Amended proposed Access Arrangement for the Western Power Network

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16 November 2018

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1 Introduction

1.1 Purpose of this document

1.1.1 These amended proposed revisions are lodged by Western Power on 16 November 2018 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 9 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 the *AA4 effective date* is the version dated March 2006).

1.3 Proposed access arrangement revisions commencement date

1.3.1 This *access arrangement* (as revised) is effective from 1 July 2019 or a later date in accordance with section 4.26 of the *Code*.

1.4 Revisions 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 26 February 2021.

1.4.2 Pursuant to section 5.31(b) of the *Code*, the target *revisions commencement date* for this *access arrangement* is 1 July 2022.

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 *Transfer and Relocation Policy* attached at Appendix D;

f) the details of the *reference services* offered by Western Power attached at Appendix E;

g) the *price lists* attached at Appendix F, which are a schedule of *reference tariffs* in effect for this *access arrangement*; and

h) the *price list information* attached at Appendix F, which explains how Western Power derived the elements of the proposed *price lists*; and demonstrates that the *price lists* comply with the *access arrangement*.

1.6 Relationship to technical rules and access arrangement information

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*.

1.6.2 Western Power's amended proposed *access arrangement information* dated 16 November 2018 is submitted alongside this *access arrangement* in accordance with section 4.4 of the *Code*. The amended proposed *access arrangement information* is to be read in conjunction with the revised *access arrangement information* that was submitted on 14 June 2018 and the *access arrangement information* that was submitted on 2 October 2017. The amended proposed *access arrangement information*, amended proposed *access arrangement information* and the *access arrangement information* do not form part of this *access arrangement*.

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 17 *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	A3
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

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	B3

2.2.3 Western Power specifies 15 *bi-directional services* as *reference service*s 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	C9
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 Demand (Residential) Bi-directional Service	C13
Multi Part Time of Use Demand (Business) Bi-directional Service	C14
Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution	C15

2.2.4 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 (whole current metering) Service	D1
Capacity Allocation Swap (Nominator) (Business) Service	D2
Capacity Allocation Swap (Nominee) (Business) Service	D3
Capacity Allocation Same Connection Point (Nominator) (Business) Service	D4

Reference service name	Short name
Capacity Allocation Same Connection Point (Nominee) (Business) Service	D5
Remote Direct Load Control Service	D6
Remote Load Limitation Service	D7
Remote De-energise Service	D8
Remote Re-energise Service	D9

2.2.5 Western Power specifies 16 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, bi-monthly, remote	M5
Unidirectional, interval, monthly, remote	M6
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, bi-monthly, remote	M12
Bidirectional, interval, monthly, remote	M13
Bidirectional, interval, daily, remote	M14
Unmetered supply, accumulation, bi-monthly, manual	M15
One off manual interval read	M16

2.2.6 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 There are no *excluded services* at the *revisions commencement date* of this *access arrangement*. 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*.

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 benchmark*s 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 A17, B1 and B3, C1 to C15 and any applicable ancillary *reference service* D2 to D7, 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: $\frac{\sum \text{Sustained } \textit{distribution customer} \text{ interruption durations}}{\text{Number of } \textit{distribution customers} \text{ served}}$ where: • 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.

	System Average Interruption Duration Index (SAIDI) CBD Urban Rural Short Rural Long
	• 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. • 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	One or more of: • 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. • Interruptions shown to be caused by a fault or other event on the *transmission system.* • 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). • Planned interruptions caused by scheduled *works.* • *Force majeure* events affecting the *distribution system*.

4.2.4 The *service standard benchmarks* expressed in terms of SAIDI for the *reference services* A1 to A10, A12 to A17, B1 and B3, C1 to C15 and any applicable ancillary *reference service* D2 to D7 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 A17, B1 and B3, C1 to C15 and any applicable ancillary reference service D2 to D7

SAIDI	For the financial year ending 30 June 2018	For the financial year ending 30 June 2019 and each financial year thereafter
CBD	39.9	33.7
Urban	183.0	130.6
Rural Short	227.8	215.4
Rural Long	724.8	848.3

System Average Interruption Frequency Index (SAIFI)

4.2.5 SAIFI is applied as follows:

Table 8: Application of SAIFI

	System Average Interruption Frequency Index (SAIFI) **CBD** **Urban** **Rural Short** **Rural Long**
Unit of Measure	Sustained interruptions per year.
Definition	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: $\frac{\text{Number of sustained } \textit{distribution customer} \text{ interruptions}}{\text{Number of } \textit{distribution customers} \text{ served}}$ where: • 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. • 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. • 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.

	System Average Interruption Frequency Index (SAIFI) CBD Urban Rural Short Rural Long
Exclusions	One or more of: • For unplanned interruptions 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. • Interruptions shown to be caused by a fault or other event on the *transmission system.* • 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). • Planned interruptions caused by scheduled *works*. • *Force majeure* events affecting the *distribution system.*

4.2.6 The *service standard benchmarks* expressed in terms of SAIFI for the *reference services* A1 to A10, A12 to A17, B1 and B3, C1 to C15 and any applicable ancillary *reference service* D2 to D7 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 A17, B1 and B3, C1 to C15 and any applicable ancillary reference service D2 to D7

SAIFI	For the financial year ending 30 June 2018	For the financial year ending 30 June 2019 and each financial year thereafter
CBD	0.26	0.21
Urban	2.12	1.27
Rural Short	2.61	2.34
Rural Long	4.51	5.70

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: $\frac{\text{Number of fault calls responded to in 30 seconds or less}}{\text{Total Number of fault calls}}$ where: (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.

	Call centre performance
	• 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. • All telephone calls received on a major event day which is excluded from SAIDI and SAIFI. • A fact or circumstance beyond the control of Western Power affecting the ability to receive calls to the extent that Western Power could not contract on 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 A17, B1 and B3, C1 to C15 and any applicable ancillary *reference service* D2 to D7 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 A17, B1 and B3, C1 to C15 and any applicable ancillary reference service D2 to D7

	For the financial year ending 30 June 2018	For the financial year ending 30 June 2019 and each financial year thereafter
Call centre performance	77.5%	86.8%

4.3 Service standard benchmarks for transmission reference services

4.3.1 For the *reference services* A11 and B2 and any applicable ancillary *reference service* D2 to D7, the *service standard benchmarks* are expressed in terms of circuit availability, loss of supply event frequency and average outage duration.

Circuit availability

4.3.2 Circuit availability is applied as follows:

Table 12: Application of circuit availability

	Circuit availability
Unit of Measure	Percentage of hours per year.
Definition	Over a 12 month period, the actual hours transmission circuits are available divided by the total possible hours available for transmission circuits (after exclusions), that is: $\frac{\text{Number of hours transmission circuits are available} \times 100}{\text{Total possible hours available for transmission circuits}}$ where: • A "transmission circuit" is an arrangement of primary transmission elements on the *transmission system* that is overhead lines, underground

	Circuit availability
	cables, and bulk transmission power transformers used to transport electricity.
Exclusions	One or more of: • 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). • *Force majeure* events affecting the *transmission system*. • Hours exceeding 14 days for planned interruptions for major construction *work*.

4.3.3 The *service standard benchmarks* expressed in terms of circuit availability for the *reference services* A11 and B2 and any applicable ancillary *reference service* D2 to D7 for each year of this *access arrangement period* are shown in the following table:

Table 13: Circuit availability service standard benchmarks for reference services A11 and B2 and any applicable ancillary reference service D2 to D7

	For the financial year ending 30 June 2018	For the financial year ending 30 June 2019 and each financial year thereafter
Circuit availability	97.7%	97.8%

Loss of supply event frequency

4.3.4 Loss of supply event frequency is applied as follows:

Table 14: 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.
Definition	Over a 12 month period, the frequency of Unplanned customer outage events where loss of supply: • exceeds 0.1 system minutes interrupted and less than or equal to 1.0 system minutes interrupted; or • 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: $\frac{\sum (\text{MWh unsupplied} \times 60)}{\text{System Peak MW}}$ where:

	Loss of supply event frequency **>0.1 and ≤1.0 system minutes interrupted** **>1.0 system minutes interrupted**
	• "Unplanned customer outages" relates to unplanned customer outages occurring on all parts of the regulated *transmission system*. • "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. • Period of the interruption starts when a loss of supply occurs and ends when Western Power offers supply restoration to the customer. • For the financial year ending 30 June 2018, "System Peak MW" is the maximum peak demand recorded for the South West Interconnected System for the previous financial year. • For the financial year ending 30 June 2019 and each financial year thereafter, "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.
Exclusions	One or more of: • Planned interruptions. • Momentary interruptions (less than one minute). • Unregulated transmission assets. • 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). • *Force majeure* events affecting the *transmission system*.

4.3.5 The *service standard benchmarks* expressed in terms of loss of supply event frequency for the *reference services* A11 and B2 and any applicable ancillary *reference service* D2 to D7 for each year of this *access arrangement period* are shown in the following table:

Table 15: Loss of supply event frequency service standard benchmarks for reference services A11 and B2 and any applicable ancillary reference service D2 to D7

Loss of supply event frequency	For the financial year ending 30 June 2018	For the financial year ending 30 June 2019 and each financial year thereafter
> 0.1 and ≤1.0 system minutes interrupted	33	26
> 1.0 system minutes interrupted	4	7

Average outage duration

4.3.6 Average outage duration is applied as follows:

Table 16: 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 on regulated transmission circuits (after exclusions), that is: $\frac{\sum \text{Duration (in minutes) of all Unplanned outages}}{\text{Total Number of events}}$ where: • "Unplanned outages" relates to interruptions occurring on all parts of the regulated *transmission system*. • "Number of events" includes all forced and fault interruptions whether or not loss of supply occurs. • 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.
Exclusions	One or more of: • Planned interruptions. • Momentary interruptions (less than one minute). • Unregulated transmission assets. • Reactive compensation plant. • 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). • *Force majeure* events affecting the *transmission system*. • The impact of each event is capped at 14 days.

4.3.7 The *service standard benchmarks* expressed in terms of average outage duration for the *reference services* A11 and B2 and any applicable ancillary *reference service* D2 to D7 for each year of this *access arrangement period* is shown in the following table:

Table 17: Average outage duration service standard benchmarks for reference services A11 and B2 and any applicable ancillary reference service D2 to D7

	For the financial year ending 30 June 2018	For the financial year ending 30 June 2019 and each financial year thereafter
Average outage duration	886	1,234

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 18: 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 *business days* to repair faulty streetlights is the sum of the number of *business days* to repair each faulty streetlight divided by the number of faulty streetlights repaired (after exclusions).
	$\frac{\sum \text{Number of } \textit{business days} \text{ to repair each faulty streetlight}}{\text{Number of faulty streetlights repaired}}$
	where:
	• In calculating the number of *business days* to repair a faulty streetlight, the first *business day* is:
	  ○ where a faulty streetlight is detected by, or reported to, Western Power on a *business day*, the next *business day; or*
	  ○ 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.
	• In calculating the number of *business days* to repair a faulty streetlight, the *business day* a fault is repaired is included (subject to the next point) even if the repair is effected part way through that *business day*.
	• In calculating the number of *business days* to repair a faulty streetlight:
	  ○ 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;
	  ○ 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.
	• 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*.

	Street lighting repair time Metropolitan area Regional area
	• Regional area means all areas in the *Western Power Network* other than the metropolitan area. Note: • If a given streetlight is the subject of more than one fault report for the same fault, then only one fault report is recorded. • 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	• *Force majeure* events. • Streetlights for which Western Power is not responsible for streetlight maintenance.

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 19: 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*

4.5 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 (whole current meter) response time

4.5.2 Supply abolishment response time is applied as follows:

Table 20: Application of supply abolishment (whole current meter) response time

	Supply abolishment (whole current meter) response time
Unit of Measure	Average number of *business days.*
Definition	Over a 12 month period, average number of *business days* to abolish supply is the sum of the number of *business days* to abolish supply for all supply abolishment requests, divided by the number of supply abolishment requests made (after exclusions). $\frac{\sum \text{Number of } \textit{business days} \text{ to abolish supply for all supply abolishment requests}}{\text{Number of supply abolishment requests}}$ where: • In calculating the number of *business days* to abolish supply, the first *business day* is:

	Supply abolishment (whole current meter) response time
	○ 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 ○ 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. • In calculating the number of *business days* to abolish supply: ○ 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 ○ 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 ○ 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. • A "supply abolishment request" is defined as an electricity transfer application for a supply abolishment in accordance with the *Applications and Queuing Policy* containing all information that Western Power, as a *reasonable and prudent person*, requires to abolish supply. • "Abolish supply" is defined as the time when the permanent disconnection of supply and the removal of the *meter* is completed.
Exclusions	• Supply abolishment requests that: ○ are cancelled or are requested to be deferred; ○ relate to non-standard technical configurations, site access issues or safety issues; ○ require external approvals or actions beyond the control of Western Power as a *reasonable and prudent person*; or • A fact or circumstance beyond the control of Western Power as a *reasonable and prudent person* affecting the ability to abolish supply. • *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 21: Supply abolishment (whole current meter) response time service standard benchmark for reference service D1

	For each financial year ending 30 June
Supply abolishment (whole current meter) response time	15 *business days*

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 22: Application of remote de-energise response time

	Remote de-energise response time
Unit of Measure	Average number of *business days.*

Definition	• Over a 12 month period, average number of *business days* to remotely de-energise is the sum of the number of *business days* to remotely de-energise a *meter* for all remote de-energise requests, divided by the number of remote de-energise requests made (after exclusions).
	
	$\frac{\sum \text{Number of } \textit{business days} \text{ to remotely de-energise for all remote de-energise requests}}{\text{Number of remote de-energise requests}}$
	
	where:
	• In calculating the number of *business days* to remotely de-energise, the first *business day* is:
	  ○ where a remote de-energise request is made by a *user* to Western Power before 12 noon on a *business day*, the next *business day*; or
	  ○ 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.
	• Fridays and the *business days* occurring before a *public holiday* are not calculated as *business days* in relation to this measure.
	• In calculating the number of *business days* to remotely de-energise:
	  ○ the *business day* the remote de-energise is performed is included, even if the remote de-energise is performed part way through that *business day*; and
	  ○ 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

	Remote de-energise response time
	○ 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. • A "remote de-energise" is defined as the time when supply voltage is removed from all outgoing circuits from the *meter* on a non-permanent basis by a command sent to a *meter* from a remote locality.
Exclusions	• Remote de-energise requests that are cancelled or are requested to be deferred. • 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. • 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 23: Remote de-energise response time service standard benchmark for reference service D8

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

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	Average number of *business days.*
Definition	Over a 12 month period, average number of *business days* to remotely re-energise is the sum of the number of *business days* to remotely re-arm a previously de-energised *meter* for all remote re-energise requests, divided by the number of remote re-energise requests made (after exclusions). $\frac{\sum \text{Number of } \textit{business days} \text{ to remotely re-arm for all remote re-energise requests}}{\text{Number of remote re-energise requests}}$ where: • In calculating the number of *business days* to remotely re-energise, the first *business day* is:

	Remote re-energise response time
	○ where a remote re-energise request is made by a *user* to Western Power before 12 noon on a *business day*, the next *business day*; or ○ 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. • In calculating the number of *business days* to remotely re-energise: ○ the *business day* the remote re-energise is performed is included, even if the remote re-energise is performed part way through that *business day*; and ○ 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 ○ 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. • 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.
Exclusions	• Remote re-energise requests that are cancelled or are requested to be deferred. • 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 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 service standard benchmark for reference service D9

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

4.7 Exclusions

4.7.1 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 *force majeure* event occurs the duration of the related interruption in minutes is not included in the calculation of the measure.

4.7.2 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*.

4.7.3 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) on and from 1 July 2020, *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) the metering *services* provided ancillary to the *services* in paragraphs (a) to (d) that are defined as standard metering services in the *MSLA*;

f) on and from 1 July 2020, *reference services* (metering) M1 to M15 as set out in Appendix E; and

g) 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 Separate revenue targets will apply in respect of the *revenue target services* provided by means of the *transmission system* and the *distribution system*. The establishment of each revenue target has been made by reference to Western Power's *approved total costs* for *revenue target services* for each of 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 2017, 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 2017.

Table 26: Derivation of Transmission Initial Capital Base (net) ($ million real as at 30 June 2017)

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
Opening capital base value	2,816.7	2,927.7	3,161.6	3,197.5	3,135.5
less depreciation	94.0	103.4	114.1	121.3	129.4
less accelerated depreciation	-	-	-	-	-
plus new facilities investment (net of capital contributions and asset disposals)	204.9	337.4	149.9	59.3	102.6
Closing capital base value	2,927.7	3,161.6	3,197.5	3,135.5	3,108.6

Table 27: Derivation of Distribution Initial Capital Base (net) ($ million real as at 30 June 2017)

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
Opening capital base value	4,248.7	4,708.5	5,142.9	5,494.3	5,723.1
less depreciation	214.0	236.2	261.9	266.5	281.5
less accelerated depreciation	3.8	0.5	-	-	-
plus new facilities investment (net of capital contributions and asset disposals)	677.6	671.1	613.3	495.2	356.8
Closing capital base value	4,708.5	5,142.9	5,494.3	5,723.1	5,798.4

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 2017; 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 28: Transmission asset groupings and economic lives for depreciation purposes

Asset group	Economic Life (years) for depreciation purposes
Transmission transformers	50 years
Transmission reactors	50 years
Transmission capacitors	40 years
Transmission circuit breakers	50 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

Table 29: 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

Asset group	Economic Life (years) for depreciation purposes
Street lighting	20 years
Distribution meters and services	15 years
Distribution IT	6 years
Distribution SCADA & communications	10.16 years
Distribution other, non-network assets	27 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 In respect of *network assets* for the *distribution system*, Western Power will apply accelerated depreciation in respect of those *network assets* that will be decommissioned as a result of the State Underground Power Program undertaken by Western Power on behalf of the Western Australian government as set out in the following table:

Table 30: Distribution accelerated depreciation by asset class ($ million real as at 30 June 2017)

	30 June 2018	30 June 2019	30 June 2020	30 June 2021	30 June 2022
Underground Cables	3.63	4.84	3.25	-	-
Transformers	-	-	-	-	-
Switchgear	0.46	1.48	0.76	-	-
Street lighting	0.28	0.57	0.36	-	-
Meters and Services	-	-	-	-	-
IT	-	-	-	-	-
SCADA & Communications	-	-	-	-	-
Other Distribution Non-Network	-	-	-	-	-
Distribution Land & Easements	-	-	-	-	-

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 *Western Power Network* for the financial year ending 30 June 2018 and 30 June 2019 is 5.87% nominal post tax, derived using the following formula:

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

where:

r_e is the cost of equity, being 6.57%

r_d is the cost of debt, being 5.29% for the financial years ended 30 June 2018 and 5.29% for the financial year ended 30 June 2019

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 providers (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 debt risk premium ("**DRP**"). 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 *DRP,* cost of debt and *weighted average cost of capital* will apply to the financial years ending 30 June 2020, 30 June 2021 and 30 June 2022.

5.4.3 The updated *DRP* and resulting updated *weighted average cost of capital* will be reflected in the update of the *price list* in accordance with sections 6.4.2 and 6.4.3.

Trailing average cost of debt variation

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

$$TA\ DRP_0 = \frac{\sum_{t=0}^{-9} DRP_t}{10}$$

where

$TA\ DRP_0$ is the equally weighted trailing average of the DRP to apply in the following year as the annual update of the estimate used in the current year; and

DRP_t is the DRP estimated for each of the 10 regulatory years

t = 0, -1, -2…. , -9.

DRP_t refers to the DRP estimates in each year = 0, -1, -2…. , -9, which are either:

5.4.5 The forward looking DRP estimators for the financial years ending 30 June 2020, 30 June 2021 and 30 June 2022 estimated during the 20 *business day* averaging period, using the Authority's bond yield method of automatic formulas as described in section 5.4.13 below ("**Bond Yield Approach**");

5.4.6 The published DRP_t, estimates, derived as follows:

- financial year 2008/09: $DRP_{2008/09}$: 5.483 per cent;

- financial year 2009/10: $DRP_{2009/10}$: 2.355 per cent;
- financial year 2010/11: $DRP_{2010/11}$: 1.895 per cent;
- financial year 2011/12: $DRP_{2011/12}$: 2.842 per cent;
- financial year 2012/13: $DRP_{2012/13}$: 2.768 per cent;
- financial year 2013/14: $DRP_{2013/14}$: 2.634 per cent;
- financial year 2014/15: $DRP_{2014/15}$: 1.640 per cent;
- financial year 2015/16: $DRP_{2015/16}$: 2.352 per cent;
- financial year 2016/17: $DRP_{2016/17}$: 1.656 per cent;
- financial year 2017/18: $DRP_{2017/18}$: 1.241 per cent.

5.4.7 The trailing average *DRP* estimate for the financial year ending 30 June 2018 (TA DRP_{2018}) is 2.487%.

5.4.8 The trailing average *DRP* estimate for the financial year ending 30 June 2019 (TA DRP_{2019}) is 2.487%, being the average derived from $DRP_{2008/09}$ to $DRP_{2017/18}$ listed in section 5.4.6 above.

5.4.9 The first annual update of the *DRP* will apply for the financial year ending 30 June 2020. All annual updates of the *DRP* are to be determined consistent with the *Bond Yield Approach*.

5.4.10 The *Authority* required that Western Power nominate an averaging period for the purposes of determining the *DRP* for each of the financial years ending 30 June 2020, 30 June 2021 and 30 June 2022. The averaging periods are a nominated 20 *business days* (based on NSW public holidays) during the period 1 January to 30 April 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.

5.4.11 The forward looking estimates of the *DRP* for each financial year ending 30 June 2020, 30 June 2021 and 30 June 2022, will be estimated using the *Bond Yield Approach*. Resulting estimates of the *DRP* will be included in the calculation of the trailing average *DRP* in accordance with the formula in section 5.4.4 above.

5.4.12 The following method of automatic formulas applies where the *Authority's Bond Yield Approach* is used for updating the estimates of the *DRP*, and will remain unchanged for the duration of this *access arrangement period*, and hence will apply for the estimates made for DRP_{2020}, as well as for the estimates DRP_{2021} and DRP_{2022}.

5.4.13 The *Authority's Bond Yield Approach* consists of the following six processes:

a) Determining the Benchmark Sample

Identifying a sample of bonds based on the benchmark sample selection criteria. This will comprise a 'cross section' of bonds.

b) Collecting Data

Collecting data for those bonds over the averaging period in question, for example 20 trading days. This represents 'time series' data related to each bond.

c) Converting Yields to Australian Dollar Equivalents

Converting yields for bonds denominated in foreign currencies into Australian dollar ("**AUD**") equivalents so that all yields are expressed as an *AUD* equivalent.

d) Averaging Yields over the Averaging Period

Calculating an average *AUD* equivalent bond yield for each bond in the cross section across the averaging period. For example, where a 20 trading day averaging period applies, each bond will have a single 20 day 'average yield' calculated.

e) Estimating 'Curves'

Estimating three yield curves based on different methodologies and using the average yield for each bond; its remaining term to maturity; and *AUD* face value.

f) Calculating the DRP

Calculating the *DRP* by subtracting the average of the 10 year *AUD* interest rate swap rate from the 10 year cost of debt estimate, with the latter calculated as the average of the three estimated yield curves at the ten year tenor.

5.4.14 Each process is comprised of a series of automatic formulas that will be used for the annual updates of the *DRP*. Further details of the automatic update approach are set out in the *Authority's approval* of this *access arrangement*.

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 2017 to be recovered so that Western Power is financially neutral compared to a situation where revenue deferral had not occurred.

Table 31: Derivation of transmission system deferred revenue ($ million real as at 30 June 2017)

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
Opening deferred revenue value	96.7	95.9	95.2	94.4	93.6
less principal recovered	0.7	0.7	0.8	0.8	0.8
Closing deferred revenue value	95.9	95.2	94.4	93.6	92.8

Table 32: Derivation of *distribution system* deferred revenue ($ million real as at 30 June 2017)

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
Opening deferred revenue value	726.1	718.5	710.6	702.3	693.9
less principal recovered	7.6	7.9	8.2	8.5	8.8
Closing deferred revenue value	718.5	710.6	702.3	693.9	685.0

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.

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 33: Amount to be added to the target revenue due to the recovery of deferred revenue ($ million real as at 30 June 2017)

Financial year ending:	30 June 2018	30 June 2019	30 June 2020	30 June 2021	30 June 2022
Transmission system	4.4	4.4	4.4	4.4	4.4
Distribution system	35.6	35.6	35.6	35.6	35.6

5.6 *Transmission system price control* – period of application

Despite section 1.3.1 of this *access arrangement* the *transmission system price control* commences on 1 July 2017. This *price control* applies annually on a financial year basis for the duration of the *access arrangement period*.

5.7 Transmission system price control for revenue target services – years ending 30 June 2018 and 30 June 2019

5.7.1 The *transmission system price control* for *revenue target services* is used to determine the maximum transmission revenue target (MTR_t) for Western Power's *transmission system* for each financial year t, where t is financial years ending 30 June 2018 and 30 June 2019.

5.7.2 For the financial years ending 30 June 2018 and 2019, MTR_t is determined as follows:

$$\mathbf{MTR_t} = TR_t + TK_t + TAA3_t$$

where:

$\mathbf{TR_t}$ is the dollar amount for the financial year t calculated from the dollar amounts (expressed in 30 June 2017 prices) set out in Table 34. For the avoidance of doubt, the dollar amounts set out in the table below include the amounts due to the recovery of *deferred revenue* detailed in section 5.5.5 of this *access arrangement* for the *transmission system*. Note that the values in the table will be updated, and these values will be reported in the *price list information* for the financial years ending 30 June 2021 and 30 June 2022, as a result of the annual updates to *weighted average cost of capital* specified in section 5.4.

$\mathbf{TK_{2017/18}}$ = $1.226M real as at 30 June 2017

$\mathbf{TK_{2018/19}}$ = $0

$\mathbf{TAA3_t}$ is a positive or negative amount for the financial year t calculated to correct for any errors in the amounts included in the calculation of TR_t to give effect to the following adjustments (if applicable) arising from the operation of the previous *access arrangement*:

- Adjusting *target revenue* for unforeseen events;
- Adjusting *target revenue* for technical rule changes;
- *Investment adjustment mechanism*;
- *Gain sharing mechanism*;
- *Service standards adjustment mechanism*; and
- D factor scheme.

$TAA3_t$ must take account of inflation, the time value of money and estimates (if any) of the above adjustments that have been included in the calculation of TR_t in this section 5.7.2 of this *access arrangement*. Western Power will provide model outputs to the *Authority* to demonstrate that the above adjustments have been made in accordance with the previous *access arrangement*.

5.8 Transmission system price control for revenue target services – years ending 30 June 2020, 30 June 2021 and 30 June 2022

5.8.1 The *transmission system price control* for *revenue target services* is used to determine the maximum transmission *revenue target* ("$\mathbf{TTR_t}$") for Western Power's *transmission system*

for each financial year t, where t is financial years ending 30 June 2020, 30 June 2021 and 30 June 2022.

5.8.2 For the financial years ending 30 June 2020, 30 June 2021 and 30 June 2022, TTR_t is determined as follows:

$$\mathbf{TTR_t} = TR_t + TAA3_t$$

where:

TR_t is as defined in section 5.7.2.

$TAA3_t$ is as defined in section 5.7.2.

Table 34: Transmission revenue target service revenues to be used for calculating TRt ($ million real as at 30 June 2017)

Financial year ending:	30 June 2018	30 June 2019	30 June 2020	30 June 2021	30 June 2022
TR_t	280.7	282.1	340.0	407.7	486.9

For the purpose of calculating TR_t, TK_t and therefore MTR_t and TTR_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, with the exception of the financial year ending 30 June 2020 pricing year which will use the most recent September quarter compared to the September quarter in the previous year for the *CPI* to apply to financial year ending 30 June 2020 only.

5.8.3 Notwithstanding section 5.8.2 for the financial year ending 30 June 2021, TTR_t will also include an additional term TK' as follows:

$$\mathbf{TK'} = (AMTR_{2018/19} - FMTR_{2018/19}) * (1 + WACC_{2018/19}) * (1 + WACC_{2019/20})$$

where:

$AMTR_{2018/19}$ is the actual transmission revenue received in 2018/19.

$FMTR_{2018/19}$ = $291.711M nominal

$WACC_{2018/19}$ is as defined in section 5.4.

$WACC_{2019/20}$ is as defined in section 5.4.

5.9 Distribution system price control – period of application

5.9.1 Despite section 1.3.1 of this *access arrangement* the *distribution system price control* commences on 1 July 2017. This *price control* applies annually on a financial year basis for the duration of the *access arrangement period*.

5.10 Distribution system price control for revenue target services – years ending 30 June 2018 and 30 June 2019

5.10.1 The *distribution system* price control for revenue target services is used to determine the maximum distribution revenue target (MDR_t) for Western Power's *distribution system* for each financial year t, where t is financial year ending 30 June 2018 and 30 June 2019.

5.10.2 For the financial years ending 30 June 2018 and 30 June 2019, MDR_t is defined as follows:

$$\mathbf{MDR_t} = DR_t + DK_t + TEC_t + DAA3_t$$

where:

DR_t is the dollar amount for the financial year t calculated from the dollar amounts (expressed in 30 June 2017 prices) set out in Table 35. For the avoidance of doubt, the dollar amounts set out in the table below include the amounts due to the recovery of *deferred revenue* detailed in section 5.5.5 for the *distribution system*. Note that the values in the table will be updated, and these values will be reported in the *price list information* for the financial years ending 30 June 2021 and 30 June 2022, as a result of the annual updates to *weighted average cost of capital* specified in section 5.4.

Table 35: Distribution revenue cap service revenues to be used for calculating DRt ($ million real as at 30 June 2017)

Financial year ending:	30 June 2018	30 June 2019	30 June 2020	30 June 2021	30 June 2022
DR_t	991.5	983.6	974.5	926.8	875.8

$DK_{2017/18}$ = $36.407M real as at 30 June 2017

$DK_{2008/19}$ = $0

TEC_t is any cost incurred by the *distribution system* for the financial year t as a result of the tariff equalisation contribution in accordance with section 6.37A of the *Code*.

$DAA3_t$ is a positive or negative amount for the financial year t calculated to correct for any errors in the amounts included in the calculation of DR_t to give effect to the following adjustments (if applicable) arising from the operation of the previous *access arrangement*:

- Adjusting *target revenue* for unforeseen events;
- Adjusting *target revenue* for technical rule changes;
- *Investment adjustment mechanism*;
- *Gain sharing mechanism;*
- *Service standards adjustment mechanism*; and
- D factor scheme.

$DAA3_t$ must take account of inflation, the time value of money and estimates (if any) of the above adjustments that have been included in the calculation of DR_t

in this section 5.10.2. Western Power will provide model outputs to the *Authority* to demonstrate that the above adjustments have been made in accordance with the previous *access arrangement*.

5.11 Distribution system price control for revenue target services – years ending 30 June 2020, 30 June 2021 and 30 June 2022

5.11.1 The *distribution system price control* for *revenue target services* is used to determine the maximum distribution *revenue target* (TDR_t) for Western Power's *distribution system* for each financial year t, where t is financial year ending 30 June 2020, 30 June 2021 and 30 June 2022.

5.11.2 For the financial years ending 30 June 2020, 30 June 2021 and 30 June 2022, DTR_t is determined as follows:

$$\mathbf{DTR_t} = DR_t + TEC_t + DAA3_t + DTEC_t$$

where:

DR_t is as defined in section 5.10.2.

TEC_t is as defined in section 5.10.2.

$DAA3_t$ is as defined in section 5.10.2.

$DTEC_t$ is an adjustment for any shortfall or over-recovery of actual *distribution system revenue* compared to TEC_t in preceding years and is calculated in accordance with section 5.11.3 of this access arrangement.

For the purpose of calculating DR_t, DK_t and therefore MDR_t and DTR_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, with the exception of the financial year ending 30 June 2020 pricing year which will use the most recent September quarter compared to the September quarter in the previous year for the *CPI* to apply to financial year ending 30 June 2020 only.

5.11.3 For the financial year ending on 30 June 2020 to 30 June 2022:

$$\mathbf{DTEC_t} = (ATEC_{t-2} – FTEC_{t-2}) * (1 + WACC_t) * (1 + WACC_{t-1}) + (TEC_{t-1} – FTEC_{t-2}) * (1 + WACC_t)$$

where:

$ATEC_t$ is the actual tariff equalisation contribution revenue received in financial year t.

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

TEC_t is the amount of tariff equalisation contribution to be recovered in a financial year t as gazetted.

$WACC_t$ 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.

5.11.4 Notwithstanding clause 5.11.2 for the financial year ending 30 June 2021, DTR_t will also include an additional term DK' as follows:

$$DK' = (AMDR_{2018/19} - FMDR_{2018/19}) * (1 + WACC_{2018/19}) * (1 + WACC_{2019/20})$$

where:

$AMDR_{2018/19}$ is the actual revenue received in 2018/19

$FMDR_{2018/19}$ = $1,218.981M nominal

$WACC_{2018/19}$ is as defined in section 5.4

$WACC_{2019/20}$ is as defined in section 5.4

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 objectives set out in sections 7.3 and 7.4 of the *Code*.

6.2.2 In accordance with the objectives set out in sections 7.3 and 7.4 of the *Code*, 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 A17 and C1 to C15 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 are location-specific and are published for each electrical node.

6.4 Price list and price list information

6.4.1 The *price lists* in respect of the pricing year ending on 30 June 2018 and the *pricing year* ending on the day before the effective date under section 1.3.1 of this *access arrangement* (30 June 2019) are attached at Appendix F.1 and F.3 respectively. In respect of these *pricing years*, these are the current *price lists* for the purposes of section 5.1(f) of the *Code*. The respective *price list information* for these *price lists* are attached at Appendix F.2 and F.4.

6.4.2 The *price list* in respect of the *pricing year* commencing on the date in section 1.3.1 of this *access arrangement* (1 July 2019) and ending on 30 June 2020 is attached at Appendix F.5. The *price list information* for this *price list* is attached at Appendix F.6.

6.4.3 In accordance with section 8.1 of the *Code* this *access arrangement* requires Western Power to submit a proposed *price list*, together with *price list information*, to the *Authority* for approval at least 45 *business days* before the start of the *pricing year* ending 30 June 2021 and 30 June 2022.

6.4.4 The *pricing years* for the *access arrangement period* are defined in the table below:

Table 36: Pricing years for this access arrangement period

Pricing year	Start date	End date
1	1 July 2017	30 June 2018
2	1 July 2018	The day before the effective date under section 1.3.1 of this access arrangement (30 June 2019)
3	Effective date under section 1.3.1 of this access arrangement (1 July 2019)	30 June 2020
4	1 July 2020	30 June 2021
5	1 July 2021	30 June 2022

6.4.5 For the purposes of the p*rice list* and p*rice list information* in the financial years ending 30 June 2020, 30 June 2021 and 30 June 2022, Western Power will use the customer information in the table below to determine prices:

Table 37: Customer numbers and energy volumes

Customer segment	Sub-segment	Tariffs	2019/20		2020/21		2021/22	
			Customer numbers	Energy volumes, GWh	Customer numbers	Energy volumes, GWh	Customer numbers	Energy volumes, GWh
Residential	Without PV	RT1, RT3, RT17, RT19, RT21	810,777	4,088	810,556	3,996	810,672	3,911
	With PV	RT13, RT15	254,837	1,103	275,034	1,080	294,895	1,054
Unmetered supply		RT10		16,493	40	16,641	41	16,789
Small businesses	Without PV	RT2, RT4, RT18, RT20, RT22	81,740	1,759	80,886	1,654	80,008	1,554
	With PV	RT14, RT16	2,250	284	2,420	345	2,590	406
Medium businesses	Low voltage business	RT6	3,967	2,037	3,998	1,964	4,029	1,948
	High voltage business	RT5	296	758	300	803	303	835
Large businesses	Low voltage business	RT8	58	186	58	181	58	176
	High voltage business	RT7	291	3,109	293	3,068	295	3,012
Streetlights		RT9		288,415	141	296,223	143	304,058

6.5 Pricing methods

6.5.1 This section of the *access arrangement* explains how the *pricing methods* comply with sections 7.3 and 7.4 of the *Code*. In accordance with the *Code* requirements, the *price list information* provided as Appendix F.6 to the *access arrangement* explains the *pricing methods* that underpinned the development of *reference tariffs* for this *access arrangement period*.

Recovery of forward-looking efficient costs of providing *reference services*

6.5.2 In accordance with section 7.3(a) of the *Code*, *reference tariffs* are designed to recover the forward-looking efficient costs of providing *reference services*. Further information is provided in the *price list information*, Appendix F.6 to the *access arrangement*.

6.5.3 Western Power, as a *reasonable and prudent person*, will set the *reference tariffs* in the *price list* so that the forecast *transmission system* revenue for *revenue target services* for year t recovers MTR or TTR as applicable and the forecast *distribution system* revenue for *revenue target services* for year t recovers MDR or TDR as applicable.

6.5.4 *Non-revenue target services* revenue is recovered on a fee-for-service basis.

6.5.5 *Capital contributions* are charged in accordance with Western Power's *contributions policy*. In general terms, such *contributions* seek to recover in net present value terms any shortfall between the expected revenue from *reference tariffs* and the costs of connection.

***Reference tariffs* should be between the *incremental* and the *stand-alone cost of service provision*.**

6.5.6 In accordance with section 7.3(b) of the *Code*, *reference tariffs* are set to at least recover the *incremental cost of service provision*, but to be less than the *stand-alone cost of service provision*. Further information is provided in the *price list information*, Appendix F.6 to the *access arrangement*.

Charges paid by different *users* of a *reference service*

6.5.7 In accordance with section 7.4(a) of the *Code*, the *charges* paid by different *users* of a *reference serv*ice differ only to the extent necessary to reflect differences in the *average cost of service provision* to the *users*.

6.5.8 Each of the *reference tariffs* takes into account the metering information available for each *reference service*, and therefore contains components that vary with usage or demand. In addition *reference tariffs* for *reference services* A5, A6, A7, A8, C5, C6, C7, C8, A11, B1 and B2 vary with location. Within the requirements of section 7.4(a) and 7.7 of the *Code*, these components reflect the differences in the average cost of different *users* of the same *reference service*. Further information is provided in the *price list information*, Appendix F.6 to the *access arrangement*.

Reasonable requirements of *users*

6.5.9 In accordance with section 7.4(b) of the *Code*, the structure of *reference tariffs* has been set to reasonably accommodate the requirements of *users* collectively.

Structure of *tariffs* should enable a *user* to predict likely annual changes

6.5.10 In accordance with section 7.4(c) of the *Code*, *users* can predict the likely annual changes in *reference tariffs*. All *reference tariffs* are specified until the financial year ending 30 June 2020. For the remainder of this *access arrangement period* rebalancing of *reference tariffs* is constrained by the imposition of side constraints on annual revenue movements. In addition, the *revenue targets* have been smoothed across this *access arrangement period* to facilitate smooth price movements.

Avoidance of price shock

6.5.11 The *transmission system* and *distribution system target revenue* for *revenue target services* has each been smoothed across this *access arrangement period* so that price movements will be smoothed from year to year.

6.5.12 In accordance with section 7.4(d) of the *Code*, rebalancing of *reference tariffs* is constrained by the imposition of side constraints on annual revenue movements.

6.5.13 To constrain *tariff* rebalancing the maximum change in revenue for each *reference tariff* when the *price list* is updated is:

For financial years ending on 30 June 2020 to 30 June 2022:

$$\frac{\sum_{y=1}^{n} p_t^{xy} q_t^{xy}}{\sum_{y=1}^{n} p_{t-1}^{xy} q_t^{xy}} \leq (1 + CPI_t)(1 - X_t) + A'_t + 0.02$$

where:

a given *reference tariff* x, has up to n tariff components, and where:

t is the financial year in which the *reference tariffs* as varied will apply;

$t-1$ is the financial year immediately preceding financial year t;

p_{t-1}^{xy} is the price being charged in the financial year $t-1$ for component y of a given *reference tariff* x;

p_t^{xy} is the proposed price for component y of a given *reference tariff* x in financial year t;

q_t^{xy} is the quantity of component y of a given *reference tariff* x that is forecast to be sold in financial year t;

CPI_t is the percentage increase in the *CPI* data relating to the most recent December quarter compared to the December quarter in the previous year;

X_t is the annual percentage change in the sum of DR_t and TR_t is initially determined to be:

Table 38: X_t

Financial year ending:	30 June 2019	30 June 2020	30 June 2021	30 June 2022
X_t	0.51%	-3.85%	-1.52%	-2.12%

A'_t is the annual correction factor in financial year t determined as follows:

$$A'_t = \frac{(DAA3_t + TAA3_t + \triangle TEC_t + DTEC_t)}{(DR'_t + TR'_t)}$$

DK_t is as defined in section 5.10.2 of the *access arrangement*;

$DAA3_t$ is as defined in section 5.10.2 of the *access arrangement*;

ΔTEC_t is the difference in the cost incurred by the *distribution system* between the financial years t-1 and t as a result of the tariff equalisation contribution in accordance with section 6.37A of the *Code*;

$DTEC_t$ is the revenue correction factor for the tariff equalisation contribution as defined in section 5.11.3 of the *access arrangement;*

DR'_t is DR_t (as set out in section 5.10.2 of the *access arrangement*), converted to nominal dollars;

TR'_t is TR_t (as set out in section 5.7.2 of the access arrangement), converted to nominal dollars.

6.5.14 The values for X_t in Table 38 will be updated and these values will be reported in the *price list information* for the financial years ending 30 June 2021 and 30 June 2022, as a result of the annual updates to *weighted average costs of capital* specified in section 5.4. Note that the update for the financial year ending 30 June 2021 will update the *weighted average cost of capital* for 30 June 2020 and 30 June 2021.

Tariff components

6.5.15 In accordance with section 7.6 of the *Code*, *reference tariffs* have been designed so that the *incremental cost of service provision* is to be recovered by *tariff* components that vary with usage, and the costs in excess of the *incremental cost of service provision* are to be recovered through *tariff* components that do not vary with usage. Further information is provided in the *price list information*, Appendix.F.6 to the *access arrangement*.

6.6 Policy on prudent discounting

6.6.1 In accordance with section 7.9 of the *Code*, Western Power may discriminate between *users* in its pricing of *services* to the extent that it is necessary to do so to aid economic efficiency, 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 *covered service*; and

b) then, recovering the amount of the *discount* from other *users* of *reference services* through *reference tariffs*.

6.6.2 In exercising its discretion with regard to prudent discounting, Western Power will have regard to the pricing objectives in sections 7.3 and 7.4 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 will provide a comparable *service* at a lower price than that offered by Western Power's *reference services* and *reference tariffs*.

6.6.4 The existing *user* or *applicant* must provide Western Power with sufficient details of the cost of the other option to enable Western Power to calculate the annualised cost of the other option.

6.6.5 Western Power's discounted price offer will be 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*, 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* 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;

c) 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

b) 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:

a) 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*:

a) arising from the connection of new generation capacity to the *transmission system* or *distribution system* from 1 July 2017;

b) arising from the connection of new *load* to the *transmission system* or *distribution system* from 1 July 2017;

c) in relation to all *augmentations* to provide additional capacity to the *transmission system* or *distribution system* for the provision of *covered services* from 1 July 2017; and

d) undertaken for *augmentation* of the *distribution system* under the state underground power program.

7.4 Gain sharing mechanism and efficiency and innovation benchmarks

7.4.1 In accordance with sections 5.25 and 6.20 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* (within the meaning of the *Code*) is to be calculated for each of the financial years of the access arrangement period as follows:

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

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

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

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

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

where:

ABS_t is the *above-benchmark surplus* in year t of the *access arrangement period*;

EIB_t is the *efficiency and innovation benchmark* for financial year t as set out in Table 39, adjusted for:

a) any difference between the actual network growth escalation factors in each financial year and the forecast network growth escalation factors and any difference between the actual indirect cost growth escalation factors in each financial year and the forecast indirect cost growth escalation factors used to establish the *non-capital costs*

component of *approved total costs* that financial year, in accordance with section 7.4.9 of the *access arrangement*; and

b) the effects of inflation;

Table 39: Efficiency and innovation benchmarks ($M real as at 30 June 2017)

Financial year ending:	30 June 2018	30 June 2019	30 June 2020	30 June 2021	30 June 2022
Network	230.1	230.4	230.8	231.0	230.9
Corporate	81.2	80.6	80.1	77.1	71.8
Indirect costs	43.2	39.5	39.2	48.7	48.2
***Efficiency and innovation benchmark* - EIB_t**	**354.6**	**350.5**	**350.1**	**356.8**	**350.8**

and

A_t is the sum of the actual *non-capital costs* incurred by Western Power for the *transmission system* and *distribution system* in year t, excluding any amount of *non-capital costs* incurred by Western Power:

i. in accordance with the D-factor scheme in the *access arrangement* and providing that the expenditure has been approved by the *Authority;*

ii. in accordance with any adjustment made under section 7.1*;*

iii. in accordance with any adjustment made under section 7.2*;*

iv. in relation to superannuation for defined benefits schemes;

v. in relation to *non-revenue target services;*

vi. in relation to licence fees;

vii. in relation to a levy made under section 14 of the *Energy Safety Act 2006 (WA)* applicable to Western Power; and

viii. in relation to amounts payable under the *Economic Regulation Authority (Electricity Network Access Funding Regulations) 2012*.

7.4.3 The gain sharing mechanism amount ($GSMA_{AA}$) for the *access arrangement period* is to be calculated as follows:

$$GSMA_{AA} = \sum[GSMA_{1:5}]$$

where:

$$GSMA_1 = \max(0, ABS_{t1} + ABS_{t2} + ABS_{t3} + ABS_{t4} + ABS_{t5})$$

$$GSMA_2 = \max(0, ABS_{t2} + ABS_{t3} + ABS_{t4} + ABS_{t5})$$

$$GSMA_3 = \max(0, ABS_{t3} + ABS_{t4} + ABS_{t5})$$

$$GSMA_4 = \max(0, ABS_{t4} + ABS_{t5})$$

$$GSMA_5 = \max(0, ABS_{t5})$$

where:

$GSMA_n$ is the total *above-benchmark surplus* for the equivalent year of the *access arrangement period*; and

ABS_t is the *above-benchmark surplus* in year t of the *access arrangement period* calculated in accordance with section 7.4.2.

