixed c/day	Demand (in excess of lower threshold) c/kVA/day	Fixed c/day	Demand (in excess of lower threshold) c/kVA/day	Fixed c/day	Demand (in excess of lower threshold) c/kVA/day	
0 to 300	0.000	37.408	1,070.155	59.611	1,070.155	97.018	
300 to 1000	11,222.291	28.431	17,883.180	46.317	29,105.471	74.748	
1000 to 1500	31,123.728	15.563	50,305.255	23.427	81,428.983	38.990	

The prices in the following table are applicable for reference tariffs **RT7** and **RT8**.

Table 18: Prices for reference tariffs RT7 and RT8

				Transr	mission		Distr	ibution		В	undled
Zone substation	TNI	Pricing zone	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 kvA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)
Cook Street	WCKT	CBD	22,102.997	19.798	20.127	31,460.422	10.589	13.571	53,563.419	30.387	33.698
Forrest Avenue	WFRT	CBD	22,102.997	19.798	20.127	31,460.422	10.589	13.571	53,563.419	30.387	33.698
Hay Street	WHAY	CBD	22,102.997	19.798	20.127	31,460.422	10.589	13.571	53,563.419	30.387	33.698
Milligan Street	WMIL	CBD	22,102.997	19.798	20.127	31,460.422	10.589	13.571	53,563.419	30.387	33.698
Wellington Street	WWNT	CBD	22,102.997	19.798	20.127	31,460.422	10.589	13.571	53,563.419	30.387	33.698
Black Flag	WBKF	Mining	22,102.997	39.632	37.128	31,460.422	5.584	9.281	53,563.419	45.216	46.409
Boulder	WBLD	Mining	22,102.997	36.560	34.495	31,460.422	5.584	9.281	53,563.419	42.144	43.776
Bounty	WBNY	Mining	22,102.997	69.869	63.045	31,460.422	5.584	9.281	53,563.419	75.453	72.326
West Kalgoorlie	WWKT	Mining	22,102.997	32.618	31.116	31,460.422	5.584	9.281	53,563.419	38.202	40.397
Albany	WALB	Mixed	22,102.997	37.867	35.615	31,460.422	12.520	15.226	53,563.419	50.387	50.841
Boddington	WBOD	Mixed	22,102.997	18.169	18.731	31,460.422	12.520	15.226	53,563.419	30.689	33.957
Bunbury Harbour	WBUH	Mixed	22,102.997	17.757	18.378	31,460.422	12.520	15.226	53,563.419	30.277	33.604
Busselton	WBSN	Mixed	22,102.997	26.030	25.469	31,460.422	12.520	15.226	53,563.419	38.550	40.695