7.4.4 In any year in which an *above-benchmark surplus* is calculated to be a positive value under section 7.4.2:

a) where Western Power failed to provide *reference services* at a *service standard* at least equivalent to the *service standard benchmarks* for those *reference services* for that year as set out in section 4 of the access arrangement:

i. after notification from Western Power under section 7.4.6, a determination will be made by the *Authority* of the extent (expressed as a percentage) that Western Power achieved the *above-benchmark surplus* by failing to provide *reference services* at a *service standard* at least equivalent to the *service standard benchmarks* for those *reference services* for that year as set out in section 4; and

ii. the percentage determined by the Authority in 7.4.4(a)(i) will be applied as a proportion of the year (the "**SSB Deficiency Proportion**") in accordance with section 7.4.7; and

b) where Western Power provided *reference services* at a *service standard* at least equivalent to the *service standard benchmarks* for those *reference services* for that year as set out in section 4, there is no *SSB Deficiency Proportion*.

7.4.5 In any year in which an *above-benchmark surplus* is calculated to be a negative value under section 7.4.2 there is no *SSB Deficiency Proportion*.

7.4.6 For the purposes of section 7.4.4(a), if in any year in which an *above-benchmark surplus* is calculated to be a positive value and Western Power fails to provide *reference services* at a *service standard* at least equivalent to the *service standard benchmarks* for those *reference services* for that year as set out in section 4 of the *access arrangement*, Western Power may notify the Authority and demonstrate to it how and to what extent there is, or is not, a relationship between the failure and Western Power's achieved *above-benchmark surplus*, through consideration of:

a) which *service standard benchmarks* have not been met in that year;

b) an analysis of the causes for not meeting the *service standard benchmark* in that year;

c) the categories of *non-capital costs* that impact on the achievement of those *service standard benchmarks* (which may be sub-categories of the cost categories in section 7.4.2);

d) the forecast *non-capital costs* for those categories in section 7.4.6(c) used to establish the *non-capital costs* component of *approved total costs*, after normalising for inflation (using the *CPI*), network growth escalation factors and indirect and corporate cost growth escalation factors; or

e) any other issues that are relevant.

7.4.7 A total *gain sharing mechanism* revenue amount for the *access arrangement* (**GSMR**) will be added to *target revenue* for the next *access arrangement period* calculated as follows:

$$GSMR = GSMA_{AA} – (GSMA_{AA} \times (\sum SSB\ Deficiency\ Proportion / AA\ Length))$$

where:

$GSMA_{AA}$ is the total *above-benchmark surplus* for the *access arrangement period* calculated in accordance with section 7.4.3;

SSB Deficiency Proportion is determined under section 7.4.4(a)ii); and

AA Length is the number of years in the *access arrangement period*.

7.4.8 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*.

7.4.9 The adjustment to EIB_t due to any differences between the actual network growth escalation factors in each financial year and the forecast network growth escalation factors and any differences between the actual indirect cost growth escalation factors in each financial year and the forecast indirect cost growth escalation factors used to establish the *non-capital costs* component of *approved total costs* for that financial year will be calculated by:

a) deflating EIB_t for financial year t by using:

i. the network growth escalation factors and indirect cost growth escalation factors assumed for financial year t when setting the forecast *non-capital cost* component of *approved total costs* for that financial year, compounded to that financial year, as set out in Table 40, Table 41 and Table 42; and

b) inflating the value determined under section 7.4.9(a) for financial year t using:

i. the network growth escalation factors recalculated for financial year t using actual data for each network growth escalation factor in each financial year, compounded to that financial year, and following the calculation method set out in Table 40 and Table 41; and

ii. indirect cost growth escalation factors recalculated for financial year t using actual data, compounded to that financial year, following the calculation method set out in Table 42 and section 7.4.10.

7.4.10 When inflating the EIB value determined under section 7.4.9(a) for indirect cost growth escalation factors, the growth factor applied to indirect costs is a weighted average of the *distribution system* and *transmission system* recalculated network growth escalation factors. The weighting is based on the total *distribution system* operating expenditure that attracts indirect costs (as a proportion of total operating expenditure that attracts indirect costs) and the total *transmission system* operating expenditure that attracts indirect costs (as a proportion of total operating expenditure that attracts indirect costs) in accordance with the Cost and Revenue Allocation Methodology and derived from the Regulatory Financial Statements for financial year t.

Table 40: Distribution system forecast network growth escalation assumptions

Network growth factor	Calculation method	Weight	2017/18	2018/19	2019/20	2020/21	2021/22
Customer numbers (a)	Year on year growth	45.8%	1.65%	1.73%	1.69%	1.66%	1.63%
Circuit length (b)	Year on year growth	23.8%	0.91%	0.91%	0.91%	0.91%	0.91%
Ratcheted Maximum Demand (c)	Year on year growth	17.6%	0.00%	0.00%	0.00%	0.00%	0.00%
Energy delivered (d)	Year on year growth	12.8%	-0.37%	-0.20%	-0.20%	-0.71%	-1.10%
Customer and Network growth factor	**Weighted average of a, b, c and d**	**100%**	**0.92%**	**0.98%**	**0.97%**	**0.89%**	**0.82%**

Table 41: Transmission system forecast network growth escalation assumptions

Network growth factor	Calculation method	Weight	2017/18	2018/19	2019/20	2020/21	2021/22
Circuit length (a)	Year on year growth	37.6%	0.32%	0.33%	0.22%	0.33%	0.32%
Ratcheted Maximum Demand (b)	Year on year growth	19.4%	0.00%	0.00%	0.00%	0.00%	0.00%
Energy Delivered (c)	Year on year growth	23.1%	-0.37%	-0.20%	-0.20%	-0.71%	-1.10%
Customer numbers (d)	Year on year growth	19.9%	0.00%	0.00%	2.63%	2.56%	0.00%
Network growth factor	**Weighted average of a, b, c and d**	**100%**	**0.03%**	**0.08%**	**0.56%**	**0.47%**	**-0.13%**

Table 42: Indirect cost forecast growth escalation assumptions

Growth escalation factor	Calculation method	2017/18	2018/19	2019/20	2020/21	2021/22
Indirect	Year on year growth	0.70%	0.76%	0.87%	0.78%	0.59%

7.4.11 For the purposes of section 7.4.9(a) the actual data used for each relevant network growth escalation factor must be independently audited. The audit must be carried out by an independent auditor approved by the *Authority*, with Western Power managing and funding the audit. The scope of the audit will be determined by the *Authority*.

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 SSBs"*** meaning the *service standard benchmarks* for SAIDI, SAIFI, call centre performance, circuit availability, 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 of the financial years ending 30 June 2018 and 30 June 2019, and the following financial years ending 30 June ("**SST Year**"*)* a reward (a positive amount) or penalty (a negative amount) will be calculated for each *SSAM SSB* by applying the applicable incentive rate to the relevant Service Standard Difference ("**SSD"**). The *SSD* is calculated as follows*:*

a) if SSA_t < SSB for SAIDI, SAIFI, loss of supply event frequency and average outage duration; or

SSA_t > SSB for call centre performance and circuit availability then

$SSD_t = (SST – SSA_t)$

b) if $SSA_t \geq$ SSB for SAIDI, SAIFI, loss of supply event frequency and average outage duration; or

$SSA_t \leq$ SSB for call centre performance and circuit availability then

$SSD_t = (SST – SSB)$

where:

SSD_t is the service standard difference in *SST Year* t;

SST is the SSAM target detailed in section 7.5.11;

SSB is the *service standard benchmark* for the *SSAM SSBs* as defined in section 7.5.3; and

SSA_t is the actual service performance in *SST Year* t with respect to the *SSAM SSBs*.

7.5.5 In relation to SAIDI and SAIFI, the rewards or penalties are calculated as the sum of the application of the formulae in section 7.5.4 to each component of SAIDI and SAIFI.

7.5.6 The rewards and penalties are applied to the performance *SST Year* in the *access arrangement period* and:

a) the reward or penalty for circuit availability will be allocated to the performance of the *transmission system*;

b) the reward or penalty for SAIDI and SAIFI will be allocated to the performance of the *distribution system*;

c) the reward or penalty for call centre performance will be allocated to the performance of the *distribution system*;

d) the reward or penalty for loss of supply event frequency will be allocated to the performance of the *transmission system;* and

e) 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 *SST 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 or penalties for the *transmission system* applied to each *SST Year* is capped at 1% of TR_t for that year as set out in Table 34. For the avoidance of doubt, for the purposes of this section TR_t in that table 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 for the *distribution system* applied to each *SST Year* is capped at 1% of DR_t for that year, and the sum of the penalties for the *distribution system* applied to each *SST Year* is capped at 2.5% as set out in Table 35. For the avoidance of doubt, for the purposes of this section DR_t in that table 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 SSAM targets and incentive rates for the *SSAM SSBs* are as follows:

Table 43: SAIDI SSAM targets and incentive rates ($ real as at 30 June 2017)

	SSAM target (SST_t) for years ending 30 June 2018 and 30 June 2019	SSAM target (SST_t) for each *SST Year*	Reward side incentive rate ($ per SAIDI minute)	Penalty side incentive rate ($ per SAIDI minute)
SAIDI - CBD (minutes)	-	17.7	30,216	30,216
SAIDI - Urban (minutes)	-	106.8	446,672	446,672
SAIDI - Rural Short (minutes)	-	188.6	143,122	143,122
SAIDI - Rural Long (minutes)	-	677.7	52,504	52,504

Table 44: SAIFI SSAM targets and incentive rates ($ real as at 30 June 2017)

	SSAM target (SST_t) for years ending 30 June 2018 and 30 June 2019	SSAM target (SST_t) for each *SST Year*	Reward side incentive rate ($ per 0.01 event)	Penalty side incentive rate ($ per 0.01 event)
SAIFI - CBD (events)	-	0.12	29,225	29,225
SAIFI - Urban (events)	-	1.09	290,705	290,705
SAIFI - Rural Short (events)	-	1.96	91,822	91,822
SAIFI - Rural Long (events)	-	4.29	55,342	55,342

Table 45: Call centre performance SSAM target and incentive rate ($ real as at 30 June 2017)

	SSAM target (SST_t) for years ending 30 June 2018 and 30 June 2019	SSAM target (SST_t) for each *SST Year*	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)	-	92.0%	-38,017	-12,429

Table 46: Circuit availability SSAM target and incentive rate ($ real as at 30 June 2017)

	SSAM target (SST_t) for years ending 30 June 2018 and 30 June 2019	SSAM target (SST_t) for each *SST Year*	Reward side incentive rate ($ per 0.1%)	Penalty side incentive rate ($ per 0.1%)
Circuit availability (Percentage of total possible hours available)	-	98.5%	-449,344	-256,768

Table 47: Loss of supply event frequency SSAM target and incentive rate ($ real as at 30 June 2017)

	SSAM target (SST_t) for years ending 30 June 2018 and 30 June 2019	SSAM target (SST_t) for each *SSAM year*	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)	-	17	89,869	59,912
Loss of supply event frequency >1.0 system minutes interrupted (number of events)	-	3	179,737	134,803

Table 48: Average outage duration SSAM target and incentive rate ($ real as at 30 June 2017)

	SSAM target (SST_t) for years ending 30 June 2018 and 30 June 2019	SSAM target (SST_t) for each *SST Year*	Reward side incentive rate ($ per minute)	Penalty side incentive rate ($ per minute)
Average outage duration (minutes)	-	708	14,097	1,367

7.6 D factor

7.6.1 In section 7.6.3 **"network control service"** means demand-side management or generation solutions (such as *distributed generating plant*) that can be a substitute for *network augmentation*.

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 financially neutral as a result of:

a) any additional *non-capital costs* incurred by Western Power as a result of deferring a *new facilities investment* project 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 financially neutral 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 fifth *access arrangement period* or subsequent *access arrangement periods* such that the present value (at 30 June 2017) of

the total amount added to *target revenue* (taking account of inflation and the time value of money) is equal to $408.8 million ($ real as at 30 June 2017).

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 fifth *access arrangement period* or subsequent *access arrangement periods* such that the present value (at 30 June 2017) of the total amount added to *target revenue* (taking account of inflation and the time value of money) is equal to $89.0 million ($ real as at 30 June 2017).

7.7.3 The timeframe for recovering the deferred revenue amounts in section 7.7.1 will be 32 years and in section 7.7.2 will be 40 years.

8 Trigger events

8.1.1 Pursuant to section 4.37 of the *Code* a *trigger event* 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* outweigh the disadvantages, 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 to the *Authority* under section 4.37 of the *Code* must incorporate an appropriate mechanism for cost recovery having regard to the *Code objective*.

9 Supplementary matters

9.1 General

9.1.1 Western Power will discharge the obligations it has under the Wholesale Electricity Market Rules ("**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 versions of the access arrangement have referred, in the Supplementary Matters chapter, to balancing requirements, ancillary service, 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. As at 1 July 2016, Western Power's principal role in respect to these functions under the WEM Rules is to provide network information to AEMO to support settlements and balancing.}

9.2 Line losses

9.2.1 Requirements for the treatment of line losses under the *access arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

9.3 Metering

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

APPENDICES

Appendix A. Electricity transfer access contract

Appendix B. Applications and queuing policy

Appendix C. Contributions policy

C.1 Contributions policy

C.2 Distribution low voltage connection scheme methodology

Appendix D. Transfer and relocation policy

Appendix E. Reference services

Appendix F. Reference tariffs

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Appendix A

ETAC Electricity Transfer Access Contract

Amended proposed access arrangement

16 November 2018

Access Arrangement (AA) for the period
1 July 2017 to 30 June 2022

westernpower

Electricity Transfer Access Contract

BETWEEN:

Electricity Networks Corporation

ABN 18 540 492 861

~ and ~

[Name of User]

[ABN/ACN/ARBN]

~ and ~

[Name of Indemnifier][1]

[ABN/ACN/ARBN]

General Counsel
Legal & Governance

363 Wellington Street
PERTH WA 6000

T: (08) 9326 6488 | **F**: (08) 9326 6498

[1] Delete if no Indemnifier
{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)

– and –

[ ] of [ ] (User)

– and –

[ ] of [ ] (Indemnifier)

INTRODUCTION

1. 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.[1]

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

[1] Delete this paragraph if there is no Indemnifier.

(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 *Interpretation 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_n" is the CPI applicable at the end of the calendar quarter (quarter $_n$) most recently ended prior to the current adjustment date; and

"CPI_c" is the value of CPI applicable for the calendar quarter occurring 12 months before the calendar quarter referred to in the definition of **CPI_n**.

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 31.3 {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 in the case of a Service with a Contract 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 allowing such transfer out of electricity; and

(ii) transfer electricity into the Network at a Connection Point unless it has an Entry Service or Bidirectional Service for that Connection Point allowing such transfer in of electricity.

(c) For each Service at each Connection Point with a Contracted Capacity, 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.

(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.

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, including under a Capacity Allocation Service, 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; or

(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 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.

(l) 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(f), 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

(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 (Directions from System Operator); 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 *Property Law Act 1969 (WA)*) 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).

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.

(c) 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).

(d) If the User does not satisfy Western Power under clause 6.2(c), 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(c).

(e) 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.

(f) Subject to clause 6.2(g), 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.

(g) For a Connection Point other than as referred to in clause 6.1, the User is not required to comply with clause 6.2(f) unless Western Power provides an indemnity to the User for all of the User's costs of and incidental to the proceedings.

(h) Nothing in clause 6.2(f) or clause 6.2(g):

(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(d),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 Price List from time to time for the Service. For the avoidance of doubt, the tariffs specified in the Price List apply to all consumption during the Pricing Year applicable to the 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 Price List and the remainder within a Pricing Year applicable to another Price List, the consumption covered by the Price List will be determined by prorating the metered consumption uniformly on a daily basis.

(b) If:

(i) no 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,

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 Price List under the new Access Arrangement, then the tariff for each quarter will be 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

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 a 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 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 Charges

(a) Subject to clause 9(b), if Western Power determines at any time during the Term that either or both of the User's or the Indemnifier's technical or financial resources are such that a Reasonable and Prudent Person would consider there to be a material risk that the User will be unable to meet its 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(a)(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; or

(B) 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 or otherwise securing the Charges for two months' Services; or

(C) if Western Power is satisfied, as a Reasonable and Prudent Person, that the User's parent company's financial 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(b)(i) and 9(b)(ii)), procure from the User's parent company a guarantee substantially in the form set out in Schedule 8.

(b) 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) 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.

(c) If any security held by Western Power under clause 9(a)(ii)(A)) or 9(a)(ii)(B) at any time is not equal to the Charges for two months' Services, 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(a)(ii)(A), provide Western Power with an additional cash payment to increase the security so that it is equal to the Charges for two months' Services; or

(ii) if the security is a guarantee under clause 9(a)(ii)(B), replace the guarantee with another guarantee (that is in accordance with clause 9(a)(ii)(B)) in an amount that is equal to the Charges for two months' Services.

(d) If any security held by Western Power under clause 9(a)(ii)(A) or 9(a)(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(a)(ii).

(e) Where a guarantee has been provided to Western Power by the User’s parent company but Western Power ceases to be satisfied, as a Reasonable and Prudent Person, that the criteria in clause 9(a)(ii)(C) are met then by notice to the User Western Power may require the provision of a new form of security complying with the requirements of clause 9(a)(ii)(A) or 9(a)(ii)(B) which security must be provided within 15 Business Days of service of Western Power’s notice.

(f) Upon the termination of this Contract and receipt by Western Power of all amounts due by the User to it under this Contract Western Power will return to the User any security provided under this clause 9 which is still held by Western Power. Where the security provided to Western Power was a cash deposit, then Western Power will return to the User the unutilised balance of the cash deposit and interest accrued on the deposit less any charges (including fees and charges associated with maintaining the interest bearing account) and taxes attributable to the maintenance of the interest bearing account in which the cash deposit was kept.

(g) Western Power may call upon a cash deposit or bank guarantee (or equivalent financial instrument) provided to it under this clause 9 if an amount due by the User 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 requiring payment of the amount.

(h) In this clause 9, a reference to the Charges for 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 two calendar month 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).

(i) 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 maintaining the interest bearing account) exceeds the Charges for two months' Services Western Power will, within a reasonable time, pay the excess amount held (above the Charges for two months' Services) to the Customer's nominated bank account.

(j) 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 User the unutilised balance of the cash deposit and interest accrued less any charges (including fees and charges associated with maintaining the interest bearing account) and taxes attributable to the maintenance of the interest bearing account.

(k) 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 (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

12.1 Western Power and the User must comply

Western Power and the User must each comply with the Technical Rules.

12.2 User to bear costs

(a) The User must bear its own costs in relation to compliance with the Technical Rules.

(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

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

(i) been negligent; or

(ii) has not acted as a Reasonable and Prudent Person.

(b) 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; and

(ii) in Part 3 of Schedule 3 any exemptions to the Technical Rules given to the User under Chapter 1 of the Technical Rules.

(b) Each Party must record any other information required to be recorded in this Contract by the Technical Rules 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

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.

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. Directions from System Operator

16.1 Western Power and the User must comply

Without limiting the generality of clause 14, Western Power and the User must each comply with any directions given by the System Operator.

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 *Competition and Consumer Act 2010* of the Commonwealth or the *Fair Trading Act 2010 (WA)* 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 *Competition and Consumer Act 2010* of the Commonwealth or the *Fair Trading Act 2010 (WA)* 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_n" is the CPI applicable at the end of the calendar quarter (quarter $_n$) most recently ended prior to the adjustment date; and

"CPI_c" is the value of CPI applicable for the calendar quarter occurring 36 months before the calendar quarter referred to in the definition of CPI_n.

(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 19.5. 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, nominated by the Chairperson of the Institute of Arbitrators (Western Australian Chapter) or their nominee 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:

(c) the Indemnified Party must give notice of the Claim to the Indemnifying Party as soon as reasonably practicable; and

(d) 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 *Civil Liability Act 2002 (WA)* applies in respect of any 'apology' (as defined in Section 5AF of that Act) given by the Indemnified Party); and

(e) 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

(f) 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(e).

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

Where:

(a) the User is the Intermediary (as defined in the Market Rules) of a person and in so far as they are registered as a Rule Participant (as defined in the Market 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:

(c) which Claims are in connection with the provision of the Services (including any failure of, or defect in provision of, the Services); or

(d) 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.

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) 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 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 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 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 *Energy Operators (Powers) 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, 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; 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 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.

27.4 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 20th 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).

27.5 User's rights not affected

Western Power's Default under clause 27.4 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 27.4, 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 by User

31.1 User may make Bare Transfer

Subject to clause 31.2, the User may make a Bare Transfer of its Access Rights under the Transfer and Relocation Policy without Western Power's prior written consent.

31.2 User must notify Western Power of Bare Transfer details

If the User makes a Bare Transfer, the User must notify Western Power of:

(a) the identity of the assignee; and

(b) the nature of the Assigned Access Rights,

before the assignee may commence using the Assigned Access Rights.

31.3 Assignment other than Bare Transfer

For an Assignment other than a Bare Transfer, the User may Assign its Access Rights subject to compliance with the Transfer and Relocation Policy.

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 the Independent Market Operator) 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

(v) if required for the purposes of prosecuting or defending a Dispute or if otherwise required in connection with legal proceedings related to this Contract.

(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 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:

(a) 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 *Electricity Industry Metering Code 2005 Communication Rules*; and

(d) 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 *Duties Act 2008 (WA)*. 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:

EXECUTED for and on behalf of **ELECTRICITY NETWORKS CORPORATION ABN 18 540 492 861** in accordance with paragraph 135(4) of the *Electricity Corporations Act 2005 (WA)*:

Signature of Authorised Officer	Signature of Authorised Officer
Full name	Full name
Position title	Position title

EXECUTED 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

EXECUTED 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)*.
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 Queuing Policy	means the 'applications and queuing policy' (as defined in the Code) in 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).*
Bare Transfer	means an Assignment under which the User Assigns the whole or a part of its access rights under this Contract to an assignee, but under which there is no Novation, with the result that the User's obligations under this Contract, and all other terms of this Contract, remain in full force and effect after the Assignment, whether or not the assignee becomes bound to the User or any other party to fulfil those obligations.
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 *Electricity Industry Customer Transfer Code 2004 Communication Rules* (made under Part 5 of the Customer Transfer Code) and/or the *Electricity Industry Metering Code 2004 Communication Rules* (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.
Capacity Allocation Same Connection Point Decrease Service	means a service to decrease Contracted Capacity at a Connection Point related to a corresponding increase to the Contracted Capacity at the same Connection Point under another Access Contract for a clearly specified period of time following which the decreased Contracted Capacity is reinstated.
Capacity Allocation Same Connection Point Increase Service	means a service to increase Contracted Capacity at a Connection Point related to a corresponding decrease to the Contracted Capacity at the same Connection Point under another Access Contract for a clearly specified period of time following which the increased Contracted Capacity is reinstated.
Capacity Allocation Service	means one or more of: (a) Capacity Allocation Same Connection Point Decrease Service; (b) Capacity Allocation Same Connection Point Increase Service; (c) Capacity Allocation Swap Decrease Service; and (d) Capacity Allocation Swap Increase Service.
Capacity Allocation Swap Decrease Service	means a service to decrease Contracted Capacity at one Connection Point related to a corresponding increase to the Contracted Capacity at another Connection Point (whether under this Contract or not) for a period of no greater than twenty four consecutive hours ending at midnight (WST) following which the decreased Contracted Capacity is reinstated.
Capacity Allocation Swap Increase Service	means a service to increase Contracted Capacity at one Connection Point related to a corresponding decrease to the Contracted Capacity at another Connection Point (whether under this Contract or not) for a period of no greater than twenty four consecutive hours ending at midnight (WST) following which the increased Contracted Capacity is reinstated.
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.
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 *Corporations Act 2001* of the Commonwealth.
Covered Service	has the meaning given to 'covered service' in the Code and includes a Bidirectional Service.
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 Appendix E of 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.
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.
Extension Period	has the meaning given to it in clause 2.2(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 (j) 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.

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	has the meaning given to it in clause 15.1.
Host Party	has the meaning given to it in clause 15.1.
Indemnifier	means the Indemnifier specified in the Parties section of this Contract (if any).
Indemnified Party	has the meaning given to it in clause 19.6.
Indemnifying Party	has the meaning given to it in clause 19.6.
Independent Market Operator	is the Independent Market Operator established under the *Electricity Industry (Independent Market Operator) Regulations 2004*, exercising functions under the *Electricity Industry (Independent Market Operator) Regulations 2004*, the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* and the Wholesale Electricity Market Rules made under the *Electricity Industry (Wholesale Electricity Market) Regulations 2004*.
Indirect Damage	suffered by a person means any one or more of: (a) any consequential loss, consequential damage or special damages however caused or suffered by the person, including: (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 (iv) punitive or exemplary damages, whether or not the 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	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 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.

Market 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 Market Rules.
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 Participant	has the meaning given to 'Code Participant' in the Metering Code.
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.
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.
Network Business	has the same meaning given to 'network business' in the Code.
NMI, or National Market Identifier	means the unique identifier assigned to the Connection Point.
Nominated Person	has the meaning given to it in clause 9(a)(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) 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.
Prescribed Rate	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.
Related Body Corporate	has the meaning given to 'Related Body Corporate' in section 50 of the Corporations Act.
Relocation	has the meaning given to 'relocation' in the Transfer and Relocation Policy.
Remote De-energise Service	means a service 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.
Remote Re-energise Service	means to re-arm a previously de-energised *meter* by a command sent to a *meter* from a remote locality.
Remote Direct Load Control Service	means a service to send a command from a remote locality to an activated device that controls a load at a *connection point*.

Remote Load Limitation Service	means a service to remotely limit load at a *connection point* through a *meter*.
Representatives' Meeting	has the meaning given to it in clause 29.1.
Service	means: (a) an Entry Service; (b) an Exit Service; (c) a Bidirectional Service; (d) a Remote Direct Load Control Service; (e) a Remote Load Limitation Service; (f) a Remote De-energise Service; (g) a Remote Re-energise Service; (h) a Supply Abolishment Service; or (i) a Capacity Allocation 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).
Supply Abolishment Service	means a service to permanently Disconnect electricity supply, remove the Meter and abolish the Connection Point.
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 Access Arrangement.
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.
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 omission, 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 the User	1	[Description]
			[Date to be satisfied by]
	For the benefit of Western Power	1	[Description]
			[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				

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;

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;

(ii) 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;

(iii) 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

(iv) 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 *Insurance Act 1973 (Cth)* 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 *Insurance Act 1973 (Cth)* 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	means the person to whose Email Address an email is sent.
Automated Response Message	means an email ("**Reply Email**") sent automatically upon receipt of an 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

(a) 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:

(i) the Purported Originator of an email and the Addressee of the email agree otherwise; or

(ii) 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:

(iii) Purported Originator of the email is the Originator of the email; and

(iv) 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

(a) **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.

(b) **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.

(c) **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.

(d) **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 irrecoverability 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.

(e) **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.

(f) **Governing Law**

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

(g) **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 B

Applications and Queuing Policy

Amended proposed access arrangement

16 November 2018

Access Arrangement (AA) for the period
1 July 2017 to 30 June 2022

westernpower

EDM 46460953

Applications and Queuing Policy

1 July 2019

westernpower

EDM 46460953

An appropriate citation for this paper is:

Applications and Queuing Policy

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Part A – Common Provisions

1. Operation and Objectives

1.1 Status of Figure 1 and Appendices

Figure 1, Appendix A and Appendix B contain additional explanatory material regarding information provided to *applicants* and the processes contemplated by this applications and queuing policy. To avoid doubt, Figure 1, Appendix A and Appendix B are 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

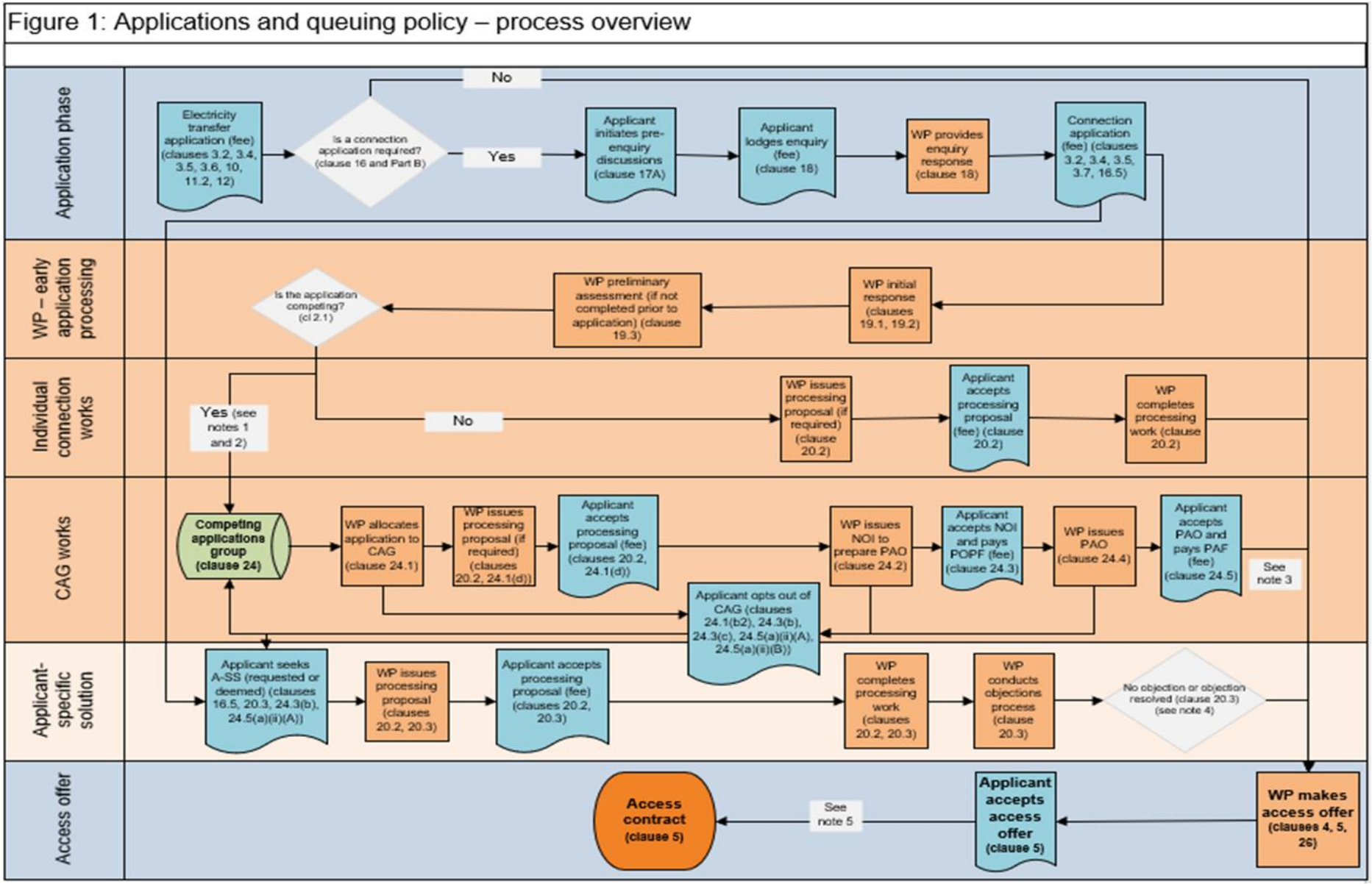


Figure 1: Applications and queuing policy – process overview
Application phase
WP – early application processing
Individual connection works
CAG works
Applicant-specific solution
Access offer
Electricity transfer application (fee) (clauses 3.2, 3.4, 3.5, 3.6, 10, 11.2, 12)
Is a connection application required? (clause 16 and Part B)
No
Yes
Applicant initiates pre-enquiry discussions (clause 17A)
Applicant lodges enquiry (fee) (clause 18)
WP provides enquiry response (clause 18)
Connection application (fee) (clauses 3.2, 3.4, 3.5, 3.7, 16.5)
WP initial response (clauses 19.1, 19.2)
WP preliminary assessment (if not completed prior to application) (clause 19.3)
Is the application competing? (cl 2.1)
Yes (see notes 1 and 2)
No
WP issues processing proposal (if required) (clause 20.2)
Applicant accepts processing proposal (fee) (clause 20.2)
WP completes processing work (clause 20.2)
Competing applications group (clause 24)
WP allocates application to CAG (clause 24.1)
WP issues processing proposal (if required) (clauses 20.2, 24.1(d))
Applicant accepts processing proposal (fee) (clauses 20.2, 24.1(d))
WP issues NOI to prepare PAO (clause 24.2)
Applicant accepts NOI and pays POPF (fee) (clause 24.3)
WP issues PAO (clause 24.4)
Applicant accepts PAO and pays PAF (fee) (clause 24.5)
See note 3
Applicant opts out of CAG (clauses 24.1(b2), 24.3(b), 24.3(c), 24.5(a)(ii)(A), 24.5(a)(ii)(B))
Applicant seeks A-SS (requested or deemed) (clauses 16.5, 20.3, 24.3(b), 24.5(a)(ii)(A))
WP issues processing proposal (clauses 20.2, 20.3)
Applicant accepts processing proposal (fee) (clauses 20.2, 20.3)
WP completes processing work (clauses 20.2, 20.3)
WP conducts objections process (clause 20.3)
No objection or objection resolved (clause 20.3) (see note 4)
Access contract (clause 5)
See note 5
Applicant accepts access offer (clause 5)
WP makes access offer (clauses 4, 5, 26)

{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 acceptance*s received by Western Power exceed the *capacity* of the proposed *competing applications group works*, 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 acceptance*s 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 solution (clause 20.3(d)).
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 application*s and *connection application*s 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:

"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 agreement" has the meaning given to it in part 8 of the *Act*, and under section 13.4(d) of the *Code* 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*.

{"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) anything connected with or arising out of Appendix 9; 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)".}

"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 same connection point decrease service" means a *covered service* to decrease *contracted capacity* at a *connection point* under one *access contract* related to a corresponding increase to the *contracted capacity* at the same *connection point* under another *access contract* for a clearly specified period of time following which the decreased contracted capacity is reinstated.

"capacity allocation same connection point increase service" means a *covered service* to increase *contracted capacity* at a *connection point* under one *access contract* related to a corresponding decrease to the *contracted capacity* at the same *connection point* under another *access contract* for a clearly specified period of time following which the increased *contracted capacity* is reinstated.

"capacity allocation service" means one or more of:

(a) *capacity allocation same connection point decrease service;* and

(b) *capacity allocation same connection point increase service;* and

(c) *capacity allocation swap decrease service;* and

(d) *capacity allocation swap increase service.*

"capacity allocation swap decrease service" means a *covered service* to decrease *contracted capacity* at one *connection point* related to a corresponding increase to the *contracted capacity* at another *connection point* (whether under the same *access contract* or not) for a period of no greater than twenty four consecutive hours ending at midnight (WST) following which the decreased *contracted capacity* is reinstated.

"capacity allocation swap increase service" means a *covered service* to increase *contracted capacity* at one *connection point* related to a corresponding decrease to the *contracted capacity* at another *connection point* (whether under the same *access contract* or not) for a period of no greater than twenty four consecutive hours ending at midnight (WST) following which the decreased *contracted capacity* 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 c*overed services* that are sought in the other *connection applications*.

"competing applications group" means a number of *applications* that are *competing* for access to limited *network capacity* and 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.

"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 a*pplication* in respect of the *connection point*.

"covered service" has the same meaning given to it in the *Code* but also includes a *bidirectional service*.

{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* or *exit 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*.

"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 a *supply abolishment service* or a *capacity allocation 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*.

"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*.

"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.

"generator" has the meaning given to it in the *Code*.

{Note: Under the *Code* "generator" means a person who *generate*s electricity".}

"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"*.}

"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, *Code*s of

Practice and Australian Standards deemed applicable under a written law and rules of the general law including the common law and equity.

"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 *Market Rules*.

{Note: Under the *Market 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 Market 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 *Market Rules*) is a "market participant" (as defined in the *Market Rules*).

"Market Rules" means the rules made pursuant to the *Electricity Industry (Wholesale Electricity Market) Regulations 2004*.

"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."}

"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 *Market 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 *price list* (as defined in the *Code*) in the *access arrangement*.

{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).

"reallocated applicant" has the meaning given to it in clause 24.6C(a).

"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* 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."}

"relocation" has the meaning given to 'relocation' in the *transfer and relocation policy*.

{Note: under the *transfer and relocation policy*, 'relocation' has the meaning given in clause 6.1. That clause provides that a 'relocation' occurs when a *user*:

(a) decreases its *contracted capacity* at a *connection point* (a "retiring point"); and

(b) makes a corresponding increase in its *contracted capacity* at another *connection point* the *user* is entitled to use under its *access contract* (a "destination point")}

"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 n*etwork*, as configured at the time of an *application*, to provide the c*overed services* sought in the *application*, having regard to matters including Western Power's contractual obligations in respect of the n*etwork.*

"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 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*.

"transfer and relocation policy" means the *transfer and relocation policy* in the *access arrangement*.

"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.

"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 another *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".}

"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.

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.

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 a *supply abolishment service* or a *capacity allocation 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 a *supply abolishment service* or a *capacity allocation 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 *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 a*pplication* 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 a*pplication*, 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

(iv) 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).

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) 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 same connection point decrease service* or *capacity allocation same connection point increase 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) 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 f*ee or refund part of the original *lodgement fee*, having regard to the work already *complete*d 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.

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 a*pplication* 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 value of any amount of any *contribution* that remains unpaid or not provided at the time of requirement.

(d) Western Power may perform a 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 a*ccess 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

Upon both Western Power and the *applicant signing* an *access contract*, and any conditions precedent in the *access contract* being fulfilled, the *application* in relation to which the *access contract* was entered ceases to exist.

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 c*onfidential 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; or

(g) the disclosure is made in accordance with clauses 24.9(d) or 24.10.

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 *access contract* fee;

(iv) a reference service (metering) modification fee;

(v) a *capacity allocation service* fee; or

(vi) a *supply abolishment service* 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 *meter*s 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 service*s 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 a *supply abolishment service*;

(iv) select a *capacity allocation 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] applies to the *application*;

(iii) to modify an *exit service, entry service* or *bi-directional service* by selecting a component reference service (metering) under Appendix E to the *access arrangement,* then the reference service (metering) modification fee applies to the application;

(iv) a *supply abolishment service*, then the *supply abolishment service* fee applies to the *application*; or

(v) a *capacity allocation service*, then the *capacity allocation service* 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*, including pursuant to a *capacity allocation service*, 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*. In addition, if the *applicant* is seeking a *capacity allocation service*, then the *capacity allocation service* fee applies to the *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 *augmentatio*n 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 applica*tion 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 *Market Rules*) allocated to any *generating plant* at the *connection point* under the *Market 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.

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 C*ode 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 *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 *premise*s 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 Point*s 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 Application*s 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* submit 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*, and compliance of the modified *generating plant* with the *technical rules*.

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*.

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 s*ervices 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.

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 *covered services*;

(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*.

(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) 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*; and

(a2) 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

(b) if it is likely that *works* will be required — operational and technical details of the *works*; and

(c) 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

(d) 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

(e) 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 *charge*d 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 *charge*d, Western Power may *charge* an additional fee to cover the reasonable costs in excess of the fee it *charge*d, 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 *complete*d the study, it must provide:

(i) existing *users* that Western Power considers may be impeded; and

(ii) any *competing applicant* with an earlier *priority date*,

with the opportunity to object to providing the *applicant-specific solution* to the *applicant*.

(c) An existing *user* and *competing applicant* with an earlier *priority* date may object to the *applicant-specific solution* within 30 business days on the grounds that the *applicant-specific solution* would impede Western Power's ability to provide *covered servic*es to that existing *user* or to provide the *covered services* that are sought in a *competing application* with an earlier *priority date* compared with what the position would be if the *applicant-specific solution* were not implemented.

(d) Western Power will evaluate the objection within 40 business days of it being lodged and if it agrees that the *applicant-specific solution* would 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 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 a further 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) Western Power evaluates under clause 20.3(d) that 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 serv*ices that are sought in a *competing connection application* with an earlier *priority date*,

then Western Power within 30 business days must make an *access offer* to the *applicant* based on the *applicant-specific solution* identified in this clause 20.3(e).

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 *application*s, 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 in respect of *network* constraints, 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 a*pplication*.

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 sum of the *preliminary acceptance* by *applicants* within a *competing applications group* exceeds the *capacity* of the proposed *works*, Western Power may make *access offers* to *applicants* in the order of the *priority date* of *applications* until there is no more *spare capacity*. 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 *application*s 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 constraints following other *network* developments, changes in *generatio*n 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 *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*; or

(ii) Western Power considers that a single set of *works* for *shared assets* is no longer viable.

(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 application*s; and

(b) a description of the circumstances which caused the *connection applications* to be *competing connection applications* (including 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) 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

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*

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.*

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 [###] ("t**he 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 A

Primary Information Provided to *Applicants* and Management of *Competing Applications Groups*

A.1 Primary Information Provided to *Applicants* and Management of *Competing Applications Groups*

A.1.1 Primary information provided to *applicants* by Western Power

Step	Action	Timing	Description
Enquiry			
Customer makes *enquiry*			An *enquiry* form must be *completed* and submitted to Western Power by the potential *applicant*. (Clause 3.2(a)) The *application* process is commenced by the *applicant* submitting an *enquiry* to Western Power. (Clause 18.1) (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*.

Step	Action	Timing	Description
Enquiry response letter	Western Power must issue a response letter	Within 20 business days, or if information not available within a further 20 business days	(Clauses 18.2A(a) and 18.2A(b)) (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 *covered services*; (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*. (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.
Application			
Customer lodges an *application*			(Clause 3.2(b)) (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*.
Initial response to connection *application*	Provide *Initial response* letter	Within 20 business days of receipt of *application*	(Clause 19.1(a)) (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.*

Step	Action	Timing	Description
Preliminary assessment for *connection application*	Provide Preliminary assessment report	By the time provided in the *initial response* letter if not undertaken prior to lodgement of the *connection application*	(Clause 19.3) A preliminary assessment with regards to a *connection application* may consist of an assessment as to: (a) whether it is likely that there is sufficient *spare capacity* to provide the requested c*overed services* or whether any *works* might be required to provide the c*overed services*, including whether it is likely that any new *connection assets* will be required to provide the c*overed services* requested in the a*pplication*; and (a2) 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 (b) if it is likely that *works* will be required — operational and technical details of the *works*; and (c) 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 (d) 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 (e) 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.
Information updates and progress reporting			
Processing of *application*			(Clause 24.10) 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.

Step	Action	Timing	Description
Processing of *application*	Western Power must update information	In accordance with clause 24.10	(Clause 24.9) 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 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) 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*.
Response to *applicant* request	Western Power must provide a progress report	On request by an *applicant* (not more than monthly)	(Clause 19.4(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.
Solution development information			

Step	Action	Timing	Description
Developing solution for *competing applications groups* (CAGs)	Western Power to keep *applicants* informed	Ongoing as part of its *network* planning	(Clause 3.15(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. (Clause 3.15(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.

Note: The Applications and Queuing Policy includes provisions for the supply of other information by Western Power requested by an *applicant* (for example information required for independent studies), the supply of information by *applicants* and the disclosure of *confidential information*. Please refer to the Applications and Queuing Policy for these provisions.

A.1.2 How the *Competing Applications* Groups (CAGs) will be managed

Step	Action	Timing	Applications and Queuing Policy provisions
General provisions (Clause 3.12) Western Power must process an *application* expeditiously and diligently. (Clause 26) 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.* Note: A reference to an *application* in this table is a reference to a *connection application*.			
Pre-CAG processes - Formation of *competing applications groups* and	Western Power to form *applications* into a CAG and notify *applicant* that it is in a CAG	30 business days from receipt of *application* and as CAGs are formed	(Clause 2.1) "**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 limited *network capacity* and have been grouped together by Western Power in accordance with clause 24.

Step	Action	Timing	Applications and Queuing Policy provisions
principles for forming CAGs			(Clause 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 in respect of *network* constraints, 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).

Step	Action	Timing	Applications and Queuing Policy provisions
			(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.
Interaction of *Applicant*-specific and CAG processes and *applicants* can opt-out of the CAG process	*Applicant* can ask for an *applicant* specific solution. *Applicants* opt-out of *competing applications group* process	Depends on *applicant's* actions	(Clause 2.1) "***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*. (Clause 16.5) (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*. (Clause 24.1(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*. (Clause 20.3A) 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*. Note: See also clauses 24.3(b), 24.3(c), 24.5(a)(ii)(A) and 24.5(a)(ii)(B) extracted below which include opting out of *competing applications groups* and choosing whether to make, or being deemed to have made, an *application* for an *applicant-specific solution*.
Developing solutions for CAGs	Western Power will seek to develop	Variable (depends on nature of the constraint	(Clause 3.15) (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

Step	Action	Timing	Applications and Queuing Policy provisions
	solutions for the resolution of *network* constraints that are preventing *applicants* within CAGs from being made preliminary *access offers*.	and *network* planning and new facilities investment test timeframes)	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.
Notice of intention to prepare a preliminary *access offer*	Western Power to issue a notice of intention to prepare a preliminary *access offer*	Variable (depends on timing of solution development)	(Clause 24.2) 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*. Note: See also clause 24.1(d) above concerning studies that may precede issuing notice of intention to prepare a *preliminary access offer* under clause 24.2.
Response to intention to prepare a preliminary *access offer*	*Applicants* respond to notice of intention to prepare a preliminary *access offer*	30 business days	(Clause 24.3) *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

Step	Action	Timing	Applications and Queuing Policy provisions
			(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.
Actions following response to notice of intention to prepare a preliminary *access offer*	Western Power considers *applicant's* responses notices of intention to prepare preliminary *access offers*	Endeavour to do within 60 business days	(Clause 24.4) 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. Note: Where an *applicant* receives a *preliminary access offer*, it will 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*.
Response to preliminary *access offer*	*Applicants* respond to preliminary *access offers*	30 business days	(Clause 24.5) (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:

Step	Action	Timing	Applications and Queuing Policy provisions
			(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.

Step	Action	Timing	Applications and Queuing Policy provisions
			(d) To avoid doubt, *preliminary acceptance* does not give rise to a *contract*.
Making *access offer* to CAG	Subsequent *access offers* are made *Access contracts* are conditional on resolution of conditions including minimum levels of acceptance by *applicants* in a CAG that were made offers accepting those offers.	Endeavour to do in 30 business days	(Clause 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 sum of the *preliminary acceptance* by *applicants* within a *competing applications group* exceeds the *capacity* of the proposed *works*, Western Power may make *access offers* to *applicants* in the order of the *priority date* of *applications* until there is no more *spare capacity*. 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 offer processing fee or *preliminary acceptance* fee paid by the *applicant*. (Clause 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*. (Clause 24.6B)

Step	Action	Timing	Applications and Queuing Policy provisions
			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*). (Clause 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 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*. Note: Where an *applicant* receives an *access offer*, it will 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*.
Response to *access offer*	*Applicants* respond to *access offers*	30 business days	(Clause 5.2) 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*

Step	Action	Timing	Applications and Queuing Policy provisions
			reasonable control) the *applicant* is to be taken to have withdrawn its *application* and any, as applicable, associated *electricity transfer application* or *connection application*. (Clause 5.3) 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. (Clause 5.4) 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*.
Formation of *access contract* and *connection application* ceases to exist	Both Western Power and *applicant* sign *access contract*	Upon signing, subject to the satisfaction of any conditions precedent	(Clause 5.1) (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*. (Clause 5.5) Upon both Western Power and the *applicant signing* an *access contract*, and any conditions precedent in the *access contract* being fulfilled, the *application* in relation to which the *access contract* was entered ceases to exist. Note: See clauses 4.5, 4.6 and 4.8 of the Applications and Queuing Policy regarding conditions precedent.
Changing or terminating a CAG	Western Power can change the composition of a CAG or terminate it	In accordance with provisions	(Clause 24.7) (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));

Step	Action	Timing	Applications and Queuing Policy provisions
			(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 constraints following other *network* developments, changes in *generation* or changes in loads in which case Western Power may recommence the processes under this clause 24. (Clause 24.7A) (a) Western Power may terminate a *competing applications group* by written notice to the *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*; or (ii) Western Power considers that a single set of *works* for *shared assets* is no longer viable. (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*.
Spare capacity	Western Power can allocate *spare capacity* to CAG and non-CAG members at any time	In accordance with provision	(Clause 24.8) (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*.

Appendix B

Timelines for *Applicant*-specific Solutions and for *Competing Applications Group*

B.1 Timelines for *Applicant-specific Solutions* and for *competing Applications Group*

Table B.1: Timelines for the Applications and Queuing Policy (AQP) – Early common stages, *Applicant-specific solution* stages and *Competing Applications Group* (CAG) stages

			Maximum elapsed time (Business days)		
AQP clause	**Action**	**Time requirement**	**Common components**	***Applicant-specific solution***	**CAG**
Early processes					
3.12	Western Power processing of *applications*	Must be expeditious and diligent	--		
17A	Pre-enquiry	Unspecified	--		
18.2	*Enquiry* stage	Reasonable time to perform system studies	--		
18.2A(b)	*Enquiry* response letter	20 business days/ 40 business days	40		
19.1(a)	Response to *application*	20 business days	60		
20.2(a)(ii)	Negotiation over amendments to scope of work in proposal	60 business days of negotiation from date of receipt of the proposal	120		
Applicant-specific solution					
20.3(a), 16.5(b), 24.3(b), 24.5(a)(ii)(A)	Studies for *Applicant-specific solution*	Endeavour to do study within 60 business days		60+	
20.3(c)	Objection to *Applicant-specific solution*	30 business days to object		90+	
20.3(d)	Decision on objection to *Applicant-specific solution*	40 business days		130+	

			Maximum elapsed time (Business days)		
20.3(e)	Offer in relation to *Applicant-specific solution*	30 business days after timeframe for objections closes or objections resolved		160+	
CAG process					
24.1(b1)	Western Power to notify *applicant* if it is in a CAG	30 business days after *application*			30
24.2	Western Power to issue a notice of intention to prepare a preliminary *access offer*	Variable dependent on natures of constraints to be resolved. Determined by WP *network* planning process			Δ = variable timeframe
24.3	Response to notice of intention to prepare a preliminary *access offer*	*Applicants* have 30 business days to respond to intention to prepare a preliminary *access offer*			Δ+ 60
24.4	Western Power to issue a preliminary *access offer*	Variable dependent on nature of constraints to be resolved. Determined by WP *network* planning process			Δ = variable timeframe
24.5(a)	Response to preliminary *access offer*	*Applicants* have 30 business days to respond to a preliminary *access offer*			Δ+ 90
24.5(a)(ii)	Negotiate changes to preliminary *access offer*	*Applicants* and Western Power have 30 business days to negotiate changes to preliminary *access offers* from receipt of the preliminary *access offer*			Δ+ 90
24.6	Make *access offer* to CAG	Endeavour to make *access offers* within 30 business days			Δ+ 150

Δ = Variable timeframe

Competing applications groups are likely to be prevented from connecting by major constraints on the core shared *network*. The timeframes for the development of solutions for these types of constraints are variable due to the broad range of potential situations and the complexity of the components that form the solution and cost estimates. The variable components that have implications for the timeframes required to develop solutions for CAGs include, but are not limited to:

- Studies, design and cost estimates for the solution, including for the purpose of identifying the solution
- Public consultations
- Land and easements acquisition
- Regulatory approvals
- Changes to actual and forecast levels and location of demand and generation
- Changes to the requirements of *applicants* within CAGs.

Appendix C.1

Contribution Policy

Amended proposed access arrangement

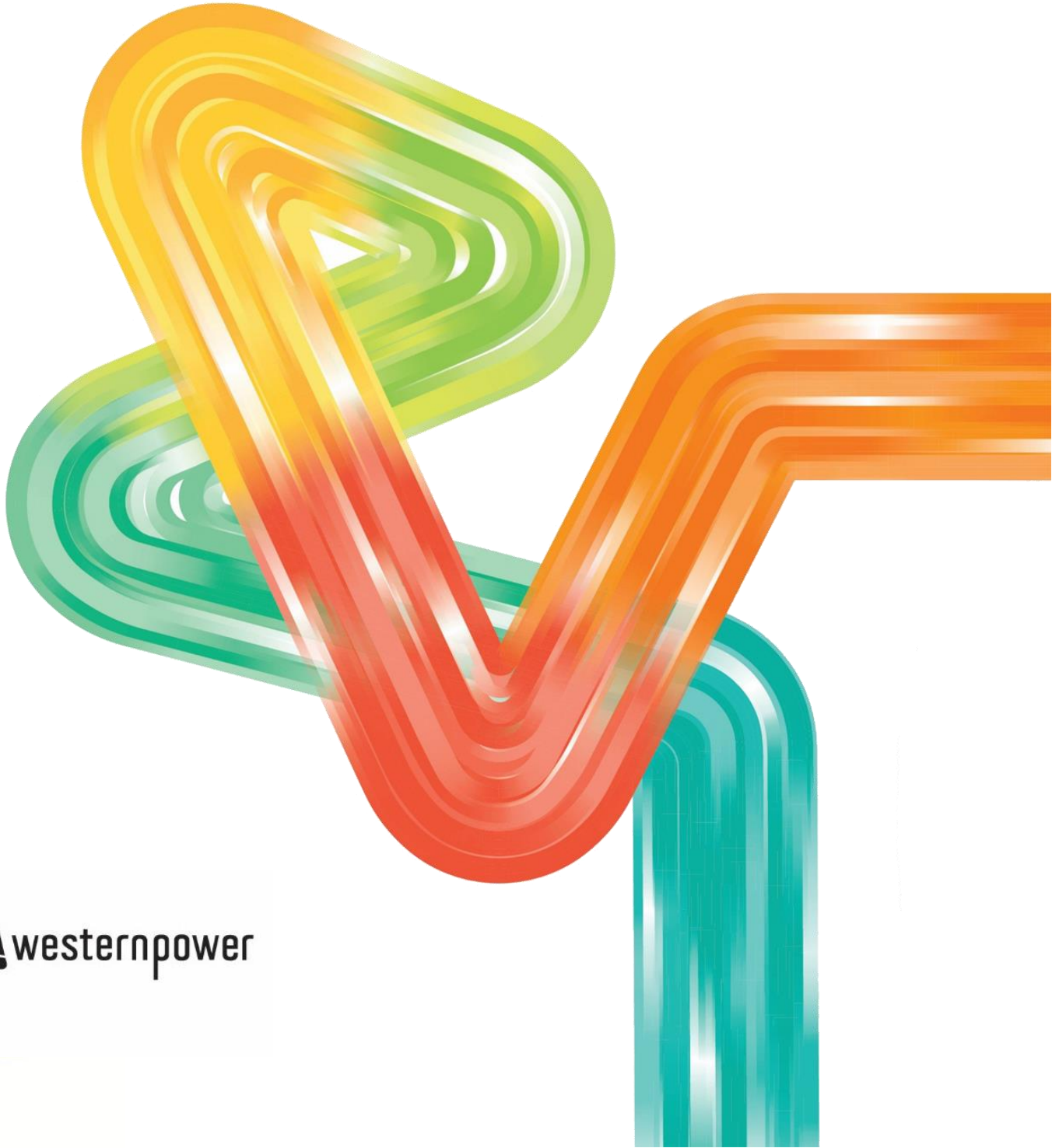
16 November 2018

Access Arrangement (AA) for the period
1 July 2017 to 30 June 2022

westernpower

Contributions Policy

1 July 2019



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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 "access agreement" in the *Code*.

{Note: Under the *Code* "access agreement" has the meaning given to it in part 8 of the *Act*, and under section 13.4(d) of the *Code* 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 *tariff* income 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 8.2 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 (or forecast 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" 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*".}

"**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* but also includes a *bidirectional service*.

{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* or *exit 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 to 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 to 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 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*".}

"**feeder diversity factor**" means the factor applied to the *capacity requirement* that reflects the effective *contribution* of the *connection* capacity to the feeder peak load.

"**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, means 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*, means 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 cost*s) of *required work.*

"**non-capital costs**" means the *non-capital costs* (as defined in the *Code*), but excluding *alternative option cost*s, 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*.

"**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 an [sic.] contract for services with a *service provider*, and under section 13.4(e) includes another *business* as a party to a *deemed access contract*".}

"**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* are *Appendix 8 works,* 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) 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 *estimated 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; 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 it will incur as a result of the receipt of such *contribution*. For the avoidance of doubt, this clause 4.4 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 tes*t 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 7.41(a); 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 residential *customer*s), 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*, the *reasonable time* is to be determined by Western Power, as a *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 Forecasting Tax Liability

For the purposes of determining the costs representing Western Power's tax liability arising 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 expense 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, in accordance with *good electricity industry practice*, Western Power reasonably 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 Determination of the *Distribution Low Voltage Connection Headworks Scheme Base Charge*

The *distribution low voltage connection headworks scheme base charge* is determined by:

(a) identifying the *applicant's* incremental electrical capacity requirement:

  (i) by deducting from the *applicant*'s required electrical capacity, the original design capacity for a greenfield development on an existing serviced lot as determined by Western Power's policies and procedures from time to time; or

  (ii) as the *applicant*'s required electrical capacity sought in the *distribution low voltage connection headworks scheme application* for an un-serviced lot.

(b) determining whether the location of the *connection point* (to which the *connection application* relates) is on a land lot 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 this *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 land lot separate from the *relevant distribution transformer*.

6.5 Exclusion from *Distribution Low Voltage Connection Headworks Scheme*

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 this *Access Arrangement*.

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.

Where a *distribution low voltage connection headworks scheme application* is excluded, the *contribution* is determined under this *contributions policy* excluding the provisions of this clause 6.

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*.

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*.

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* under 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 8.2, 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, in terms acceptable to Western Power, guaranteeing the *contribution.*

8.4 *Augmentations* Undertaken by *Applicants*

(a) An *applicant* may, 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) but in no circumstance will Western Power become obliged to make any payment to the *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:

(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 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 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

Amended proposed access arrangement

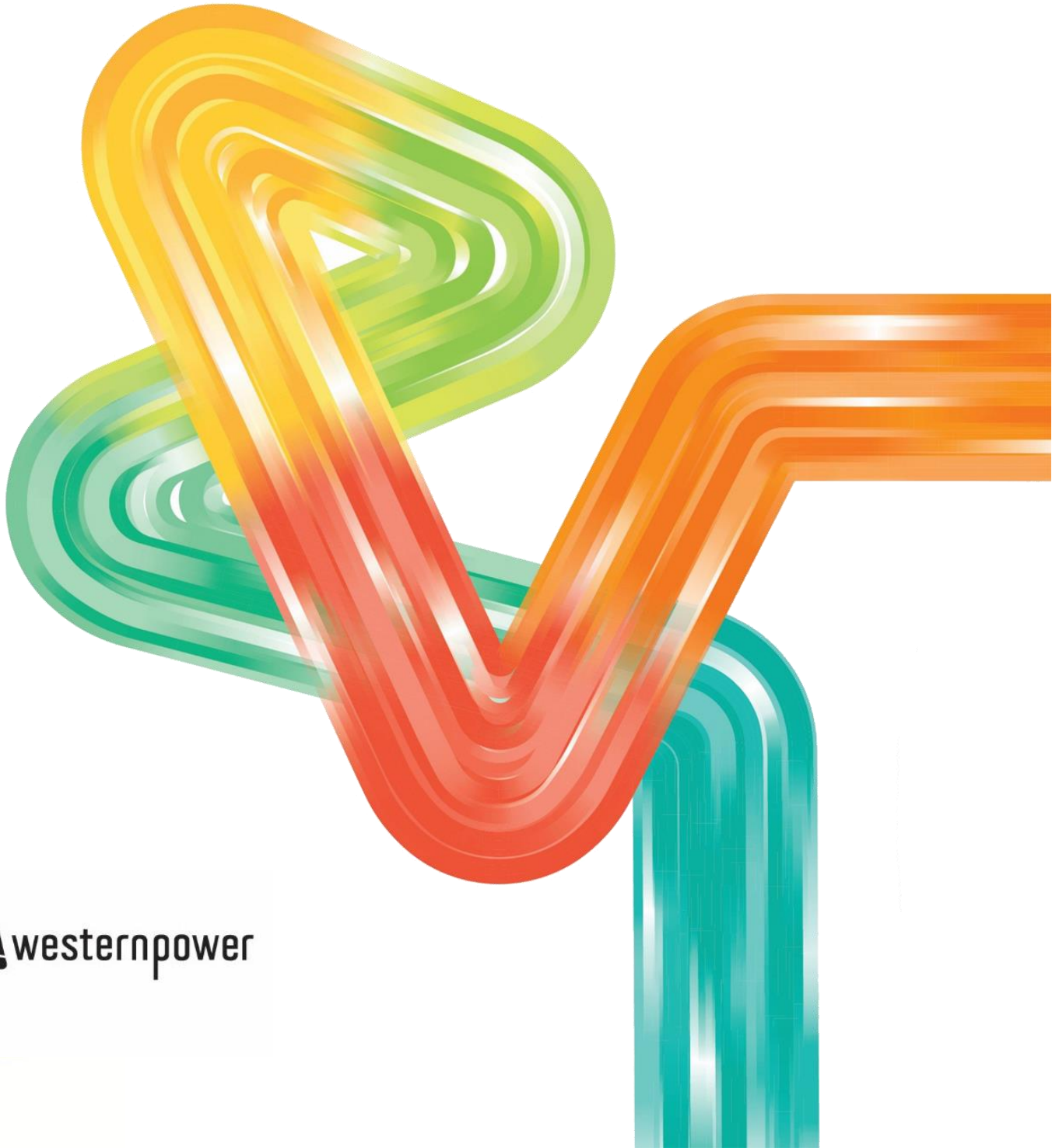
16 November 2018

Access Arrangement (AA) for the period
1 July 2017 to 30 June 2022

westernpower

Distribution Low Voltage Connection Scheme Methodology

1 July 2019



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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”*.}

{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 another *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

This document explains Western Power's *distribution low voltage connection scheme* methodology used to determine the prices that may be applied under the *contributions policy*, as provided for under sections 5.17C and 5.17D of the *Code*. This *distribution low voltage connection scheme* complies with those *Code* provisions which apply to all *headworks schemes*.

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 *load*s 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*; and

(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.

This methodology document explains how the requirements of sections 5.17D(d)(i), (ii) and (iii) have been met in the *contributions policy*.

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* are to be reviewed at least once every 12 months to reflect the actual costs of the provision of *distribution low voltage connection scheme works*.

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 the *users*' capacity requirements and the locations of their *connection point*s.

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 *load*s 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 land lot separate from 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 user*s to make informed investment decisions.

(b) The methodology must ensure *contributions* from the *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. It is noted that 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 land lot 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 develop the *distribution low voltage connection scheme* prices is as follows.

(a) Western Power determines the costs of *distribution low voltage connection scheme works* for *connection* of *applicants* that meet the eligibility criterion for the *distribution low voltage connection scheme* over a period of 12 months.

(b) The costs of *distribution low voltage connection scheme works* determined under (a) have been allocated to categories as follows:

(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 land lot 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 (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 derived 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 land lot 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

Western Power develops standard *distribution low voltage connection scheme* prices based on modelling of *connections* over the past 12 month period. Costs per unit of capacity (kVA) reduce as the demand increases due to economies of scale. Those economies reflect 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 the size increases).

In order for these economies of scale to be recognised in the pricing structure 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 that transformer to be installed on their lot, and in almost all circumstances customers seeking *load*s in excess of 630 kVA will require direct connection to a new transformer on their lot. Consequently the thresholds identified are:

(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 only recover Western Power's costs over the long term, when applied across all *distribution low voltage connection scheme applicant*s.

5.3 Separate Prices for Transformer Direct Connection and L*ow Voltage* Street Connection

Direct connection to transformers avoids the cost of the *low voltage* street *network* and as such, 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 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 twelve 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 periodically to reflect changes in the cost of provision of *network* assets. Any adjustments will apply for a minimum of six months.

Appendix D

Transfer and Relocation Policy

Amended proposed access arrangement

16 November 2018

Access arrangement for the period
1 July 2017 to 30 June 2022

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EDM 46469949

Transfer and Relocation Policy

1 July 2019

westernpower

EDM 46469949

An appropriate citation for this paper is:

Transfer and Relocation Policy

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1. Defined terms and interpretation

1.1 Defined terms

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

"access contract" has the meaning given to it in the *Code*.

"access rights" means all or part of a *user*'s rights under an *access contract* to obtain a *covered service*.

"applications and queuing policy" means the applications and queuing policy under the *access arrangement*.

"assign" means to assign or novate a *user*'s *access rights* under an *access contract* to another person, and may take the form of a *bare transfer* or a *novation*.

"assigned access right" means any *access right* that is or is proposed to be the subject of an *assignment*.

"assignee" means a person who takes an *assignment*.

"assignment" means an *assignment* of a *user*'s *access rights* under an *access contract* to another person, and may take the form of a *bare transfer* or a novation.

"assignor" is a person who makes an *assignment*.

"bare transfer" means an *assignment* under which the *assignor assign*s the whole or a part of its *access rights* under an *access contract* to an *assignee*, but under which there is no *novation*, with the result that the *assignor's* obligations under the *access contract* for *services*, and all other terms of the *access contract* for *services*, remain in full force and effect after the *assignment*, whether or not the *assignee* becomes bound to the *assignor* or any other party to fulfil those obligations.

"bare transferee" means a person who takes a *bare transfer*.

"bidirectional point" has the meaning given to it in the *applications and queuing policy*.

"capacity" for a *connection point*, refers to the capacity of the *network* to transfer electricity at the *connection point.*

"Code" means the *Electricity Networks Access Code 2004*.

"connection point" means, in respect of a *user*, an *exit point* or an *entry point* or *bidirectional point* under the *user*'s *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 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.

"customer transfer request" has the meaning given in the *customer transfer code*.

"destination point" has the meaning given in clause 6.1(b).

"encumbrance" includes any lease, licence, native title right, easement, mortgage, charge, lien, pledge, deposit, hypothecation, restrictive covenant, building condition, retention of title or other interest of any third party affecting any property.

"entry point" has the meaning given to it in the *applications and queuing policy*.

"exit point" has the meaning given to it in the *applications and queuing policy.*

"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.

"network" has the meaning given to "Western Power Network" in the *Code*.

"novate" and **"novation"** mean to substitute, with the consent of all parties to the *access contract* and with effect on and from a date nominated as the effective date of the novation, an *assignee* for an *assignor* as a party to an *access contract*, with the result that:

(a) all rights and obligations of the *assignor* under the *access contract* become rights and obligations of the *assignee* as if the *assignee* had been named in the *access contract* in place of the *assignor*; and

(b) the *assignor* is released from any obligations under the *access 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.

"relocation" has the meaning given in clause 6.1.

"retiring point" has the meaning given in clause 6.1(a).

"service", in respect of a *connection point*, means a *covered service* to be provided under an *access contract* in respect of the *connection point*.

1.2 Interpretation

(a) 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 *transfer and relocation policy*.

(b) Unless the contrary intention is apparent:

(iii) a rule of interpretation in the *Code*; and

(iv) the *Interpretation Act 1984*, apply to the interpretation of this *transfer and relocation policy*.

2. Application of this *transfer and relocation* policy

2.1 Application in respect of an *access contract*

Unless otherwise expressly stated in an *access contract*, this *transfer and relocation policy* applies in its entirety to each *access contract*.

2.2 Application in respect of a *customer transfer request*

This *transfer and relocation policy* does not in any way apply to a *customer transfer request*.

2.3 Access Code

This *transfer and relocation policy* is based on the *Code* as in force as at the date this *transfer and relocation policy* is approved by the *Authority*. If there is an amendment to the *Code* after this date then the application of this *transfer and relocation policy* is subject to any varied or additional requirements imposed or required by those amendments.

3. *Assignment* only under this *transfer and relocation policy*

A *user* must not, except as expressly permitted by this *transfer and relocation policy*:

(a) *assign*, *novate*, declare itself a trustee of, or otherwise dispose of, any of its rights under an *access contract*; or

(b) subcontract the performance of its obligations under an *access contract*; or

(c) create an *encumbrance* over any of its rights or obligations under an *access contract*.

4. *Bare transfers*

The provisions in this clause 4 apply to a *bare transfer*.

4.1 *User* may make *bare transfer*

(a) Subject to clause 4.2, a *user* may make a *bare transfer* without Western Power's prior consent.

(b) For the avoidance of doubt, a *bare transferee* does not become a *user* by virtue of any *bare transfer*.

4.2 *User* must notify Western Power of the details of the *bare transfer*

If the *user* makes a *bare transfer*, the *user* must notify Western Power of:

(a) the identity of the *assignee*; and

(b) the nature of the assigned *access rights*,

before the *assignee* may commence using the *assigned access rights*.

4.3 *Bare transfer* does not release the *user*

(a) A *bare transfer* does not constitute a *novation*, and does not result in:

(i) the release of the *user* in any way from any of its obligations to Western Power under the *access contract*; or

(ii) the release of any provider of any bank guarantee under the *access contract* from any liability to Western Power under that bank guarantee.

(b) The *user* remains wholly liable to Western Power for any default under the *access contract* in accordance with its terms, whether caused by the *user*, the *assignee* or any other person.

(c) The provider of any bank guarantee under the *access contract* remains wholly liable to Western Power in accordance with the terms of that bank guarantee.

5. Assignments other than *bare transfers*

The provisions in this clause 5 apply to an *assignment* other than a *bare transfer*.

5.1 Western Power's consent required

For an *assignment* other than a *bare transfer*, the following provisions apply.

(a) A *user* may not *assign* all or any *access rights* without Western Power's prior written consent which consent may be withheld on reasonable commercial and technical grounds and which consent may be subject to conditions which are reasonable on commercial and technical grounds.

(b) Western Power is not required to give its consent to the *assignment* unless, under the proposed *assignment*, the *assignee* is bound to Western Power under terms that are identical to the terms of the *access contract* between Western Power and the *user*.

(c) Western Power's consent shall not be unreasonably withheld or delayed where the *user* can satisfy Western Power (acting on reasonable commercial and technical grounds) that the proposed *assignee* is financially and technically capable of performing the *user*'s obligations in respect of the *assigned access rights.*

5.2 Deed of *novation*

(a) The *assignor* and the *assignee* must enter into a deed of *novation* with Western Power in such reasonable form as Western Power requires, pursuant to which, on and from the effective date of the *novation*:

(i) the *assignee* acknowledges Western Power's rights under the relevant *access contract* in respect of the *assigned access rights*, and undertakes to observe, perform and be bound by the *user*'s obligations and to meet the *user*'s liabilities in respect of the *assigned access rights* under the relevant *access contract*; and

(ii) subject to any limitations and exclusions of liability in the relevant *access contract*, the *assignor* indemnifies the *assignee* and Western Power against, and agrees to defend and hold them harmless from, all liabilities and costs either of them may suffer as a result of any default by the *assignor* under the relevant *access contract* in respect of the *assigned access rights* occurring prior to the effective date of the *novation*, including any default whose effects do not crystallise until after the effective date of the *novation*; and

(iii) Western Power releases the *assignor* from that part of the *user*'s obligations and liabilities under the relevant *access contract* as they relate to the *assigned access rights*.

5.3 *Assignment* to financially and technically competent persons

Western Power is not required to give its consent to an *assignment* under clause 5.1 if, in Western Power's reasonable opinion, such an *assignment* would have the effect of materially increasing Western Power's financial or technical risk under the relevant *access contract*. Western Power's reasonable opinion may be based on, without limitation, credit reference information available to Western Power and in forming its opinion Western Power will take into account any relevant information provided by the proposed *assignee*.

6. Relocation

6.1 Occurrence of *relocation*

A **"relocation"** occurs when a *user*:

(a) decreases its *contracted capacity* at a *connection point* (a **"retiring point"**); and

(b) makes a corresponding increase in its *contracted capacity* at another *connection point* under the *user*'s *access contract* (a **"destination point"**).

6.2 *Access contract* provisions in respect of a *destination point*

Western Power and the *user* must comply with any provisions in the *access contract* with respect to an increase of *contracted capacity* at a *connection point* relating to a *destination point*.

6.3 *Access contract* provisions in respect to a *retiring point*

Western Power and the *user* must comply with any provisions in the *access contract* with respect to a decrease of *contracted capacity* at, or a deletion of, a *connection point*, relating to a *retiring point*.

6.4 Consent

(a) A *relocation* is conditional upon the *user* obtaining the consent of Western Power. Western Power:

(i) must withhold its consent to a *relocation* where it would impede the ability of Western Power to provide a *covered service* sought in an *access application*;

(ii) may withhold its consent to a *relocation* on reasonable commercial or technical grounds; and

(iii) may consent to a *relocation* subject to conditions provided that the conditions are required on reasonable commercial and technical grounds.

(b) Without limitation, a condition of consent under clause 6.4(a)(iii) may include that Western Power must receive at least the same amount of revenue as it would have received before the *relocation* or more revenue if the tariffs at the destination point are higher.

(c) If Western Power withholds its consent to a *relocation*, or imposes a condition in respect of a *relocation*, Western Power must provide the *user*, on the *user*'s written request, with an explanation of the grounds relied upon.

6.5 Process for *Relocation*

(a) Nothing in this clause 6 limits the requirements of the *applications and queuing policy*.

(b) Without limiting clauses 6.2 and 6.3, the *user* must also, as part of requesting a *relocation*, if required by the *applications and queuing policy*, apply for approval of the *relocation.* Any such application will be processed in accordance with the *applications and queuing policy* and the *user's access contract*.

6.6 Western Power's costs

A *user* who requests any *assignment* or *relocation* under this *transfer and relocation policy* shall reimburse Western Power for any cost incurred by Western Power, acting as a *reasonable and prudent person*, in processing such request.

Appendix E

Reference Services

Amended proposed access arrangement

16 November 2018

Access arrangement for the period
1 July 2017 to 30 June 2022

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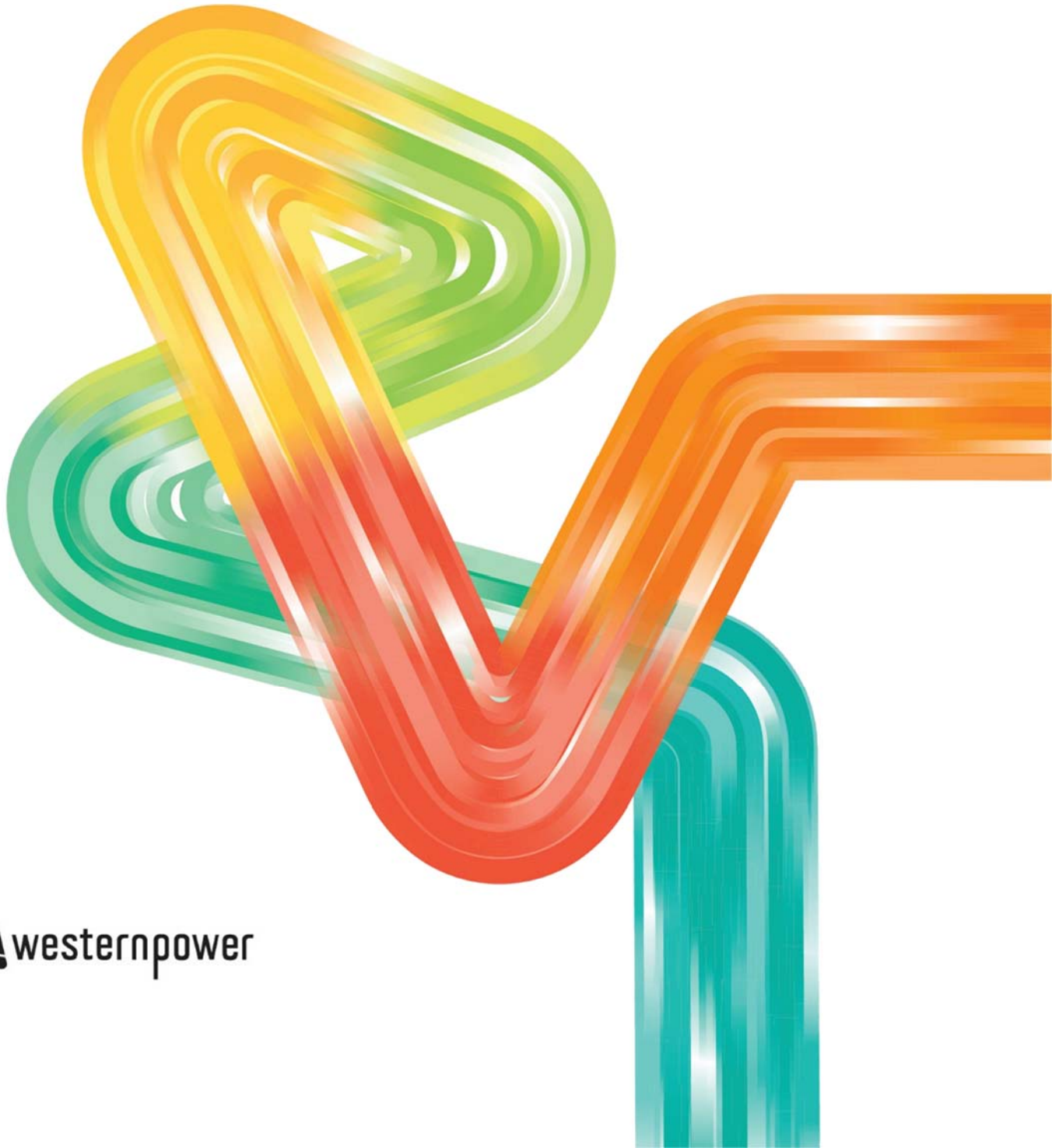
Appendix E - Reference Services

1 July 2019



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An appropriate citation for this paper is:

Appendix E - Reference Services

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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 the date in section 1.3.1 of the *access arrangement*.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

"***minimum meter***" means:

a. if throughput at the *connection point* is less than 50MWh per annum, an *accumulation meter*; or

b. if throughput at the *connection point* is equal to or greater than 50MWh per annum an *interval meter*.

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

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

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

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

"***residential premises***" means:

a. premises where the electricity supply is solely for residential purposes;

b. where the electricity supply is to premises used for both residential and other purposes, that part of the premises used solely for residential purposes if that part is independently supplied and separately metered; or

c. premises used for both residential and other purposes where the circuit wiring is not separate provided that Western Power determines, as a *reasonable and prudent person*, that the consumption at the premises is, or will be, less than 20MWh per annum.

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

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

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

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

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

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

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

a. who meets all of the following conditions:

   (i) is a direct *small use customer* of the *user*;

   (ii) is a voluntary, non-profit making organisation;

   (iii) is endorsed as exempt from income tax under the Income *Tax Assessment Act 1997* (Commonwealth) Subdivision 50-B;

   (iv) provides a public service, which is available to any member of the public without discrimination;

   (v) is not a Commonwealth, State or local government department, instrumentality or agency; and

   (vi) does not receive the major part of its funding from any organisation mentioned in sub-paragraph (v); or

b. is a charitable or benevolent organisation providing residential accommodation other than for commercial gain.

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

1.2 Interpretation

Unless the contrary intention is apparent:

1.1 a rule of interpretation in the *Code*; and

1.2 the *Interpretation Act 1984*,

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

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

1.3 Relationship to the *metering instruments*

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

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

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

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

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

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

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

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

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

1.3.2 From 1 July 2020, *reference service (metering)*

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

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

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

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

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

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

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

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

b. *customer meter* reading (including a card read *meter* reading);

c. historical *interval energy data* from *interval meters* for a period of up to 12 months in accordance with the requirements of clause A4.2 of the *Electricity Industry (Customer Transfer) Code 2016*; and

d. the provision of *standing data* in accordance with the *Metering Code*.

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

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

1.4 Eligibility criteria

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

1.4.1 From the *AA4 effective date* to 30 June 2020

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

1.4.2 From 1 July 2020

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

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

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

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

1.5 Provision of *reference services*

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

1.6 Transitional

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

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

2. Reference Services (Exit Services)

Western Power offers 17 *exit services* as *reference services*.

Reference Service Name:	Reference Service A1 – Anytime Energy (Residential) Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the low voltage (415 volts or less) *distribution system*. This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at *residential premises* or premises occupied by a *voluntary/charitable organisation*; and 2. At the *metering point:* a. on and before 30 June 2020, a *minimum meter* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 3. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 4. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 5. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT1" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service A2 – Anytime Energy (Business) Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the low voltage (415 volts or less) *distribution system*. This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at *non-residential premises*; and 2. The maximum demand at the *exit point* is: a. less than 1,500 kVA based on historic metering data; or b. Western Power determines, as a *reasonable and prudent person*, that the *user's* forecast maximum demand will be less than 1,500 kVA; and 3. At the *metering point:* a. on and before 30 June 2020, a *minimum meter* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 4. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT2" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service A3 – Time of Use Energy (Residential) Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit* point on the low voltage (415 volts or less) *distribution system*. This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at *residential premises* or premises occupied by a *voluntary/charitable organisation*; and 2. At the *metering point:* a. on and before 30 June 2020, a *minimum meter* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 3. 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 RT3; and 4. This A3 – Time of Use Energy (Residential) Exit Service: a. was provided at the *connection point* as at the *AA4 effective date*; and b. has continued to be provided at the *connection point* from the *AA4 effective date*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT3" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

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

Reference Service Name:	Reference Service A5 – High Voltage Metered Demand Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the high voltage (6.6 kV or higher) *distribution system.* This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at *non-residential premises*; and 2. The maximum demand at the *exit point* is: a. less than 1,500 kVA based on historic metering data; or b. Western Power determines, as a *reasonable and prudent person*, that the *user*'s forecast maximum demand will be less than 1,500 kVA; and 3. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 4. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT5" in the *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service A6 – Low Voltage Metered Demand Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the low voltage (415 volts or less) *distribution system.* This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at *non-residential premises*; and 2. The maximum demand at the *exit point* is: a. less than 1,500 kVA based on historic metering data; or b. Western Power determines, as a reasonable and prudent person, that the *user's* forecast maximum demand will be less than 1,500 kVA; and 3. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 4. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT6" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service A7 – High Voltage Contract Maximum Demand Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the high voltage (6.6 kV or higher) *distribution system*. This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at *non-residential premises*; and 2. The contracted maximum demand at the *exit point* is greater than 1,000 kVA; and 3. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 4. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service.*
Applicable Reference Tariff:	"RT7" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service A8 – Low Voltage Contract Maximum Demand Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the low voltage (415 volts or less) *distribution system.* This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at *non-residential premises*; and 2. The contracted maximum demand at the *exit point* is greater than 1,000 kVA; and 3. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 4. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT8" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service A9 – Streetlighting Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the low voltage (415 volts or less) *distribution system* for the purpose of public street lighting, plus the service of the provision and maintenance of the streetlight. This *exit service* includes: 1. on and before 30 June 2020, the provision of the *metering services* set out in the *Metering Code* for a type 7 connection point; and 2. on and after 1 July 2020, a *reference service (metering)*. {Note: The streetlighting *exit service* is provided using a variety of different streetlighting assets owned by Western Power. These assets are designed for the environment they will operate in with input from the *user's* customer of this *service*. The streetlighting design occurs in accordance with the applicable streetlighting design standards (including AS/NZS 1158 and AS/NZS 60598) and regulatory requirements at the time of installation which cover: • streetlight light level technical parameters (lumens); • glare, impact and spilled light levels; • height, reach, tilt and other configuration of the streetlight; • location (set back from roads) and spacing from other streetlight assets; • materials, equipment and lighting components including the type of lamp used; • inclusion of any safety features such as provision of fuses; • attachment to existing assets or as a standalone asset. Western Power's current streetlight asset design catalogue is available to users and consumers on Western Power's website - https://westernpower.com.au/media/2973/distribution-design-catalogue-streetlights-20180820.pdf. In order to continue to provide the streetlighting *exit service* to design levels Western Power undertakes a broad range of streetlight inspection, maintenance and replacement activities including: • time based routine inspections of streetlight poles to assess their structural and electrical integrity; • repair of streetlight infrastructure including where damage occurs by third parties; • emergency response to incidents involving streetlights; • replacement of streetlight lamps, luminaires, control equipment and supply wiring; • replacement and repair of underground streetlight supply cables and overhead conductors; • call centre and online activities to receive streetlight fault information; and • replacement and reinforcement of streetlight poles.}
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The streetlight is a Western Power streetlight; and 2. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT9" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in 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* at an *exit point* on the low voltage (415 volts or less) *distribution system.* This *exit service* includes: 1. on and before 30 June 2020, the provision of the *metering services* set out in the *Metering Code* for a type 7 connection point; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located on public land; and 2. The maximum *load* at the *exit point* is not subject to *user* or *consumer* controlled variations in duration of usage; and 3. Western Power, as a *reasonable and prudent person,* forecasts the maximum *load* at the *exit point* to be less than 1 kW single-phase except for streetlights, traffic lights, rail crossings, and pedestrian lighting where the *consumer* is a road or local government authority, then the maximum *load* at the *exit point* is less than 4.8 kW single phase; and 4. The installation of a *meter* is not practicable due to the nature or location of the *exit point* and/or *consumer's facilities and equipment*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT10" in the applicable *Price List* published in Appendix F of the *access arrangement*.
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service A11 – Transmission Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the *transmission system*. This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 2. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 3. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 4. Each of the following does not apply under an agreement with Western Power: a. The tariff that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"TRT1" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.3 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* at an *exit point* on the low voltage (415 volts or less) *distribution system*. This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at the *residential premises* or premises occupied by a *voluntary/charitable organisation*; and 2. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 3. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 4. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 5. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT17" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service A13 – 3 Part Time of Use Energy (Business) Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the low voltage (415 volts or less) *distribution system*. This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at non-*residential*; and 2. The maximum demand at the *exit point* is: a. less than 1,500 kVA based on historic metering data; or b. Western Power determines, as a *reasonable and prudent person*, that the *user's* forecast maximum demand will be less than 1,500 kVA; and 3. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 4. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT18" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service A14 – 3 Part Time of Use Demand (Residential) Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the low voltage (415 volts or less) *distribution system*. This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at the *residential premises* or premises occupied by a *voluntary/charitable organisation*; and 2. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 3. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 4. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 5. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT19" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service A15 – 3 Part Time of Use Demand (Business) Exit Service
Reference Service Description:	An *exit service* combined with a *connection service* at an *exit point* on the low voltage (415 volts or less) *distribution system*. This *exit service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *exit point* is located at *non-residential premises*; and 2. The maximum demand at the *exit point* is: a. less than 1,500 kVA based on historic metering data; or b. Western Power determines, as a *reasonable and prudent person*, that the *user's* forecast maximum demand will be less than 1,500 kVA; and 3. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 4. The *meter* is configured to measure the transfer of electricity out of the *Western Power Network*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT20" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

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

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

3. Reference Services (Entry Services)

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

Reference Service Name:	Reference Service B1 – Distribution Entry Service
Reference Service Description:	An *entry service* combined with a *connection service* on the *distribution system*. This *entry service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 2. The *meter* is configured to measure the transfer of electricity into the *Western Power Network*; and 3. The *generator's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 4. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT11" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service B2 – Transmission Entry Service
Reference Service Description:	An *entry service* combined with a *connection service* at an *entry point* on the *transmission system.* This *entry service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. At the *metering point*: a. on and before 30 June 2020, an *interval meter (uni-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 2. The *meter* is configured to measure the transfer of electricity into the *Western Power Network*; and 3. The *generator's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 4. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"TRT2" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in Section 4.3 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* connected behind a *connection point* (including distributed *generating plant* and other non-network solutions) to provide benefits to the *Western Power Network* that defer Western Power's *capital* and *non-capital costs*. {Note: a 'thin connection' that involves the export of electricity onto the *Western Power Network* or the provision of another network support service may be eligible for this reference service.}
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. All of the *eligibility criteria* for *entry service* B1 are met; and 2. The *connection point* was created or the *facilities and equipment* are installed after the *AA4 effective date*; 3. The *connection point* is not subject to a capacity sharing arrangement; and 4. A network support services contract setting out the terms upon which the distributed *generating plant* or other non-network solution at the *connection point* will provide benefits to the *Western Power Network* that defers Western Power's *new facilities investment* and *non-capital costs* is in force; and 5. The *user* has made an *electricity transfer application* in accordance with the *Applications and Queuing Policy* for this *service* and has been assessed for a discount to the *reference tariff* applicable to reference service B1 in accordance with the discount mechanism set out in the *price list* for reference tariff RT23.
Applicable Reference Tariff:	"RT23" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in Section 4.3 of the *access arrangement.*

4. Reference Services (Bi-directional Services)

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

Reference Service Name:	Reference Service C1 – Anytime Energy (Residential) Bi-directional Service
Reference Service Description:	A *bi-directional service* combined with a *connection service* at a *bi-directional point* on the low voltage (415 volts or less) *distribution system*. This *bi-directional service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *bi-directional point* is located at a *residential premises* or premises occupied by a *voluntary/charitable organisation* with an inverter system rated up to 10 kVA for single phase connections and 30 kVA for three phase connections; and 2. At the *metering point*: a. on and before 30 June 2020, a *minimum meter* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 3. The *meter* is configured to measure the transfer of electricity into and out of the *Western Power Network*; and 4. The *consumer's* inverter system complies with the requirements of AS 4777 and the *technical rules*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT13" in the applicable *Price List* published in Appendix F of the *access arrangement*.
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in Section 4.2 of the *access arrangement.*

Reference Service Name:	Reference Service C2 – Anytime Energy (Business) Bi-directional Service
Reference Service Description:	A *bi-directional service* combined with a *connection service* at a *bi-directional point* on the low voltage (415 volts or less) *distribution system*. This *bi-directional service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. 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 2. At the *metering point*: a. on and before 30 June 2020, a *minimum meter* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 3. The *meter* is configured to measure the transfer of electricity into and out of the *Western Power Network*; and 4. The *consumer's* inverter system complies with the requirements of AS 4777 and the *technical rules*, and satisfies a technical assessment by Western Power for installations larger than 30kVA; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT14" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

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

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

Reference Service Name:	Reference Service C5 – High Voltage Metered Demand Bi-directional Service
Reference Service Description:	A *bi-directional service* combined with a *connection service* at a *bi-directional point* on the high voltage (6.6 kV or higher) *distribution system.* This *bi-directional service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *bi-directional point* is located at *non-residential premises*; and 2. The maximum demand at the *bi-directional point* is: a. less than 1,500 kVA based on historic metering data; or b. Western Power determines, as a *reasonable and prudent person*, that the *user*'s forecast maximum demand will be less than 1,500 kVA; and 3. At the *metering point*: a. on and before 30 June 2020, an *interval meter (bi-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 4. The *meter* is configured to measure the transfer of electricity into and out of the *Western Power Network*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. The premises have an inverter system rated up to a total of 1 MVA for single or three-phase connections; and 7. The *consumer's* inverter system complies with the requirements of AS 4777 and the *technical rules*, and satisfies a technical assessment by Western Power for installations larger than 30kVA; and 8. Each of the following does not apply under an agreement with Western Power: a. The *tariff* that determines the *charge* is different to the Applicable Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT5" in the Price List published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access 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* at a *bi-directional point* on the low voltage (415 volts or less) *distribution system.* This *bi-directional service* includes: 1. on and before 30 June 2020, a *standard metering service*; and 2. on and after 1 July 2020, a *reference service (metering)*.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *bi-directional point* is located at *non-residential premises*; and 2. The maximum demand at the *bi-directional point* is: a. less than 1,500 kVA based on historic metering data; or b. Western Power determines, as a *reasonable and prudent person*, that the *user's* forecast maximum demand will be less than 1,500 kVA; and 3. At the *metering point*: a. on and before 30 June 2020, an *interval meter (bi-directional)* is installed; and b. on and after 1 July 2020, a *reference service (metering)* is provided to the same *user*; and 4. The *meter* is configured to measure the transfer of electricity into and out of the *Western Power Network*; and 5. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000; and 6. The premises have an inverter system rated up to a total of 1 MVA for single or three-phase connections; and 7. The *consumer's* inverter system complies with the requirements of AS 4777 and the *technical rules*, and satisfies a technical assessment by Western Power for installations larger that 30kVA; 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 Reference Tariff for this *service*; or b. The *user* is to receive delivered electricity at a *service standard* different to the Applicable Service Standard Benchmarks for this *service*.
Applicable Reference Tariff:	"RT6" in the applicable Price List published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in section 4.2 of the *access arrangement.*