				Transr	mission		Distri	ibution		В	undled
Zone substation	TNI	Pricing zone	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)
Byford	WBYF	Mixed	22,102.997	19.129	19.554	31,460.422	12.520	15.226	53,563.419	31.649	34.780
Capel	WCAP	Mixed	22,102.997	23.067	22.929	31,460.422	12.520	15.226	53,563.419	35.587	38.155
Chapman	WCPN	Mixed	22,102.997	30.973	29.706	31,460.422	12.520	15.226	53,563.419	43.493	44.932
Darlington	WDTN	Mixed	22,102.997	21.440	21.535	31,460.422	12.520	15.226	53,563.419	33.960	36.761
Durlacher Street	WDUR	Mixed	22,102.997	27.910	27.080	31,460.422	12.520	15.226	53,563.419	40.430	42.306
Eneabba	WENB	Mixed	22,102.997	26.190	25.606	31,460.422	12.520	15.226	53,563.419	38.710	40.832
Geraldton	WGTN	Mixed	22,102.997	27.910	27.080	31,460.422	12.520	15.226	53,563.419	40.430	42.306
Marriott Road	WMRR	Mixed	22,102.997	17.128	17.839	31,460.422	12.520	15.226	53,563.419	29.648	33.065
Muchea	WMUC	Mixed	22,102.997	21.261	21.381	31,460.422	12.520	15.226	53,563.419	33.781	36.607
Northam	WNOR	Mixed	22,102.997	28.914	27.941	31,460.422	12.520	15.226	53,563.419	41.434	43.167
Picton	WPIC	Mixed	22,102.997	19.226	19.637	31,460.422	12.520	15.226	53,563.419	31.746	34.863
Rangeway	WRAN	Mixed	22,102.997	29.788	28.690	31,460.422	12.520	15.226	53,563.419	42.308	43.916
Sawyers Valley	WSVY	Mixed	22,102.997	26.424	25.807	31,460.422	12.520	15.226	53,563.419	38.944	41.033
Yanchep	WYCP	Mixed	22,102.997	21.185	21.316	31,460.422	12.520	15.226	53,563.419	33.705	36.542
Yilgarn	WYLN	Mixed	22,102.997	35.330	33.440	31,460.422	12.520	15.226	53,563.419	47.850	48.666
Baandee	WBDE	Rural	22,102.997	39.533	37.043	31,460.422	5.439	9.156	53,563.419	44.972	46.199
Beenup	WBNP	Rural	22,102.997	42.582	39.656	31,460.422	5.439	9.156	53,563.419	48.021	48.812
Bridgetown	WBTN	Rural	22,102.997	25.589	25.091	31,460.422	5.439	9.156	53,563.419	31.028	34.247
Carrabin	WCAR	Rural	22,102.997	43.521	40.461	31,460.422	5.439	9.156	53,563.419	48.960	49.617
Cataby	WCTB	Rural	22,102.997	26.498	25.870	31,460.422	5.439	9.156	53,563.419	31.937	35.026
Collie	WCOE	Rural	22,102.997	30.431	29.241	31,460.422	5.439	9.156	53,563.419	35.870	38.397
Coolup	WCLP	Rural	22,102.997	34.408	32.650	31,460.422	5.439	9.156	53,563.419	39.847	41.806
Cunderdin	WCUN	Rural	22,102.997	36.318	34.287	31,460.422	5.439	9.156	53,563.419	41.757	43.443
Katanning	WKAT	Rural	22,102.997	33.057	31.492	31,460.422	5.439	9.156	53,563.419	38.496	40.648
Kellerberrin	WKEL	Rural	22,102.997	38.470	36.132	31,460.422	5.439	9.156	53,563.419	43.909	45.288
Kojonup	WKOJ	Rural	22,102.997	22.640	22.563	31,460.422	5.439	9.156	53,563.419	28.079	31.719
Kondinin	WKDN	Rural	22,102.997	24.456	24.120	31,460.422	5.439	9.156	53,563.419	29.895	33.276



				Transr	mission		Distr	ibution		В	undled
Zone substation	TNI	Pricing zone	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 kvA (c per day)	Demand charge for 1000 <akva<7000 (c/kVA/day)</akva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)
Manjimup	WMJP	Rural	22,102.997	25.377	24.909	31,460.422	5.439	9.156	53,563.419	30.816	34.065
Margaret River	WMRV	Rural	22,102.997	33.178	31.596	31,460.422	5.439	9.156	53,563.419	38.617	40.752
Merredin	WMER	Rural	22,102.997	34.805	32.990	31,460.422	5.439	9.156	53,563.419	40.244	42.146
Moora	WMOR	Rural	22,102.997	25.654	25.147	31,460.422	5.439	9.156	53,563.419	31.093	34.303
Mount Barker	WMBR	Rural	22,102.997	34.700	32.900	31,460.422	5.439	9.156	53,563.419	40.139	42.056
Narrogin	WNGN	Rural	22,102.997	39.272	36.819	31,460.422	5.439	9.156	53,563.419	44.711	45.975
Pinjarra	WPNJ	Rural	22,102.997	17.979	18.568	31,460.422	5.439	9.156	53,563.419	23.418	27.724
Regans	WRGN	Rural	22,102.997	26.498	25.870	31,460.422	5.439	9.156	53,563.419	31.937	35.026
Three Springs	WTSG	Rural	22,102.997	25.574	25.078	31,460.422	5.439	9.156	53,563.419	31.013	34.234
Wagerup	WWGP	Rural	22,102.997	17.086	17.803	31,460.422	5.439	9.156	53,563.419	22.525	26.959
Wagin	WWAG	Rural	22,102.997	33.534	31.901	31,460.422	5.439	9.156	53,563.419	38.973	41.057
Wundowie	WWUN	Rural	22,102.997	29.170	28.160	31,460.422	5.439	9.156	53,563.419	34.609	37.316
Yerbillon	WYER	Rural	22,102.997	42.376	39.480	31,460.422	5.439	9.156	53,563.419	47.815	48.636
Amherst	WAMT	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Arkana	WARK	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Australian Paper Mills	WAPM	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Balcatta	WBCT	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Beechboro	WBCH	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Belmont	WBEL	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Bentley	WBTY	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Bibra Lake	WBIB	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
British Petroleum	WBPM	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Canning Vale	WCVE	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Clarence Street	WCLN	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Clarkson	WCKN	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Cockburn Cement	WCCT	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003