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

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

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

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

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

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

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

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

Reference Service Name:	Reference Service C15 – Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution
Reference Service Description:	A *bi-directional service* provided on the same basis as *bi-directional services* C1 to C14 (selected by the *user*) in circumstances where this *service* provides for *facilities and equipment* connected behind a *connection point* (including distributed *generating plant* and other non-network solutions) to provide benefits to the *Western Power Network* that defer Western Power's *capital* and *non-capital costs*. {Note: a 'thin connection' that involves the export of electricity onto the *Western Power Network* or the provision of another network support service may be eligible for this reference service.}
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. All of the *eligibility criteria* for *bi-directional services* C1 or C14 (as applicable) are met; and 2. The *connection point* was created or the *facilities and equipment* are installed after the *AA4 effective date*; and 3. The *connection point* is not subject to a capacity sharing arrangement; and 4. A network support services contract setting out the terms upon which the distributed *generating plant* or other non-network solution at the *connection point* will provide benefits to the *Western Power Network* that defers Western Power's *new facilities investment* and *non-capital costs* is in force; and 5. The *user* has made an *electricity transfer application* in accordance with the *Applications and Queuing Policy* for this *service* and has been assessed for a discount to the *reference tariff* applicable to reference services C1 to C14 (as applicable) in accordance with the discount mechanism set out in the *price list* for reference tariff RT24.
Applicable Reference Tariff:	"RT24" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*
Applicable Service Standard Benchmarks:	As set out in Section 4.2 of the *access arrangement.*

5. Reference Services (ancillary)

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

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

Reference Service Name:	Reference Service D2 –Capacity Allocation Swap (Nominator) (Business) Service
Reference Service Description:	A *service* ancillary to: • *exit services* A5, A6, A7, A8 and A11; • *entry services* B1 and B2; and • *bi-directional services* C5, C6, C7 and C8, under which a *user* applies to Western Power to decrease contracted capacity at one *connection point* under its *access contract* and nominates a corresponding increase in contracted capacity at another *connection point* under its *access contract* or at a *connection point* under another *user's access contract* for an *intra day period* nominated by the *user* following which the contracted capacity under the *user's access contract* is reinstated.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *user* has submitted an *electricity transfer application* to decrease its contracted capacity at one *connection point* and that application is approved; and 2. Western Power receives a corresponding *electricity transfer application* to increase contracted capacity at another *connection point* pursuant to *reference service* D3 and that application is approved; and 3. All of the *eligibility criteria* for the *reference services* at the *connection points* are met; and 4. The increase and decrease of contracted capacity relates to either contracted maximum demand (CMD) or declared sent out capacity (DSOC) (not both); and 5. The *user* has an *access contract* that provides for capacity allocation services at multiple *connection points* as per the "Electricity Transfer Access Contract" published in Appendix A of the *access arrangement*; and 6. The *Western Power Network* has the technical capability to give effect to the decrease of contracted capacity; and 7. The service is not associated with any material modification of the *facilities and equipment* connected at an existing *connection point*; and 8. No augmentation of the *Western Power Network* is required to facilitate the capacity allocation arrangements; and 9. An operating document setting out the practical, technical and other operational details of the capacity allocation (swap) arrangements applies between the *user(s)*, the *consumer(s)* at each of the two *connection points*, *system management* and Western Power; and 10. The provision of the *service* is approved by *system management* and the *market operator*. {Note: In addition to lodging an 'electricity transfer application' under the *Applications and Queuing Policy* to transfer to this service a *user* may also be required to lodge a 'connection application' as described in clause 10.2(e) the *Applications and Queuing Policy*.}
Applicable Reference Tariff:	Any applicable lodgement fees payable in accordance with the *Applications and Queuing Policy*.
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*

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

Reference Service Name:	Reference Service D3 –Capacity Allocation Swap (Nominee) (Business) Service
Reference Service Description:	A *service* ancillary to: • *exit services* A5, A6, A7, A8 and A11; • *entry services* B1 and B2; and • *bi-directional services* C5, C6, C7 and C8, under which a *user* applies to Western Power to increase contracted capacity at one *connection point* under its *access contract* and nominates a corresponding decrease in contracted capacity at another *connection point* under its *access contract* or at a *connection point* under another *user's access contract* for an *intra day period* nominated by the *user* following which the contracted capacity under the *user's access contract* is reinstated.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *user* has submitted an *electricity transfer application* to increase its contracted capacity at one *connection point* and that application is approved; and 2. Western Power receives a corresponding *electricity transfer application* to decrease contracted capacity at another *connection point* pursuant to *reference service* D2 and that application is approved; and 3. All of the *eligibility criteria* for the *reference services* at the *connection points* are met; and 4. The increase and decrease of contracted capacity relates to either CMD or DSOC (not both); and 5. The *user* has an *access contract* that provides for capacity allocation services at multiple *connection points* as per the "Electricity Transfer Access Contract" published in Appendix A of the *access arrangement*; and 6. The *Western Power Network* has the technical capability to give effect to the increase of contracted capacity; and 7. The service is not associated with any material modification of the *facilities and equipment* connected at an existing *connection point*; and 8. No augmentation of the *Western Power Network* is required to facilitate the capacity allocation arrangements; and 9. An operating document setting out the practical, technical and other operational details of the capacity allocation (swap) arrangements applies between the *user(s)*, the *consumer(s)* at each of the two *connection points*, *system management* and Western Power; and 10. The provision of the *service* is approved by *system management* and the *market operator*. {Note: In addition to lodging an 'electricity transfer application' under the *Applications and Queuing Policy* to transfer to this service a *user* may also be required to lodge a 'connection application' as described in clause 10.2(e) the *Applications and Queuing Policy*.}
Applicable Reference Tariff:	Any applicable lodgement fees payable in accordance with the *Applications and Queuing Policy*.
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*

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

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

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

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

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

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

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

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

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

Reference Service Name:	Reference Service D8 – Remote De-energise Service
Reference Service Description:	A *service* ancillary to: • *exit services* A1 to A8 and A12 to A17; • *entry service* B1; and • *bi-directional services* C1 to C15, to de-energise a *meter* by removing supply voltage from all outgoing circuits on a non-permanent basis by a command sent to a *meter* from a remote locality. The *service* does not include any site visits by Western Power.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *user* has submitted a service order for a remote de-energise service in accordance with Western Power's requirements; and 2. The *user* complies with all of its obligations under the *Code of Conduct for the Supply of Electricity to Small Use Customers 2018* relevant to this *service*; and 3. The *user* is receiving an *exit service*, *entry service* or *bi-directional service* at the *connection point*; and 4. The *user* has an *access contract* that provides for remote de-energise services as per the "Electricity Transfer Access Contract" published in Appendix A of the *access arrangement*; and 5. The remote de-energise service order includes all information required by Western Power acting as a *reasonable and prudent person*, to perform the *service*; and 6. A *reference service (metering)* M5, M6, M7, M12, M13 or M14 is being provided at the *connection point*; and 7. Western Power and the *user* agree a liability regime regarding Western Power's involvement in remotely de-energising the electricity supply voltage of the *user's* customer (the *consumer*); and 8. Western Power's advanced metering infrastructure project is implemented; and 9. A telecommunications network supported by Western Power can facilitate transmitting commands to and messages from the *meter*; and 10. There is a supply voltage present at the *meter*; and 11. Supporting IT infrastructure and processes capable of receiving and actioning *user* requests for this *service* have been established; and 12. A whole current *meter* (being a *meter* that does not have a *transformer*) is installed at the *metering point*; and 13. The *meter* is configured to receive and provide commands for this *service* from a remote locality; and 14. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000.
Applicable Reference Tariff:	"RT28" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*

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

Reference Service Name:	Reference Service D9 – Remote Re-energise Service
Reference Service Description:	A *service* ancillary to: • *exit services* A1 to A8 and A12 to A17; • *entry service* B1; and • *bi-directional services* C1 to C15, to re-arm a previously de-energised *meter* by a command sent to a *meter* from a remote locality. The *service* does not include any site visits by Western Power.
Eligibility Criteria:	*Users* are eligible to use this *service* if: 1. The *user* has submitted a service order for a remote re-energise request in accordance with Western Power's requirements; and 2. The *meter* is de-energised following the completion of a remote de-energise service D8; and 3. The *user* complies with all of its obligations under the *Code of Conduct for the Supply of Electricity to Small Use Customers 2018* relevant to this *service*; and 4. The *user* is receiving an *exit service*, *entry service* or *bi-directional service* at the *connection point*; and 5. The *user* has an *access contract* that provides for remote re-energise services as per the "Electricity Transfer Access Contract" published in Appendix A of the *access arrangement*; and 6. The remote re-energise service order includes all information required by Western Power acting as a *reasonable and prudent person*, to perform the *service*; and 7. A *reference service (metering)* M5, M6, M7, M12, M13 or M14 is being provided at the *connection point*; and 15. Western Power and the *user* agree a liability regime regarding Western Power's involvement in remotely facilitating re-energising the electricity supply voltage of the *user's* customer (the *consumer*) by re-arming the *meter*; and 8. de-energising the electricity supply voltage of the *user's* customer (the *consumer*); and 9. Western Power's advanced metering infrastructure project is implemented; and 10. A telecommunications network supported by Western Power can facilitate transmitting commands to and messages from the *meter*; and 11. There is a supply voltage present at the *meter*; and 12. Supporting IT infrastructure and processes capable of receiving and actioning *user* requests for this *service* have been established; and 13. A whole current *meter* (being a *meter* that does not have a *transformer*) is installed at the *metering point*; and 14. The *meter* is configured to receive and provide commands for this *service* from a remote locality; and 15. The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000.
Applicable Reference Tariff:	"RT29" in the applicable *Price List* published in Appendix F of the *access arrangement.*
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix A of the *access arrangement.*

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

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

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

E.1.1 Nature and currency of this Annexure

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

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

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

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

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

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

In Table E.1 below:

a. an existing *metering installation* is one at an existing *metering point* immediately before the *AA4 effective date* and continues as an existing *metering installation* until such time as the *meter* forming part of the *metering installation* is upgraded, replaced, changed or reconfigured*;*

b. a new *metering installation* is one established at a new *metering point* after the *AA4 effective date*;

c. an upgraded or replaced *metering installation* is one where the *meter* forming part of the *metering installation* is upgraded or replaced after the *AA4 effective date* but does not include a *metering installation* where the *meter* is changed or reconfigured at the request of the *user*.

For:

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

b. a *bi-directional service* the *meter* will be configured to measure the transfer of electricity into and out of the *Western Power Network*.

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

E.1.3 Availability of *Reference Services*

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

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

E.1.4 *Standard metering services*

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

Table E.1: *Standard Metering Services*

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

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

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

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

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

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

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

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

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

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

Annexure 2: Reference services (metering)

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

E.1.1 Service descriptions

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

Table E.1.1: *Reference services (metering)*

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

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

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

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

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

b. *customer meter* reading (including card read *meter* reading); and

c. the provision of *standing data* in accordance with the *Metering Code*.

E.1.2 Permissible reference services (metering)

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

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

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

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

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16
Exit Services																
A1 - Anytime Energy (Resi) Exit																
Throughput <50MWh	✓*		✓	✓	✓	✓	✓									✓
Throughput >50MWh				✓*		✓	✓									
A2 - Anytime Energy (Busi) Exit																

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16
Throughput <50MWh	✓*		✓	✓	✓	✓	✓									✓
Throughput >50MWh				✓*		✓	✓									
A3 - TOU Energy (Resi) Exit																
Throughput <50MWh		✓*	✓	✓	✓	✓	✓									✓
Throughput >50MWh				✓*		✓	✓									
A4 - TOU Energy (Busi) Exit																
Throughput <50MWh		✓*	✓	✓	✓	✓	✓									✓
Throughput >50MWh				✓*		✓	✓									
A5 - HV Demand Exit						✓*	✓									
A6 - LV Demand Exit																
Throughput <50MWh				✓*	✓	✓	✓									
Throughput >50MWh				✓*		✓	✓									
A7 - HV CMD Exit						✓*	✓									
A8 - LV CMD Exit																
Throughput <50MWh				✓*	✓	✓	✓									
Throughput >50MWh				✓*		✓	✓									
A9 – Unmetered															✓*	
A10 – Streetlight															✓*	
A11 - Transmission Exit				✓*		✓	✓									
A12 - 3 Part TOU (Resi) Exit																
Throughput <50MWh			✓	✓*	✓	✓	✓									
Throughput >50MWh				✓*		✓	✓									
A13 - 3 Part TOU (Busi) Exit																
Throughput <50MWh			✓	✓*	✓	✓	✓									
Throughput >50MWh				✓*		✓	✓*									
A14 - 3 Part TOU Demand (Resi) Exit																
Throughput <50MWh			✓	✓*	✓	✓	✓									
Throughput >50MWh				✓*		✓	✓									
A15 - 3 Part TOU Demand (Busi) Exit																
Throughput <50MWh			✓	✓*	✓	✓	✓									
Throughput >50MWh				✓*		✓	✓									
A16 – Multi Part TOU (Resi) Exit																
Throughput <50MWh			✓	✓*	✓	✓	✓									
Throughput >50MWh				✓*		✓	✓									
A17 – Multi Part TOU (Busi) Exit																
Throughput <50MWh			✓	✓*	✓	✓	✓									
Throughput >50MWh				✓*		✓	✓*									
Entry Services																

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16
B1 - Distribution Entry				✓*		✓	✓									
B2 - Transmission Entry						✓*	✓									
B3– Entry Service Facilitating a Distributed Generation or Other Non-Network Solution	See *permissible reference services (metering)* for underlying *entry service.*															
Bi-Directional Services																
C1 - Anytime Energy (Resi) Bi-Directional																
Throughput <50MWh								✓*		✓	✓	✓	✓	✓		✓
Throughput >50MWh											✓*		✓	✓		
C2 - Anytime Energy (Busi) Bi-Directional																
Throughput <50MWh								✓*		✓	✓	✓	✓	✓		✓
Throughput >50MWh											✓*		✓	✓		
C3 - TOU (Resi) Bi-Directional																
Throughput <50MWh									✓*	✓	✓	✓	✓	✓		✓
Throughput >50MWh											✓*		✓	✓		
C4 - TOU (Busi) Bi-Directional																
Throughput <50MWh									✓*	✓	✓	✓	✓	✓		✓
Throughput >50MWh											✓*		✓	✓		
C5 - HV Metered Demand Bi-Directional													✓*	✓		
C6 - LV Metered Demand Bi-Directional																
Throughput <50MWh										✓	✓*	✓	✓	✓		
Throughput >50MWh											✓*		✓	✓		
C7 - HV CMD Bi-Directional											✓		✓*	✓		
C8 - LV CMD Bi-Directional																
Throughput <50MWh										✓	✓*	✓	✓	✓		
Throughput >50MWh											✓*		✓	✓		
C9 - 3 Part TOU (Resi) Bi-Directional																
Throughput <50MWh										✓	✓*	✓	✓	✓		
Throughput >50MWh											✓*		✓	✓		
C10 - 3 Part TOU (Busi) Bi-Directional																
Throughput <50MWh										✓	✓*	✓	✓	✓		
Throughput >50MWh											✓*		✓	✓		
C11 - 3 Part TOU Demand (Resi) Bi-Directional																
Throughput <50MWh										✓	✓*	✓	✓	✓		
Throughput >50MWh											✓*		✓	✓		

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16
C12 - 3 Part TOU Demand (Busi) Bi-Directional																
Throughput <50MWh										✓	✓*	✓	✓	✓		
Throughput >50MWh											✓*		✓	✓		
C13 – Multi Part TOU (Resi) Bi-Directional																
Throughput <50MWh										✓	✓*	✓	✓	✓		
Throughput >50MWh											✓*		✓	✓		
C14 – Multi Part TOU (Busi) Bi-Directional																
Throughput <50MWh										✓	✓*	✓	✓	✓		
Throughput >50MWh											✓*		✓	✓		
C15 – Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution	See *permissible reference services (metering)* for underlying *bi-directional service.*															
Reference service (ancillary)																
D1 – Supply abolishment (whole current metering)	See *permissible reference services (metering)* for underlying *exit service, entry service or bi-directional service*															
D2 –Capacity Allocation Swap (Nominator) (Business)																
D3 –Capacity Allocation Swap (Nominee) (Business)																
D4 –Capacity Allocation Same Connection Point (Nominator) (Business)																
D5 –Capacity Allocation Same Connection Point (Nominee) (Business)																
D6 – Remote Direct Load Control Service																
D7 – Remote Load Limitation Service																
D8 – Remote De-energise Service																
D9 – Remote Re-energise Service																

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

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

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

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

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

E.1.4 Eligibility Criteria for Reference Service (metering)

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

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

Table E.2.1: *Eligibility Criteria Services*

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16
The *User* receives a compatible *Network* access service at the *connection point.*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
The *consumer's facilities and equipment* comply with the *technical rules*, the *WA Electrical Requirements* and AS 3000.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
An *accumulation meter* is installed at the *metering point.*	✓	✓						✓	✓							
An *interval meter* is installed at the *metering point.*			✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		
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.	✓	✓						✓	✓							
The *meter* is configured to measure and record *interval energy data:* - out of the *network* for an exit service; or - in to the *network* for an entry service; or - in to and out of the *network* for a bi-directional service.			✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		
Annual throughput at the *connection point* is, and is expected to remain, less than 50MWh.	✓	✓	✓		✓			✓	✓	✓		✓				
The *connection point* is located on the low voltage (415V or less) *distribution system.*	✓	✓	✓		✓			✓	✓	✓		✓				

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16
The *meter* is configured with registers to measure and record *accumulated energy data* for the time bands for the underlying *Network* access service.		✓							✓							
The *meter* is configured with registers to measure and record *interval energy data* for the underlying *Network* access service (if applicable).			✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		
The *meter* is connected to a communications network supported by *Western Power.*					✓	✓	✓					✓	✓	✓		
The *meter* is capable of storing *interval energy data*.																✓
The *user* receives a *reference service (metering)* (M1 to M15) in respect to the *connection point.*																✓

Appendix F.1

2017/18 Price List

Amended proposed access arrangement

16 November 2018

Access arrangement for the period
1 July 2017 to 30 June 2022

westernpower

EDM#46286179

An appropriate citation for this paper is:

Appendix F.1

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1. Introduction

This document details Western Power's price list. For the purpose of section 5.1(f) of the *Electricity Networks Access Code 2004* this document forms part of Western Power's Access Arrangement.

For the avoidance of doubt, the prices within this price list have applied since 1 July 2016 and apply to all consumption from 1 July 2017 until 30 June 2018. 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 in that section provided by Western Power as stated in the company's access arrangement.

Sections 4 and 5 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 6 details all the prices that are required to calculate the charges.

2. Reference Services

The following table details which reference tariff is applicable to each of the reference services here listed.

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	RT5
A6 – Low Voltage Metered Demand Exit Service	RT6
A7 – High Voltage Contract Maximum Demand Exit Service	RT7
A8 – Low Voltage Contract Maximum Demand Exit Service	RT8
A9 – Streetlighting Exit Service	RT9
A10 – Un-Metered Supplies Exit Service	RT10
A11 – Transmission Exit Service	TRT1
B1 – Distribution Entry Service	RT11
B2 – Transmission Entry Service	TRT2
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

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. Distribution Tariff Application Guide

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.

4.1 Reference Tariffs 1 and 2 (RT1 and RT2)

Reference Tariffs RT1 and RT2 consist of:

a. a fixed use of system charge (detailed in Table 1) which is payable each day;

b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 1) by the quantity of electricity consumed at an exit point (expressed in kWh);

c. a fixed metering charge per revenue meter (detailed in Table 1) which is payable each day; and

d. a variable metering charge calculated by multiplying the variable price (detailed in Table 1) by the quantity of electricity consumed at an exit point (expressed in kWh).

4.2 Reference Tariffs 3 and 4 (RT3 and RT4)

Reference Tariffs RT3 and RT4 consist of:

a. a fixed use of system charge (detailed in Table 1) 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 1) 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 1) by the quantity of off-peak electricity consumed at an exit point (expressed in kWh);

d. a fixed metering charge per revenue meter (detailed in Table 1) which is payable each day;

e. an on-peak variable metering charge calculated by multiplying the on-peak variable price (detailed in Table 1) by the quantity of on-peak electricity consumed at an exit point (expressed in kWh); and

f. an off-peak variable metering charge calculated by multiplying the off-peak variable price (detailed in Table 1) by the quantity of off-peak electricity consumed at an exit point (expressed in kWh).

Notes:

1. The on and off-peak periods for these tariffs are defined in the following table (all times are Western Standard Time (WST)):

	Monday – Friday (includes public holidays)			Saturday - Sunday
	Off-peak	**On-Peak**	**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

4.3 Reference Tariff 5 (RT5)

4.3.1 Tariff Calculation

Reference Tariff RT5 consists of:

a. a fixed metered demand charge (detailed in Table 4) which is payable each day based on the rolling 12-month maximum half-hourly demand at an exit 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 4) by the rolling 12-month maximum half-hourly demand at an exit 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 7) 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 (detailed in Table 9) which is payable each day.

Notes:

1. The on and off-peak periods for this tariff are defined in the following table (all times are WST):

Monday – Friday (includes public holidays)			Saturday - Sunday
Off-peak	**On-Peak**	**Off-Peak**	**Off-Peak**
12:00am – 8:00am	8:00am – 10:00pm	10:00pm – 12:00am	All times

4.3.2 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 an exit point (expressed in kVA);

DF is the discount factor, which is set at 50%

$E_{Off\ Peak}$ is the total off-peak energy for the billing period (expressed in kWh); and

E_{Total} is the total energy (both on and off peak) for the billing period (expressed in kWh).

Notes:

1. This discount does not apply to the demand-length portion of the charge.

4.4 Reference Tariff 6 (RT6)

4.4.1 Tariff Calculation

Reference Tariff RT6 consists of:

a. a fixed metered demand charge (detailed in Table 5) which is payable each day based on the rolling 12-month maximum half-hourly demand at an exit point (expressed in kVA) multiplied by (1-Discount);

b. a variable metered demand charge (detailed in Table 5) calculated by multiplying the demand price (in excess of lower threshold) by the rolling 12-month maximum half-hourly demand at an exit point (expressed in kVA) minus the lower threshold with the result multiplied by (1-Discount);

c. if the metered demand is equal to or greater than 1,000 kVA a variable demand length charge calculated by multiplying the demand length price (detailed in Table 7) 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 (detailed in Table 9) which is payable each day

Notes:

1. This tariff is similar to RT5 in section 4.3 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):

Monday – Friday (includes public holidays)			Saturday - Sunday
Off-peak	**On-Peak**	**Off-Peak**	**Off-Peak**
12:00am – 8:00am	8:00am – 10:00pm	10:00pm – 12:00am	All times

4.4.2 Discount

The same formula detailed in section 4.3.2 also applies for RT6.

4.5 Reference Tariff 7 (RT7)

4.5.1 Tariff Calculation

Reference Tariff 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 6) which is payable each day; plus

   ii. a variable demand charge calculated by multiplying the applicable demand price (detailed in Table 6) by the CMD at an exit point (expressed in kVA) minus 1,000 kVA; plus

   iii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 7) 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 6) by the CMD at an exit point (expressed in kVA); plus

   ii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 8) 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 (detailed in Table 9) which is payable each day;

d. a fixed administration charge (detailed in Table 10) which is payable each day; and

e. excess network usage charges calculated in accordance with section 4.5.2 (if applicable).

Notes:

1. For exit points located at the zone substation the fixed and demand charge specified in sections 4.5.1 (a)(i), (a)(ii) & (b)(i) is to be calculated using the transmission component only. In all other instances, the fixed and demand charge specified in sections 4.5.1 (a)(i), (a)(ii) & (b)(i) is to be calculated using the bundled charge.

4.5.2 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

$$ENUC_{Transmission} = ENUM * (PD - CMD) * DC_{Transmission} / CMD$$

$ENUC_{Distribution}$	= ENUM * (PD – CMD) * ($DC_{Distribution}$ + DLC) / CMD
ENUM	is the Excess network usage multiplier factor, which is set at 2
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)
$DC_{Transmission}$	are the applicable transmission components of the fixed and variable demand charges for the billing period for the nominated CMD
$DC_{Distribution}$	are the applicable distribution components of the fixed and variable demand 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

Notes:

1. The ENUC does not include the metering or administration components of the tariff.

4.6 Reference Tariff 8 (RT8)

4.6.1 Tariff Calculation

Reference Tariff 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 6) which is payable each day; plus
   ii. a variable demand charge calculated by multiplying the applicable demand price (detailed in Table 6) by the CMD at an exit point (expressed in kVA) minus 1,000 kVA; plus
   iii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 7) 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 6) by the CMD at an exit point (expressed in kVA); plus
   ii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 8) 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 11) which is payable each day;

d. a variable low voltage charge calculated by multiplying the low voltage demand price (detailed in Table 11) by the CMD at an exit point (expressed in kVA);

e. a fixed metering charge per revenue meter (detailed in Table 9) which is payable each day;

f. a fixed administration charge (detailed in Table 10) which is payable each day; and

g. excess network usage charges calculated in accordance with section 4.6.2 (if applicable).

Notes:

1. This tariff is identical to RT7 in section 4.5, with an additional low voltage charge to cover the use of transformers and LV circuits.

4.6.2 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

$ENUC_{Transmission}$	$= ENUM * (PD - CMD) * DC_{Transmission} / CMD$
$ENUC_{Distribution}$	$= ENUM * (PD - CMD) * (DC_{Distribution} + DLC + LVC) / CMD$
ENUM	is the Excess network usage multiplier factor, which is set at 2
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)
$DC_{Transmission}$	are the applicable transmission components of the fixed and variable demand charges for the billing period for the nominated CMD
$DC_{Distribution}$	are the applicable distribution components of the fixed and variable demand 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
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.

4.7 Reference Tariff 9 (RT9)

Reference Tariff RT9 consists of:

a. a fixed use of system charge (detailed in Table 1) which is payable each day;

b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 1) 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 2 and Table 3).

4.8 Reference Tariff 10 (RT10)

Reference Tariff RT10 consists of:

a. a fixed use of system charge (detailed in Table 1) which is payable each day; and

b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 1) 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 1) which is payable each day; and

b. the variable use of system charge for RT9 calculated by multiplying the energy price (detailed in Table 1) 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).

4.9 Reference Tariff 11 (RT11)

4.9.1 Tariff Calculation

Reference Tariff RT11 consists of:

a. a variable connection charge calculated by multiplying the connection price (detailed in Table 12) by the loss-factor adjusted declared sent-out capacity (DSOC) at the entry point (expressed in kW);

b. a variable control system service charge calculated by multiplying the control system service price (detailed in Table 16) 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 14) 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 7) 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 7) 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 8) 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 8) 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 (detailed in Table 9) which is payable each day; and

g. excess network usage charges calculated in accordance with section 4.9.2 (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 IMO for that generator.
2. For this reference tariff a unity power factor is assumed when converting between kW and kVA.

4.9.2 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

$ENUC_{Transmission}$ = $ENUM * (PD_{kW} – DSOC_{kW}) * TEPC / DSOC_{kW}$

$ENUC_{Distribution}$ = $ENUM * (PD_{kVA} – DSOC_{kVA}) * (DLC) / DSOC_{kVA}$

ENUM is the Excess network usage multiplier factor, which is set at 2

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

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.

4.10 Reference Tariffs 13 and 14 (RT13 and RT14)

Reference Tariffs RT13 and RT14 consist of:

a. a fixed use of system charge (detailed in Table 1) which is payable each day;

b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 1) by the quantity of electricity consumed at an exit point (expressed in kWh);

c. a fixed metering charge per revenue meter (detailed in Table 1) which is payable each day; and

d. a variable metering charge calculated by multiplying the variable price (detailed in Table 1) by the quantity of electricity consumed at an exit point (expressed in kWh).

4.11 Reference Tariffs 15 and 16 (RT15 and RT16)

Reference Tariffs RT15 and RT16 consist of:

a. a fixed use of system charge (detailed in Table 1) 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 1) 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 1) by the quantity of off-peak electricity consumed at an exit point (expressed in kWh);

d. a fixed metering charge per revenue meter (detailed in Table 1) which is payable each day;

e. an on-peak variable metering charge calculated by multiplying the on-peak variable price (detailed in Table 1) by the quantity of on-peak electricity consumed at an exit point (expressed in kWh); and

f. an off-peak variable metering charge calculated by multiplying the off-peak variable price (detailed in Table 1) by the quantity of off-peak electricity consumed at an exit point (expressed in kWh).

Notes:

1. The on and off-peak periods for these tariffs are defined in the following table (all times are WST):

	Monday – Friday (includes public holidays)			Saturday - Sunday
	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. Transmission Tariff Application Guide

5.1 Transmission Reference Tariff 1 (TRT1)

5.1.1 Tariff Calculation

Reference Tariff 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 13 or where there is no applicable use of system price in Table 13 for the exit point, the price calculated by Western Power in accordance with Appendix A of the 2016/17 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 15) 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 17) by the CMD at the exit point (expressed in kW);

e. a fixed metering charge per revenue meter (detailed in Table 18) which is payable each day; and

f. excess network usage charges calculated in accordance with section 5.1.2 (if applicable).

5.1.2 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 set at 2
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

Note: The ENUC does not include the metering components of the tariff.

5.2 Transmission Reference Tariff 2 (TRT2)

5.2.1 Tariff Calculation

Reference Tariff 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 14 or where there is no applicable use of system price in Table 14 for the entry point, the price calculated by Western Power in accordance with Appendix A of the 2016/17 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 16) 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 18) which is payable each day; and

e. excess network usage charges calculated in accordance with section 5.2.2 (if applicable).

5.2.2 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:

$$ENUC = ENUM * (PD - DSOC) * (UOS + CON + CSS) / DSOC$$

Where

ENUM	is the Excess network usage multiplier factor, which is set at 2
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
CSS	is the applicable variable control system service charge for the billing period

Note: The ENUC does not include the metering components of the tariff.

6. Price Tables

The tables in the following sections must be used in conjunction with the details in the sections above.

Table 6, Table 13 and Table 14 include a Transmission Node Identity (TNI) to uniquely identify zone substations.

All prices quoted in this Price List are **GST exclusive**.

6.1 Prices for energy-based tariffs on the distribution network

6.1.1 Use of system and metering prices

The prices in the following tables are applicable for reference tariffs **RT1, RT2, RT3, RT4, RT9, RT10, RT13, RT14, RT15** and **RT16.**

Table 1

	Fixed Price	Energy Rates		
	c/day	c/kWh	On Peak c/kWh	Off Peak c/kWh
Reference tariff 1 - RT1				
Transmission	0.000	1.496	-	-
Distribution	82.444	6.448	-	-
Bundled Tariff	82.444	7.944	-	-
Metering	3.834	0.800	-	-
Reference tariff 2 - RT2				
Transmission	0.000	1.775	-	-
Distribution	152.112	8.983	-	-
Bundled Tariff	152.112	10.758	-	-
Metering	3.834	0.800	-	-
Reference tariff 3 - RT3				
Transmission	0.000	-	2.704	0.568
Distribution	82.444	-	11.017	2.518
Bundled Tariff	82.444	-	13.721	3.086
Metering	3.834	-	1.020	1.020
Reference tariff 4 - RT4				

	Fixed Price	Energy Rates		
	c/day	c/kWh	On Peak c/kWh	Off Peak c/kWh
Transmission	0.000	-	2.796	0.675
Distribution	293.150	-	12.288	2.746
Bundled Tariff	293.150	-	15.084	3.421
Metering	7.668	-	0.270	0.270
Reference tariff 9 – RT9				
Transmission	0.000	0.940	-	-
Distribution	6.979	3.434	-	-
Bundled Tariff	6.979	4.374	-	-
Reference tariff 10 – RT10				
Transmission	0.000	0.620	-	-
Distribution	54.899	3.706	-	-
Bundled Tariff	54.899	4.326	-	-
Reference tariff 13 - RT13				
Transmission	0.000	1.496	-	-
Distribution	82.444	6.448	-	-
Bundled Tariff	82.444	7.944	-	-
Metering	3.834	0.800	-	-
Reference tariff 14 - RT14				
Transmission	0.000	1.775	-	-
Distribution	152.112	8.983	-	-
Bundled Tariff	152.112	10.758	-	-
Metering	3.834	0.800	-	-
Reference tariff 15 - RT15				
Transmission	0.000	-	2.704	0.568
Distribution	82.444	-	11.017	2.518
Bundled Tariff	82.444	-	13.721	3.086

	Fixed Price	Energy Rates		
	c/day	c/kWh	On Peak c/kWh	Off Peak c/kWh
Metering	3.834	-	1.020	1.020
Reference tariff 16 - RT16				
Transmission	0.000	-	2.796	0.675
Distribution	293.150	-	12.288	2.746
Bundled Tariff	293.150	-	15.084	3.421
Metering	7.668	-	0.270	0.270

6.1.2 Streetlight asset prices

The prices in the following table are applicable for reference tariff **RT9**.

Table 2 – Current light types

Light Specification	Daily Charge c/day
42W CFL SE	27.830
42W CFL BH	29.577
42W CFL KN	33.331
70W MH	48.648
70W HPS	23.926
125W MV	28.960
150W MH	56.206
150W HPS	31.474
250W MH	56.206
250W HPS	31.474
22W LED	16.656

Table 3 – Obsolete light types

Light Specification	Daily Charge c/day
50W MV	17.306
70W MV	23.293
80W MV	23.293
150W MV	28.960
250W MV	37.778
400W MV	39.665
40W FLU	17.306
80W HPS	23.926
125W HPS	31.474
100W INC	17.306
80W MH	23.293
125W MH	56.206

6.2 Prices for demand-based tariffs on the distribution network (RT5 to RT8 and RT11[1])

6.2.1 Demand charges

The prices in the following table are applicable for reference tariff **RT5**.

Table 4

	Transmission		Distribution		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	17.868	191.351	60.778	191.351	78.646
300 to 1000	5,360.400	13.228	18,424.751	43.386	23,785.151	56.614
1000 to 1500	14,620.000	7.557	48,794.951	18.723	63,414.951	26.280

The prices in the following table are applicable for reference tariff **RT6**.

Table 5

	Transmission		Distribution		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	17.868	1,098.170	62.808	1,098.170	80.676
300 to 1000	5,360.400	13.228	19,940.570	47.816	25,300.970	61.044
1000 to 1500	14,620.000	7.557	53,411.770	24.318	68,031.770	31.875

1 Note that some components of RT11 are in section 6.3

The prices in the following table are applicable for reference tariffs **RT7** and **RT8**.

Table 6

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Cook Street	WCKT	CBD	13,424.658	14.439	14.294	32,919.726	11.806	14.822	46,344.384	26.245	29.116
Forrest Avenue	WFRT	CBD	13,424.658	14.439	14.294	32,919.726	11.806	14.822	46,344.384	26.245	29.116
Hay Street	WHAY	CBD	13,424.658	14.439	14.294	32,919.726	11.806	14.822	46,344.384	26.245	29.116
Milligan Street	WMIL	CBD	13,424.658	14.439	14.294	32,919.726	11.806	14.822	46,344.384	26.245	29.116
Wellington Street	WWNT	CBD	13,424.658	14.439	14.294	32,919.726	11.806	14.822	46,344.384	26.245	29.116
Black Flag	WBKF	Goldfields Mining	13,424.658	28.526	26.369	32,919.726	6.340	10.137	46,344.384	34.866	36.506
Boulder	WBLD	Goldfields Mining	13,424.658	26.344	24.498	32,919.726	6.340	10.137	46,344.384	32.684	34.635
Bounty	WBNY	Goldfields Mining	13,424.658	50.000	44.775	32,919.726	6.340	10.137	46,344.384	56.340	54.912
West Kalgoorlie	WWKT	Goldfields Mining	13,424.658	23.544	22.098	32,919.726	6.340	10.137	46,344.384	29.884	32.235
Albany	WALB	Mixed	13,424.658	27.272	25.294	32,919.726	13.915	16.630	46,344.384	41.187	41.924
Boddington	WBOD	Mixed	13,424.658	13.283	13.303	32,919.726	13.915	16.630	46,344.384	27.198	29.933
Bunbury Harbour	WBUH	Mixed	13,424.658	12.990	13.052	32,919.726	13.915	16.630	46,344.384	26.905	29.682
Busselton	WBSN	Mixed	13,424.658	18.865	18.088	32,919.726	13.915	16.630	46,344.384	32.780	34.718
Byford	WBYF	Mixed	13,424.658	13.964	13.887	32,919.726	13.915	16.630	46,344.384	27.879	30.517
Capel	WCAP	Mixed	13,424.658	16.761	16.284	32,919.726	13.915	16.630	46,344.384	30.676	32.914
Chapman	WCPN	Mixed	13,424.658	22.376	21.097	32,919.726	13.915	16.630	46,344.384	36.291	37.727
Darlington	WDTN	Mixed	13,424.658	15.607	15.295	32,919.726	13.915	16.630	46,344.384	29.522	31.925
Durlacher Street	WDUR	Mixed	13,424.658	20.200	19.232	32,919.726	13.915	16.630	46,344.384	34.115	35.862

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Eneabba	WENB	Mixed	13,424.658	18.978	18.185	32,919.726	13.915	16.630	46,344.384	32.893	34.815
Geraldton	WGTN	Mixed	13,424.658	20.200	19.232	32,919.726	13.915	16.630	46,344.384	34.115	35.862
Marriott Road	WMRR	Mixed	13,424.658	12.543	12.669	32,919.726	13.915	16.630	46,344.384	26.458	29.299
Muchea	WMUC	Mixed	13,424.658	15.477	15.184	32,919.726	13.915	16.630	46,344.384	29.392	31.814
Northam	WNOR	Mixed	13,424.658	20.914	19.844	32,919.726	13.915	16.630	46,344.384	34.829	36.474
Picton	WPIC	Mixed	13,424.658	14.034	13.947	32,919.726	13.915	16.630	46,344.384	27.949	30.577
Rangeway	WRAN	Mixed	13,424.658	21.535	20.376	32,919.726	13.915	16.630	46,344.384	35.450	37.006
Sawyers Valley	WSVY	Mixed	13,424.658	19.145	18.328	32,919.726	13.915	16.630	46,344.384	33.060	34.958
Yanchep	WYCP	Mixed	13,424.658	15.425	15.139	32,919.726	13.915	16.630	46,344.384	29.340	31.769
Yilgarn	WYLN	Mixed	13,424.658	25.470	23.749	32,919.726	13.915	16.630	46,344.384	39.385	40.379
Baandee	WBDE	Rural	13,424.658	28.454	26.307	32,919.726	6.180	10.000	46,344.384	34.634	36.307
Beenup	WBNP	Rural	13,424.658	30.621	28.164	32,919.726	6.180	10.000	46,344.384	36.801	38.164
Bridgetown	WBTN	Rural	13,424.658	18.551	17.819	32,919.726	6.180	10.000	46,344.384	24.731	27.819
Carrabin	WCAR	Rural	13,424.658	31.287	28.735	32,919.726	6.180	10.000	46,344.384	37.467	38.735
Collie	WCOE	Rural	13,424.658	21.991	20.767	32,919.726	6.180	10.000	46,344.384	28.171	30.767
Coolup	WCLP	Rural	13,424.658	24.815	23.188	32,919.726	6.180	10.000	46,344.384	30.995	33.188
Cunderdin	WCUN	Rural	13,424.658	26.172	24.351	32,919.726	6.180	10.000	46,344.384	32.352	34.351
Katanning	WKAT	Rural	13,424.658	23.855	22.365	32,919.726	6.180	10.000	46,344.384	30.035	32.365
Kellerberrin	WKEL	Rural	13,424.658	27.702	25.662	32,919.726	6.180	10.000	46,344.384	33.882	35.662
Kojonup	WKOJ	Rural	13,424.658	16.457	16.024	32,919.726	6.180	10.000	46,344.384	22.637	26.024
Kondinin	WKDN	Rural	13,424.658	17.748	17.130	32,919.726	6.180	10.000	46,344.384	23.928	27.130
Manjimup	WMJP	Rural	13,424.658	18.401	17.690	32,919.726	6.180	10.000	46,344.384	24.581	27.690
Margaret River	WMRV	Rural	13,424.658	23.943	22.440	32,919.726	6.180	10.000	46,344.384	30.123	32.440
Merredin	WMER	Rural	13,424.658	25.096	23.429	32,919.726	6.180	10.000	46,344.384	31.276	33.429
Moora	WMOR	Rural	13,424.658	18.598	17.859	32,919.726	6.180	10.000	46,344.384	24.778	27.859
Mount Barker	WMBR	Rural	13,424.658	25.023	23.366	32,919.726	6.180	10.000	46,344.384	31.203	33.366

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Narrogin	WNGN	Rural	13,424.658	28.269	26.148	32,919.726	6.180	10.000	46,344.384	34.449	36.148
Pinjarra	WPNJ	Rural	13,424.658	13.147	13.187	32,919.726	6.180	10.000	46,344.384	19.327	23.187
Regans	WRGN	Rural	13,424.658	19.198	18.373	32,919.726	6.180	10.000	46,344.384	25.378	28.373
Three Springs	WTSG	Rural	13,424.658	18.541	17.810	32,919.726	6.180	10.000	46,344.384	24.721	27.810
Wagerup	WWGP	Rural	13,424.658	12.514	12.644	32,919.726	6.180	10.000	46,344.384	18.694	22.644
Wagin	WWAG	Rural	13,424.658	24.195	22.656	32,919.726	6.180	10.000	46,344.384	30.375	32.656
Wundowie	WWUN	Rural	13,424.658	21.095	19.999	32,919.726	6.180	10.000	46,344.384	27.275	29.999
Yerbillon	WYER	Rural	13,424.658	30.475	28.039	32,919.726	6.180	10.000	46,344.384	36.655	38.039
Amherst	WAMT	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Arkana	WARK	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Australian Paper Mills	WAPM	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Balcatta	WBCT	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Beechboro	WBCH	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Belmont	WBEL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Bentley	WBTY	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Bibra Lake	WBIB	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
British Petroleum	WBPM	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Canning Vale	WCVE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Clarence Street	WCLN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Clarkson	WCKN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Cockburn Cement	WCCT	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Collier	WCOL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Cottesloe	WCTE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Edmund Street	WEDD	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Forrestfield	WFFD	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Gosnells	WGNL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Hadfields	WHFS	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Hazelmere	WHZM	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Henley Brook	WHBK	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Herdsman Parade	WHEP	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Joel Terrace	WJTE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Joondalup	WJDP	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Kalamunda	WKDA	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Kambalda	WKBA	Urban	13,424.658	26.160	24.341	32,919.726	2.696	7.014	46,344.384	28.856	31.355
Kewdale	WKDL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Landsdale	WLDE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Maddington	WMDN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Malaga	WMLG	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Mandurah	WMHA	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Manning Street	WMAG	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Mason Road	WMSR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Meadow Springs	WMSS	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Medical Centre	WMCR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Medina	WMED	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Midland Junction	WMJX	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Morley	WMOY	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Mullaloo	WMUL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Mundaring Weir	WMWR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Munday	WMDY	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Murdoch	WMUR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Myaree	WMYR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Nedlands	WNED	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
North Beach	WNBH	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
North Fremantle	WNFL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
North Perth	WNPH	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
O'Connor	WOCN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Osborne Park	WOPK	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Padbury	WPBY	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Piccadilly	WPCY	Urban	13,424.658	24.631	23.030	32,919.726	2.696	7.014	46,344.384	27.327	30.044
Riverton	WRTN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Rivervale	WRVE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Rockingham	WROH	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Shenton Park	WSPA	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Sth Ftle Power Station	WSFT	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Southern River	WSNR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Tate Street	WTTS	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
University	WUNI	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Victoria Park	WVPA	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Waikiki	WWAI	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Wangara	WWGA	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Wanneroo	WWNO	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Welshpool	WWEL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Wembley Downs	WWDN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Willetton	WWLN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Yokine	**WYKE**	**Urban**	**13,424.658**	**14.817**	**14.618**	**32,919.726**	**2.696**	**7.014**	**46,344.384**	**17.513**	**21.632**

6.2.2 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 7

	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	1.662	1.163
Mining	0.352	0.246
Mixed	0.767	0.537
Rural	0.479	0.336

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 8

	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	1.425	0.997
Mining	0.301	0.211
Mixed	0.658	0.460
Rural	0.411	0.288

6.2.3 Metering prices

The prices in the following table are applicable for reference tariffs **RT5, RT6, RT7, RT8** and **RT11**.

Table 9

Metering Equipment Funding	Voltage	c/revenue meter/day
Western Power funded	High Voltage (6.6 kV or higher)	1127.730
	Low voltage (415 volts or less)	203.207
Customer funded	High Voltage (6.6 kV or higher)	550.278
	Low Voltage (415 volts or less)	99.155

6.2.4 Administration charges

The prices in the following table are applicable for reference tariffs **RT7** and **RT8**.

Table 10

CMD	Price (c/day)
>=7,000 kVA	8,732.000
<7,000 kVA	5,015.000

6.2.5 LV Prices

The prices in the following table are applicable for reference tariff **RT8**.

Table 11

Category	Price (c/day)
Fixed	1,068.986
Demand	10.111/kVA

6.2.6 Connection Price

The prices in the following table are applicable for reference tariff **RT11**.

Table 12

	Connection Price (c/kW/day)
Connection Price	1.290

6.3 Transmission prices

6.3.1 Use of system prices

The prices in the following table are applicable for reference tariff **TRT1**.

Table 13

Substation	TNI	Use of System Price (c/kW/day)
Albany	WALB	15.137
Alcoa Pinjarra	WAPJ	4.293
Amherst	WAMT	3.603
Arkana	WARK	4.599
Australian Fused Materials	WAFM	2.986
Australian Paper Mills	WAPM	4.656
Baandee (WC)	WBDE	16.225
Balcatta	WBCT	4.712
Beckenham	WBEC	11.887
Beechboro	WBCH	4.185
Beenup	WBNP	18.152
Belmont	WBEL	3.709
Bentley	WBTY	4.828
Bibra Lake	WBIB	3.315
Binningup Desalination Plant	WBDP	2.561
Black Flag	WBKF	16.545

Substation	TNI	Use of System Price (c/kW/day)
Boddington Gold Mine	WBGM	2.777
Boddington	WBOD	2.707
Boulder	WBLD	14.586
Bounty	WBNY	35.831
Bridgetown	WBTN	7.414
British Petroleum	WBPM	6.402
Broken Hill Kwinana	WBHK	4.996
Bunbury Harbour	WBUH	2.448
Busselton	WBSN	7.668
Byford	WBYF	3.313
Canning Vale	WCVE	3.789
Capel	WCAP	5.798
Carrabin	WCAR	18.745
Cataby Kerr McGee	WKMC	6.914
Chapman	WCPN	10.787
Clarence Street	WCLN	6.226
Clarkson	WCKN	4.695
Cockburn Cement	WCCT	2.602
Cockburn Cement Ltd	WCCL	2.594
Collie	WCOE	10.474
Collier	WCOL	6.197
Cook Street	WCKT	4.459
Coolup	WCLP	12.987
Cottesloe	WCTE	4.829
Cunderdin	WCUN	14.195
Darlington	WDTN	4.773
Edgewater	WEDG	4.134

Substation	TNI	Use of System Price (c/kW/day)
Edmund Street	WEDD	4.254
Eneabba	WENB	7.768
Forrest Ave	WFRT	6.234
Forrestfield	WFFD	4.887
Geraldton	WGTN	8.853
Glen Iris	WGNI	2.889
Golden Grove	WGGV	23.204
Gosnells	WGNL	3.933
Hadfields	WHFS	4.728
Hay Street	WHAY	4.728
Hazelmere	WHZM	3.665
Henley Brook	WHBK	4.040
Herdsman Parade	WHEP	7.170
Joel Terrace	WJTE	6.507
Joondalup	WJDP	4.430
Kalamunda	WKDA	4.993
Katanning	WKAT	12.133
Kellerberrin	WKEL	15.555
Kewdale	WKDL	3.635
Kojonup	WKOJ	5.551
Kondinin	WKDN	6.699
Kwinana Alcoa	WAKW	1.149
Kwinana Desalination Plant	WKDP	3.153
Kwinana PWS	WKPS	2.303
Landsdale	WLDE	4.261
Maddington	WMDN	3.829
Malaga	WMLG	3.639

Substation	TNI	Use of System Price (c/kW/day)
Mandurah	WMHA	3.126
Manjimup	WMJP	7.280
Manning Street	WMAG	5.292
Margaret River	WMRV	12.211
Marriott Road Barrack Silicon Smelter	WBSI	2.342
Marriott Road	WMRR	2.050
Mason Road	WMSR	1.828
Mason Road CSBP	WCBP	2.765
Mason Road Kerr McGee	WKMK	1.675
Meadow Springs	WMSS	3.545
Medical Centre	WMCR	5.609
Medina	WMED	2.639
Merredin 66kV	WMER	13.237
Midland Junction	WMJX	4.454
Milligan Street	WMIL	5.281
Moora	WMOR	7.456
Morley	WMOY	4.856
Mt Barker	WMBR	13.172
Muchea Kerr McGee	WKMM	7.035
Muchea	WMUC	4.658
Muja PWS	WMPS	1.400
Mullaloo	WMUL	4.577
Munday	WMDY	4.933
Murdoch	WMUR	2.951
Mundaring Weir	WMWR	7.147
Myaree	WMYR	5.638
Narrogin	WNGN	16.059

Substation	TNI	Use of System Price (c/kW/day)
Nedlands	WNED	5.280
North Beach	WNBH	4.712
North Fremantle	WNFL	4.740
North Perth	WNPH	4.022
Northam	WNOR	9.488
Nowgerup	WNOW	5.435
O'Connor	WOCN	4.917
Osborne Park	WOPK	5.110
Padbury	WPBY	4.774
Parkeston	WPRK	16.603
Parklands	WPLD	3.644
Piccadilly	WPCY	13.204
Picton 66kv	WPIC	3.375
Pinjarra	WPNJ	2.606
Rangeway	WRAN	10.040
Regans	WRGN	7.989
Riverton	WRTN	3.263
Rivervale	WRVE	5.072
Rockingham	WROH	2.795
Sawyers Valley	WSVY	7.917
Shenton Park	WSPA	5.492
Southern River	WSNR	3.425
South Fremantle 22kV	WSFT	3.551
Summer St	WSUM	6.716
Sutherland	WSRD	4.022
Tate Street	WTTS	5.671
Three Springs	WTSG	7.405

Substation	TNI	Use of System Price (c/kW/day)
Three Springs Terminal (Karara)	WTST	17.883
Tomlinson Street	WTLN	5.746
University	WUNI	6.089
Victoria Park	WVPA	5.545
Wagerup	WWGP	2.042
Wagin	WWAG	12.435
Waikiki	WWAI	3.056
Wangara	WWGA	4.375
Wanneroo	WWNO	4.605
Wellington Street	WWNT	6.683
Welshpool	WWEL	3.613
Wembley Downs	WWDN	5.392
West Kalgoorlie	WWKT	12.070
Western Collieries	WWCL	2.055
Western Mining	WWMG	2.415
Westralian Sands	WWSD	5.257
Willetton	WWLN	3.472
Worsley	WWOR	1.705
Wundowie	WWUN	9.677
Yanchep	WYCP	4.611
Yerbillon	WYER	18.023
Yilgarn	WYLN	13.536
Yokine	WYKE	4.995

The prices in the following table are applicable for reference tariffs **RT11** and **TRT2**.

Table 14

Substation	TNI	Use of System Price (c/kW/day)
Albany	WALB	1.942
Boulder	WBLD	1.407
Bluewaters	WBWP	1.956
Cockburn PWS	WCKB	1.186
Collgar	WCGW	2.245
Collie PWS	WCPS	2.276
Emu Downs	WEMD	1.983
Geraldton	WGTN	0.333
Greenough Solar Farm	TMGS	0.424
Kemerton PWS	WKEM	1.581
Kwinana Alcoa	WAKW	1.223
Kwinana Donaldson Road	WKND	0.928
Kwinana PWS	WKPS	1.186
Landwehr (Alinta)	WLWT	1.476
Mason Road	WMSR	0.928
Merredin Power Station	TMDP	1.635
Muja PWS	WMPS	2.388
Mumbida Wind Farm	TMBW	2.012
Mungarra GTs	WMGA	1.976
Newgen Kwinana	WNGK	1.380
Newgen Neerabup	WGNN	1.216
Oakley (Alinta)	WOLY	1.646
Parkeston	WPKS	1.697
Pinjar GTs	WPJR	0.986
Alcoa Pinjarra	WAPJ	1.728

Substation	TNI	Use of System Price (c/kW/day)
Tiwest GT	WKMK	0.959
Wagerup	WWGP	1.361
Walkaway Windfarm	WWWF	2.183
West Kalgoorlie GTs	WWKT	1.380
Worsley	WWOR	1.546

6.3.2 Common Service Prices

The prices in the following table are applicable for reference tariff **TRT1**.

Table 15

	Common Service Price (c/kW/day)
Common Service Price	4.300

6.3.3 Control System Service Prices

The prices in the following table are applicable for reference tariffs **RT11** and **TRT2**.

Table 16

	Price (c/kW/day)
Control System Service Price (Generators)	0.199

The prices in the following table are applicable for reference tariff **TRT1**.

Table 17

	Price (c/kW/day)
Control System Service Price (Loads)	1.624

6.3.4 Metering prices

The prices in the following table are applicable for reference tariffs **TRT1** and **TRT2**.

Table 18

	c/metering unit/day
Transmission Metering	4,233.137

Appendix F.2

2017/18 Price List Information

Amended proposed access arrangement

16 November 2018

Access arrangement for the period
1 July 2017 to 30 June 2022

westernpower

EDM 46274767

An appropriate citation for this paper is:

Appendix F.2

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1. Introduction

This document is Western Power's Price List Information, as defined in the *Electricity Networks Access Code 2004* (the Code), to apply from 1 July 2017.

1.1 Code Requirements

Section 8.1 of the Code requires Western Power to submit Price List Information to the Authority.

The Code defines Price List Information as:

> "price list information" means a document which sets out information which would reasonably be required to enable the Authority, users and applicants to:
>
> (a) Understand how the service provider derived the elements of the proposed price list; and
>
> (b) Assess the compliance of the proposed price list with the Access Arrangement.

The Access Arrangement specifies the form of price control and details the revenue that Western Power is able to earn in each year of the Access Arrangement period. The Access Arrangement contains the detailed price control formula that is applied each year to determine the network tariffs. Network tariffs are set each year to recover no more than the revenue target for that year. In 2017/18 the revenue target is the sum of:

- Western Power's revenue requirement contained in the Access Arrangement plus
- an adjustment for any previous year revenue over or under-recoveries (known as the k-factor adjustment) plus
- an adjustment for the Tariff Equalisation Contribution (TEC)

1.2 2017/18 Foreword

1.2.1 Price List forms part of initial proposal

The 2017/18 Price List forms part of Western Power's initial proposal for the fourth Access Arrangement period (AA4). It covers the 2017/18 financial year, however the prices within were determined for the 2016/17 financial year. This document's primary purpose is to demonstrate the revenue requirement for 2017/18 and the application of the revenue cap formulae detailed in the third access arrangement.

1.3 Revenue requirement for 2017/18

The following sections detail the calculation of the revenue requirements for Western Power's Transmission and Distribution networks.

1.3.1 Maximum Transmission Regulated Revenue

The following table demonstrates the derivation of the maximum transmission regulated revenue for 2017/18 in accordance with section 5.7 of the Access Arrangement.

Table 1 – Maximum Transmission Regulated Revenue for 2017/18 ($M real as at 30 June 2017)

	2017/18
TR_t	280.7
plus TK_t	1.2
MTR_t	**281.9**

The following table details the transmission reference service revenue in nominal terms (please see section 1.3.3 for details of the inflation factor used).

Table 2 - Transmission Revenue Cap Revenue for 2017/18 ($M)

	Revenue (Real)	Revenue (Nominal)
Revenue Cap Revenue ($MTR_{2017/18}$)	281.9	286.1

1.3.2 Maximum Distribution Regulated Revenue

The following table demonstrates the derivation of the maximum distribution regulated revenue for 2017/18 in accordance with section 5.10 of the Access Arrangement.

Table 3 – Maximum Distribution Regulated Revenue for 2017/18 ($M real as at 30 June 2017)

	201718
DR_t	991.5
plus DK_t	36.4
MDR_t (not including TEC_t)	**1,027.9**

The following table details the distribution reference service revenue in nominal terms (please see section 1.3.3 for details of the inflation factor used).

Table 4 - Distribution Revenue Cap Revenue for 2017/18 ($M)

	Revenue (Real)	Revenue (Nominal)
MDR_t (not including TEC_t)	1,027.9	1,043.1
TEC_t		167.0
Revenue Cap Revenue (MDR_{201718})		**1,210.1**

1.3.3 Derivation of Inflation Factor

In sections 1.3.1 and 1.3.2 Western Power has inflated the reference service revenue from real terms to nominal terms by using actual inflation.

Table 5 - Derivation of 2017/18 Inflation Factor

December 2015 – December 2016 – Actual	1.48%
Derived Inflation Factor	1.015

1.4 Forecast revenue recovery

The following table sets out the reference service revenue, which is forecast to be collected when applying the 2017/18 Price List.

Table 6 – Forecast revenue in 2017/18, $M nominal

Transmission revenue	286.1
Distribution revenue	1,210.1
Total revenue cap revenue	**1,496.2**

Appendix F.3

2018/19 Price List

Amended proposed access arrangement

16 November 2018

Access arrangement for the period
1 July 2017 to 30 June 2022

westernpower

EDM 46764114

An appropriate citation for this paper is:

Appendix F.3

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1. Introduction

This document details Western Power's price list. For the purpose of section 5.1(f) of the *Electricity Networks Access Code 2004* this document forms part of Western Power's access arrangement.

For the avoidance of doubt, the prices within this price list have applied since 1 July 2016 and will apply to all consumption from 1 July 2018 until 30 June 2019. 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 in that section provided by Western Power as stated in the access arrangement.

Sections 4 and 5 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 6 details all of the prices that are required to calculate the charges.

2. Reference Services

The following table details which reference tariff is applicable to each of the reference services here listed.

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	RT5
A6 – Low Voltage Metered Demand Exit Service	RT6
A7 – High Voltage Contract Maximum Demand Exit Service	RT7
A8 – Low Voltage Contract Maximum Demand Exit Service	RT8
A9 – Streetlighting Exit Service	RT9
A10 – Un-Metered Supplies Exit Service	RT10
A11 – Transmission Exit Service	TRT1
B1 – Distribution Entry Service	RT11
B2 – Transmission Entry Service	TRT2
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

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. Distribution Tariff Application Guide

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.

4.1 Reference Tariffs 1 and 2 (RT1 and RT2)

Reference Tariffs RT1 and RT2 consist of:

a. a fixed use of system charge (detailed in Table 1) which is payable each day;

b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 1) by the quantity of electricity consumed at an exit point (expressed in kWh);

c. a fixed metering charge per revenue meter (detailed in Table 1) which is payable each day; and

d. a variable metering charge calculated by multiplying the variable price (detailed in Table 1) by the quantity of electricity consumed at an exit point (expressed in kWh).

4.2 Reference Tariffs 3 and 4 (RT3 and RT4)

Reference Tariffs RT3 and RT4 consist of:

a. a fixed use of system charge (detailed in Table 1) 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 1) 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 1) by the quantity of off-peak electricity consumed at an exit point (expressed in kWh);

d. a fixed metering charge per revenue meter (detailed in Table 1) which is payable each day;

e. an on-peak variable metering charge calculated by multiplying the on-peak variable price (detailed in Table 1) by the quantity of on-peak electricity consumed at an exit point (expressed in kWh); and

f. an off-peak variable metering charge calculated by multiplying the off-peak variable price (detailed in Table 1) by the quantity of off-peak electricity consumed at an exit point (expressed in kWh).

Notes:

1. The on and off-peak periods for these tariffs are defined in the following table (all times are Western Standard Time (WST)):

	Monday – Friday (includes public holidays)			Saturday - Sunday
	Off-peak	**On-Peak**	**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

4.3 Reference Tariff 5 (RT5)

4.3.1 Tariff Calculation

Reference Tariff RT5 consists of:

a. a fixed metered demand charge (detailed in Table 4) which is payable each day based on the rolling 12-month maximum half-hourly demand at an exit 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 4) by the rolling 12-month maximum half-hourly demand at an exit 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 7) 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 (detailed in Table 9) which is payable each day.

Notes:

1. The on and off-peak periods for this tariff are defined in the following table (all times are WST):

Monday – Friday (includes public holidays)			Saturday - Sunday
Off-peak	**On-Peak**	**Off-Peak**	**Off-Peak**
12:00am – 8:00am	8:00am – 10:00pm	10:00pm – 12:00am	All times

4.3.2 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 an exit point (expressed in kVA);

DF is the discount factor, which is set at 50%

$E_{Off\ Peak}$ is the total off-peak energy for the billing period (expressed in kWh); and

E_{Total} is the total energy (both on and off peak) for the billing period (expressed in kWh).

Notes:

1. This discount does not apply to the demand-length portion of the charge.

4.4 Reference Tariff 6 (RT6)

4.4.1 Tariff Calculation

Reference Tariff RT6 consists of:

a. a fixed metered demand charge (detailed in Table 5) which is payable each day based on the rolling 12-month maximum half-hourly demand at an exit point (expressed in kVA) multiplied by (1-Discount);

b. a variable metered demand charge (detailed in Table 5) calculated by multiplying the demand price (in excess of lower threshold) by the rolling 12-month maximum half-hourly demand at an exit point (expressed in kVA) minus the lower threshold with the result multiplied by (1-Discount);

c. if the metered demand is equal to or greater than 1,000 kVA a variable demand length charge calculated by multiplying the demand length price (detailed in Table 7) 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 (detailed in Table 9) which is payable each day

Notes:

1. This tariff is similar to RT5 in section 4.3 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):

Monday – Friday (includes public holidays)			Saturday - Sunday
Off-peak	**On-Peak**	**Off-Peak**	**Off-Peak**
12:00am – 8:00am	8:00am – 10:00pm	10:00pm – 12:00am	All times

4.4.2 Discount

The same formula detailed in section 4.3.2 also applies for RT6.

4.5 Reference Tariff 7 (RT7)

4.5.1 Tariff Calculation

Reference Tariff 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 6) which is payable each day; plus

   ii. a variable demand charge calculated by multiplying the applicable demand price (detailed in Table 6) by the CMD at an exit point (expressed in kVA) minus 1,000 kVA; plus

   iii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 7) 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 6) by the CMD at an exit point (expressed in kVA); plus

   ii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 8) 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 (detailed in Table 9) which is payable each day;

d. a fixed administration charge (detailed in Table 10) which is payable each day; and

e. excess network usage charges calculated in accordance with section 4.5.2 (if applicable).

Notes:

1. For exit points located at the zone substation the fixed and demand charge specified in sections 4.5.1 (a)(i), (a)(ii) & (b)(i) is to be calculated using the transmission component only. In all other instances, the fixed and demand charge specified in sections 4.5.1 (a)(i), (a)(ii) & (b)(i) is to be calculated using the bundled charge.

4.5.2 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

$$ENUC_{Transmission} = ENUM * (PD - CMD) * DC_{Transmission} / CMD$$

$ENUC_{Distribution}$	= ENUM * (PD – CMD) * ($DC_{Distribution}$ + DLC) / CMD
ENUM	is the Excess network usage multiplier factor, which is set at 2
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)
$DC_{Transmission}$	are the applicable transmission components of the fixed and variable demand charges for the billing period for the nominated CMD
$DC_{Distribution}$	are the applicable distribution components of the fixed and variable demand 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

Notes:

1. The ENUC does not include the metering or administration components of the tariff.

4.6 Reference Tariff 8 (RT8)

4.6.1 Tariff Calculation

Reference Tariff 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 6) which is payable each day; plus
   ii. a variable demand charge calculated by multiplying the applicable demand price (detailed in Table 6) by the CMD at an exit point (expressed in kVA) minus 1,000 kVA; plus
   iii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 7) 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 6) by the CMD at an exit point (expressed in kVA); plus
   ii. a variable demand length charge calculated by multiplying the demand length price (detailed in Table 8) 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 11) which is payable each day;

d. a variable low voltage charge calculated by multiplying the low voltage demand price (detailed in Table 11) by the CMD at an exit point (expressed in kVA);

e. a fixed metering charge per revenue meter (detailed in Table 9) which is payable each day;

f. a fixed administration charge (detailed in Table 10) which is payable each day; and

g. excess network usage charges calculated in accordance with section 4.6.2 (if applicable).

Notes:

1. This tariff is identical to RT7 in section 4.5, with an additional low voltage charge to cover the use of transformers and LV circuits.

4.6.2 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

$ENUC_{Transmission}$	$= ENUM * (PD - CMD) * DC_{Transmission} / CMD$
$ENUC_{Distribution}$	$= ENUM * (PD - CMD) * (DC_{Distribution} + DLC + LVC) / CMD$
ENUM	is the Excess network usage multiplier factor, which is set at 2
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)
$DC_{Transmission}$	are the applicable transmission components of the fixed and variable demand charges for the billing period for the nominated CMD
$DC_{Distribution}$	are the applicable distribution components of the fixed and variable demand 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
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.

4.7 Reference Tariff 9 (RT9)

Reference Tariff RT9 consists of:

a. a fixed use of system charge (detailed in Table 1) which is payable each day;

b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 1) 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 2 and Table 3).

4.8 Reference Tariff 10 (RT10)

Reference Tariff RT10 consists of:

a. a fixed use of system charge (detailed in Table 1) which is payable each day; and

b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 1) 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 1) which is payable each day; and

b. the variable use of system charge for RT9 calculated by multiplying the energy price (detailed in Table 1) 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).

4.9 Reference Tariff 11 (RT11)

4.9.1 Tariff Calculation

Reference Tariff RT11 consists of:

a. a variable connection charge calculated by multiplying the connection price (detailed in Table 12) by the loss-factor adjusted declared sent-out capacity (DSOC) at the entry point (expressed in kW);

b. a variable control system service charge calculated by multiplying the control system service price (detailed in Table 16) 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 14) 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 7) 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 7) 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 8) 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 8) 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 (detailed in Table 9) which is payable each day; and

g. excess network usage charges calculated in accordance with section 4.9.2 (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 IMO for that generator.
2. For this reference tariff a unity power factor is assumed when converting between kW and kVA.

4.9.2 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

$$ENUC_{Transmission} = ENUM * (PD_{kW} – DSOC_{kW}) * TEPC / DSOC_{kW}$$

$$ENUC_{Distribution} = ENUM * (PD_{kVA} – DSOC_{kVA}) * (DLC) / DSOC_{kVA}$$

ENUM	is the Excess network usage multiplier factor, which is set at 2
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
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.

4.10 Reference Tariffs 13 and 14 (RT13 and RT14)

Reference Tariffs RT13 and RT14 consist of:

a. a fixed use of system charge (detailed in Table 1) which is payable each day;

b. a variable use of system charge calculated by multiplying the energy price (detailed in Table 1) by the quantity of electricity consumed at an exit point (expressed in kWh);

c. a fixed metering charge per revenue meter (detailed in Table 1) which is payable each day; and

d. a variable metering charge calculated by multiplying the variable price (detailed in Table 1) by the quantity of electricity consumed at an exit point (expressed in kWh).

4.11 Reference Tariffs 15 and 16 (RT15 and RT16)

Reference Tariffs RT15 and RT16 consist of:

a. a fixed use of system charge (detailed in Table 1) 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 1) 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 1) by the quantity of off-peak electricity consumed at an exit point (expressed in kWh);

d. a fixed metering charge per revenue meter (detailed in Table 1) which is payable each day;

e. an on-peak variable metering charge calculated by multiplying the on-peak variable price (detailed in Table 1) by the quantity of on-peak electricity consumed at an exit point (expressed in kWh); and

f. an off-peak variable metering charge calculated by multiplying the off-peak variable price (detailed in Table 1) by the quantity of off-peak electricity consumed at an exit point (expressed in kWh).

Notes:

1. The on and off-peak periods for these tariffs are defined in the following table (all times are WST):

	Monday – Friday (includes public holidays)			Saturday - Sunday
	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. Transmission Tariff Application Guide

5.1 Transmission Reference Tariff 1 (TRT1)

5.1.1 Tariff Calculation

Reference Tariff 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 13 or where there is no applicable use of system price in Table 13 for the exit point, the price calculated by Western Power in accordance with Appendix A of the 2016/17 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 15) 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 17) by the CMD at the exit point (expressed in kW);

e. a fixed metering charge per revenue meter (detailed in Table 18) which is payable each day; and

f. excess network usage charges calculated in accordance with section 5.1.2 (if applicable).

5.1.2 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 set at 2
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

Note: The ENUC does not include the metering components of the tariff.

5.2 Transmission Reference Tariff 2 (TRT2)

5.2.1 Tariff Calculation

Reference Tariff 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 14 or where there is no applicable use of system price in Table 14 for the entry point, the price calculated by Western Power in accordance with Appendix A of the 2016/17 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 16) 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 18) which is payable each day; and

e. excess network usage charges calculated in accordance with section 5.2.2 (if applicable).

5.2.2 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:

$$ENUC = ENUM * (PD - DSOC) * (UOS + CON + CSS) / DSOC$$

Where

ENUM	is the Excess network usage multiplier factor, which is set at 2
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
CSS	is the applicable variable control system service charge for the billing period

Note: The ENUC does not include the metering components of the tariff.

6. Price Tables

The tables in the following sections must be used in conjunction with the details in the sections above.

Table 6, Table 13 and Table 14 include a Transmission Node Identity (TNI) to uniquely identify zone substations.

All prices quoted in this Price List are **GST exclusive**.

6.1 Prices for energy-based tariffs on the distribution network

6.1.1 Use of system and metering prices

The prices in the following tables are applicable for reference tariffs **RT1, RT2, RT3, RT4, RT9, RT10, RT13, RT14, RT15** and **RT16.**

Table 1

	Fixed Price	Energy Rates		
	c/day	c/kWh	On Peak c/kWh	Off Peak c/kWh
Reference tariff 1 - RT1				
Transmission	0.000	1.496	-	-
Distribution	82.444	6.448	-	-
Bundled Tariff	82.444	7.944	-	-
Metering	3.834	0.800	-	-
Reference tariff 2 - RT2				
Transmission	0.000	1.775	-	-
Distribution	152.112	8.983	-	-
Bundled Tariff	152.112	10.758	-	-
Metering	3.834	0.800	-	-
Reference tariff 3 - RT3				
Transmission	0.000	-	2.704	0.568
Distribution	82.444	-	11.017	2.518
Bundled Tariff	82.444	-	13.721	3.086
Metering	3.834	-	1.020	1.020
Reference tariff 4 - RT4				

	Fixed Price	Energy Rates		
	c/day	c/kWh	On Peak c/kWh	Off Peak c/kWh
Transmission	0.000	-	2.796	0.675
Distribution	293.150	-	12.288	2.746
Bundled Tariff	293.150	-	15.084	3.421
Metering	7.668	-	0.270	0.270
Reference tariff 9 – RT9				
Transmission	0.000	0.940	-	-
Distribution	6.979	3.434	-	-
Bundled Tariff	6.979	4.374	-	-
Reference tariff 10 – RT10				
Transmission	0.000	0.620	-	-
Distribution	54.899	3.706	-	-
Bundled Tariff	54.899	4.326	-	-
Reference tariff 13 - RT13				
Transmission	0.000	1.496	-	-
Distribution	82.444	6.448	-	-
Bundled Tariff	82.444	7.944	-	-
Metering	3.834	0.800	-	-
Reference tariff 14 - RT14				
Transmission	0.000	1.775	-	-
Distribution	152.112	8.983	-	-
Bundled Tariff	152.112	10.758	-	-
Metering	3.834	0.800	-	-
Reference tariff 15 - RT15				
Transmission	0.000	-	2.704	0.568
Distribution	82.444	-	11.017	2.518
Bundled Tariff	82.444	-	13.721	3.086

	Fixed Price	Energy Rates		
	c/day	c/kWh	On Peak c/kWh	Off Peak c/kWh
Metering	3.834	-	1.020	1.020
Reference tariff 16 - RT16				
Transmission	0.000	-	2.796	0.675
Distribution	293.150	-	12.288	2.746
Bundled Tariff	293.150	-	15.084	3.421
Metering	7.668	-	0.270	0.270

6.1.2 Streetlight asset prices

The prices in the following table are applicable for reference tariff **RT9**.

Table 2 – Current light types

Light Specification	Daily Charge c/day
42W CFL SE	27.830
42W CFL BH	29.577
42W CFL KN	33.331
70W MH	48.648
70W HPS	23.926
125W MV	28.960
150W MH	56.206
150W HPS	31.474
250W MH	56.206
250W HPS	31.474
22W LED	16.656

Table 3 – Obsolete light types

Light Specification	Daily Charge c/day
50W MV	17.306
70W MV	23.293
80W MV	23.293
150W MV	28.960
250W MV	37.778
400W MV	39.665
40W FLU	17.306
80W HPS	23.926
125W HPS	31.474
100W INC	17.306
80W MH	23.293
125W MH	56.206

6.2 Prices for demand-based tariffs on the distribution network (RT5 to RT8 and RT11[1])

6.2.1 Demand charges

The prices in the following table are applicable for reference tariff **RT5**.

Table 4

	Transmission		Distribution		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	17.868	191.351	60.778	191.351	78.646
300 to 1000	5,360.400	13.228	18,424.751	43.386	23,785.151	56.614
1000 to 1500	14,620.000	7.557	48,794.951	18.723	63,414.951	26.280

The prices in the following table are applicable for reference tariff **RT6**.

Table 5

	Transmission		Distribution		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	17.868	1,098.170	62.808	1,098.170	80.676
300 to 1000	5,360.400	13.228	19,940.570	47.816	25,300.970	61.044
1000 to 1500	14,620.000	7.557	53,411.770	24.318	68,031.770	31.875

1 Note that some components of RT11 are in section 6.3

The prices in the following table are applicable for reference tariffs **RT7** and **RT8**.

Table 6

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Cook Street	WCKT	CBD	13,424.658	14.439	14.294	32,919.726	11.806	14.822	46,344.384	26.245	29.116
Forrest Avenue	WFRT	CBD	13,424.658	14.439	14.294	32,919.726	11.806	14.822	46,344.384	26.245	29.116
Hay Street	WHAY	CBD	13,424.658	14.439	14.294	32,919.726	11.806	14.822	46,344.384	26.245	29.116
Milligan Street	WMIL	CBD	13,424.658	14.439	14.294	32,919.726	11.806	14.822	46,344.384	26.245	29.116
Wellington Street	WWNT	CBD	13,424.658	14.439	14.294	32,919.726	11.806	14.822	46,344.384	26.245	29.116
Black Flag	WBKF	Goldfields Mining	13,424.658	28.526	26.369	32,919.726	6.340	10.137	46,344.384	34.866	36.506
Boulder	WBLD	Goldfields Mining	13,424.658	26.344	24.498	32,919.726	6.340	10.137	46,344.384	32.684	34.635
Bounty	WBNY	Goldfields Mining	13,424.658	50.000	44.775	32,919.726	6.340	10.137	46,344.384	56.340	54.912
West Kalgoorlie	WWKT	Goldfields Mining	13,424.658	23.544	22.098	32,919.726	6.340	10.137	46,344.384	29.884	32.235
Albany	WALB	Mixed	13,424.658	27.272	25.294	32,919.726	13.915	16.630	46,344.384	41.187	41.924
Boddington	WBOD	Mixed	13,424.658	13.283	13.303	32,919.726	13.915	16.630	46,344.384	27.198	29.933
Bunbury Harbour	WBUH	Mixed	13,424.658	12.990	13.052	32,919.726	13.915	16.630	46,344.384	26.905	29.682
Busselton	WBSN	Mixed	13,424.658	18.865	18.088	32,919.726	13.915	16.630	46,344.384	32.780	34.718
Byford	WBYF	Mixed	13,424.658	13.964	13.887	32,919.726	13.915	16.630	46,344.384	27.879	30.517
Capel	WCAP	Mixed	13,424.658	16.761	16.284	32,919.726	13.915	16.630	46,344.384	30.676	32.914
Chapman	WCPN	Mixed	13,424.658	22.376	21.097	32,919.726	13.915	16.630	46,344.384	36.291	37.727
Darlington	WDTN	Mixed	13,424.658	15.607	15.295	32,919.726	13.915	16.630	46,344.384	29.522	31.925
Durlacher Street	WDUR	Mixed	13,424.658	20.200	19.232	32,919.726	13.915	16.630	46,344.384	34.115	35.862

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Eneabba	WENB	Mixed	13,424.658	18.978	18.185	32,919.726	13.915	16.630	46,344.384	32.893	34.815
Geraldton	WGTN	Mixed	13,424.658	20.200	19.232	32,919.726	13.915	16.630	46,344.384	34.115	35.862
Marriott Road	WMRR	Mixed	13,424.658	12.543	12.669	32,919.726	13.915	16.630	46,344.384	26.458	29.299
Muchea	WMUC	Mixed	13,424.658	15.477	15.184	32,919.726	13.915	16.630	46,344.384	29.392	31.814
Northam	WNOR	Mixed	13,424.658	20.914	19.844	32,919.726	13.915	16.630	46,344.384	34.829	36.474
Picton	WPIC	Mixed	13,424.658	14.034	13.947	32,919.726	13.915	16.630	46,344.384	27.949	30.577
Rangeway	WRAN	Mixed	13,424.658	21.535	20.376	32,919.726	13.915	16.630	46,344.384	35.450	37.006
Sawyers Valley	WSVY	Mixed	13,424.658	19.145	18.328	32,919.726	13.915	16.630	46,344.384	33.060	34.958
Yanchep	WYCP	Mixed	13,424.658	15.425	15.139	32,919.726	13.915	16.630	46,344.384	29.340	31.769
Yilgarn	WYLN	Mixed	13,424.658	25.470	23.749	32,919.726	13.915	16.630	46,344.384	39.385	40.379
Baandee	WBDE	Rural	13,424.658	28.454	26.307	32,919.726	6.180	10.000	46,344.384	34.634	36.307
Beenup	WBNP	Rural	13,424.658	30.621	28.164	32,919.726	6.180	10.000	46,344.384	36.801	38.164
Bridgetown	WBTN	Rural	13,424.658	18.551	17.819	32,919.726	6.180	10.000	46,344.384	24.731	27.819
Carrabin	WCAR	Rural	13,424.658	31.287	28.735	32,919.726	6.180	10.000	46,344.384	37.467	38.735
Collie	WCOE	Rural	13,424.658	21.991	20.767	32,919.726	6.180	10.000	46,344.384	28.171	30.767
Coolup	WCLP	Rural	13,424.658	24.815	23.188	32,919.726	6.180	10.000	46,344.384	30.995	33.188
Cunderdin	WCUN	Rural	13,424.658	26.172	24.351	32,919.726	6.180	10.000	46,344.384	32.352	34.351
Katanning	WKAT	Rural	13,424.658	23.855	22.365	32,919.726	6.180	10.000	46,344.384	30.035	32.365
Kellerberrin	WKEL	Rural	13,424.658	27.702	25.662	32,919.726	6.180	10.000	46,344.384	33.882	35.662
Kojonup	WKOJ	Rural	13,424.658	16.457	16.024	32,919.726	6.180	10.000	46,344.384	22.637	26.024
Kondinin	WKDN	Rural	13,424.658	17.748	17.130	32,919.726	6.180	10.000	46,344.384	23.928	27.130
Manjimup	WMJP	Rural	13,424.658	18.401	17.690	32,919.726	6.180	10.000	46,344.384	24.581	27.690
Margaret River	WMRV	Rural	13,424.658	23.943	22.440	32,919.726	6.180	10.000	46,344.384	30.123	32.440
Merredin	WMER	Rural	13,424.658	25.096	23.429	32,919.726	6.180	10.000	46,344.384	31.276	33.429
Moora	WMOR	Rural	13,424.658	18.598	17.859	32,919.726	6.180	10.000	46,344.384	24.778	27.859
Mount Barker	WMBR	Rural	13,424.658	25.023	23.366	32,919.726	6.180	10.000	46,344.384	31.203	33.366

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Narrogin	WNGN	Rural	13,424.658	28.269	26.148	32,919.726	6.180	10.000	46,344.384	34.449	36.148
Pinjarra	WPNJ	Rural	13,424.658	13.147	13.187	32,919.726	6.180	10.000	46,344.384	19.327	23.187
Regans	WRGN	Rural	13,424.658	19.198	18.373	32,919.726	6.180	10.000	46,344.384	25.378	28.373
Three Springs	WTSG	Rural	13,424.658	18.541	17.810	32,919.726	6.180	10.000	46,344.384	24.721	27.810
Wagerup	WWGP	Rural	13,424.658	12.514	12.644	32,919.726	6.180	10.000	46,344.384	18.694	22.644
Wagin	WWAG	Rural	13,424.658	24.195	22.656	32,919.726	6.180	10.000	46,344.384	30.375	32.656
Wundowie	WWUN	Rural	13,424.658	21.095	19.999	32,919.726	6.180	10.000	46,344.384	27.275	29.999
Yerbillon	WYER	Rural	13,424.658	30.475	28.039	32,919.726	6.180	10.000	46,344.384	36.655	38.039
Amherst	WAMT	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Arkana	WARK	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Australian Paper Mills	WAPM	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Balcatta	WBCT	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Beechboro	WBCH	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Belmont	WBEL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Bentley	WBTY	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Bibra Lake	WBIB	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
British Petroleum	WBPM	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Canning Vale	WCVE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Clarence Street	WCLN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Clarkson	WCKN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Cockburn Cement	WCCT	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Collier	WCOL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Cottesloe	WCTE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Edmund Street	WEDD	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Forrestfield	WFFD	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Gosnells	WGNL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Hadfields	WHFS	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Hazelmere	WHZM	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Henley Brook	WHBK	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Herdsman Parade	WHEP	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Joel Terrace	WJTE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Joondalup	WJDP	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Kalamunda	WKDA	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Kambalda	WKBA	Urban	13,424.658	26.160	24.341	32,919.726	2.696	7.014	46,344.384	28.856	31.355
Kewdale	WKDL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Landsdale	WLDE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Maddington	WMDN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Malaga	WMLG	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Mandurah	WMHA	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Manning Street	WMAG	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Mason Road	WMSR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Meadow Springs	WMSS	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Medical Centre	WMCR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Medina	WMED	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Midland Junction	WMJX	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Morley	WMOY	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Mullaloo	WMUL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Mundaring Weir	WMWR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Munday	WMDY	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Murdoch	WMUR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Myaree	WMYR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Nedlands	WNED	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
North Beach	WNBH	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
North Fremantle	WNFL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
North Perth	WNPH	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
O'Connor	WOCN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Osborne Park	WOPK	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Padbury	WPBY	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Piccadilly	WPCY	Urban	13,424.658	24.631	23.030	32,919.726	2.696	7.014	46,344.384	27.327	30.044
Riverton	WRTN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Rivervale	WRVE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Rockingham	WROH	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Shenton Park	WSPA	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Sth Ftle Power Station	WSFT	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Southern River	WSNR	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Tate Street	WTTS	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
University	WUNI	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Victoria Park	WVPA	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Waikiki	WWAI	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Wangara	WWGA	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Wanneroo	WWNO	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Welshpool	WWEL	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000	Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000	Demand Charge for kVA > 7000
Wembley Downs	WWDN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Willetton	WWLN	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632
Yokine	WYKE	Urban	13,424.658	14.817	14.618	32,919.726	2.696	7.014	46,344.384	17.513	21.632

6.2.2 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 7

	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	1.662	1.163
Mining	0.352	0.246
Mixed	0.767	0.537
Rural	0.479	0.336

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 8

	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	1.425	0.997
Mining	0.301	0.211
Mixed	0.658	0.460
Rural	0.411	0.288

6.2.3 Metering prices

The prices in the following table are applicable for reference tariffs **RT5, RT6, RT7, RT8** and **RT11**.

Table 9

Metering Equipment Funding	Voltage	c/revenue meter/day
Western Power funded	High Voltage (6.6 kV or higher)	1127.730
	Low voltage (415 volts or less)	203.207
Customer funded	High Voltage (6.6 kV or higher)	550.278
	Low Voltage (415 volts or less)	99.155

6.2.4 Administration charges

The prices in the following table are applicable for reference tariffs **RT7** and **RT8**.

Table 10

CMD	Price (c/day)
>=7,000 kVA	8,732.000
<7,000 kVA	5,015.000

6.2.5 LV Prices

The prices in the following table are applicable for reference tariff **RT8**.

Table 11

Category	Price (c/day)
Fixed	1,068.986
Demand	10.111/kVA

6.2.6 Connection Price

The prices in the following table are applicable for reference tariff **RT11**.

Table 12

	Connection Price (c/kW/day)
Connection Price	1.290

6.3 Transmission prices

6.3.1 Use of system prices

The prices in the following table are applicable for reference tariff **TRT1**.

Table 13

Substation	TNI	Use of System Price (c/kW/day)
Albany	WALB	15.137
Alcoa Pinjarra	WAPJ	4.293
Amherst	WAMT	3.603
Arkana	WARK	4.599
Australian Fused Materials	WAFM	2.986
Australian Paper Mills	WAPM	4.656
Baandee (WC)	WBDE	16.225
Balcatta	WBCT	4.712
Beckenham	WBEC	11.887
Beechboro	WBCH	4.185
Beenup	WBNP	18.152
Belmont	WBEL	3.709
Bentley	WBTY	4.828
Bibra Lake	WBIB	3.315
Binningup Desalination Plant	WBDP	2.561
Black Flag	WBKF	16.545

Substation	TNI	Use of System Price (c/kW/day)
Boddington Gold Mine	WBGM	2.777
Boddington	WBOD	2.707
Boulder	WBLD	14.586
Bounty	WBNY	35.831
Bridgetown	WBTN	7.414
British Petroleum	WBPM	6.402
Broken Hill Kwinana	WBHK	4.996
Bunbury Harbour	WBUH	2.448
Busselton	WBSN	7.668
Byford	WBYF	3.313
Canning Vale	WCVE	3.789
Capel	WCAP	5.798
Carrabin	WCAR	18.745
Cataby Kerr McGee	WKMC	6.914
Chapman	WCPN	10.787
Clarence Street	WCLN	6.226
Clarkson	WCKN	4.695
Cockburn Cement	WCCT	2.602
Cockburn Cement Ltd	WCCL	2.594
Collie	WCOE	10.474
Collier	WCOL	6.197
Cook Street	WCKT	4.459
Coolup	WCLP	12.987
Cottesloe	WCTE	4.829
Cunderdin	WCUN	14.195
Darlington	WDTN	4.773
Edgewater	WEDG	4.134

Substation	TNI	Use of System Price (c/kW/day)
Edmund Street	WEDD	4.254
Eneabba	WENB	7.768
Forrest Ave	WFRT	6.234
Forrestfield	WFFD	4.887
Geraldton	WGTN	8.853
Glen Iris	WGNI	2.889
Golden Grove	WGGV	23.204
Gosnells	WGNL	3.933
Hadfields	WHFS	4.728
Hay Street	WHAY	4.728
Hazelmere	WHZM	3.665
Henley Brook	WHBK	4.040
Herdsman Parade	WHEP	7.170
Joel Terrace	WJTE	6.507
Joondalup	WJDP	4.430
Kalamunda	WKDA	4.993
Katanning	WKAT	12.133
Kellerberrin	WKEL	15.555
Kewdale	WKDL	3.635
Kojonup	WKOJ	5.551
Kondinin	WKDN	6.699
Kwinana Alcoa	WAKW	1.149
Kwinana Desalination Plant	WKDP	3.153
Kwinana PWS	WKPS	2.303
Landsdale	WLDE	4.261
Maddington	WMDN	3.829
Malaga	WMLG	3.639

Substation	TNI	Use of System Price (c/kW/day)
Mandurah	WMHA	3.126
Manjimup	WMJP	7.280
Manning Street	WMAG	5.292
Margaret River	WMRV	12.211
Marriott Road Barrack Silicon Smelter	WBSI	2.342
Marriott Road	WMRR	2.050
Mason Road	WMSR	1.828
Mason Road CSBP	WCBP	2.765
Mason Road Kerr McGee	WKMK	1.675
Meadow Springs	WMSS	3.545
Medical Centre	WMCR	5.609
Medina	WMED	2.639
Merredin 66kV	WMER	13.237
Midland Junction	WMJX	4.454
Milligan Street	WMIL	5.281
Moora	WMOR	7.456
Morley	WMOY	4.856
Mt Barker	WMBR	13.172
Muchea Kerr McGee	WKMM	7.035
Muchea	WMUC	4.658
Muja PWS	WMPS	1.400
Mullaloo	WMUL	4.577
Munday	WMDY	4.933
Murdoch	WMUR	2.951
Mundaring Weir	WMWR	7.147
Myaree	WMYR	5.638
Narrogin	WNGN	16.059

Substation	TNI	Use of System Price (c/kW/day)
Nedlands	WNED	5.280
North Beach	WNBH	4.712
North Fremantle	WNFL	4.740
North Perth	WNPH	4.022
Northam	WNOR	9.488
Nowgerup	WNOW	5.435
O'Connor	WOCN	4.917
Osborne Park	WOPK	5.110
Padbury	WPBY	4.774
Parkeston	WPRK	16.603
Parklands	WPLD	3.644
Piccadilly	WPCY	13.204
Picton 66kv	WPIC	3.375
Pinjarra	WPNJ	2.606
Rangeway	WRAN	10.040
Regans	WRGN	7.989
Riverton	WRTN	3.263
Rivervale	WRVE	5.072
Rockingham	WROH	2.795
Sawyers Valley	WSVY	7.917
Shenton Park	WSPA	5.492
Southern River	WSNR	3.425
South Fremantle 22kV	WSFT	3.551
Summer St	WSUM	6.716
Sutherland	WSRD	4.022
Tate Street	WTTS	5.671
Three Springs	WTSG	7.405

Substation	TNI	Use of System Price (c/kW/day)
Three Springs Terminal (Karara)	WTST	17.883
Tomlinson Street	WTLN	5.746
University	WUNI	6.089
Victoria Park	WVPA	5.545
Wagerup	WWGP	2.042
Wagin	WWAG	12.435
Waikiki	WWAI	3.056
Wangara	WWGA	4.375
Wanneroo	WWNO	4.605
Wellington Street	WWNT	6.683
Welshpool	WWEL	3.613
Wembley Downs	WWDN	5.392
West Kalgoorlie	WWKT	12.070
Western Collieries	WWCL	2.055
Western Mining	WWMG	2.415
Westralian Sands	WWSD	5.257
Willetton	WWLN	3.472
Worsley	WWOR	1.705
Wundowie	WWUN	9.677
Yanchep	WYCP	4.611
Yerbillon	WYER	18.023
Yilgarn	WYLN	13.536
Yokine	WYKE	4.995

The prices in the following table are applicable for reference tariffs **RT11** and **TRT2**.

Table 14

Substation	TNI	Use of System Price (c/kW/day)
Albany	WALB	1.942
Boulder	WBLD	1.407
Bluewaters	WBWP	1.956
Cockburn PWS	WCKB	1.186
Collgar	WCGW	2.245
Collie PWS	WCPS	2.276
Emu Downs	WEMD	1.983
Geraldton	WGTN	0.333
Greenough Solar Farm	TMGS	0.424
Kemerton PWS	WKEM	1.581
Kwinana Alcoa	WAKW	1.223
Kwinana Donaldson Road	WKND	0.928
Kwinana PWS	WKPS	1.186
Landwehr (Alinta)	WLWT	1.476
Mason Road	WMSR	0.928
Merredin Power Station	TMDP	1.635
Muja PWS	WMPS	2.388
Mumbida Wind Farm	TMBW	2.012
Mungarra GTs	WMGA	1.976
Newgen Kwinana	WNGK	1.380
Newgen Neerabup	WGNN	1.216
Oakley (Alinta)	WOLY	1.646
Parkeston	WPKS	1.697
Pinjar GTs	WPJR	0.986
Alcoa Pinjarra	WAPJ	1.728

Substation	TNI	Use of System Price (c/kW/day)
Tiwest GT	WKMK	0.959
Wagerup	WWGP	1.361
Walkaway Windfarm	WWWF	2.183
West Kalgoorlie GTs	WWKT	1.380
Worsley	WWOR	1.546

6.3.2 Common Service Prices

The prices in the following table are applicable for reference tariff **TRT1**.

Table 15

	Common Service Price (c/kW/day)
Common Service Price	4.300

6.3.3 Control System Service Prices

The prices in the following table are applicable for reference tariffs **RT11** and **TRT2**.