				Transr	mission		Distr	ibution		В	undled
Zone substation	TNI	Pricing zone	Fixed charge for first 1000 KVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)
Collier	WCOL	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Cottesloe	WCTE	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Edmund Street	WEDD	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Forrestfield	WFFD	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Gosnells	WGNL	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Hadfields	WHFS	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Hazelmere	WHZM	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Henley Brook	WHBK	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Herdsman Parade	WHEP	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Joel Terrace	WJTE	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Joondalup	WJDP	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Kalamunda	WKDA	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Kambalda	WKBA	Urban	22,102.997	36.303	34.274	31,460.422	2.248	6.421	53,563.419	38.551	40.695
Kewdale	WKDL	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Landsdale	WLDE	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Maddington	WMDN	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Malaga	WMLG	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Mandurah	WMHA	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Manning Street	WMAG	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Mason Road	WMSR	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Meadow Springs	WMSS	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Medical Centre	WMCR	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Medina	WMED	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Midland Junction	WMJX	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Morley	WMOY	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Mullaloo	WMUL	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003



				Transr	mission		Distr	ibution		В	undled
Zone substation	TNI	Pricing zone	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 KVA (c per day)	Demand charge for 1000 <kva<7000 (c/kvA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 KVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)
Mundaring Weir	WMWR	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Munday	WMDY	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Murdoch	WMUR	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Myaree	WMYR	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Nedlands	WNED	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
North Beach	WNBH	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
North Fremantle	WNFL	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
North Perth	WNPH	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
O'Connor	WOCN	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Osborne Park	WOPK	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Padbury	WPBY	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Piccadilly	WPCY	Urban	22,102.997	34.149	32.428	31,460.422	2.248	6.421	53,563.419	36.397	38.849
Riverton	WRTN	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Rivervale	WRVE	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Rockingham	WROH	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Shenton Park (Old)	WSPA	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Shenton Park (New)	WSPK	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Sth Ftle Power Station	WSFT	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Southern River	WSNR	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Tate Street	WTTS	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
University	WUNI	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Victoria Park	WVPA	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Waikiki	WWAI	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Wangara	WWGA	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Wanneroo	WWNO	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Welshpool	WWEL	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003



				Transı	mission		Distr	ibution		В	undled
Zone substation	TNI	Pricing zone	Fixed charge for first 1000 KVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000 <kva<7000 (c/kVA/day)</kva<7000 	Demand Charge for kVA > 7000 (c/kVA/day)
Wembley Downs	WWDN	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Willetton	WWLN	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003
Yokine	WYKE	Urban	22,102.997	20.329	20.582	31,460.422	2.248	6.421	53,563.419	22.577	27.003

### 8.2.2 Demand length charges

The prices in the following table are applicable for reference tariffs **RT5**, **RT6**, **RT7**, **RT8** and **RT11** and the CMD/DSOC is between 1,000 and 7,000 kVA.

Table 19: Reference for tariffs RT5, RT6, RT7, RT8 and RT11

	Demand-Length Charge								
Pricing zone	For kVA >1000 and first 10 km length (c/kVA.km/day)	For kVA >1000 and length in excess of 10 km (c/kVA.km/day)							
CBD	0.000	0.000							
Urban	1.705	1.205							
Mining	0.365	0.255							
Mixed	0.795	0.550							
Rural	0.495	0.345							

The prices in the following table are applicable for reference tariffs **RT7**, **RT8** and **RT11** and the CMD/DSOC is at least 7,000 kVA.

Table 20: Reference tariffs RT7, RT8 and RT11

	Demand-Length Charge							
Pricing zone	For first 10 km length (c/kVA.km/day)	For length in excess of 10 km (c/kVA.km/day)						
CBD	0.000	0.000						
Urban	1.460	1.025						
Mining	0.315	0.220						
Mixed	0.685	0.475						



	Demand-Length Charge	
Pricing zone	For first 10 km length (c/kVA.km/day)	For length in excess of 10 km (c/kVA.km/day)
Rural	0.430	0.295

#### 8.2.3 Metering prices

The prices in the following table are applicable for all reference tariffs (excluding RT9, RT10, RT25, RT26, RT27, RT28 and RT29).

The total metering price payable is the sum of the applicable charge in Table 21, which is based on the reference tariff of the connection point and the charge in table 22, which is based on the metering reference service applicable to the connection point, or as selected by the retailer. The applicable metering reference service for each reference service is defined in Appendix E, table E.1.2<sup>3</sup>.

Note that for billing purposes, Western Power will calculate the total metering charge per connection point (a sum of the relevant charge in Table 21 and Table 22) as a single daily charge.

For the purposes of the Metering Model Service Level Agreement, the charges in Table 22 (M1 – M15) are considered to be the incremental fees involved in providing the additional metering services.

Table 21: Metering prices<sup>4</sup>

Reference Tariff	c/revenue meter/day
RT1	6.881
RT2	7.262
RT3	7.154
RT4	11.285
RT5 – RT8	12.441
RT11	12.441
RT13	6.863
RT14	7.922
RT15	6.884
RT16	12.280
RT17	12.441
RT18	12.441
RT19	12.441

<sup>&</sup>lt;sup>3</sup> <a href="https://www.erawa.com.au/electricity/electricity-access/western-power-network/western-powers-network-access-arrangements/access-arrangement-2017-2022">https://www.erawa.com.au/electricity/electricity-access/western-power-network/western-powers-network-access-arrangements/access-arrangements/access-arrangement-2017-2022</a>

Additional charges will apply if the user has selected a non-standard metering service for the relevant exit, entry or bi-directional service. The charge will reflect Western Power's incremental costs of providing the additional metering services and may consist of capital and non-capital costs.



Reference Tariff	c/revenue meter/day
RT20	12.441
RT21	12.441
RT22	12.441
TRT1 and TRT2	879.135

**Table 22: Metering reference service prices** 

Metering Reference Service	c/revenue meter/day
M1	2.092
M2	2.092
M3	23.875
M4	47.751
M5	12.758
M6	12.758
M7	110.597
M8	2.092
M9	2.092
M10	23.875
M11	47.751
M12	12.758
M13	12.758
M14	110.597
M15	0.000

## 8.2.4 Administration charges

The prices in the following table are applicable for reference tariffs **RT7** and **RT8**.

Table 23: Administration charges for RT7 and RT8

CMD	Price (c/day)
>=7,000 kVA	8,877.00
<7,000 kVA	5,097.00

#### 8.2.5 LV prices

The prices in the following table are applicable for reference tariff RT8.



Table 24: LV prices RT8

Category	Price (c/day)
Fixed	1,101.980
Demand	10.744 / kVA

#### **8.2.6** Connection price

The prices in the following table are applicable for reference tariff **RT11**.

**Table 25: Connection Price RT11** 

	Connection Price (c/kW/day)
Connection price	1.655

## **8.3** Transmission prices

#### 8.3.1 Use of system prices

The prices in the following table are applicable for reference tariff **TRT1**.

Table 26: Transmission prices TRT1

Substation	TNI	Use of System Price (c/kW/day)
Albany	WALB	17.498
Alcoa Pinjarra	WAPJ	4.963
Amherst	WAMT	4.165
Arkana	WARK	5.316
Australian Fused Materials	WAFM	3.452
Australian Paper Mills	WAPM	5.382
Baandee (WC)	WBDE	18.756
Balcatta	WBCT	5.447
Beckenham	WBEC	13.741
Beechboro	WBCH	4.838
Beenup	WBNP	20.984
Belmont	WBEL	4.287
Bentley	WBTY	5.580
Bibra Lake	WBIB	3.832