Table 16

	Price (c/kW/day)
Control System Service Price (Generators)	0.199

The prices in the following table are applicable for reference tariff **TRT1**.

Table 17

	Price (c/kW/day)
Control System Service Price (Loads)	1.624

6.3.4 Metering prices

The prices in the following table are applicable for reference tariffs **TRT1** and **TRT2**.

Table 18

	c/metering unit/day
Transmission Metering	4,233.137

Appendix F.4

2018/19 Price List Information

Amended proposed access arrangement

16 November 2018

access arrangement for the period
1 July 2017 to 30 June 2022

westernpower

EDM 46766030

An appropriate citation for this paper is:

Appendix F.4

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1. Introduction

This document is Western Power's Price List Information, as defined in the *Electricity Networks Access Code 2004* (the Code), to apply from 1 July 2018.

1.1 Code Requirements

Section 8.1 of the Code requires Western Power to submit Price List Information to the Authority.

The Code defines Price List Information as:

> "price list information" means a document which sets out information which would reasonably be required to enable the Authority, users and applicants to:
>
> (a) Understand how the service provider derived the elements of the proposed price list; and
>
> (b) Assess the compliance of the proposed price list with the access arrangement.

The access arrangement specifies the form of price control and details the revenue that Western Power is able to earn in each year of the access arrangement period. The access arrangement contains the detailed price control formula that is applied each year to determine the network tariffs. Network tariffs are set each year to recover no more than the revenue target. For 2018/19 the revenue target is the sum of:

- Western Power's revenue requirement contained in the access arrangement plus
- an adjustment for any previous year revenue over or under-recoveries (known as the k-factor adjustment) plus
- an adjustment for the Tariff Equalisation Contribution (TEC).

1.2 2018/19 Foreword

1.2.1 Price List forms part of proposal

The 2018/19 Price List forms part of Western Power's proposal for the fourth access arrangement period (AA4). It covers the 2018/19 financial year, however the prices within were determined for the 2016/17 financial year and have applied since that time, due to the delays with the AA4 review process. This document's primary purpose is to demonstrate the revenue requirement for 2018/19.

1.3 Revenue requirement for 2018/19

The following sections detail the calculation of the revenue requirements for Western Power's Transmission and Distribution networks.

1.3.1 Maximum Transmission Regulated Revenue

The following table demonstrates the derivation of the transmission regulated revenue for 2018/19 in accordance with section 5.7 of the access arrangement.

Table 1 –Maximum Transmission Regulated Revenue for 2018/19 ($M real as at 30 June 2017)

	2018/19
TR_t	282.1
plus TK_t	0
MTR_t	**282.1**

The following table details the transmission reference service revenue in nominal terms (please see section 1.3.3 for details of the inflation factor used).

Table 2 - Transmission Revenue Cap Revenue for 2018/19 ($M)

	Revenue (Real)	Revenue (Nominal)
Revenue Cap Revenue ($MTR_{2018/19}$)	282.1	291.7

1.3.2 Maximum Distribution Regulated Revenue

The following table demonstrates the derivation of the distribution regulated revenue for 2018/19 in accordance with section 5.10 of the access arrangement.

Table 3 –Maximum Distribution Regulated Revenue for 2018/19 ($M real as at 30 June 2017)

	2018/19
DR_t	983.6
plus DK_t	0
MDR_t (not including TEC_t)	**983.6**

The following table details the distribution revenue in nominal terms (please see section 1.3.3 for details of the inflation factor used).

Table 4 - Distribution Revenue Cap Revenue for 2018/19 ($M)

	Revenue (Real)	Revenue (Nominal)
MDR_t (not including TEC_t)	983.6	1,021.0
TEC_t		198.0
Revenue Cap Revenue ($MDR_{2018/19}$)		1,219.0

1.3.3 Derivation of Inflation Factor

In sections 1.3.1 and 1.3.2 Western Power has inflated the reference service revenue from real terms to nominal terms by using real inflation.

Table 5 - Derivation of 2018/19 Inflation Factor

December 2015 – December 2016 – Actual	1.48%
December 2016 – December 2017 – Actual	1.91%
Derived Inflation Factor	1.034

1.4 Forecast revenue recovery

The following table sets out the reference service revenue, which is forecast to be collected when applying the 2018/19 Price List.

Table 6 – Forecast revenue in 2018/19, $M nominal

Transmission revenue	291.7
Distribution revenue	1,219.0
Total revenue cap revenue	1,510.7

Appendix F.5

2019/20 Price List

Amended proposed access arrangement

16 November 2018

Access arrangement for the period
1 July 2017 to 30 June 2022

westernpower

EDM 46281208

An appropriate citation for this paper is:

Appendix F.5

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1. Introduction

This document details Western Power's Price List. For the purpose of section 5.1(f) of the *Electricity Networks Access Code 2004* this document forms part of Western Power's Access Arrangement.

This Price List is for the pricing year commencing on 1 July 2019 and ending on 30 June 2020.

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 3 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 7.4 details all of 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

Reference service	Reference tariff
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
D1 – Supply Abolishment (Whole Current Metering) 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

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 Table 11) by the quantity of electricity consumed at an exit point (expressed in kWh); and

c. a fixed metering charge per revenue meter (detailed in Table 21) 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;

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 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 (detailed in Table 21) 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	**On-Peak**	**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. 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 (detailed in Table 21) which is payable each day.

Notes:

1. If a user reduces its contracted capacity at a connection point pursuant to its access contract and clause 10.2 of the Applications and Queuing Policy to a contracted capacity that is less than the 'rolling 12-month maximum half-hourly demand' then for the purposes of calculating parts a. and b. of the RT5 tariff the 'rolling 12-month maximum half-hourly demand' shall be the reduced contracted capacity amount as from the date the contracted capacity reduction is accepted by Western Power. The effect of this is that the reduced contracted capacity will replace the historical rolling 12-months of maximum half-hourly demand data.
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 (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

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 $(E_{Off\text{-}peak}/E_{Total}) * DF$

For 1,000 <= MD <1,500 kVA $((1500 - MD)/500) * (E_{Off\text{-}peak}/E_{Total}) * DF$

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%;
$E_{Off\text{-}peak}$	is the total off-peak energy for the billing period (expressed in kWh); and
E_{Total}	is the total energy (both on and off-peak) for the billing period (expressed in kWh).

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. 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);

b. 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 equal to or 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 (detailed in Table 21) 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	3:00pm – 9:00pm	9:00pm – 12:00am	All times

3. If a user reduces its contracted capacity at a connection point pursuant to its access contract and clause 10.2 of the Applications and Queuing Policy to a contracted capacity that is less than the 'rolling 12-month maximum half-hourly demand' then for the purposes of calculating parts a. and b. of the RT5 tariff the 'rolling 12-month maximum half-hourly demand' shall be the reduced contracted capacity amount as from the date the contracted capacity reduction is accepted by Western Power. The effect of this is that the reduced contracted capacity will replace the historical rolling 12-months of maximum half-hourly demand data.

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:
   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 metering charge per revenue meter (detailed in Table 21) which is payable each day;

d. a fixed administration charge (detailed in Table 22) 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

$ENUC_{Transmission}$	$= ENUM * (PD – CMD) * DC_{Transmission} / CMD$;
$ENUC_{Distribution}$	$= ENUM * (PD – CMD) * (DC_{Distribution} + DLC) / CMD$;
ENUM	is the Excess network usage multiplier factor, which is defined in Table 30;
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);
$DC_{Transmission}$	are the applicable transmission components of the fixed and variable demand charges for the billing period for the nominated CMD;
$DC_{Distribution}$	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 23) which is payable each day;

d. a variable low voltage charge calculated by multiplying the low voltage demand price (detailed in Table 23) by the CMD (expressed in kVA);

e. a fixed metering charge per revenue meter (detailed in Table 21) which is payable each day;

f. a fixed administration charge (detailed in Table 22) 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;

ENUM	is the Excess network usage multiplier factor, which is defined in Table 30;
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);
$DC_{Transmission}$	are the applicable transmission components of the fixed and variable demand charges for the billing period for the nominated CMD;
$DC_{Distribution}$	are the applicable distribution components of the fixed and variable demand 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

b. 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. a variable connection charge calculated by multiplying the connection price (detailed in Table 24) by the loss-factor adjusted declared sent-out capacity (DSOC) at the entry point (expressed in kW);

b. a variable control system service charge calculated by multiplying the control system service price (detailed in Table 28) 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 26) 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 (detailed in Table 21) 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

$$ENUC_{Transmission} = ENUM * (PD_{kW} – DSOC_{kW}) * TEPC / DSOC_{kW};$$

$$ENUC_{Distribution} = ENUM * (PD_{kVA} – DSOC_{kVA}) * (DLC) / DSOC_{kVA};$$

ENUM is the Excess network usage multiplier factor, which is defined in Table 30;

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 (detailed in Table 21) 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 (detailed in Table 21) 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;

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 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 (detailed in Table 21) 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 – RT17 and RT18

Monday – Friday (excludes public holidays)				Saturday – Sunday (includes public holidays)
Off-peak	**Shoulder**	**On-Peak**	**Off-Peak**	**Off-Peak**
12:00am – 12:00pm	12:00pm – 3:00pm	3:00pm – 9:00pm	9:00pm – 12:00am	All times

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;

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 (detailed in Table 21) 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 (excludes public holidays)				Saturday – Sunday (includes public holidays)
Off-peak	**Shoulder**	**On-Peak**	**Off-Peak**	**Off-Peak**
12:00am – 12:00pm	12:00pm – 3:00pm	3:00pm – 9:00pm	9:00pm – 12:00am	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;

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 (detailed in Table 21) 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 (excludes public holidays)				Saturday – Sunday (includes public holidays)
Off-peak	**Shoulder**	**On-Peak**	**Off-Peak**	**Off-Peak**
12:00am – 12:00pm	12:00pm – 3:00pm	3:00pm – 9:00pm	9:00pm – 12:00am	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;

b. 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. 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 (detailed in Table 21) 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

Monday – Friday (excludes public holidays)					Saturday – Sunday (includes public holidays)	
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;

b. 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 (detailed in Table 21) 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 – Sunday (includes public holidays)	
Off-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 (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 25) or where there is no applicable use of system price in Table 25 for the exit point, the price calculated by Western Power in accordance with Appendix A of the 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 27) 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 29) 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 30;
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 26) or where there is no applicable use of system price in Table 26 for the entry point, the price calculated by Western Power in accordance with Appendix A of the 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 28 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:

$$ENUC = ENUM * (PD – DSOC) * (UOS + CON + CSS) / DSOC$$

Where

ENUM	is the Excess network usage multiplier factor, which is defined in Table 30;
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
CSS	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) to provide benefits to the Western Power Network that defer its' capital and non-capital costs.

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 providing a network benefit to Western Power, 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) to provide benefits to the Western Power network that defer its' capital and non-capital costs.

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 providing a network benefit to Western Power, 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.

7.3 Reference Tariff 25 (RT25)

7.3.1 Tariff calculation

RT25 consists of a charge per connection point supply abolishment (detailed in Table 31).

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 32).

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 32).

7.6 Reference Tariff 28 (RT28)

7.6.1 Tariff calculation

RT28 consists of a charge per request for de-energisation (detailed in Table 32).

7.7 Reference Tariff 29 (RT29)

7.7.1 Tariff calculation

RT29 consists of a charge per request for re-energisation (detailed in Table 32).

8. Price tables

The tables in the following sections must be used in conjunction with the details in the sections above.

Table 18, Table 25 and Table 26 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	2.027			
Distribution	86.850	6.399			
Bundled tariff	86.850	8.426			
Reference tariff 2 - RT2					
Transmission	0.000	2.448			
Distribution	164.423	8.867			
Bundled tariff	164.423	11.315			
Reference tariff 3 - RT3					
Transmission	0.000		3.663		0.769
Distribution	86.850		10.901		2.502
Bundled tariff	86.850		14.564		3.271
Reference tariff 4 - RT4					
Transmission	0.000		3.788		0.914
Distribution	299.580		12.142		2.725

	Fixed Price	Energy Rates			
	c/day	Anytime c/kWh	On-Peak c/kWh	Shoulder c/kWh	Off-peak c/kWh
Bundled tariff	299.580		15.930		3.639
Reference tariff 9 – RT9					
Transmission	0.000	1.273			
Distribution	7.244	3.374			
Bundled tariff	7.244	4.647			
Reference tariff 10 – RT10					
Transmission	0.000	0.840			
Distribution	55.890	3.639			
Bundled tariff	55.890	4.479			
Reference tariff 13 - RT13					
Transmission	0.000	2.027			
Distribution	86.850	6.399			
Bundled tariff	86.850	8.426			
Reference tariff 14 - RT14					
Transmission	0.000	2.448			
Distribution	164.423	8.867			
Bundled tariff	164.423	11.315			
Reference tariff 15 - RT15					
Transmission	0.000		3.663		0.769
Distribution	86.850		10.901		2.502
Bundled tariff	86.850		14.564		3.271
Reference tariff 16 - RT16					
Transmission	0.000		3.788		0.914
Distribution	299.580		12.142		2.725
Bundled tariff	299.580		15.930		3.639
Reference tariff 17 - RT17					

	Fixed Price	Energy Rates			
	c/day	Anytime c/kWh	On-Peak c/kWh	Shoulder c/kWh	Off-peak c/kWh
Transmission	0.000		2.230	2.027	1.843
Distribution	86.850		7.039	6.399	5.817
Bundled tariff	86.850		9.269	8.426	7.660
Reference tariff 18 - RT18					
Transmission	0.000		2.693	2.448	2.225
Distribution	164.423		9.754	8.867	8.061
Bundled tariff	164.423		12.447	11.315	10.286

Table 12: Reference tariffs for RT19 and RT20

	Fixed Price		Energy Rates		
	c/day	Demand c/kW	On-Peak c/kWh	Shoulder c/kWh	Off-Peak c/kWh
Reference tariff 19 - RT19					
Transmission	0.000	1.656	2.007	1.824	1.659
Distribution	86.850	3.600	7.743	6.399	5.288
Bundled tariff	86.850	5.256	9.750	8.223	6.947
Reference tariff 20 - RT20					
Transmission	0.000	1.854	2.424	2.203	2.003
Distribution	164.423	4.330	10.729	8.867	7.328
Bundled tariff	164.423	6.184	13.153	11.070	9.331

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	2.230	2.027	1.843	1.843	

	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
Distribution	86.850	7.039	6.399	5.817	5.817	
Bundled tariff	86.850	9.269	8.426	7.660	7.660	
Reference tariff 22 - RT22						
Transmission	0.000	2.693	2.448	2.225	2.225	2.003
Distribution	164.423	9.754	8.867	8.061	8.061	7.255
Bundled tariff	164.423	12.447	11.315	10.286	10.286	9.257

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	25.885	n/a
42W CFL BH	27.509	n/a
42W CFL KN	31.000	n/a
70W MH	45.248	n/a
70W HPS	22.254	n/a
125W MV	26.936	n/a
150W MH	52.276	n/a
150W HPS	29.274	n/a
250W MH	52.276	n/a
250W HPS	29.274	n/a
Standard LED 20W	13.757	8.574
Standard LED 36W	13.757	8.574
Standard LED 53W	13.868	8.574

Light specification	Daily charge (No contribution) c/day	Daily charge (Full upfront contribution) c/day
Standard LED 80W	13.735	8.574
Standard LED 160W	15.069	8.574
Standard LED 170W	15.069	8.574
Decorative BH LED 17W	25.609	8.574
Decorative KN LED 17W	28.078	8.574
Decorative LED 34W	28.011	8.574
Decorative LED 42W	25.609	8.574
Decorative LED 80W	29.412	8.574
Decorative LED 100W	33.036	8.574
Decorative LED 155W	33.036	8.574

Table 15: Obsolete light types

Light specification	Daily charge c/day
50W MV	16.566
70W MV	22.297
80W MV	22.297
150W MV	27.722
250W MV	36.162
400W MV	37.968
40W FLU	16.566
80W HPS	22.903
125W HPS	30.128
100W INC	16.566
80W MH	22.297
125W MH	53.802
22W LED	16.566

8.2 Prices for demand-based tariffs on the distribution network (RT5 to RT8 and RT11[1])

8.2.1 Demand charges

The prices in the following table are applicable for reference tariff **RT5**.

1 Note that some components of RT11 are in section 8.3

Table 16: Prices for reference tariff RT5

	Transmission		Distribution		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	24.206	187.312	61.752	187.312	85.958
300 to 1000	7,261.734	17.920	18,348.110	44.325	25,609.844	62.245
1000 to 1500	19,805.714	10.237	48,846.646	19.065	68,652.360	29.302

The prices in the following table are applicable for reference tariff **RT6**.

Table 17: Prices for reference tariff RT6

	Transmission		Distribution		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	23.586	1,069.340	63.782	1,069.340	87.368
300 to 1000	7,075.728	17.461	19,822.488	48.755	26,898.216	66.216
1000 to 1500	19,298.400	9.975	53,337.247	24.660	72,635.647	34.635

The prices in the following table are applicable for reference tariffs **RT7** and **RT8**.

Table 18: Prices for reference tariffs RT7 and RT8

Zone substation	TNI	Pricing zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000 (c/kVA/day)	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)	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)	Demand Charge for kVA > 7000 (c/kVA/day)
Cook Street	WCKT	CBD	15,908.220	16.076	16.052	32,933.425	11.331	14.417	48,841.645	27.407	30.469
Forrest Avenue	WFRT	CBD	15,908.220	16.076	16.052	32,933.425	11.331	14.417	48,841.645	27.407	30.469
Hay Street	WHAY	CBD	15,908.220	16.076	16.052	32,933.425	11.331	14.417	48,841.645	27.407	30.469
Milligan Street	WMIL	CBD	15,908.220	16.076	16.052	32,933.425	11.331	14.417	48,841.645	27.407	30.469
Wellington Street	WWNT	CBD	15,908.220	16.076	16.052	32,933.425	11.331	14.417	48,841.645	27.407	30.469
Black Flag	WBKF	Goldfields Mining	15,908.220	31.896	29.612	32,933.425	6.014	9.860	48,841.645	37.910	39.472
Boulder	WBLD	Goldfields Mining	15,908.220	29.445	27.511	32,933.425	6.014	9.860	48,841.645	35.459	37.371
Bounty	WBNY	Goldfields Mining	15,908.220	56.011	50.282	32,933.425	6.014	9.860	48,841.645	62.025	60.142
West Kalgoorlie	WWKT	Goldfields Mining	15,908.220	26.301	24.816	32,933.425	6.014	9.860	48,841.645	32.315	34.676
Albany	WALB	Mixed	15,908.220	30.488	28.405	32,933.425	13.382	16.175	48,841.645	43.870	44.580
Boddington	WBOD	Mixed	15,908.220	14.777	14.939	32,933.425	13.382	16.175	48,841.645	28.159	31.114
Bunbury Harbour	WBUH	Mixed	15,908.220	14.448	14.657	32,933.425	13.382	16.175	48,841.645	27.830	30.832
Busselton	WBSN	Mixed	15,908.220	21.047	20.313	32,933.425	13.382	16.175	48,841.645	34.429	36.488
Byford	WBYF	Mixed	15,908.220	15.543	15.595	32,933.425	13.382	16.175	48,841.645	28.925	31.770
Capel	WCAP	Mixed	15,908.220	18.683	18.287	32,933.425	13.382	16.175	48,841.645	32.065	34.462
Chapman	WCPN	Mixed	15,908.220	24.989	23.692	32,933.425	13.382	16.175	48,841.645	38.371	39.867
Darlington	WDTN	Mixed	15,908.220	17.387	17.176	32,933.425	13.382	16.175	48,841.645	30.769	33.351
Durlacher Street	WDUR	Mixed	15,908.220	22.546	21.598	32,933.425	13.382	16.175	48,841.645	35.928	37.773
Eneabba	WENB	Mixed	15,908.220	21.174	20.422	32,933.425	13.382	16.175	48,841.645	34.556	36.597
Geraldton	WGTN	Mixed	15,908.220	22.546	21.598	32,933.425	13.382	16.175	48,841.645	35.928	37.773

Zone substation	TNI	Pricing zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000 (c/kVA/day)	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)	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)	Demand Charge for kVA > 7000 (c/kVA/day)
Marriott Road	WMRR	Mixed	15,908.220	13.947	14.227	32,933.425	13.382	16.175	48,841.645	27.329	30.402
Muchea	WMUC	Mixed	15,908.220	17.243	17.052	32,933.425	13.382	16.175	48,841.645	30.625	33.227
Northam	WNOR	Mixed	15,908.220	23.348	22.285	32,933.425	13.382	16.175	48,841.645	36.730	38.460
Picton	WPIC	Mixed	15,908.220	15.621	15.662	32,933.425	13.382	16.175	48,841.645	29.003	31.837
Rangeway	WRAN	Mixed	15,908.220	24.044	22.882	32,933.425	13.382	16.175	48,841.645	37.426	39.057
Sawyers Valley	WSVY	Mixed	15,908.220	21.361	20.582	32,933.425	13.382	16.175	48,841.645	34.743	36.757
Yanchep	WYCP	Mixed	15,908.220	17.183	17.001	32,933.425	13.382	16.175	48,841.645	30.565	33.176
Yilgarn	WYLN	Mixed	15,908.220	28.464	26.670	32,933.425	13.382	16.175	48,841.645	41.846	42.845
Baandee	WBDE	Rural	15,908.220	31.815	29.543	32,933.425	5.859	9.727	48,841.645	37.674	39.270
Beenup	WBNP	Rural	15,908.220	34.248	31.628	32,933.425	5.859	9.727	48,841.645	40.107	41.355
Bridgetown	WBTN	Rural	15,908.220	20.695	20.011	32,933.425	5.859	9.727	48,841.645	26.554	29.738
Carrabin	WCAR	Rural	15,908.220	34.996	32.269	32,933.425	5.859	9.727	48,841.645	40.855	41.996
Collie	WCOE	Rural	15,908.220	24.556	23.321	32,933.425	5.859	9.727	48,841.645	30.415	33.048
Coolup	WCLP	Rural	15,908.220	27.729	26.040	32,933.425	5.859	9.727	48,841.645	33.588	35.767
Cunderdin	WCUN	Rural	15,908.220	29.252	27.346	32,933.425	5.859	9.727	48,841.645	35.111	37.073
Katanning	WKAT	Rural	15,908.220	26.651	25.116	32,933.425	5.859	9.727	48,841.645	32.510	34.843
Kellerberrin	WKEL	Rural	15,908.220	30.970	28.818	32,933.425	5.859	9.727	48,841.645	36.829	38.545
Kojonup	WKOJ	Rural	15,908.220	18.343	17.995	32,933.425	5.859	9.727	48,841.645	24.202	27.722
Kondinin	WKDN	Rural	15,908.220	19.792	19.237	32,933.425	5.859	9.727	48,841.645	25.651	28.964
Manjimup	WMJP	Rural	15,908.220	20.526	19.866	32,933.425	5.859	9.727	48,841.645	26.385	29.593
Margaret River	WMRV	Rural	15,908.220	26.749	25.200	32,933.425	5.859	9.727	48,841.645	32.608	34.927
Merredin	WMER	Rural	15,908.220	28.045	26.311	32,933.425	5.859	9.727	48,841.645	33.904	36.038
Moora	WMOR	Rural	15,908.220	20.747	20.056	32,933.425	5.859	9.727	48,841.645	26.606	29.783
Mount Barker	WMBR	Rural	15,908.220	27.962	26.240	32,933.425	5.859	9.727	48,841.645	33.821	35.967
Narrogin	WNGN	Rural	15,908.220	31.607	29.364	32,933.425	5.859	9.727	48,841.645	37.466	39.091

Zone substation	TNI	Pricing zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000 (c/kVA/day)	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)	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)	Demand Charge for kVA > 7000 (c/kVA/day)
Pinjarra	WPNJ	Rural	15,908.220	14.626	14.809	32,933.425	5.859	9.727	48,841.645	20.485	24.536
Regans	WRGN	Rural	15,908.220	21.420	20.633	32,933.425	5.859	9.727	48,841.645	27.279	30.360
Three Springs	WTSG	Rural	15,908.220	20.683	20.001	32,933.425	5.859	9.727	48,841.645	26.542	29.728
Wagerup	WWGP	Rural	15,908.220	13.914	14.199	32,933.425	5.859	9.727	48,841.645	19.773	23.926
Wagin	WWAG	Rural	15,908.220	27.032	25.443	32,933.425	5.859	9.727	48,841.645	32.891	35.170
Wundowie	WWUN	Rural	15,908.220	23.551	22.459	32,933.425	5.859	9.727	48,841.645	29.410	32.186
Yerbillon	WYER	Rural	15,908.220	34.085	31.488	32,933.425	5.859	9.727	48,841.645	39.944	41.215
Amherst	WAMT	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Arkana	WARK	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Australian Paper Mills	WAPM	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Balcatta	WBCT	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Beechboro	WBCH	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Belmont	WBEL	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Bentley	WBTY	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Bibra Lake	WBIB	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
British Petroleum	WBPM	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Canning Vale	WCVE	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Clarence Street	WCLN	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Clarkson	WCKN	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Cockburn Cement	WCCT	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Collier	WCOL	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Cottesloe	WCTE	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Edmund Street	WEDD	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Forrestfield	WFFD	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238

Zone substation	TNI	Pricing zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000 (c/kVA/day)	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)	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)	Demand Charge for kVA > 7000 (c/kVA/day)
Gosnells	WGNL	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Hadfields	WHFS	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Hazelmere	WHZM	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Henley Brook	WHBK	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Herdsman Parade	WHEP	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Joel Terrace	WJTE	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Joondalup	WJDP	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Kalamunda	WKDA	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Kambalda	WKBA	Urban	15,908.220	29.239	27.335	32,933.425	2.470	6.822	48,841.645	31.709	34.157
Kewdale	WKDL	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Landsdale	WLDE	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Maddington	WMDN	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Malaga	WMLG	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Mandurah	WMHA	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Manning Street	WMAG	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Mason Road	WMSR	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Meadow Springs	WMSS	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Medical Centre	WMCR	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Medina	WMED	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Midland Junction	WMJX	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Morley	WMOY	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Mullaloo	WMUL	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Mundaring Weir	WMWR	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238

Zone substation	TNI	Pricing zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000 (c/kVA/day)	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)	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)	Demand Charge for kVA > 7000 (c/kVA/day)
Munday	WMDY	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Murdoch	WMUR	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Myaree	WMYR	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Nedlands	WNED	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
North Beach	WNBH	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
North Fremantle	WNFL	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
North Perth	WNPH	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
O'Connor	WOCN	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Osborne Park	WOPK	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Padbury	WPBY	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Piccadilly	WPCY	Urban	15,908.220	27.522	25.863	32,933.425	2.470	6.822	48,841.645	29.992	32.685
Riverton	WRTN	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Rivervale	WRVE	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Rockingham	WROH	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Shenton Park (Old)	WSPA	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Shenton Park (New)	WSPK	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Sth Ftle Power Station	WSFT	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Southern River	WSNR	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Tate Street	WTTS	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
University	WUNI	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Victoria Park	WVPA	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Waikiki	WWAI	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Wangara	WWGA	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238

Zone substation	TNI	Pricing zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per day)	Demand charge for 1000<kVA<7000 (c/kVA/day)	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)	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)	Demand Charge for kVA > 7000 (c/kVA/day)
Wanneroo	WWNO	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Welshpool	WWEL	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Wembley Downs	WWDN	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Willetton	WWLN	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238
Yokine	WYKE	Urban	15,908.220	16.501	16.416	32,933.425	2.470	6.822	48,841.645	18.971	23.238

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
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).

Table 21: Metering prices

	c/revenue meter/day
Distribution connected customer (Accumulation / AMI)	7.966
Distribution connected customer (Interval meters)	34.603
Transmission connected customer	1,011.758

8.2.4 Administration charges

The prices in the following table are applicable for reference tariffs **RT7** and **RT8**.

Table 22: Administration charges for RT7 and RT8

CMD	Price (c/day)
>=7,000 kVA	8,955.000
<7,000 kVA	5,155.000

8.2.5 LV prices

The prices in the following table are applicable for reference tariff **RT8**.

Table 23: LV prices RT8

Category	Price (c/day)
Fixed	1,120.00
Demand	10.805/kVA

8.2.6 Connection price

The prices in the following table are applicable for reference tariff **RT11**.

Table 24: Connection Price RT11

	Connection Price (c/kW/day)
Connection price	1.448

8.3 Transmission prices

8.3.1 Use of system prices

The prices in the following table are applicable for reference tariff **TRT1**.

Table 25: Transmission prices TRT1

Substation	TNI	Use of System Price (c/kW/day)
Albany	WALB	15.894
Alcoa Pinjarra	WAPJ	4.508
Amherst	WAMT	3.783
Arkana	WARK	4.829
Australian Fused Materials	WAFM	3.135
Australian Paper Mills	WAPM	4.889
Baandee (WC)	WBDE	17.036
Balcatta	WBCT	4.948
Beckenham	WBEC	12.481
Beechboro	WBCH	4.394
Beenup	WBNP	19.060
Belmont	WBEL	3.894

Substation	TNI	Use of System Price (c/kW/day)
Bentley	WBTY	5.069
Bibra Lake	WBIB	3.481
Binningup Desalination Plant	WBDP	2.689
Black Flag	WBKF	17.372
Boddington Gold Mine	WBGM	2.916
Boddington	WBOD	2.842
Boulder	WBLD	15.315
Bounty	WBNY	37.623
Bridgetown	WBTN	7.785
British Petroleum	WBPM	6.722
Broken Hill Kwinana	WBHK	5.246
Bunbury Harbour	WBUH	2.570
Busselton	WBSN	8.051
Byford	WBYF	3.479
Canning Vale	WCVE	3.978
Capel	WCAP	6.088
Carrabin	WCAR	19.682
Cataby Kerr McGee	WKMC	7.260
Chapman	WCPN	11.326
Clarence Street	WCLN	6.537
Clarkson	WCKN	4.930
Cockburn Cement	WCCT	2.732
Cockburn Cement Ltd	WCCL	2.724
Collie	WCOE	10.998
Collier	WCOL	6.507
Cook Street	WCKT	4.682
Coolup	WCLP	13.636

Substation	TNI	Use of System Price (c/kW/day)
Cottesloe	WCTE	5.070
Cunderdin	WCUN	14.905
Darlington	WDTN	5.012
Edgewater	WEDG	4.341
Edmund Street	WEDD	4.467
Eneabba	WENB	8.156
Forrest Ave	WFRT	6.546
Forrestfield	WFFD	5.131
Geraldton	WGTN	9.296
Glen Iris	WGNI	3.033
Golden Grove	WGGV	24.364
Gosnells	WGNL	4.130
Hadfields	WHFS	4.964
Hay Street	WHAY	4.964
Hazelmere	WHZM	3.848
Henley Brook	WHBK	4.242
Herdsman Parade	WHEP	7.529
Joel Terrace	WJTE	6.832
Joondalup	WJDP	4.652
Kalamunda	WKDA	5.243
Katanning	WKAT	12.740
Kellerberrin	WKEL	16.333
Kewdale	WKDL	3.817
Kojonup	WKOJ	5.829
Kondinin	WKDN	7.034
Kwinana Alcoa	WAKW	1.206
Kwinana Desalination Plant	WKDP	3.311

Substation	TNI	Use of System Price (c/kW/day)
Kwinana PWS	WKPS	2.418
Landsdale	WLDE	4.474
Maddington	WMDN	4.020
Malaga	WMLG	3.821
Mandurah	WMHA	3.282
Manjimup	WMJP	7.644
Manning Street	WMAG	5.557
Margaret River	WMRV	12.822
Marriott Road Barrack Silicon Smelter	WBSI	2.459
Marriott Road	WMRR	2.153
Mason Road	WMSR	1.919
Mason Road CSBP	WCBP	2.903
Mason Road Kerr McGee	WKMK	1.759
Meadow Springs	WMSS	3.722
Medical Centre	WMCR	5.889
Medina	WMED	2.771
Merredin 66kV	WMER	13.899
Midland Junction	WMJX	4.677
Milligan Street	WMIL	5.545
Moora	WMOR	7.829
Morley	WMOY	5.099
Mt Barker	WMBR	13.831
Muchea Kerr McGee	WKMM	7.387
Muchea	WMUC	4.891
Muja PWS	WMPS	1.470
Mullaloo	WMUL	4.806
Munday	WMDY	5.180

Substation	TNI	Use of System Price (c/kW/day)
Murdoch	WMUR	3.099
Mundaring Weir	WMWR	7.504
Myaree	WMYR	5.920
Narrogin	WNGN	16.862
Nedlands	WNED	5.544
North Beach	WNBH	4.948
North Fremantle	WNFL	4.977
North Perth	WNPH	4.223
Northam	WNOR	9.962
Nowgerup	WNOW	5.707
O'Connor	WOCN	5.163
Osborne Park	WOPK	5.366
Padbury	WPBY	5.013
Parkeston	WPRK	17.433
Parklands	WPLD	3.826
Piccadilly	WPCY	13.864
Picton 66kv	WPIC	3.544
Pinjarra	WPNJ	2.736
Rangeway	WRAN	10.542
Regans	WRGN	8.388
Riverton	WRTN	3.426
Rivervale	WRVE	5.326
Rockingham	WROH	2.935
Sawyers Valley	WSVY	8.313
Shenton Park	WSPA	5.767
Southern River	WSNR	3.596
South Fremantle 22kV	WSFT	3.729

Substation	TNI	Use of System Price (c/kW/day)
Summer St	WSUM	7.052
Sutherland	WSRD	4.223
Tate Street	WTTS	5.955
Three Springs	WTSG	7.775
Three Springs Terminal (Karara)	WTST	18.777
Tomlinson Street	WTLN	6.033
University	WUNI	6.393
Victoria Park	WVPA	5.822
Wagerup	WWGP	2.144
Wagin	WWAG	13.057
Waikiki	WWAI	3.209
Wangara	WWGA	4.594
Wanneroo	WWNO	4.835
Wellington Street	WWNT	7.017
Welshpool	WWEL	3.794
Wembley Downs	WWDN	5.662
West Kalgoorlie	WWKT	12.674
Western Collieries	WWCL	2.158
Western Mining	WWMG	2.536
Westralian Sands	WWSD	5.520
Willetton	WWLN	3.646
Worsley	WWOR	1.790
Wundowie	WWUN	10.161
Yanchep	WYCP	4.842
Yerbillon	WYER	18.924
Yilgarn	WYLN	14.213
Yokine	WYKE	5.245

The prices in the following table are applicable for reference tariffs **RT11** and **TRT2**.

Table 26: Reference tariffs RT11 and TRT2

Substation	TNI	Use of System Price (c/kW/day)
Albany	WALB	2.039
Badgingarra	BGA	2.082
Boulder	WBLD	1.477
Bluewaters	WBWP	2.054
Cockburn PWS	WCKB	1.245
Collgar	WCGW	2.357
Collie PWS	WCPS	2.390
Emu Downs	WEMD	2.082
Geraldton	WGTN	0.350
Greenough Solar Farm	TMGS	0.445
Kemerton PWS	WKEM	1.660
Kwinana Alcoa	WAKW	1.284
Kwinana Donaldson Road	WKND	0.974
Kwinana PWS	WKPS	1.245
Landwehr (Alinta)	WLWT	1.550
Mason Road	WMSR	0.974
Merredin Power Station	TMDP	1.717
Muja PWS	WMPS	2.507
Mumbida Wind Farm	TMBW	2.113
Mungarra GTs	WMGA	2.075
Newgen Kwinana	WNGK	1.449
Newgen Neerabup	WGNN	1.277
Oakley (Alinta)	WOLY	1.728
Parkeston	WPKS	1.782

Substation	TNI	Use of System Price (c/kW/day)
Pinjar GTs	WPJR	1.035
Alcoa Pinjarra	WAPJ	1.814
Tiwest GT	WKMK	1.007
Wagerup	WWGP	1.429
Walkaway Windfarm	WWWF	2.292
West Kalgoorlie GTs	WWKT	1.449
Worsley	WWOR	1.623

8.3.2 Common service prices

The prices in the following table are applicable for reference tariff **TRT1**.

Table 27: Common Service Prices TRT1

	Common Service Price (c/kW/day)
Common service price	4.627

8.3.3 Control system service prices

The prices in the following table are applicable for reference tariffs **RT11** and **TRT2**.

Table 28: Control system service prices for reference tariffs RT11 and TRT2

	Price (c/kW/day)
Control system service price (Generators)	0.211

The prices in the following table are applicable for reference tariff **TRT1**.

Table 29: Control system service prices for reference tariff TRT1

	Price (c/kW/day)
Control system service price (Loads)	1.747

8.4 Excess network usage charges – substation classification

The following table applies to reference tariffs **RT7, RT8, RT11, TRT1** and **TRT2**.

Table 30: Values for ENUM for reference tariffs RT7, RT8, RT11, TRT1 and TRT2

Substation	ENUM
All substations in pricing zone 'Goldfields Mining' in Table 18	2.5
Albany	2.5
All other substations	1

8.5 Other prices

The following table applies to reference tariff **RT25**.

Table 31: Supply abolishment charges for RT25

Location	Charge ($)
Metropolitan area[2]	392.13
Non-Metropolitan area	499.46

The following table applies to reference tariff **RT26, RT27, RT28 and RT29**.

Table 32: Charges for RT26, RT27, RT28 and RT29

Service	Charge per request ($)
RT26	4.81
RT27	4.81
RT28	4.81
RT29	4.81

[2] As defined in the Electricity Industry (Metering) Code

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 33: 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
Reference service (metering) modification fee	$0.00
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
Supply abolishment service fee	$0.00

Table 34: 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

Application for Reference Service	New Connection Point Fee
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
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	$3,500.00 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	$3,500.00 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/

Appendix F.6

2019/20 Price List Information

Amended proposed access arrangement

16 November 2018

Access arrangement for the period
1 July 2017 to 30 June 2022

westernpower

EDM 46274768

An appropriate citation for this paper is:

Appendix F.6

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Appendix A A–1

1. Introduction

This document is Western Power's Price List Information, as defined in the *Electricity Networks Access Code 2004* (Code), to apply from 1 July 2019 or as approved by the Economic Regulation Authority (the *Authority)*.

This document details:

- the history of the network tariffs
- the Price List's compliance with the *access arrangement*
- the objectives and principles that underlie Western Power's approach to deriving the reference tariffs
- the methodology of deriving cost of supply and the reference tariffs from the target revenue.

1.1 Code Requirements

Section 8.1 of the *Code* requires Western Power to submit *Price List Information* to the *Authority*.

The *Code* defines *Price List Information* as:

> "price list information" means a document which sets out information which would reasonably be required to enable the *Authority*, users and applicants to:
>
> a. Understand how the service provider derived the elements of the proposed price list; and
>
> b. Assess the compliance of the proposed price list with the *access arrangement*.

The *access arrangement* contains the detailed price control formula that is applied each year to determine the network tariffs. Network tariffs are set each year to recover the revenue target. For 2019/20 the revenue target is the sum of:

- Western Power's revenue requirement contained in the *access arrangement* plus
- an adjustment for the Tariff Equalisation Contribution (TEC) plus
- an adjustment for any previous year revenue over or under-recoveries due to the TEC

1.2 2019/20 Foreword

This section details a number of matters that relate specifically to the preparation of the 2019/20 Price List.

1.2.1 Price List forms part of proposal

The 2019/20 Price List forms part of Western Power's amend proposal for the fourth *access arrangement* period (AA4). Due to delays with the AA4 process, there was no 2017/18 and 2018/19 Price List produced in April 2017 and April 2018 respectively, with the 2016/17 Price List remaining in place throughout. The *access arrangement* includes a 2017/18 Price List (attached at Appendix F.1) and a 2018/19 Price List (attached at Appendix F.3) however these both use the prices in the 2016/17 Price List.

1.2.2 Metering pricing

For 19/20, the prices for distribution metering are now split into two charges:

- For accumulation meters
- For interval meters

The costs involved in reading interval meters are higher than for accumulation meters and are priced accordingly. The largest contributor to this cost difference is the reading costs; manual reads involve higher labour costs (as the data is time consuming to extract), and for remotely read meters the higher costs are attributable to the costs of the monthly data transmission via sim cards.

Distribution metering revenue is part of the distribution revenue target, however section 4.5.1 details how the distribution revenue target is allocated between metering and other revenue components.

As required by the *Authority*, metering services will be unbundled from access reference services during AA4 however the ability to select separate metering services does not commence until 1 July 2020. Therefore, the price list and price list information for the 2020/21 pricing year will include prices for each of the new metering services.

1.2.3 Streetlight pricing and services

As discussed in the revised access arrangement information, Western Power is adopting a new replacement strategy for the AA4 period. Western Power is currently evaluating its luminaire replacement strategy. Our preferred position is light emitting diode (LED) streetlight replacements as the default for all failed luminaries. In the event of a lamp failure, Western Power will continue to replace the lamp with a traditional lamp equivalent. Western Power will also offer customers LED equivalent option for all current streetlight types for State Underground Power Program (SUPP) and new subdivision applications.

Since the submission of the draft decision response, Western Power has further refined the pricing for the new LED lights. This revised pricing recognises that there is likely to be a benefit of reduced ongoing operating expenditure over the life of an LED luminaire compared to a traditional luminaire.

Western Power's LED streetlight asset tariffs for 19/20 are based on a capital annuity payment to recover the cost of the luminaire and an allocation of forecast operating costs. Given the funding options available to local councils WA Local Government Association (WALGA) in their submission to the *Authority*, have expressed interest in tariffs that reflect different capital funding options (i.e. tariffs with/without capital cost recovery). Western Power will work together with WALGA and local councils to develop suitable tariffs to accommodate different capital contribution options for LED streetlights with the intention of offering more options as part of the RT9 tariff. As LGAs are ultimately billed by Synergy, any changes to the tariff structure will have to be discussed with them. If further options are designed they will be made available as an interim arrangement with Synergy (as a non-reference service) before forming part of the standard RT9 tariffs, ideally in the 2020/21 Price List.

As is the case for metering above, streetlight revenue is recovered within the distribution revenue target and is detailed in section 4.5.1.

1.2.4 Changes to the Excess Network Usage Charge

As discussed in attachment 11.1 of the initial AA4 proposal, Western Power is proposing changes to the way that use of the network in excess of contracted values is charged. Excess Network Usage Charges (ENUC) apply when a customer exceeds their contracted maximum demand (for a load) or their declared sent out capacity (for a generator). The ENUC is there to incentivise customers to operate within the contracted values as these are the values used when planning and operating the network.

However, Western Power recognises that not all instances of exceedance have equal impact. That is, there are some parts of the network where a demand increase would not have an impact on the safety or reliability of the network. The way the ENUC has been applied over the AA3 period does not make that distinction. To address this concern, Western Power is proposing to introduce a more nuanced ENUC. The new charges will consider the location of the customer, making the signal clearer and fairer. Each year, Western Power produces a State of the Infrastructure Report, this document includes discussion on which parts of the transmission network that are constrained. It is these areas that the revised ENUC will focus on.

Section 7.1.14 discusses this in further detail.

1.3 Revenue targets for 2019/20

The following sections detail the calculation of the revenue requirements for Western Power's Transmission and Distribution networks.

1.3.1 Target Transmission Regulated Revenue

The following table demonstrates the derivation of the target transmission regulated revenue for 2019/20 in accordance with section 5.8 of the *access arrangement*.

Table 1.1 – Target Transmission Regulated Revenue for 2019/20 ($M real as at 30 June 2017)

Transmission Revenue	2019/20
TR_t	340.0
$TAA3_t$	0.0
TTR_t	340.0

The derivation of the transmission system cost of supply cost pools and tariffs require the reference service revenue as an input in nominal terms. The following table details the transmission reference service revenue in nominal terms (please see section 1.3.3 for details of the inflation factor used).

Table 1.2 - Transmission Target Revenue for 2019/20 ($M)

Transmission Revenue	Revenue (Real)	Revenue (Nominal)
Target Revenue ($TTR_{2019/20}$)	340.0	358.2

1.3.2 Target Distribution Regulated Revenue

The following table demonstrates the derivation of the target distribution regulated revenue for 2019/20 in accordance with section 5.11 of the *access arrangement*.

Table 1.3 – Target Distribution Regulated Revenue for 2019/20 ($M real as at 30 June 2017)

Distribution Revenue	2019/20
DR_t	974.5

Distribution Revenue	2019/20
$DAA3_t$	0
TDR_t (not including TEC_t)	974.5

The derivation of the distribution system cost of supply cost pools and tariffs require the reference service revenue as an input in nominal terms. The following table details the distribution reference service revenue in nominal terms (please see section 1.3.3 for details of the inflation factor used).

Table 1.4 - Distribution Revenue Target Revenue for 2019/20 ($M)

Distribution Revenue	Revenue (Real)	Revenue (Nominal)
TDR_t (not including TEC_t)	974.5	1,026.7
TEC_t		162.0
Target Revenue ($TDR_{2019/20}$)		1,188.7

1.3.3 Derivation of Inflation Factor

In sections 1.3.1 and 1.3.2 Western Power has inflated the reference service revenue from real terms to nominal terms by using inflation in accordance with sections 5.6 and 5.7 of the *access arrangement*.

Table 1.5 - Derivation of 2019/20 Inflation Factor

December 2015 – December 2016 – Actual	1.48%
December 2016 – December 2017 – Actual	1.91%
September 2017 – September 2018 – Actual	1.89%
Derived Inflation Factor	1.054

1.4 Forecast revenue recovery

The following table sets out the reference service revenue, by tariff, which is forecast to be collected when applying the 2019/20 Price List. Note the new reference tariffs are showing zero volumes as there will not be any customers on these reference services at 1 July 2019.