Substation	TNI	Use of System Price (c/kW/day)
Binningup Desalination Plant	WBDP	2.960
Black Flag	WBKF	19.126
Boddington Gold Mine	WBGM	3.211
Boddington	WBOD	3.129
Boulder	WBLD	16.861
Bounty	WBNY	41.420
Bridgetown	WBTN	8.570
British Petroleum	WBPM	7.400
Broken Hill Kwinana	WBHK	5.775
Bunbury Harbour	WBUH	2.830
Busselton	WBSN	8.864
Byford	WBYF	3.830
Canning Vale	WCVE	4.380
Capel	WCAP	6.702
Carrabin	WCAR	21.668
Cataby Kerr McGee	WKMC	7.993
Chapman	WCPN	12.469
Clarence Street	WCLN	7.197
Clarkson	WCKN	5.428
Cockburn Cement	WCCT	3.008
Cockburn Cement Ltd	WCCL	2.999
Collie	WCOE	12.108
Collier	WCOL	7.163
Cook Street	WCKT	5.154
Coolup	WCLP	15.012
Cottesloe	WCTE	5.582
Cunderdin	WCUN	16.409
Darlington	WDTN	5.518
Edgewater	WEDG	4.779
Edmund Street	WEDD	4.917



Substation	TNI	Use of System Price (c/kW/day)
Eneabba	WENB	8.979
Forrest Ave	WFRT	7.206
Forrestfield	WFFD	5.649
Geraldton	WGTN	10.234
Glen Iris	WGNI	3.339
Golden Grove	WGGV	26.823
Gosnells	WGNL	4.547
Hadfields	WHFS	5.465
Hay Street	WHAY	5.465
Hazelmere	WHZM	4.236
Henley Brook	WHBK	4.670
Herdsman Parade	WHEP	8.288
Joel Terrace	WJTE	7.522
Joondalup	WJDP	5.122
Kalamunda	WKDA	5.772
Katanning	WKAT	14.026
Kellerberrin	WKEL	17.982
Kewdale	WKDL	4.202
Kojonup	WKOJ	6.417
Kondinin	WKDN	7.744
Kwinana Alcoa	WAKW	1.327
Kwinana Desalination Plant	WKDP	3.646
Kwinana PWS	WKPS	2.662
Landsdale	WLDE	4.926
Maddington	WMDN	4.426
Malaga	WMLG	4.207
Mandurah	WMHA	3.613
Manjimup	WMJP	8.415
Manning Street	WMAG	6.118
Margaret River	WMRV	14.116



Substation	TNI	Use of System Price (c/kW/day)
Marriott Road Barrack Silicon Smelter	WBSI	2.707
Marriott Road	WMRR	2.371
Mason Road	WMSR	2.113
Mason Road CSBP	WCBP	3.196
Mason Road Kerr McGee	WKMK	1.937
Meadow Springs	WMSS	4.098
Medical Centre	WMCR	6.483
Medina	WMED	3.051
Merredin 66kV	WMER	15.302
Midland Junction	WMJX	5.149
Milligan Street	WMIL	6.104
Moora	WMOR	8.619
Morley	WMOY	5.614
Mt Barker	WMBR	15.227
Muchea Kerr McGee	WKMM	8.132
Muchea	WMUC	5.385
Muja PWS	WMPS	1.619
Mullaloo	WMUL	5.291
Munday	WMDY	5.703
Murdoch	WMUR	3.412
Mundaring Weir	WMWR	8.261
Myaree	WMYR	6.517
Narrogin	WNGN	18.564
Nedlands	WNED	6.103
North Beach	WNBH	5.447
North Fremantle	WNFL	5.479
North Perth	WNPH	4.649
Northam	WNOR	10.967
Nowgerup	WNOW	6.283
O'Connor	WOCN	5.684



Substation	TNI	Use of System Price (c/kW/day)
Osborne Park	WOPK	5.907
Padbury	WPBY	5.519
Parkeston	WPRK	19.193
Parklands	WPLD	4.212
Piccadilly	WPCY	15.263
Picton 66kv	WPIC	3.901
Pinjarra	WPNJ	3.012
Rangeway	WRAN	11.606
Regans	WRGN	9.234
Riverton	WRTN	3.771
Rivervale	WRVE	5.863
Rockingham	WROH	3.231
Sawyers Valley	WSVY	9.152
Shenton Park	WSPA	6.349
Southern River	WSNR	3.959
South Fremantle 22kV	WSFT	4.105
Summer St	WSUM	7.764
Sutherland	WSRD	4.649
Tate Street	WTTS	6.556
Three Springs	WTSG	8.560
Three Springs Terminal (Karara)	WTST	20.672
Tomlinson Street	WTLN	6.642
University	WUNI	7.039
Victoria Park	WVPA	6.409
Wagerup	WWGP	2.360
Wagin	WWAG	14.375
Waikiki	WWAI	3.532
Wangara	WWGA	5.058
Wanneroo	WWNO	5.323
Wellington Street	WWNT	7.725