Table 1.6 – Reference Service Revenue Forecast in 2019/20 ($M Nominal)

Reference Tariff	kWh	Customer Numbers	Forecast Transmission Revenue	Forecast Distribution Revenue
TRT1 – Transmission Exit	N/A	31	35.2	0.0
TRT2 – Transmission Entry	N/A	31	47.1	0.0

Reference Tariff	kWh	Customer Numbers	Forecast Transmission Revenue	Forecast Distribution Revenue
RT1 - Anytime Energy (Residential)	4,035,000,000	803,312	81.8	536.7
RT2 - Anytime Energy (Business)	930,000,000	72,319	22.8	128.5
RT3 - Time of Use Energy (Residential)	53,000,000	7,465	1.0	5.7
RT4 - Time of Use Energy (Business)	829,000,000	9,421	19.6	73.3
RT5 - High Voltage Metered Demand	758,000,000	296	9.1	22.9
RT6 - Low Voltage Metered Demand	2,037,000,000	3,967	38.4	117.3
RT7 - High Voltage Contract Maximum Demand	3,109,000,000	291	62.1	60.2
RT8 - Low Voltage Contract Maximum Demand	186,000,000	58	5.2	12.7
RT9 – Streetlighting	141,000,000	288,415	1.8	40.2
RT10 - Unmetered Supplies	40,000,000	16,493	0.3	4.8
RT11 - Distribution Entry	-	-	1.3	2.2
RT13 – Anytime Energy (Residential) Bi-directional	1,051,000,000	244,678	21.3	152.0
RT14 – Anytime Energy (Business) Bi-directional	123,000,000	1,363	3.0	11.8
RT15 – Time of Use (Residential) Bi-directional	52,000,000	10,159	0.9	6.4
RT16 – Time of Use (Business) Bi-directional	161,000,000	887	3.9	13.3
RT17 – 3 Part Time of Use Energy (Residential)	-	-	-	-
RT18 - 3 Part Time of Use Energy (Business)	-	-	-	-
RT19 – Time of Use Demand (Residential)	-	-	-	-
RT20 – Time of Use Demand (Business)	-	-	-	-
RT21 – Multi Part Time of Use (Residential)	-	-	-	-
RT22 – Multi Part Time of Use (Business)	-	-	-	-
Total Reference Service Revenue	**13,505,000,000**	**1,459,194**	**355.0**	**1,188.0**
Standby Services	-	-	3.4	0.7
TOTAL REVENUE TARGET REVENUE			**358.2**	**1,188.7**

2. Pricing Principles Overview

This section discusses the principles, objectives and an overview of the methodology used in determining the reference tariffs.

2.1 Pricing Objectives

Reference service revenue is recovered through a set of reference tariffs that have been designed to meet high-level objectives described below. These objectives have been updated for the AA4 period.

Table 2.1: Pricing Objectives

Theme	Pricing objectives
Revenue sufficiency	Tariffs should be formulated to recover revenue from users in a manner that achieves: • sufficient revenue to provide a safe and reliable network • efficient network services to all network users • sufficient revenue to recover the revenue allowance defined in the price control.
Network efficiency	Tariffs must send appropriate and effective signals to promote the economically efficient investment in, operation and use of the Western Power Network. Tariff signals will include the objective of: • informing network users of their impact on existing and future network capacity and costs • assisting in managing growth in peak demand (to avoid increases in capital expenditure requirements) • providing network users with an incentive to shift their loads away from peak to off-peak periods. Tariffs will be cost reflective by: • reflecting the actual long run, time-varying cost of service provision to network users • individual charging parameters within each tariff taking account of the long run marginal costs.
Choice	Tariffs should provide network users with tariff choices that enable them to manage their costs
Simplicity	Be simple and straightforward, readily understood by customers and minimise administration costs, as far as is reasonable taking into account other objectives

2.2 Pricing Methods

The pricing methods (cost allocations) are set out in section 6.5 of the *access arrangement*. This section provides a summary of Western Power's pricing methods.

2.2.1 General

Reference tariffs aim to reasonably reflect the cost of providing the network service to users. The first step in developing reference tariffs is to model the cost of supply for users. The cost of supply cannot be derived at an individual customer level and so customers are categorised into a number of groups with similar costs.

Reference tariffs will generally have a number of components, which fall into fixed and variable categories. Fixed components would generally be a charge per user regardless of their size whereas the variable component would be related to energy or demand. These categories of costs reflect the fact that costs will be related either to the number of users serviced or to the amount of capacity provided.

The two processes of 'determining cost of supply' and 'setting reference tariffs' to recover those costs are separated so the costs of supply can be allocated to particular customer groups and the reference tariffs can be set to recover those costs. The costs are separated into fixed and variable components and the reference tariffs are similarly split so that fixed costs are recovered by fixed charges and variable costs by variable charges.

It is recognised the determination of the cost of supply for users and respective reference tariffs is an inexact process. A number of simplifying assumptions are required, for example, to categorise users into a small number of customer groups or classes with similar characteristics.

It is also noted that demand is the best measurement of capacity. However, the vast majority of users have energy only metering (or no metering at all) that does not record demand, and therefore energy is used as a proxy for demand.

2.2.2 Process to Determine Cost of Supply

This section presents an overview of the process to derive the cost of supply. Detailed information on this process is provided in sections 3 and 4.

There are two basic stages in determining the cost of supply for users:

- determination of the reference service revenue for Western Power; and
- allocation of the revenue components to different cost pools for various customer groups, based on factors such as supply voltage, location and load characteristics.

Note: Transmission and distribution are treated separately, and each has independent target revenues.

The reference service revenue requirement must then be allocated to asset classes and the use of the assets allocated to users. The customer groups used in the analysis and modelling of costs generally reflect the nature of the physical connection to the network and the relative size and nature of the user, namely:

Transmission connected:

- Transmission Generation
- Transmission Loads

Distribution connected:

- High Voltage >1 MVA maximum demand
- High Voltage <1 MVA maximum demand
- Low Voltage >1 MVA maximum demand
- General Business Large (300 to < 1,000 kVA maximum demand)
- General Business Medium (100 to < 300 kVA maximum demand)
- General Business Small (15 to < 100 kVA maximum demand)
- Small Business (<15 kVA maximum demand)
- Residential
- Streetlights
- Unmetered Supplies

2.2.3 Process to Determine Reference Tariffs

This section presents an overview of the process by which reference tariffs are derived. Detailed information on the process is provided in sections 5.5.1 and 7.

The users within the customer groups are linked to reference tariffs so that cost of supply can then be derived for each reference tariff. The cost of supply is in terms of fixed and variable costs and price settings are then simply established to recover the cost pools from the users.

2.2.4 Modelling Cost Allocations

Western Power's transmission and distribution cost of supply (COS) models accurately reflect the network cost of supply for the various customer groups. The model assembles capital and operating costs for the components (lines, substations, transformers, etc.) of the modern equivalent assets employed in providing network capacity and delivering energy and allocates these to each customer group according to a pre-determined set of principles.

Tables from Western Power's COS model is provided in this document to demonstrate that Western Power complies with its cost allocation methodology.

3. Derivation of Transmission System Cost of Supply

This section details the derivation of the transmission system cost of supply for connection points on the transmission system.

3.1 Cost Pools

The following cost pools are used in the derivation of the transmission system cost of supply:

- Connection Services Cost Pool. Which is further allocated to the following cost pools:
  - Connection Services for Exit Points Cost Pool; and
  - Connection Services for Entry Points Cost Pool.
- Shared Network Services Cost Pool. Which is further allocated to the following cost pools:
  - Use of System for Loads Cost Pool;
  - Use of System for Generators Cost Pool; and
  - Common Service for Loads Cost Pool.
- Control System Services Cost Pool. Which is further allocated to the following cost pools:
  - Control System Services for Loads Cost Pool; and
  - Control System Services for Generators Cost Pool.

3.1.1 Connection Services for Exit Points Cost Pool

The Connection Services for Exit Points Cost Pool includes the Gross Optimised Deprival Value (GODV) of all connection assets at each Exit Point and one-third of the value of the voltage control assets at those points (since the function of voltage control equipment is partly location specific and partly system related).

3.1.2 Connection Services for Entry Points Cost Pool

The Connection Services for Entry Points Cost Pool includes the GODV of all connection assets at each Entry Point and one-third of the value of the voltage control assets at those points (since the function of voltage control equipment is partly location specific and partly system related).

3.1.3 Use of System for Loads Cost Pool

Use of System for Exit Points Cost Pool includes 50% of the total Shared Network Services Cost Pool.

3.1.4 Use of System for Generators Cost Pool

Use of System for Entry Points Cost Pool includes 20% of the total Shared Network Services Cost Pool.

3.1.5 Common Service for Loads Cost Pool

The Common Service for Loads Cost Pool includes:

- 30% of the total Shared Network Services Cost Pool;
- Shared Voltage Control Assets – two thirds of the value of voltage control assets at Entry and Exit points (since the function of voltage control equipment is partly location specific and partly system related) and the value of all of voltage control assets at transmission substations; and

- Adjustments for under or over recovery of revenue expected for any reason in any other tariff component.

3.1.6 Control System Service for Loads Cost Pool

The Control System Service for Loads Cost Pool consists of a portion of the total cost of all Supervisory Control and Data Acquisition (SCADA), SCADA related communications equipment, and costs associated with the control centre, proportioned based on the total number of points in the SCADA master station relevant to loads.

3.1.7 Control System Service for Generators Cost Pool

The Control System Service for Generators Cost Pool consists of a portion of the total cost of all SCADA, SCADA related communications equipment, and costs associated with the control centre, proportioned based on the total number of points in the SCADA master station relevant to generators.

3.2 Cost of Supply

In order to calculate transmission cost of supply, all transmission assets are valued and categorised into the above cost pools. Each network branch is further defined as either exit, entry or shared network and cost allocation is then applied based on the GODV of all relevant assets.

3.2.1 Transmission Assets

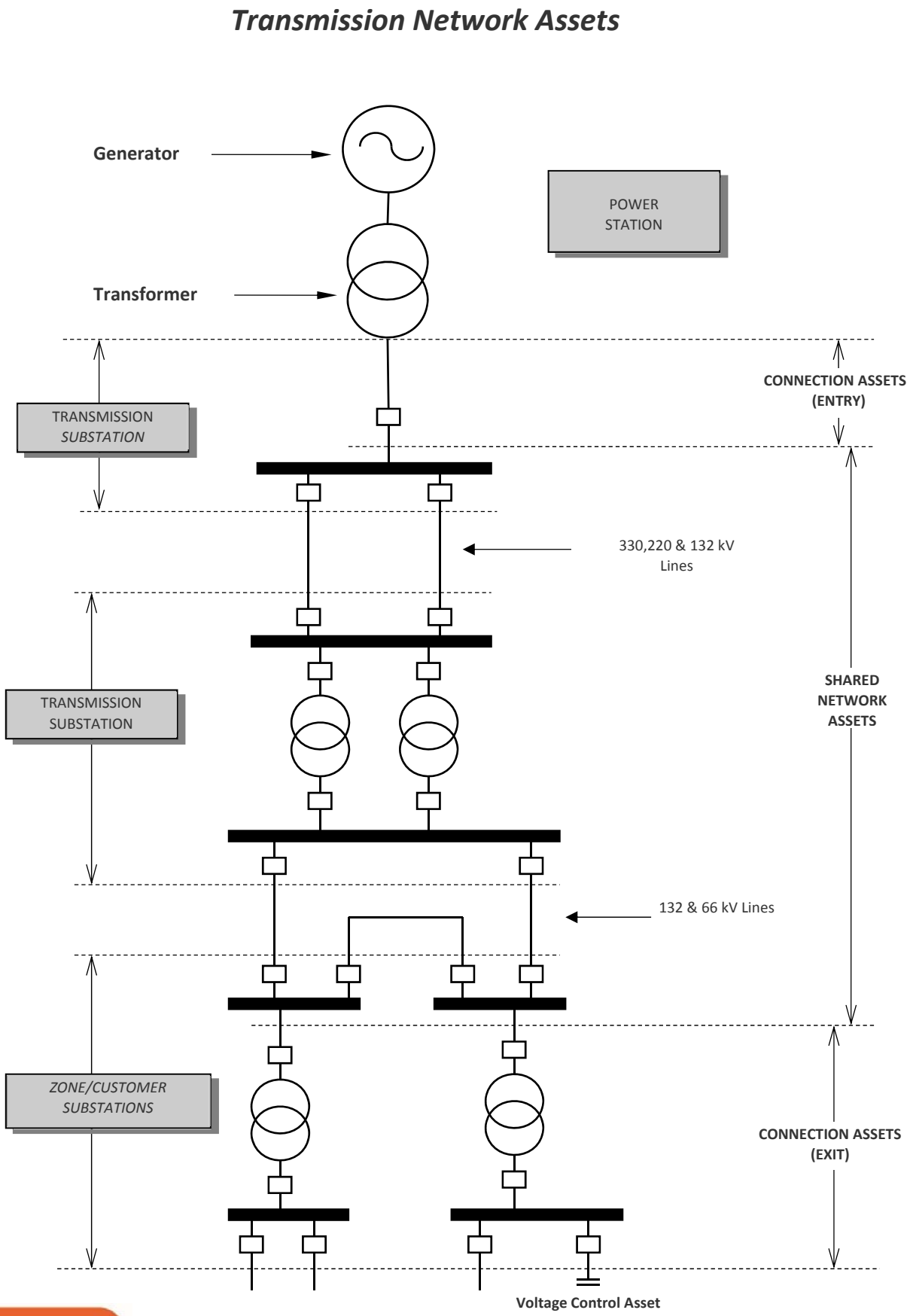
The principal elements of the transmission networks include transmission substations and zone substations, interconnected by transmission and sub-transmission lines. The transmission networks enable the transportation of electricity from power stations to zone substations and high voltage user loads. The zone substations provide the interface between the transmission network and distribution network.

Generally, the transmission networks assets comprise connection assets, shared network assets and other or ancillary assets. These are described as follows:

- Connection Assets: those assets at the point of physical interconnection with the transmission networks which are dedicated to a User - that is, at substations including transformers and switchgear, but excluding the incoming line switchgear. Connection assets for generators are referred to as entry assets and for loads they are called exit assets.
- Shared Network Assets: all other transmission assets, which are shared to some extent by network Users.
- Other or Ancillary Assets: network assets performing an Ancillary Services function comprise:
  - those providing a Control System Service, for example, system control centres, supervisory control and communications facilities.
  - those providing a Voltage Control Service in the networks, for example, a proportion of the costs of capacitor and reactor banks in substations.

Figure 1 shows, in simplified form, the principal elements of the transmission networks and the categorisation of the assets as described above.

Figure 1: Transmission Network Assets



3.2.2 Asset Valuation

All valuations of transmission assets are performed using the Optimised Deprival Value (ODV) methodology.

3.2.3 Valuation of Individual Branches and Nodes

To determine cost of supply, valuation data is required for every individual branch and node on the network. Every branch and node consist of many individual asset valuation building blocks that are all individually assessed.

Branches include transmission lines and transformers and include the substation circuits at each end. Each transmission line branch will typically have the cost of each of the circuit breakers at different substations included, whereas each transformer branch will typically have the cost of each of the circuit breakers at that same substation included.

Substation site establishment costs are allocated equally to all substation circuits.

The costs for shared circuit breakers (such as bus section breakers etc.) are allocated equally between all other substation circuits, which derive benefit from that shared circuit breaker.

3.3 Methodology of Allocating to Cost Pools

3.3.1 Overview

The methodology for allocating the transmission revenue to each cost pool is to allocate the revenue in the proportion to the GODV of the assets in each cost pool.

However, the annual revenue requirement for the Control System Service Cost Pool is calculated separately (using the same method as for all other network assets) but assuming higher depreciation and operating expenditure than for other network assets. When calculating other Cost Pool Revenues appropriate adjustments are required.

Consequently:

Cost Pool Revenue = RR * GODV (Cost Pool)

where:

RR = a revenue rate of return determined as $AARR_{network}$ / $\Sigma GODV_{network}$

$AARR_{network}$ = Transmission Reference Service Revenue excluding Annual Revenue Requirement for Control System Services.

GODV (Cost Pool) = GODV of the transmission network assets which belong in that cost pool.

$\Sigma GODV_{network}$ = GODV of all transmission assets excluding Control System Service assets

3.4 Cost Pool Allocations

Applying the above methodology, the following cost pool revenues were derived for 2019/20.

Table 3.1 - Transmission Pricing Cost Pools for 2019/20 ($M Nominal)

Cost Pool	Allocated Revenue
Entry Connection	7.2
Exit Connection HV	0.6
Exit Connection LV	70.5
Control System Services for Generators	5.8
Control System Services for Loads	26.4
Use of System for Generators	42.6
Use of System for Loads	115.4
Common Service for Loads (including Voltage Control)	89.4
Metering CT/VT	0.5
Total Revenue Target Revenue	358.2

4. Derivation of Distribution System Cost of Supply

This section details the derivation of the distribution system cost of supply for connection points on the distribution system.

The derivation of the distribution system cost of supply operates along the same principles as the transmission system. That is, the reference service revenue entitlement (which includes TEC) is determined for the distribution system, and that revenue is then allocated to asset categories to derive the cost of supply for each of the customer groups. The cost of supply is based on the relative usage of each asset category by the various customer groups.

The structure of the distribution network cost of supply and reference tariffs reflects the features of the distribution network.

4.1 Cost Pools

The distribution cost pools used in the distribution system cost of supply are:

- High Voltage Network
- Low Voltage Network
- Transformers
- Streetlight Assets
- Metering
- Administration

4.2 Customer Groups

The distribution customer groups used in the distribution system cost of supply are:

- High Voltage >1 MVA maximum demand
- High Voltage <1 MVA maximum demand
- Low Voltage >1 MVA maximum demand
- General Business Large (300 to < 1,000 kVA maximum demand)
- General Business Medium (100 to < 300 kVA maximum demand)
- General Business Small (15 to < 100 kVA maximum demand)
- Small Business (<15 kVA maximum demand)
- Residential
- Streetlights
- Unmetered Supplies

4.3 Locational Zones

Distribution reference tariffs are provided for individual locational zones for users with energy demands in excess of 1 MVA. Locational zones are defined as those areas supplied by the network where the distribution system cost of supply is similar. For example, the rural wheat belt areas of Western Australia

are considered to have a reasonably uniform distribution system and costs of supply, as do the urban and CBD areas of Perth.

Zone substations with similar cost structures are allocated to locational zones that feed an area of the distribution system. Where a zone substation supplies an area of more than one distinct cost of supply, then all users supplied from that substation are considered to be in the one dominant category. That is, there is only one locational zone defined for each zone substation.

The five zones are defined in the sections below, and for details of the allocation of each zone substation to locational zones see the price list in the *access arrangement*.

4.3.1 CBD Locational Zone

This is defined as the intense business area generally recognised as the Perth CBD area. The defining street boundaries is generally from the Swan River north to Aberdeen Street Northbridge, west to Rokeby Road Subiaco, and east to the East Perth redevelopment area.

4.3.2 Urban Locational Zone

This is defined as the uniformly and continuously settled areas of Perth that contains the urban domestic, commercial and industrial users but exclude the CBD zone. This area also excludes the outer urban area that is treated as mixed. The country towns of Geraldton and Kalgoorlie are also included.

4.3.3 Rural Locational Zone

This is defined to include those areas which have a predominantly rural/farming characteristic and includes small to medium size towns within the southwest land division, for example Merredin.

4.3.4 Mixed Locational Zone

This is defined to include those areas that have a mixed user base that has at least two dominant load types, for example a mix of significant mining and rural loads or significant urban and rural loads. It also includes significant outer areas of Perth, which can be a mix of fringe urban, semi-rural and rural types, for example Yanchep.

4.3.5 Mining Locational Zone

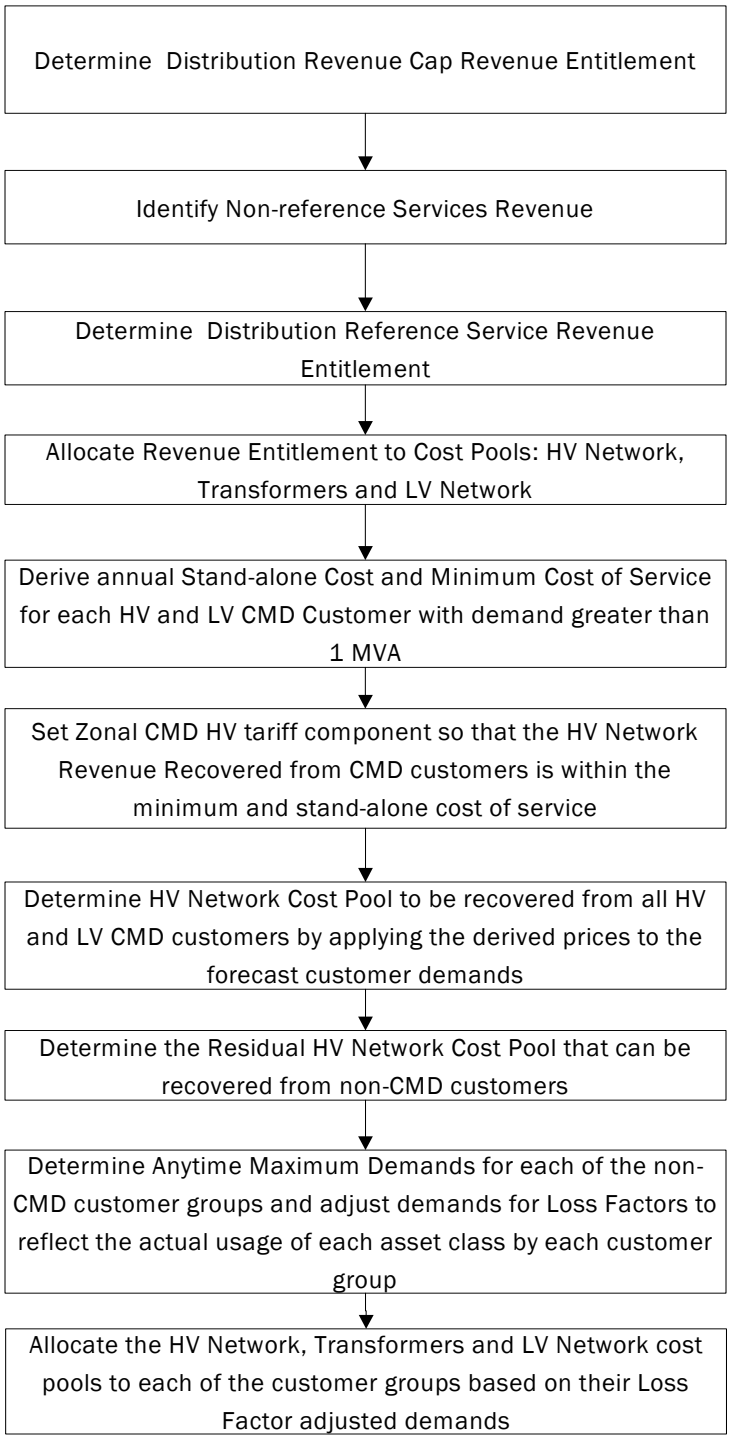
This is defined to include the mining area surrounding Kalgoorlie, which is supplied at 33 kV and the mining area at Forrestania which is also supplied at 33 kV. It does not include the town of Kalgoorlie (Urban zone).

4.4 Methodology of Deriving the Cost of Supply

4.4.1 Flowchart

The derivation of the cost of supply for each customer group is illustrated in the following flow diagram.

Figure 2: Distribution Cost of Supply Flow Chart



Each step in this process to derive the distribution cost of supply is described in more detail in the following sections.

4.4.2 Calculate the Forecast Distribution Network Revenue to be recovered from Distribution-Connected Users

The forecast distribution network revenue entitlement, determined in accordance with the approach approved by the *Authority* in the *access arrangement,* includes an amount for the TEC. The allocation of TEC to the cost pools and the customer groups is undertaken on the same basis as the network revenue entitlement set out below.

4.4.3 Allocate Revenue Entitlement to Cost Pools HV Network, Transformers and LV Network

The network revenue entitlement is then allocated to each of the asset classes being the High Voltage (HV) network, transformers and the Low Voltage (LV) network. The allocation is based on the GODV of each asset category as a proportion of the total GODV.

4.4.4 Derive HV annual stand-alone cost and incremental cost of supply for all HV and LV CMD users with demand greater than 1 MVA

In the cost of supply analysis, the costs for users with annual maximum demands less than 1,000 kVA are assumed to be uniform across the network whereas costs for users with demands above 1,000 kVA are determined on the basis of their location on the network and relative use of network assets.

On this basis, the HV network costs that can be allocated to users with maximum demands in excess of 1,000 kVA are calculated through a process that ensures the cost is between the incremental and stand-alone cost of supply. This approach is consistent with the requirements of section 7.3 of the *Code* and demonstrated in section 7.3.

In terms of costs of supply analysis, this approach is contrary to the approach for users with demands below 1,000 kVA. For these users the approach is facilitated by allocating the network costs on the basis of sharing the average costs of the network between users depending on their relative usage of the network components.

This approach for larger users can distort the final price outcomes because it assumes that costs can be allocated linearly on usage. This approach is reasonable for smaller users where the stand-alone cost will far exceed the average cost of supply. On the other hand, the stand-alone cost for larger users can be less than a simple linear allocation of costs and for this reason it is essential to take a different approach.

The approach taken is to derive the HV network incremental and stand-alone cost for each user with maximum demand in excess of 1,000 kVA. This process will give maximum and minimum revenues that could be recovered from this customer group.

The reality of network pricing is that the actual revenue recovered from these users should fall between these two values. The actual value is determined by deriving reference tariff components that, when applied to the forecast user data will produce charge and revenue outcomes that recover at least the incremental cost of supply but do not recover more than the stand-alone cost of supply. The detail of this price setting is contained in section 7.

4.4.5 Redefine Revenue Pools

The outcome of the process to date is that the HV network revenue for HV and LV users with maximum demands greater than 1,000 kVA has been forecast. This now results in a reallocation of the reference tariff revenue entitlement into the costs pools of:

- HV network cost pool that is recovered from users with demands greater than 1,000 kVA

- Residual HV network cost pool for users with demands less than 1,000 kVA
- Transformer cost pool
- LV network cost pool

These cost pools must now be allocated to customer groups based on relative usage of the network elements.

4.4.6 Allocation of Residual HV Network Costs to Customer Groups

This allocation is to reflect the usage of each of the customer groups of the HV network remembering that the costs associated with users with maximum demands greater than 1,000 kVA have already been determined.

The allocation is based on the diversified maximum demand imposed by each customer group. Where a user has a metered demand, that demand is recorded but for the vast majority of users there is no metered demand. For all of these users a notional demand is calculated based on their diversified load factor. Those calculated demands are adjusted by average loss factors to reflect the actual demand placed on the HV network.

The load factors are based on industry codes that reflect typical users. These load factors were derived from sample data taken over a large number of users and are recorded against each user. The sum of the demands is called the anytime maximum demand (ATMD).

The load factors that are used are listed by customer group as follows:

Table 4.1: Load Factor by Customer Group

Customer Group	Load Factor (%)
Unmetered	8
Streetlights	8
Residential	8
Small Business	8
General Business Small	8
General Business Medium	5
General Business Large	4
Low Voltage >1MVA	4
High Voltage	1

4.4.7 Fixed and Variable Costs

Based on the premise that the network was built in part to supply each user, it is reasonable to allocate some of the HV costs on a per user basis rather than purely on demand. Capacity to carry load should clearly be allocated on demand, but the cost to get a minimum capacity supply to a user should, in principle, simply be allocated on a per user basis. This reflects the principle that all users benefit from the HV line regardless of their actual usage.

The question of what percentage of costs should be allocated on a per user basis is the classical fixed and variable cost allocation issue. To determine the fixed component of the cost the approach taken will be to calculate the cost to establish the network to supply the smallest possible load to each user. The variable component of the cost can then be based on all costs that give the network capacity to provide differential supply to each user. This process is described below.

4.4.7.1 Capital related costs (return and depreciation)

The "minimal" cost HV line could be seen as a single-phase line with minimum conductor size, maximum bay lengths and minimum pole and hardware ratings. It is reasonable to assign 40 metre bays in the urban area and 250 metre bays in rural areas for this purpose. The approximate costs for such hypothetical constructions (derived from the results of the 2004 valuation study) would be as follows.

Table 4.2: Capital Related Costs

Line Construction	Cost per Kilometre ($)
1 Phase Steel (40 m bays)	18,000
3 Phase Large Size (40 m bays)	50,000
1 Phase Steel (250 m bays)	8,500
3 Phase Large Size (120 m bays)	24,000

From these numbers it is reasonable to deduce that the cost to provide a minimal HV supply is approximately 35% of the cost to provide a full capacity supply in both the urban and rural cases. The remaining 65% is therefore considered related to load and should be allocated on demand.

4.4.7.2 Operating and maintenance costs

A proportion of the costs associated with operations and maintenance do not vary with load, while other costs are determined to be load related.

A proportion of maintenance costs relating to routine inspection and repair could be regarded as being fixed in nature, whereas a proportion is required to maintain capacity, and therefore could be regarded as variable. Fault restoration work can be similarly differentiated, depending on the nature of the faults.

It is difficult to be definitive in allocating maintenance costs but a 50:50 split between fixed and variable is considered reasonable and has been adopted for cost allocation purposes.

4.4.7.3 Resultant cost allocation

Applying these percentage allocations to three phase HV capital and operational and maintenance costs results in a fixed to variable ratio of approximately 40:60.

4.4.8 Allocation of Transformer Costs to Customer Groups

Transformers are installed to provide capacity and energy for each load and the costs can be fairly allocated on demand.

The cost of maintenance of transformers is a very small proportion of the total distribution network maintenance expense, and so no maintenance costs are allocated to transformers.

4.4.9 Allocation of LV Network Costs to Customer Groups

The logic for developing cost allocation principles for LV network costs is identical to the HV case. Therefore, the LV costs are allocated on a similar basis.

However, the LV costs per kVA are generally higher for smaller users than for larger users. Larger users use proportionately less of the LV network because they are typically connected closer to transformers, and generally have a lower level of back-up. For example, a user with a load of 300 kVA or more would generally be connected directly to a transformer with limited capacity in the LV network to supply only part load in the event of an HV contingency.

Appropriate weighting factors have therefore been derived to reflect the proportionate usage of the LV network by the different customer groups, as follows:

Customer Group	Cost Weighting
Residential	1
Small Business	1
General Business - Small	1
General Business - Medium	0.9
General Business - Large	0.1
Low Voltage > 1 MVA	0.1
High Voltage	0

4.4.10 Allocation of TEC Costs to Customer Groups

TEC is allocated to the cost pools consistent with the methodology detailed above. TEC is then allocated to customers groups on the same basis that is set out above for:

- allocation of HV network costs to customer groups
- allocation of transformer costs to customer groups
- allocation of LV network costs to customer groups

4.4.11 Streetlighting Costs

Allocation of network costs to streetlighting is in two components - the use of network costs and the costs associated with the streetlight asset itself.

4.4.11.1 Use of Network Costs

Costs for the use of the HV and LV networks and transformers are allocated on a fixed and variable basis as for other customer groups, but with customer numbers reduced by a factor of 10.

4.4.11.2 Streetlight Asset Costs

Streetlighting costs are directly allocated to streetlights based on the share of the revenue target that is directly attributable to streetlight maintenance. This calculation is shown in section 4.5.1.

4.4.12 Metering Costs

Similarly to streetlights, metering costs are allocated based on their share of the revenue target, shown in section 4.5.1.

4.4.13 Administration Costs

The allocation of administration costs is based on specific charges for the larger customer groups, with the residual cost pool allocated by ATMD over the other customer groups.

4.5 Cost Pool Allocations

Applying the above methodology, the following tables details the allocation of the distribution network revenue entitlement (which includes TEC) to the cost pools:

Table 4.3: Allocation of the Distribution Network Revenue Entitlement to Cost Pools

Customer group	ATMD MVA	GWh	Loss Adjusted ATMD's	Transformer Adjusted ATMD's	LV Adjusted ATMD's	Number of Customers	LV Adjusted Customer Numbers	High Voltage Network		Low Voltage Network		Transformers	Streetlight Assets	Metering	Administration
								Fixed $/annum	Variable $/annum	Fixed $/annum	Variable $/annum	Variable $/annum	Fixed		
Unmetered	6	40	6	6	6	16,493	16,493	2.0	0.4	1.4	0.3	0.2	0.0	0.0	0.6
Streetlights	36	141	39	39	4	288,415	28,842	3.6	2.4	2.0	0.2	1.3	27.8	0.0	1.9
Residential	1,998	5,191	2,090	2,090	2,090	1,065,614	1,065,614	131.4	140.3	78.6	108.4	73.9	0.0	27.1	95.6
Small Business	340	763	356	356	356	71,564	71,564	13.3	26.1	5.9	18.3	13.2	0.0	3.9	14.2
General Business - Small	561	1,259	587	587	587	12,608	12,608	2.1	43.9	1.1	30.4	22.0	0.0	2.1	20.6
General Business - Medium	497	1,114	513	513	462	2,833	2,549	0.5	38.0	0.2	24.2	19.3	0.0	1.3	18.0
General Business - Large	474	1,062	490	490	49	938	94	0.1	33.1	0.0	2.5	17.5	0.0	0.6	17.1
LV greater than 1 MVA	171	383	174	174	17	122	12	3.7	14.5	0.0	0.9	6.6	0.0	0.1	2.2
HV less than 1 MVA	82	295	84	0	0	144	0	0.0	4.1	0.0	0.0	0.0	0.0	0.2	2.3

Customer group	ATMD MVA	GWh	Loss Adjusted ATMD's	Transformer Adjusted ATMD's	LV Adjusted ATMD's	Number of Customers	LV Adjusted Customer Numbers	High Voltage Network		Low Voltage Network		Transformers	Streetlight Assets	Metering	Administration
								Fixed $/annum	Variable $/annum	Fixed $/annum	Variable $/annum	Variable $/annum	Fixed		
HV>1 MVA	1,097	3,257	1,157	0	0	393	0	21.1	37.5	0.0	0.0	0.0	0.0	0.6	5.9
TOTAL	**5,262**	**13,505**	**5,497**	**4,256**	**3,572**	**1,459,124**	**1,197,776**	**177.8**	**340.3**	**89.2**	**185.2**	**153.9**	**27.8**	**36.0**	**178.6**

Table 4.4 - Distribution Cost Pools for 2019/20 ($M Nominal)

	Locational Zone					
Cost Pool	**CBD**	**Urban**	**Goldfields Mining**	**Mixed**	**Rural**	**Total**
High Voltage Network	12.1	184.9	4.4	121.0	125.5	447.9
High Voltage Network > 1 MVA	9.3	37.6	5.3	14.1	3.9	70.2
High Voltage Network Total	21.4	222.4	9.7	135.2	129.4	518.1
Low Voltage Network	12.0	192.7	1.6	49.5	18.6	274.3
Transformers	8.2	81.8	2.2	37.7	24.2	154.0
Streetlight Assets						27.8
Metering						36.0
Administration						178.5
Revenue requirement						1,188.73

4.5.1 Derivation of streetlight and metering asset cost pools

The costs for streetlight and metering shown in Table 4.4 are calculated using a similar approach as the overall revenue modelling approach taken to determine the transmission and distribution revenue targets. That is, using a building block approach to revenue. The cost pool is the sum of the:

- Return on assets (that is, the product of the rate of return with the Regulated Asset Base (RAB) of the assets);
- Depreciation (based on the regulated value of the assets and the expected life of the assets); and
- Operating expenditure approved.

Added to these costs are a portion of Western Power's overall tax building block and a portion of the recovery of deferred revenue. For a more detailed explanation of the building blocks, see Chapter 10 of the AAI for the initial proposal.

Table 4.5: Derivation of Streetlight and Metering Costs

2019/20 cost of service	Streetlights	Metering
Opening RAB	98.2	130.5
Return on asset	3.4	6.6
Depreciation	7.8	11.3
Opex	14.3	15.1
Indirect cost allocation	2.3	3.0
Cost of service	27.8	36.0

5. Reference Tariff Structure

This section provides an overview of the reference tariffs that apply to the transmission and distribution system.

5.1 Reference Services and Tariff Structure

The following table details the relationship between the reference services, detailed in the *access arrangement*, and the reference tariffs.

Table 5.1 - Reference Services

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

Reference service	Reference tariff
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
D1 – Supply Abolishment (Whole Current Metering) 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

5.2 Exit Service Tariff Overview

An overview of the structure of each of the reference tariffs applicable to exit services is presented in the following sections.

5.2.1 RT1 and RT2

The tariff structure for distribution includes:

- A fixed charge per user, and
- A charge per kWh for energy consumption.

The tariff structure for transmission includes:

- A charge per kWh for energy consumption.

Energy only tariffs have no incentive for users to improve their load factor or shift energy consumption to off-peak.

5.2.2 RT3 and RT4

The tariff structure for distribution includes:

- A fixed charge per user;
- A charge per kWh for metered on-peak energy consumption; and
- A charge per kWh for metered off-peak energy consumption.

The tariff structure for transmission includes:

- A charge per kWh for metered on-peak energy consumption; and
- A charge per kWh for metered off-peak energy consumption.

Time of use tariffs have the incentive for users to manage their energy consumption to shift energy consumption from on-peak to off-peak. However, as noted earlier, these time of use tariffs do not adequately reflect the actual peak periods of the network.

5.2.3 RT5 – High Voltage Metered Demand

The tariff structure is based on the metered demand of the user, with a discount to the demand charge based on the ratio of off-peak energy to total energy used. In addition, the tariff has a demand length tariff component for users with demand greater than 1,000 kVA.

This tariff has a mix of incentives for the user to manage their electricity consumption.

The demand used is a running 12-month peak. This provides a clear incentive to manage the peak demand because any excessive demand recorded in one month then impacts upon the demand charge for the next 12 months. The demand length charge is also based on the running 12-month peak.

The second incentive is the off-peak energy discount which is based upon the ratio of off-peak energy to total energy used. The maximum discount is 30% for off-peak energy usage.

5.2.4 RT6 – Low Voltage Metered Demand

The tariff structure is identical to RT5 – High Voltage Metered Demand.

5.2.5 RT7 – High Voltage Contract Maximum Demand

The tariff structure requires the user to nominate a contracted maximum demand (CMD) that reasonably reflects their expected annual peak demand. In addition, the tariff has a demand length tariff component also based on the CMD. There is a monthly penalty for any demand excursion above the CMD. All prices are in terms of $ per kVA.

The distribution component of the prices is zonal and there are 5 locational zones ranging from CBD to rural. This is because the costs of supply are seen to be dependent on the nature of the network that varies according to the location and consequent construction standard and cost.

There are also separate charges for administration and metering.

The transmission component of the tariff is nodal with prices based on the zone substation to which the user is connected.

This tariff has a mix of incentives for the user to manage their electricity consumption.

The demand is in kVA rather than kW so there is a clear benefit from managing the power factor as close to unity as possible. For example, improving the power factor from 0.7 to 0.8 will reduce the demand charge by 12.5%.

The second incentive is to manage the peak demand, which can be achieved by improving the load factor and by containing the peak demand. This incentive is very strong, and the user has flexibility in the options available for managing the demand. The penalty for exceeding the contract maximum demand provides additional incentive.

The demand length charge provides an incentive for the user to locate as close as possible to the zone substation. For existing users there is no real opportunity to respond to this incentive, but for new users there is some ability to respond.

The transmission component of the price is nodal so that there is a clear signal for users to locate near to the lower price substations. This may or may not be achievable depending on the individual user circumstances.

5.2.6 RT8 – Low Voltage Contract Maximum Demand

The tariff structure is identical to RT7 – High Voltage Contract Maximum Demand with the addition of a low voltage charge that reflects the additional cost for usage of the low voltage distribution network.

5.2.7 RT9 – Streetlighting and RT10 – Unmetered Supplies

Streetlights and unmetered supplies do not have metering information to support either the initial setting of the tariff or the billing of users based on energy consumption or energy demand and therefore the energy consumption must be estimated based on burn hours and globe wattage.

The tariff structure for distribution includes:

- A fixed charge per user; and
- A charge per kWh for calculated energy consumption.

The tariff structure for transmission includes:

- A charge per kWh for calculated energy consumption.

Where the asset is a Western Power maintained streetlight, there is a charge to reflect the capital and operating costs of the streetlight asset itself, revenue to recover these costs are included within the revenue target. The tariff structure for the streetlight asset is a fixed charge per light based on the type and rating of the light.

5.2.8 TRT1 – Transmission

The tariff is based on the zone substation to which the user is connected. The user will pay the use of system, common service and control system service charges. There is also a separate metering charge. All prices are in dollars per kW.

The tariff structure requires the user to nominate a CMD, in kWs, that reasonably reflects their expected annual peak demand. There is a monthly penalty for any demand excursion above the CMD.

The incentive is clearly for the user to manage their peak demand through the initial nomination of the CMD and also the monthly penalty for exceeding the CMD.

5.3 Entry Service Tariff Overview

An overview of the structure of each of the reference tariffs applicable to entry services is presented in the following sections.

5.3.1 RT11 – Distribution

The transmission charge is identical to the charge for a transmission connected generator in that the generator nominates a declared sent out capacity (DSOC) and the charge is based on the transmission nodal price at the nearest transmission entry point. The transmission charge for use of system is in dollars per kW. Unlike the transmission exit reference tariff (TRT1) there is no common service charge. The generator must also pay the connection charge which is also expressed in terms of $ per kW.

The generator's DSOC is in kW and is corrected for losses from the zone substation to the generator site, for purposes of calculation of the transmission price component.

The distribution charge is based on the zonal CMD demand length price. There is no demand only charge. As such the distribution charge for generators with demand less than 1,000 kVA is zero. There is also a separate metering charge.

The DSOC must be nominated in kW for the transmission charge and in kVA for the distribution charge. However, the power factor is assumed to be unity for the purpose of charging because the power factor will not generally be within the control of the generator.

The incentive for distribution-connected generators is to locate as near as possible to the zone substation although for generators with a DSOC less than 1,000 kVA there is no such incentive. However, small generators are not considered to require strong locational incentives because the network will generally not be impacted to any significant extent.

The transmission component also contains a locational signal. Like for TRT2 customers, there is a monthly penalty for any demand excursion above the DSOC that has not been authorised by System Management.

5.3.2 TRT2 – Transmission

The tariff is based on the zone substation to which the generator is connected. The generator will pay the entry point use of system and control system service charges. There is also a separate metering charge. All prices are in dollars per kW.

The tariff structure requires the generator to nominate a DSOC, in kWs, that reflects their maximum intended export capacity. There is a monthly penalty for any demand excursion above the DSOC that has not been authorised by System Management.

5.4 Bi-directional Service Tariff Overview

An overview of the structure of each of the reference tariffs applicable to bi-directional services is presented in the following sections.

5.4.1 RT13 and RT14

The tariff structure for distribution includes:

- A fixed charge per user, and
- A charge per kWh for energy consumption.

The tariff structure for transmission includes:

- A charge per kWh for energy consumption.

5.4.2 RT15 and RT16

The tariff structure for distribution includes:

- A fixed charge per user;
- A charge per kWh for metered on-peak energy consumption; and
- A charge per kWh for metered off-peak energy consumption.

The tariff structure for transmission includes:

- A charge per kWh for metered on-peak energy consumption; and
- A charge per kWh for metered off-peak energy consumption.

Time of use tariffs have the incentive for users to manage their energy consumption to shift energy consumption from on-peak to off-peak. However, as noted earlier, these time of use tariffs do not adequately reflect the actual peak periods of the network.

5.4.3 RT17 and RT18

The tariff structure for distribution includes:

- A fixed charge per user
- A charge per kWh for metered on-peak energy consumption
- A charge per kWh for metered shoulder energy consumption
- A charge per kWh for metered off-peak energy consumption

The tariff structure for transmission includes:

- A charge per kWh for metered on-peak energy consumption
- A charge per kWh for metered shoulder energy consumption
- A charge per kWh for metered off-peak energy consumption

5.4.4 RT19

The tariff structure for distribution includes:

- A fixed charge per user
- A charge per kW for metered on-peak demand
- A charge per kWh for metered on-peak energy consumption
- A charge per kWh for metered shoulder energy consumption
- A charge per kWh for metered off-peak energy consumption

The tariff structure for transmission includes:

- A charge per kW for metered on-peak demand

- A charge per kWh for metered on-peak energy consumption
- A charge per kWh for metered shoulder energy consumption
- A charge per kWh for metered off-peak energy consumption

5.4.5 RT20

The tariff structure for distribution includes:

- A fixed charge per user
- A charge per kVA for metered on-peak demand
- A charge per kWh for metered on-peak energy consumption
- A charge per kWh for metered shoulder energy consumption
- A charge per kWh for metered off-peak energy consumption

The tariff structure for transmission includes:

- A charge per kVA for metered on-peak demand
- A charge per kWh for metered on-peak energy consumption
- A charge per kWh for metered shoulder energy consumption
- A charge per kWh for metered off-peak energy consumption

5.4.6 RT21

The tariff structure for distribution includes:

- A fixed charge per user
- A charge per kWh for metered on-peak energy consumption
- A charge per kWh for metered shoulder energy consumption
- A charge per kWh for metered off-peak energy consumption
- A charge per kWh for metered overnight energy consumption

The tariff structure for transmission includes:

- A charge per kWh for metered on-peak energy consumption
- A charge per kWh for metered shoulder energy consumption
- A charge per kWh for metered off-peak energy consumption
- A charge per kWh for metered overnight energy consumption

5.4.7 RT22

The tariff structure for distribution includes:

- A fixed charge per user
- A charge per kWh for metered on-peak energy consumption
- A charge per kWh for metered shoulder energy consumption
- A charge per kWh for metered off-peak energy consumption
- A charge per kWh for metered overnight energy consumption

The tariff structure for transmission includes:

- A charge per kWh for metered on-peak energy consumption
- A charge per kWh for metered shoulder energy consumption
- A charge per kWh for metered off-peak energy consumption
- A charge per kWh for metered overnight energy consumption

5.5 Other Tariffs Overview

5.5.1 RT23

The tariff structure is identical to RT11, with the inclusion of a discount that represents the benefit provided to the Western Power Network.

5.5.2 RT24

The tariff structure is identical to RT5- RT8 and RT13 – RT22 (as applicable), with the inclusion of a discount that represents the benefit provided to the Western Power Network.

5.5.3 RT25

RT25 consists of a charge per connection point supply abolishment.

5.5.4 RT26

RT26 consists of a charge per request to remotely control load.

5.5.5 RT27

RT27 consists of a charge per request to remotely limit load.

5.5.6 RT28

RT28 consists of a charge per request for de-energisation.

5.5.7 RT29

RT29 consists of a charge per request for re-energisation.

6. Derivation of Transmission System Tariff Components

This section describes the methodology used to calculate transmission reference tariff components.

6.1 Cost Reflective Network Pricing

6.1.1 General

The Cost Reflective Network Pricing (CRNP) cost allocation method allocates the revenue requirement to all network elements, based on their GODV, then determines the use made of each network element by each connection point during the survey period.