Substation	TNI	Use of System Price (c/kW/day)
Welshpool	WWEL	4.177
Wembley Downs	WWDN	6.233
West Kalgoorlie	WWKT	13.953
Western Collieries	WWCL	2.376
Western Mining	WWMG	2.792
Westralian Sands	WWSD	6.077
Willetton	WWLN	4.014
Worsley	WWOR	1.971
Wundowie	WWUN	11.186
Yanchep	WYCP	5.331
Yerbillon	WYER	20.834
Yilgarn	WYLN	15.648
Yokine	WYKE	5.774

The prices in the following table are applicable for reference tariffs  $\bf RT11$  and  $\bf TRT2$ .

Table 27: Reference tariffs RT11 and TRT2

Substation	TNI	Use of System Price (c/kW/day)
Albany	WALB	2.243
Badgingarra	BGA	2.288
Boulder	WBLD	1.624
Bluewaters	WBWP	2.257
Cockburn PWS	WCKB	1.368
Collgar	WCGW	2.591
Collie PWS	WCPS	2.625
Emu Downs	WEMD	2.288
Geraldton	WGTN	0.384
Greenough Solar Farm	TMGS	0.489
Kemerton PWS	WKEM	1.824
Kwinana Alcoa	WAKW	1.411
Kwinana Donaldson Road	WKND	1.072



Substation	TNI	Use of System Price (c/kW/day)
Kwinana PWS	WKPS	1.368
Landwehr (Alinta)	WLWT	1.703
Mason Road	WMSR	1.072
Merredin Power Station	TMDP	1.886
Muja PWS	WMPS	2.755
Mumbida Wind Farm	TMBW	2.321
Mungarra GTs	WMGA	2.280
Newgen Kwinana	WNGK	1.592
Newgen Neerabup	WGNN	1.403
Oakley (Alinta)	WOLY	1.899
Parkeston	WPKS	1.958
Pinjar GTs	WPJR	1.138
Alcoa Pinjarra	WAPJ	1.994
Tiwest GT	WKMK	1.106
Wagerup	WWGP	1.570
Walkaway Windfarm	WWWF	2.518
West Kalgoorlie GTs	WWKT	1.592
Worsley	WWOR	1.783
Yandin Wind Farm	WYDW	1.403
Merredin Solar Farm	WMSF	1.886
Warradarge Wind Farm	WWDW	2.288

## **8.3.2** Common service prices

The prices in the following table are applicable for reference tariff **TRT1**.

**Table 28: Common Service Prices TRT1** 

	Common Service Price (c/kW/day)
Common service price	5.211



#### 8.3.3 Control system service prices

The prices in the following table are applicable for reference tariffs **RT11** and **TRT2**.

Table 29: Control system service prices for reference tariffs RT11 and TRT2

	Price (c/kW/day)
Control system service price (Generators)	0.220

The prices in the following table are applicable for reference tariff **TRT1**.

Table 30: Control system service prices for reference tariff TRT1

	Price (c/kW/day)
Control system service price (Loads)	1.955

### 8.4 Excess network usage charges – substation classification

The following table applies to reference tariffs RT7, RT8, RT11, TRT1 and TRT2.

Table 31: Values for ENUM for reference tariffs RT7, RT8, RT11, TRT1 and TRT2

TNI	ENUM
ALB, BKF, BLD, BNY, PCY, PKS, WKT	2.5
All other substations	1

#### 8.5 Other prices

The following table applies to reference tariff **RT25**.

Table 32: Supply abolishment charges for RT25

Location	Charge (\$)
Whole current meters metropolitan area⁵	435.94
Whole current meters non-Metropolitan area	555.26
Non- whole current meters	User specific charge which reflects the costs to Western Power of undertaking the requested supply abolishment requested by the user and may consist of capital and non-capital costs.

<sup>&</sup>lt;sup>5</sup> As defined in the Electricity Industry (Metering) Code



The following table applies to reference tariff **RT26, RT27, RT28 and RT29**.

Table 33: Charges for RT26, RT27, RT28 and RT29

Service	Charge per request (\$)
RT26	5.35
RT27	5.35
RT28	5.35
RT29	5.35



## 9. Applications and Queuing Policy fees

The Applications and Queuing Policy refers to several fees being published in the Price List. These prices are detailed below:

Table 34: Fees payable under the Applications and Queuing Policy

Fee type	Price
New Standard Access Contract Fee	\$1,150.00
Access Contract Modification Fee	\$140 per modification
Enquiry Fee	\$3,500.00
Application Lodgement Fee	\$5,000.00
Preliminary Offer Processing Fee	A variable fee
Preliminary Acceptance Fee	A variable fee
Distributed energy or other non-network solution assessment fee (B3 or C15)	A variable fee
Capacity allocation service fee – for a capacity swap reference service (D2 or D3)	\$1,750.00
Capacity allocation service fee – for a capacity allocation reference service (D4 or D5)	\$140 per modification
Remote load control/limitation/de-energise/re-energise service fee	A variable fee

Table 35: Fees payable under the Applications and Queuing Policy

Application for Reference Service	New Connection Point Fee
A1 – Anytime Energy (Residential) Exit Service	\$0.00 per connection point
A2 – Anytime Energy (Business) Exit Service	\$0.00 per connection point
A3 – Time of Use Energy (Residential) Exit Service	\$0.00 per connection point
A4 – Time of Use Energy (Business) Exit Service	\$0.00 per connection point
A5 – High Voltage Metered Demand Exit Service C5 – High Voltage Metered Demand Bi-directional Service	\$44.00 per connection point
A6 – Low Voltage Metered Demand Exit Service C6 – Low Voltage Metered Demand Bi-directional Service	\$44.00 per connection point
A7 – High Voltage Contract Maximum Demand Exit Service C7 – High Voltage Contract Maximum Demand Bi-directional Service	\$88.00 per connection point
A8 – Low Voltage Contract Maximum Demand Exit Service C8 – Low Voltage Contract Maximum Demand Bi-directional Service	\$88.00 per connection point
A9 – Streetlighting Exit Service	\$0.00 per connection point

Application for Reference Service	New Connection Point Fee
A10 – Unmetered Supplies Exit Service	\$0.00 per connection point
A11 – Transmission Exit Service	\$175.00 per connection point
B1 – Distribution Entry Service	\$175.00 per connection point
B2 – Transmission Entry Service	\$175.00 per connection point
B3 – Entry Service Facilitating a Distributed Generation or Other Non- Network Solution	\$175.00 per connection point
C1 – Anytime Energy (Residential) Bi-directional Service	\$0.00 per connection point
C2 – Anytime Energy (Business) Bi-directional Service	\$0.00 per connection point
C3 – Time of Use (Residential) Bi-directional Service	\$0.00 per connection point
C4 – Time of Use (Business) Bi-directional Service	\$0.00 per connection point
A12 – 3 Part Time of Use Energy (Residential) Exit Service C9 – 3 Part Time of Use Energy (Residential) Bi-directional Service	\$0.00 per connection point
A13 – 3 Part Time of Use Energy (Business) Exit Service C10 – 3 Part Time of Use Energy (Business) Bi-directional Service	\$0.00 per connection point
A14 – 3 Part Time of Use Demand (Residential) Exit Service C11 – 3 Part Time of Use Demand (Residential) Bi-directional Service	\$0.00 per connection point
A15 – 3 Part Time of Use Demand (Business) Exit Service C12 – 3 Part Time of Use Demand (Business) Bi-directional Service	\$0.00 per connection point
A16 – Multi Part Time of Use Energy (Residential) Exit Service C13 – Multi Part Time of Use Energy (Residential) Bi-directional Service	\$0.00 per connection point
A17 – Multi Part Time of Use Energy (Business) Exit Service C14 – Multi Part Time of Use Energy (Business) Bi-directional Service	\$0.00 per connection point
C15 – Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution	\$175.00 per connection point

The AQP includes two variable fees, the preliminary offer processing fee and preliminary acceptance fee. The methodology for these fees can be found on the following webpage:

https://westernpower.com.au/about/regulation/network-access-prices/