The CRNP cost allocation process requires detailed network analysis and involves the following steps:

1. Determining the annual revenue requirement for individual transmission shared network assets (see below);
2. Determining the network load and generation pattern;
3. Performing a load-flow to calculate the MVA loading on network elements;
4. Determining the allocation of generation to loads;
5. Determining the utilisation of each asset on the network by each connection point;
6. Allocating the revenue requirement of individual network elements to each user based on the assessed usage share; and
7. Determining the total cost allocated to each connection point by adding the share of the costs of each individual network element attributed to each point in the network.

6.1.2 Allocation of Generation to Load

A major assumption in the use of the CRNP methodology is the allocation of generation to load using the 'electrical distance'. With this approach, a greater proportion of load at a particular location is supplied by generators that are electrically closer than those that are electrically remote. The electrical distance is the impedance between the two locations, and this can readily be determined through a standard 'fault level calculation'. Once the assumption has been made as to the proportion that each generator actually supplies each load for a particular load and generation condition (time of day) it is possible to trace the flow through the network that results from supplying each load (or generator).

The utilisation that any load makes of any element is then simply the ratio of the flow on the element resulting from the supply to this load to the total flow on the element made by all loads and generators in the system.

6.1.3 Operating Conditions for Cost Allocation

The choice of operating conditions is important in developing prices using the CRNP methodology. The use made of the network by particular loads and generators will vary depending on the load and generation conditions on the network at the time. The National Electricity Rules (NER) sets out principles that could be applied to determine the sample of operating conditions to consider.

The load and generation patterns used to establish transmission prices should include all operating scenarios that result in most stress in the network and for which network investment may be contemplated. The operating conditions chosen should broadly correspond to the times at which high

demands drive network expansion decisions. Operating conditions should be included that impose peak loading conditions on particular elements, recognising that these may occur at times other than for peak demand.

Consistent with these principles, the operating conditions to be used for the cost allocation process for the transmission system are as follows:

- Load and generation conditions shall be actual operating conditions from 12 months prior; and
- Operating conditions shall include data for every node for every half hour where system peak demand is greater than an amount such that data from 10 individual summer days and 10 individual winter days are included.

6.2 Price Setting for Transmission Reference Services

Transmission tariffs for exit and entry services are fixed and are generally expressed as dollars/kw/annum. Generally, transmission prices are derived by dividing the cost pool, either in its entirety or at a zone substation level, by the assigned maximum demand applying to those assets. However, the details of some parts of the process are complex and explained in more detail in the following sections.

6.2.1 Transmission Pricing Model

Once Transmission assets are valued and T-price (see below for details) has established the relativity of Use of System (UOS) prices the Transmission Pricing Model is used:

1. to calculate the annual revenue requirements for all respective cost pools (based on valuation data and the rate of return required); and
2. to scale the raw T-price derived UOS prices to give the required UOS cost pool revenues.

6.2.2 Connection Price

The Connection Price is a price for the utilisation of Western Power owned connection assets. The Connection Price reflects the total annual costs allocated to the connection assets divided by the total usage at all points. The Connection Price is calculated by taking the Connection Cost Pool Revenue and dividing it by the aggregate of relevant CMDs and DSOCs (over all Exit or Entry points where the charge is applied).

Connection charges for connection points on the distribution system will be differentiated between loads and generators by applying the principles applied to the transmission shared system.[1] This results in generators paying approximately a quarter of the price as for loads.

Connection charges for connection points on the transmission system are not published but are determined subject to the specific connection arrangements. These connection charges are individually calculated to reflect the actual connection assets that apply to that user. The amount of the charge is based on achieving a regulated return on all relevant assets and an allocation of the transmission network operating costs.

1 By adopting the principle of 20 per cent of costs being allocated to generation and the remaining 80 per cent to loads.

6.2.3 UOS Prices

Consistent with the NER, the proportion of the transmission reference service revenue that is allocated to Transmission UOS is allocated to each and every connection point using a CRNP method. CRNP assigns a proportion of shared network costs to individual user connection points.

6.2.3.1 T-Price

Western Power uses T-price to establish the relativity of UOS prices for each exit and entry point. T-price is a modelling tool to allocate network costs using CRNP. T-price requires significant work to establish all of the inputs and to run the model, in summary:

- The GODV of every branch and node of the network is allocated. Every node is classified as either Exit or Entry, and every branch is classified as either shared or dedicated to consumers or dedicated to generators.
- Electrical configuration and parameters of the network are established (PSSE system Raw Data file).
- Interval data is assembled for all entry and exit points.
- Load flow analysis is carried out so that all network element costs are allocated to each zone substation based on usage of those network elements.
- The costs for all entry and exit points are then converted to prices by assigning a maximum demand to each node and using that demand to calculate a price in terms of dollars/kW/annum.

6.2.3.2 UOS Price Moderation

The application of CRNP for UOS prices can introduce volatility to individual prices as a result of changes in network usage beyond the control of any one user. It is hence appropriate to moderate any price fluctuations to mitigate price shock and improve certainty to customers. Annual variations to UOS prices are therefore scaled and moderated such that annual changes are constrained within a band of ± 5%.

6.2.4 Common Service Price for Loads

The Common Service Price is expressed in cents/kW/day and is uniform for all exit points. The Common Service Price is calculated by taking the Common Service Cost Pool Revenue and dividing it by the aggregate of relevant CMDs (over all Exit points where the charge is applied).

6.2.5 Control System Service Price

The Control System Service Price is expressed in cents /kW/day. Separate Prices for consumers and generators are calculated based on the respective cost pools but are uniform for each.

6.2.5.1 Control System Service for Loads

The Control System Services price for Loads is calculated by taking the Control System Services for Loads Cost Pool Revenue and dividing it by the aggregate of relevant CMDs (over all Exit points where the charge is applied).

6.2.5.2 *Control System Service for Generators*

The Control System Services price for Generators is calculated by taking the Control System Services for Generators Cost Pool Revenue and dividing it by the aggregate of relevant DSOCs (over all Entry Points where the charge is applied).

6.2.6 Transmission Tariff Setting

The following table details the forecast transmission revenue which will be collected from transmission connection points and the total amount that will be collected from distribution connection points (please see section 6.3 for further details).

Table 6.1 - Transmission Revenue Forecast for 2019/20 ($M Nominal)

Customer type	Forecast Total MW	Number Customers	Forecast Transmission Revenue Recovered
Transmission Exit	695	31	35.2
Transmission Entry	5535	31	47.1
Distribution Users	3,792		273.2
Transmission Standby			2.7
Total Revenue Target Revenue			**358.2**

6.3 Price Setting for Distribution Reference Services

The tariffs for connection points on the transmission system do not collect the full transmission reference service revenue entitlement. Connection points on the distribution system utilise the transmission system as well as the distribution system. The remainder of the transmission reference service revenue entitlement is collected from tariffs for connection points on the distribution system.

Charges are determined for each direct connected transmission user based on respective CMDs. The revenue from these users is then deducted from the revenue entitlement for that substation to give a net revenue amount to be recovered from users connected to that substation via tariffs for connection points on the distribution system.

Reference tariffs for users connected to the distribution system with a peak demand >1 MVA incorporate transmission nodal prices. The transmission pass-through revenue, net of the revenues from the >1 MVA users, is then allocated in aggregate to the various small customer groupings on the basis of loss adjusted any time maximum demand (ATMD) for each grouping (further described below).

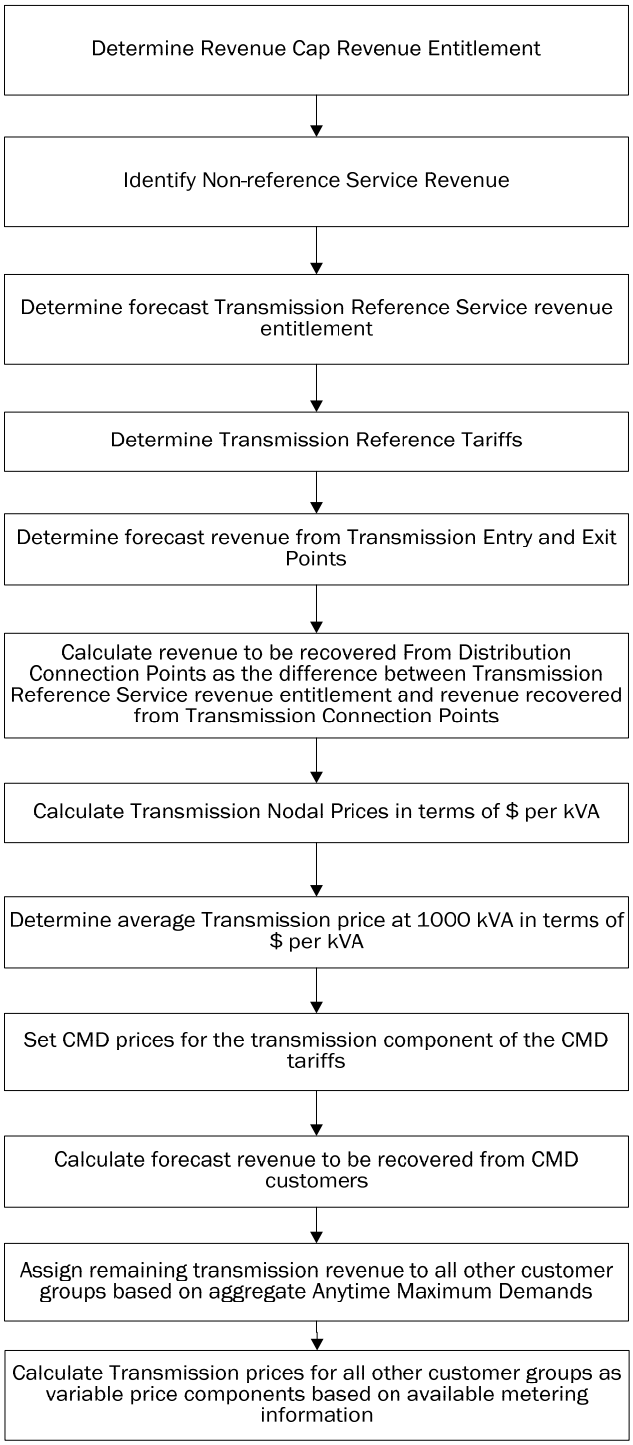
A number of processes take place to determine transmission prices that match the structure of distribution reference tariffs so that a full suite of bundled tariffs can be produced.

Transmission prices take a range of forms, as discussed in section 5. The CMD tariffs are based on a nominated peak demand in terms of kVA. The CMD tariffs are nodal in that they are based on the transmission node to which the load user is connected. All other tariffs are uniform across the Western Power Network.

6.3.1 Flow Chart

The process to derive prices is illustrated in the following flow diagram.

Figure 3: Derivation of Transmission Tariff Component of Distribution System Flow Chart



Each step in this process to derive transmission component of the distribution system reference tariffs is described in more detail as follows. The first two steps of determining the revenue entitlement and prices for transmission connected users have been covered earlier in this section.

6.3.2 Calculate the Forecast Revenue to be recovered from Distribution-Connected Users

It is assumed at this stage of the process that the forecast transmission revenue entitlement has been determined and transmission reference tariffs set. By applying the reference tariffs to the forecast transmission-connected user data, the revenue to be recovered from transmission entry and exit points can be forecast. The residual is the revenue that must be recovered from connection points on the distribution system.

6.3.3 Calculate Transmission Nodal Prices in terms of $ per kVA

To calculate the transmission prices in terms of dollars per kVA the zone substation power factors must be determined. The power factors are measured at the low voltage bus of the zone substations at system peak. To create a single nodal price the transmission use of system, common service and connection prices are added together for each zone substation. Multiplying that price by the power factor then provides the price in terms of dollars/kVA.

There is an additional factor taken into account at this stage. The Urban and CBD prices are set to be uniform for distribution-connected users. To achieve this, a weighted average transmission nodal price and a weighted average power factor are used.

This step is taken for a number of reasons. It does not make sense for users across the Perth metropolitan area to see a range of prices depending on location. For example, users can be connected to one zone substation for a period of time and then transferred to a different zone substation for operational reasons. Individual zone substation nodal prices would result in such a user seeing a price change although they had not changed anything from their perspective. From an administrative perspective it would be very difficult to manage such a situation. Price changes would also need to be managed within any side constraints imposed on price movements.

Another reason for this approach is that nodal prices are designed to give users an economic signal in terms of location. However, in an urban environment it is difficult for users to respond to any economic signal because land zoning and availability will normally be the determining factor in location rather than cost of supply.

This process produces a set of zone substation prices that are individual for Rural, Mixed and Mining substations and uniform for the CBD and Urban substations. These transmission nodal prices apply to connection points on the distribution system with demands equal to or greater than 7,000 kVA. This principle is established because the cost that a 7,000 kVA user imposes on the transmission network will be the same whether connected to the distribution or transmission networks.

For users with CMD below 7,000 kVA the factor of load diversity becomes more relevant. In addition, the price must be structured to fit into the bundled tariff structure for all CMD users with demands greater than 1,000 kVA.

6.3.4 Determine Average Transmission Price at 1,000 kVA

At this stage we have the transmission nodal prices at 7,000 kVA. We also have established that the transmission price in terms of $/kVA at 1,000 kVA will be uniform for all users and will be the same from 0 to 1,000 kVA. The next task is to establish that uniform price.

Transmission costs are allocated to all users on the basis of anytime peak kVA demand. The transmission price is simply the revenue to be recovered from users with demands below 1,000 kVA divided by the sum of the anytime maximum demands of all those users.

The anytime maximum demands are not metered for the vast majority of users with demands below 1,000 kVA. The energy consumption is metered, and the anytime maximum demands are estimated by applying load factors based on Industry Codes. The industry codes and associated load factors were developed using sample data for actual representative user types.

At this stage the size of the revenue pool is not established. The revenue pool will be the amount defined by the following formula:

$$RP_{Below\ 1,000} = RP_{Total} – RP_{Over\ 7,000} - RP_{1,000\ to\ 7,000}$$

where,

$RP_{Below\ 1,000}$ = revenue to be recovered from users with demands below 1,000 kVA

RP_{Total} = revenue to be recovered from all distribution connected users

$RP_{Over\ 7,000}$ = revenue to be recovered from users with demands greater than 7,000 kVA

$RP_{1,000\ to\ 7,000}$ = revenue to be recovered from users with demands between 1,000 and 7,000 kVA

This equation has unknown elements in several terms at this stage. The revenue to be recovered from users with demands greater than 7,000 kVA is known because it is equal to the forecast demands of those users multiplied by the nodal price for each user.

The next step is to determine the pricing structure for users with demands between 1,000 and 7,000 kVA. To facilitate the bundling of transmission and distribution components in reference tariffs for connection points on the distribution system the transmission price structure must be consistent with the distribution price structure. For these users this means the prices will be in 'rate block' structure and take the form:

$$\text{User Charge}_{1,000\ to\ 7,000} = (\text{Price}_{At\ 1,000} * 1,000\ kVA) + (\text{Price}_{1,000\ to\ 7,000} *(\text{CMD}_{User} – 1,000\ kVA))$$

Where:

$\text{User Charge}_{1,000\ to\ 7,000}$ = the use of system charge for a user with CMD between 1,000 and 7,000 kVA

$\text{Price}_{At\ 1,000}$ = the average use of system price for all users with CMD below 1,000 kVA

$\text{Price}_{1,000\ to\ 7,000}$ = the use of system for this user with CMD between 1,000 and 7,000 kVA

CMD_{User} = the contract maximum demand for that user

The $\text{Price}_{1,000\ to\ 7,000}$ will be different for each zone substation but can be calculated by the formula:

$$\text{Price}_{1,000\ to\ 7,000} = [(\text{Price}_{At\ 7,000} * 7,000\ kVA) - (\text{Price}_{At\ 1,000} * 1,000\ kVA)]/6,000\ kVA$$

So there is now a formula to calculate the price for each user with CMD between 1,000 and 7,000 kVA with the unknown being the price at 1,000 kVA. There is a single unknown ($\text{Price}_{At\ 1,000}$) that can be solved in the above equation which can be expanded as below.

Original Equation:

$$RP_{Below\ 1,000} = RP_{Total} – RP_{Over\ 7,000} - RP_{1,000\ to\ 7,000}$$

Expansion of each term:

$RP_{Below\ 1,000}$ = ∑ User anytime maximum demands multiplied by Price At 1,000

RP_{Total} = Total transmission revenue entitlement allocated to distribution-connected users

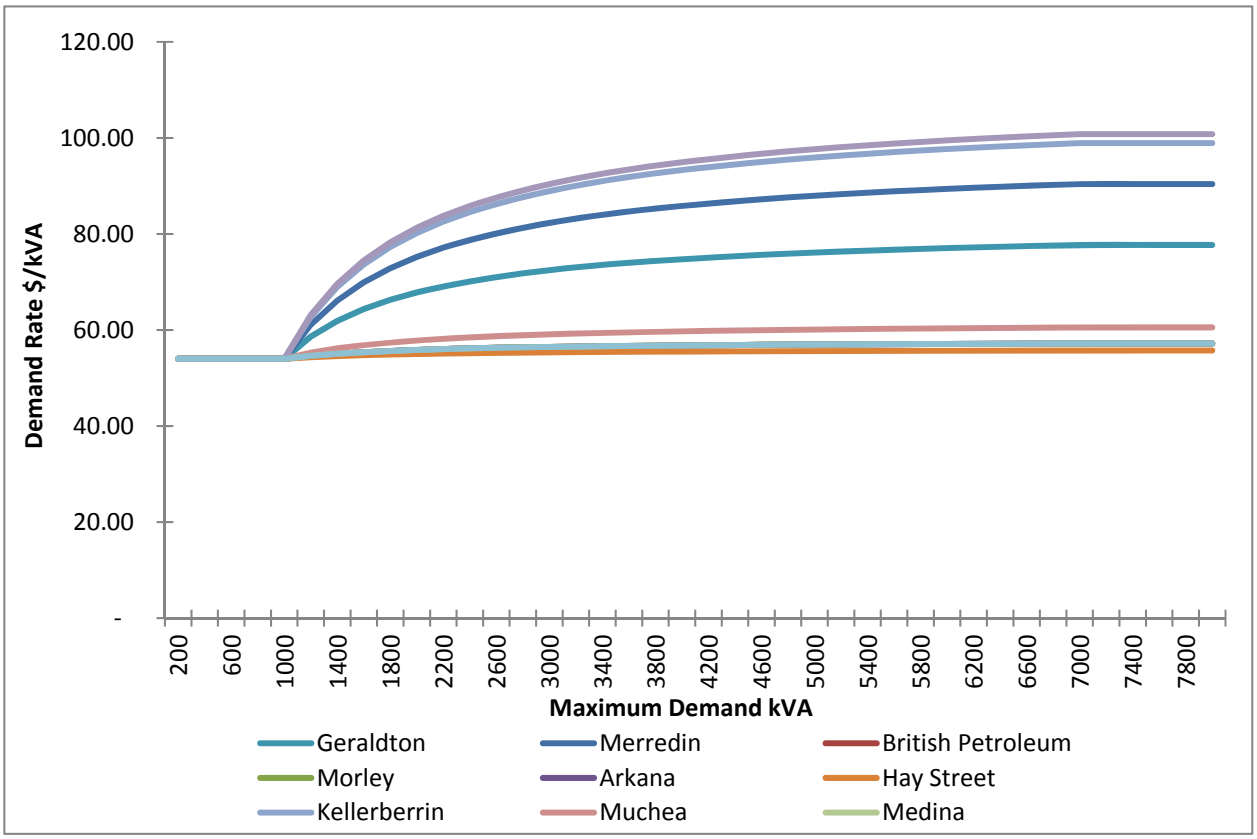
$RP_{Over\ 7,000}$ = ∑ Individual demands for users greater than 7,000 kVA anytime maximum demands multiplied by the nodal price at the zone substation to which the user is connected

$RP_{1,000\ to\ 7,000}$ = ∑ User charges for all users with CMDs between 1,000 and 7,000 kVA

At this stage of the process the average price at and below 1,000 kVA, the nodal price for each zone substation for demands between 1,000 and 7,000 kVA and the nodal price for demands greater than 1,000 kVA are known. This has set the transmission tariffs for CMD users.

The rate blocks were developed using the principle of a straight-line transition from the charge at 1,000 kVA to the charge at 7,000 kVA. When converted back to prices the actual prices at any demand can be mapped and in fact the transition from a flat price below 1,000 kVA to a flat price above 7,000 kVA is a 1/x curve. The following graph illustrates the price outcomes for the above process. A number of substations have been chosen to represent the range of prices across urban and rural substations.

Figure 4: Rate Blocks Example



6.3.5 Calculate Transmission Revenue to be recovered from users with demands below 1,000 kVA

This has been determined in the previous section in that the revenue is the average price multiplied by the sum of the anytime maximum demands of all users with demands less than 1,000 kVA.

6.3.6 Calculate Transmission Prices for all other Customer Groups

The first step in this process is to allocate the total revenue entitlement for all users with demands below 1,000 kVA to the customer groups within this category. The customer groups are restated for reference.

- General Business Large (300 to < 1,000 kVA maximum demand)
- General Business Medium (100 to < 300 kVA maximum)
- General Business Small (15 to < 100 kVA maximum demand)
- Small Business (<15 kVA maximum demand)
- Residential
- Streetlights
- Unmetered Supplies

The result of this process is an amount of revenue that must be recovered within each customer group. At this stage the customer group users are mapped to reference tariff groups together with their associated revenues.

In the case of Transmission reference tariff components, the cost pools are allocated on the basis of demand. The tariffs now being considered do not have metered values for demand and on that basis; energy is used as a proxy for demand. The revenue is recovered entirely through the variable component of the tariffs, which in each of these tariffs is the energy rate. Thus, the tariff components are in terms of cents per kWh.

In the case of unmetered supplies, streetlights, energy small and energy large tariffs the price is calculated by the formula:

$$\text{Price}_{\text{Tariff}} = \text{Forecast Revenue Entitlement for Tariff} / \text{Total Forecast Energy for Tariff}$$

In the case of the time of use energy tariffs the transmission revenue allocated to those tariffs is recovered through both the on-peak and off-peak energy amounts. It is essentially the on-peak demand and therefore on-peak energy that drives the cost of the transmission network. However off-peak energy must also be served, and a proportion of the revenue is recovered through the off-peak energy.

Approximately 30% of the forecast revenue entitlement is recovered through the off-peak energy and 70% through the on-peak energy. This ratio is chosen to achieve three outcomes:

- It recovers most of the cost from on-peak usage which is the main driver of transmission costs;
- It allows for a portion of the costs to be recovered from off-peak energy usage to provide for equity between users with different load patterns; and
- It provides an economic signal to encourage off-peak energy usage that has the benefit of reducing network costs resulting in lower reference tariffs for all users.

6.3.7 Transmission Components of Distribution Reference Tariffs Forecast Revenue

The following table details the forecast transmission reference service revenue, by tariff, which will be collected from distribution connection points.

Table 6.2: Transmission Reference Service Revenue Recovered from Distribution Connection Points for 2019/20 ($M Nominal)

Reference Tariff	kWh	Number Customers	Forecast Transmission Revenue Recovered
RT1 - Anytime Energy (Residential)	4,035,000,000	803,312	81.8
RT2 - Anytime Energy (Business)	930,000,000	72,319	22.8
RT3 - Time of Use Energy (Residential)	53,000,000	7,465	1.0
RT4 - Time of Use Energy (Business)	829,000,000	9,421	19.6
RT5 - High Voltage Metered Demand	758,000,000	296	9.1
RT6 - Low Voltage Metered Demand	2,037,000,000	3,967	38.4
RT7 - High Voltage Contract Maximum Demand	3,109,000,000	291	62.1
RT8 - Low Voltage Contract Maximum Demand	186,000,000	58	5.2
RT9 – Streetlighting	141,000,000	288,415	1.8
RT10 - Unmetered Supplies	40,000,000	16,493	0.3
RT11 - Distribution Entry	-	-	1.3
RT13 – Anytime Energy (Residential) Bi-directional	1,051,000,000	244,678	21.3
RT14 – Anytime Energy (Business) Bi-directional	123,000,000	1,363	3.0
RT15 – Time of Use (Residential) Bi-directional	52,000,000	10,159	0.9
RT16 – Time of Use (Business) Bi-directional	161,000,000	887	3.9
RT17 - Time of Use Energy (Residential)	-	-	-
RT18 - Time of Use Energy (Business)	-	-	-
RT19 – Time of Use Demand (Residential)	-	-	-
RT20 – Time of Use Demand (Business)	-	-	-
RT21 – Multi Part Time of Use Energy (Residential)	-	-	-
RT22 – Multi Part Time of Use Energy (Business)	-	-	-
TOTAL - Reference Service			355.0
TOTAL – Non-Reference Service	-	-	3.4
TOTAL	**13,505,000,000**	**1,459,194**	**358.2**

6.4 Annual Price Review

As described in the *access arrangement*, revenue target revenue is reviewed annually. Together with changes to user CMDs and DSOCs (including zone substation maximum demands) it is consequently necessary to adjust prices annually also.

6.5 Compliance with sections 7.3 (b) and 7.6 of the *Code*

This section sets out how Western Power's *transmission tariffs* comply with sections 7.3(b) and 7.6 of the *Code*.

Section 7.3(b) of the *Code* requires that *reference tariffs* are set between the 'incremental costs of service provision' and 'stand-alone costs of service provision'.

'Incremental costs of service provision' means:

> *'that part of approved total costs that would be avoided by the service provider … if it were not to provide the covered service … to the group of users'*.

'Stand-alone cost of service provision' means:

> *'that part of approved total costs that the service provider would incur in providing the covered service to the … group of users .. if the covered service provided … was the sole group of users supply by the service provider…'*

Western Power has determined values for each of these concepts for each of the transmission reference services.

For the definition of incremental costs, the total costs that are avoided are a portion of the costs that Western Power incurs in performing it network operations activities. All other activities, e.g. asset maintenance and replacement would still be performed. Network operations expenditure between loads and generators has been allocated evenly (i.e. 50% each) and is based on the operational expenditure forecast within the access arrangement period.

For the definition of stand-alone costs, Western Power has determined that within a financial year, other than the network operations costs identified above, all other costs would still apply to both transmission connected generators and loads.

Table 6.3: Demonstration Transmission Reference Tariffs are between incremental and stand-alone cost of service provision for 2019/20 ($M Nominal)

Reference Service	Reference Tariff	Incremental Cost of Service	Stand-alone Cost of Service Provision	Forecast Revenue Recovered from Reference Tariff
A11	TRT1	2.3	355.9	35.2
B2	TRT2	2.3	355.9	47.1

Section 7.6 of the *Code* requires:

> *'unless an alternative pricing method better meets the Code objective, then incremental costs need to be recovered by variable components.'*

Western Power proposes to use an alternative pricing method, namely the method outlined in this Price List Information, to price transmission services on the basis that the method better meets the Code objective.

Applying the steps outlined in section 7.6 would results in *transmission tariffs* that largely do not vary with usage or demand. That is, with the exception of the small incremental costs, the balance of transmission revenue would be recovered evenly on a per network user basis. This means that all transmission connected loads and generators would be charged a flat fee with a very small variable component, regardless of their size and how much of the downstream network they use. This outcome does not facilitate the Code objective to '*to promote the economically efficient investment in and operation and use of, networks and services of networks in Western Australia in order to promote competition in markets upstream and downstream of the networks.*' Western Power's approach set out in this Price List Information of pricing transmission usage based on the capacity share and the usage of the network during peak periods better achieves the Code objective.

For distribution reference tariffs, compliance is demonstrated in section 7.3 of this document.

7. Derivation of Distribution System Tariff Components

This section describes the methodology used to calculate distribution reference tariff components.

The cost allocation process reflects the costs of supply for a customer group reasonably accurately. The process for determining prices for that customer group, while ideally similar in principle, is somewhat different in that it must take into account other factors such as equity, simplicity and efficiency (e.g. existing metering type).

Prices are determined with pre-loss-adjusted ATMDs.

The *Code* requires uniform reference tariffs for all users with annual energy demand below 1 MVA, which equates to approximately all but 500 connected to the Western Power Network. Users with energy demand below 1 MVA will exhibit the full range of energy consumption patterns. It is therefore clear that any tariff structure will not be totally cost reflective. However, the assumptions that are made in allocating users to particular load groups and in deriving the cost of supply to those customer groups, and the consequent prices, are all considered reasonable. Through the process described in this paper the tariff settings are derived through a rigorous process taking into account the information available and the requirements of the *Code*.

The distribution reference tariff components include the costs associated with the TEC. Section 7.12 of the *Code* sets out the requirement for Western Power to recover TEC through distribution reference tariffs for exit services (Western Power has extended this to include bi-directional services to be consistent with the Code Objective). Section 7.6 details the amounts associated with TEC that are embedded within the distribution reference tariff components.

7.1 Price Setting

This section details the methodology used to derive the tariff components from the cost pools, customer groups and locational zones.

7.1.1 Tariff Components

Distribution reference tariffs have been developed to enable users with different loads and usage patterns to choose the most appropriate form for them. The tariffs have fixed and variable components and are generally compatible with existing forms of user metering.

The components of each reference tariff are shown in the following table.

Table 7.1: Distribution Reference Tariff Components

TARIFF		TARIFF COMPONENTS									
	Fixed Component	Energy Only	On-Peak Energy	Shoulder Energy	Off-Peak Energy	Metered Demand	Annual Metered Demand	Off-Peak Discount Factor (%)	CMD/DSOC	Demand/ Length for ATMD > 1,000 kVA	Fixed Metering Component
RT1 – Anytime Energy (Residential)	✓	✓									✓
RT2 – Anytime Energy (Business)	✓	✓									✓
RT3 - Time of Use Energy (Residential)	✓		✓		✓						✓
RT4 - Time of Use Energy (Business)	✓		✓		✓						✓
RT5 - HV Metered Demand	✓					✓	✓	✓		✓	✓
RT6 - LV Metered Demand	✓					✓	✓	✓		✓	✓
RT7 - HV CMD	✓								✓	✓	✓
RT8 - LV CMD	✓								✓	✓	✓
RT9 - Streetlighting	✓	✓									
RT10 – Unmetered Supplies	✓	✓									
RT11 - Distribution Entry									✓	✓	✓
RT13 – Anytime Energy (Residential) Bi-directional	✓	✓									✓
RT14 – Anytime Energy (Business) Bi-directional	✓	✓									✓
RT15 – Time of Use (Residential) Bi-directional	✓		✓		✓						✓
RT16 – Time of Use (Business) Bi-directional	✓		✓		✓						✓
RT17 –Time of Use Energy (Residential)	✓		✓	✓	✓						✓
RT18 –Time of Use Energy (Business)	✓		✓	✓	✓						✓
RT19 –Time of Use Demand (Residential)	✓		✓	✓	✓	✓					✓
RT20 –Time of Use Demand (Business)	✓		✓	✓	✓	✓					✓

TARIFF		TARIFF COMPONENTS									
RT21 – Multi Part Time of Use Energy (Residential)	✓	✓	✓	✓	✓						✓
RT22 – Multi Part Time of Use Energy (Business)	✓	✓	✓	✓	✓						✓

7.1.2 The tariff comprises a fixed component ($/annum) and a variable component (cents/kWh)

This is the simplest and most appropriate charging methodology for large numbers of small users with existing energy only metering.

The fixed and variable components are set to best recover the costs associated with the smaller customer groups. The tariff components for residential and business are different, reflecting the different costs of supply.

7.1.3 RT3 and RT4 - Time of Use Energy Tariff (Residential or Business)

The tariff comprises a fixed component ($/annum) and variable on- and off-peak energy components (cents/kWh).

The tariff components for residential and business are different, reflecting the different costs of supply.

The fixed component of the residential time of use tariff is set to be the same as the fixed component of the residential energy only tariff.

Analysis of system load profiles by other utilities shows that typically 70% and 30% of network costs are associated with on- and off-peak load respectively. The on- and off-peak energy components of the tariffs are set to recover these approximate proportions of the variable cost pools for the respective customer groups.

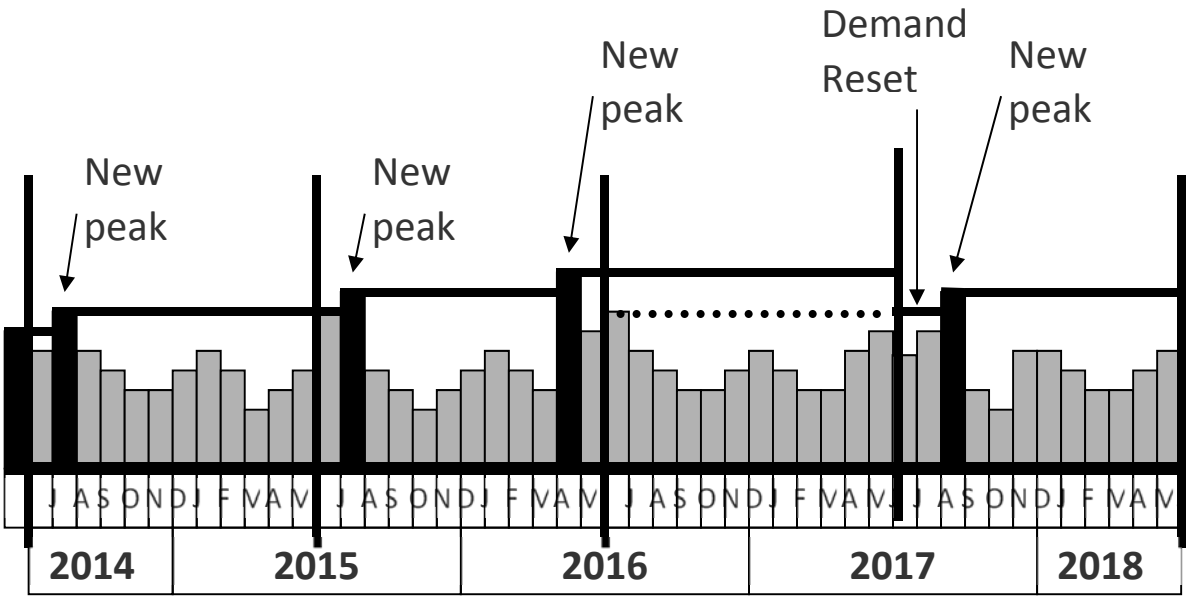
7.1.4 RT5 and RT6 - Metered Demand Tariff (HV and LV)

The metered demand tariff is based on a metered annual any time maximum demand with a discount to give credit for off-peak energy usage as a proportion of total energy used.

The annual any time maximum demand is the rolling peak value over the previous 12 months. This rolling peak, rather than a monthly-metered peak, is chosen for compatibility with the CMD tariffs that are based on a contracted maximum demand set for a defined period. A tariff based on a metered monthly peak would need to be higher to recover the same revenue from these users due to the effect of seasonal variation in loads.

The principle of using this rolling peak is illustrated in Figure 5.

Figure 5: Rolling Peak Illustration



There is no excess network usage charge for this tariff. The incentive to control the peak demand is significant because any half-hourly excess peak would be retained in the charges for a full 12 months. However, this is not intended to be unreasonably punitive to users and the negative impact of an extraordinary event would be assessed on a case by case basis.

In addition, a customer can make an application under section 10.2 of the Applications and Queuing Policy to reduce their demand where it can be reasonably demonstrated that future demand will be lower. This new demand will effectively reset the previous 12 months data.

The off-peak discount is applied monthly, based on the metered off-peak and total energy amounts. The discount is intended to create an incentive for users to use the network off-peak, and is provided as a specific reduction in the monthly charge depending on the proportion of off-peak energy used.

The tariff also includes a 'demand-length' component for demands greater than 1,000 kVA, identical to that applying in the CMD tariffs, based on the rolling annual peak.

The demand price is in rate block format. The transition points are set at 300 kVA and 1,000 kVA and the discount phases out at 1,500 kVA. At 1,500 kVA the tariff is set to be less attractive than the CMD tariffs for most users.

A discount mechanism applies to this tariff and is defined within the Price List.

7.1.5 RT7 and RT8 - Contract Maximum Demand Tariff (HV and LV)

The HV component of the CMD tariff is set to reflect a price that results in a user charge that is greater than the user incremental cost of supply but less than the stand-alone cost of supply. To achieve this outcome the two costs of service are modelled for each of the HV and LV CMD users.

Customers on transition tariffs are modelled, for pricing setting purposes, as contract maximum demand tariff customers.

The price structure is based on two particular components. There is a component that is directly linked to the nominated maximum demand which is in terms of $/kVA. The second component is based on a combination of the maximum demand and the length of HV feeder from the zone substation to the user's connection point. This price component is expressed in terms of $/kVA.km. Both of these tariff components are set to be uniform at 1,000 kVA and to be fully cost reflective at 7,000 kVA. This structure is consistent with the transmission CMD tariff for distribution connected customers.

The demand-length component of the tariff cannot be used in isolation because it distorts the charge for users either very close to the zone substation, where the cost could be virtually zero, or at a long distance from the substation, where the charge could be unreasonably high. The demand-based components of the tariff ameliorate this distortion as it recognises the cost of supply of a user does not only relate to the distance from the zone substation but also relates to the demand the user places on the network.

The effect of the pricing structure is, for a fixed demand, the charge to a user increases as distance to the zone substation increases. This is effectively providing a fixed and variable component to the price for identical users depending on their distance from a zone substation. In a similar manner, users at the same distance from a zone substation will pay more as their demand increases.

An additional feature of this price structure is that the price is not linear in relation to the demand.

For the demand-based component, the price at 1,000 kVA is uniform for each of the locational zones and is reflective of the average HV cost of the network per KVA demand. However, as the demand increases, the price declines recognising that the cost of supply declines on a per unit basis, as the demand increases.

The demand-length component is set to zero at 1,000 kVA. This is consistent with the requirement that all tariffs are uniform below 1,000 kVA demand. The price above 7,000 kVA is uniform, and the price varies continuously between 1,000 and 7,000 kVA.

In setting the CMD tariffs both components are adjusted so that for each of the users with demands greater than 1,000 kVA, their charge will fall between the incremental and stand-alone cost. The process to derive the settings is described as follows.

Demand Component of the CMD Tariff

The price at 7,000 kVA is individually set for each zone. The price is adjusted to provide a best fit so that users will see a charge that is between the incremental and stand-alone cost. This is done in combination with the demand-length component setting. However, it is clear that the price at 7,000 kVA should reflect the actual costs of the networks that supply these users. As such the cost for the CBD zone will be the highest, the Urban zone the next highest and so on so that the rural zone is the cheapest.

The distribution nodal prices at 7,000 kVA have been established. It has also been established the distribution price in terms of $/kVA at 1,000 kVA will be uniform for all users and will be the same from 0 to 1,000 kVA. The next step is to establish that uniform price. At 1,000 kVA the demand-length price is zero, so the demand price should reflect the average network price for all users in terms of $/kVA.

Distribution costs are allocated to all users on the basis of anytime peak kVA demand adjusted for losses. The distribution price is simply the revenue to be recovered from users with demands below 1,000 kVA divided by the sum of the anytime maximum demands of all those users.

The anytime maximum demands are not metered for the vast majority of users with demands below 1,000 kVA. The energy consumption is metered and the anytime maximum demands are estimated by applying load factors based on 'industry codes'. The industry codes and associated load factors were developed using sample data for actual representative user types.

At this stage the size of the revenue pool for users with demands below 1,000 kVA is not established. The revenue pool will be the amount defined by the following formula:

$$RP_{Below\ 1,000} = RP_{Total} – RP_{Over\ 7,000} - RP_{1,000\ to\ 7,000}$$

where:

$RP_{Below\ 1,000}$ = revenue to be recovered from users with demands below 1,000 kVA

RP_{Total} = revenue to be recovered from all distribution users

$RP_{Over\ 7,000}$ = revenue to be recovered from users with demands greater than 7,000 kVA

$RP_{1,000\ to\ 7,000}$ = revenue to be recovered from users with demands between 1,000 and 7,000 kVA

This equation has unknown elements in each of the terms at this stage. The revenue pools will only be determined when the CMD tariff settings are established and the prices can be applied to the forecast user data for users with demands greater than 1,000 kVA. The price at 7,000 kVA is set by graphically plotting the charge outcomes for each of the users with demands above 7,000 kVA, in the locational zones, and setting a price that puts the charge outcomes between the incremental and stand-alone cost of supply. Graphs demonstrating this are included in section 7.2.

To facilitate the solving of the remaining terms of this equation the pricing settings for users with demands between 1,000 and 7,000 kVA must be determined. The tariffs are defined in terms of 'rate block' structure and, for the demand component of the tariff, take the form:

$$\text{User Demand Charge}_{1,000\ to\ 7,000} = (\text{Price}_{At\ 1,000} * 1,000\ kVA) + (\text{Price}_{1,000\ to\ 7,000} *(CMD_{User} – 1,000\ kVA))$$

where:

User Demand Charge $_{1,000\ to\ 7,000}$ = the demand charge for a user with CMD between 1,000 and 7,000 kVA

Price $_{At\ 1,000}$ = the average demand price for all users with CMD below 1,000 kVA

Price $_{1,000\ to\ 7,000}$ = the incremental demand price for this user with CMD between 1,000 and 7,000 kVA

CMD_{User} = the contract maximum demand for that user

The Price $_{1,000\ to\ 7,000}$ will be different for each locational zone but can be calculated by the formula:

$$\text{Price}_{1,000\ to\ 7,000} = [(\text{Price}_{At\ 7,000} * 7,000\ kVA) - (\text{Price}_{At\ 1,000} * 1,000\ kVA)]/6,000\ kVA$$

There is now a formula to calculate the price for each user with CMD between 1,000 and 7,000 kVA with the unknown being the price at 1,000 kVA. The price at 7,000 kVA has been previously set.

There is now a single unknown (Price At 1,000) that can be solved in the above equation which now must be expanded as below.

Original Equation:

$$RP_{Below\ 1,000} = RP_{Total} – RP_{Over\ 7,000} - RP_{1,000\ to\ 7,000}$$

Expansion of each term:

$RP_{Below\ 1,000}$ = ∑ User anytime maximum demands multiplied by Price At 1,000

RP_{Total} = Total HV network revenue entitlement

$RP_{Over\ 7,000}$ = ∑ Individual demands for users greater than 7,000 kVA anytime maximum demands multiplied by the zonal price at the zone substation to which the user is connected

$RP_{1,000\ to\ 7,000}$ = ∑ User charges for all users with CMDs between 1,000 and 7,000 kVA

At this stage of the process the average price at and below 1,000 kVA, the demand price formula for each locational zone for demands between 1,000 and 7,000 kVA and the zonal price for demands greater than 7,000 kVA is known. This has set the demand component of the CMD tariffs.

Demand-Length Component of the CMD Tariff

The demand-length component of the tariff is set at zero at 1,000 kVA. It is also uniform at and above 7,000 kVA. The tariff is designed to be expressed in 'rate block' format so that the price is in terms of an incremental price above 1,000 kVA and up to 7,000 kVA and a uniform price above 7,000 kVA.

The price between 1,000 and 7,000 kVA is expressed as:

$$Price_{1,000\ to\ 7,000} = [(Price_{At\ 7,000} * 7,000\ kVA) - (Price_{At\ 1,000} * 1,000\ kVA)]/6,000\ kVA$$

The price settings are established in the same process as setting the demand settings in that the incremental and stand-alone costs are graphically plotted for every CMD user within each locational zone and the price settings are adjusted so the user charges fit between the limits. Graphs demonstrating this are included in section 7.2.

At this stage, the price settings are established for both the demand and demand-length price components of the CMD tariffs. The forecast HV network revenue for the HV and LV CMD users can be calculated by applying the prices to the forecast user data and summing the charges for all users.

The prices for both the demand and demand-length components of the prices are illustrated in Figure 11.

7.1.6 Metering Prices

The prices for distribution metering are split into two charges:

- For accumulation meters
- For interval meters

The costs involved in reading interval meters are higher than for accumulation meters and are priced accordingly. The largest contributor to this cost difference is the reading costs themselves; manual reads involve higher labour costs (as the data is time consuming to extract), and for remotely read meters the higher costs are attributable to the costs of the monthly data transmission via sim cards.

7.1.7 Administration costs

An administration charge is published separately in conjunction with the CMD tariff but is incorporated in the variable component of all the other tariffs.

The setting of the components in the metered demand tariff ensures compatibility with the administration price for the CMD tariff.

7.1.8 RT9 – Streetlighting Tariff

Separate network Use of System and Asset prices are designed to best recover the costs of providing streetlight services.

The use of system price comprises a fixed and variable charge similar to other low voltage tariffs, based on the expected daily cycle of energy usage.

The asset charge varies with the size and type of luminaire and is based on the annualised cost of capital and maintenance associated with each.

7.1.9 RT10 - Unmetered Supplies

The unmetered supplies tariff comprises a fixed and variable charge similar to other low voltage tariffs, designed to best recover the costs of providing these services based on the expected daily cycle of energy usage.

7.1.10 RT13 to 16 - Bi-directional Tariffs

The tariff components for these tariffs are identical to tariffs RT1 to 4, as applicable.

7.1.11 RT17 and RT18

These are the new tariffs that are designed to better reflect Western Power's system peak than the existing time of use tariffs (RT3, RT4, RT15 and RT16). Short peak and shoulder times and longer off-peak provide customers with more options to adjust their energy consumption in a cost-reflective manner.

Currently, there are no customers on these new tariffs which represents complexity in estimating uptake levels and cost allocation. It is expected that the new customers will migrate to RT17 and RT18 over time. Therefore, the initial shoulder rates of the tariffs are set on the same levels as RT1 for RT17 and RT2 for RT18. The peak component of the tariff is initially set with 10% increase in price, while off-peak provides 10% discount, that way ensuring the tariffs broadly reflect the costs of a typical customer on comparable tariffs.

This pricing approach will be reviewed in the next access arrangement period, when sufficient customers are on these tariffs to analyse their costs more appropriately. For now, it is assumed that given they are effectively the same customers as were previously on RT1 and 2, they will have the same costs to supply as these customers.

7.1.12 RT19 – RT20

This is a new tariff that is designed to better reflect Western Power's system peak than the existing time of use tariffs (RT3, RT4, RT15, and RT16) and offers a demand charge component. Shorter peak and shoulder times and longer off-peak, combined with the introduction of the demand charge and subsequent reduction of the energy rates provide customers with price signals to adjust their energy consumption in a cost-reflective manner. The inclusion of the moderate demand charge component serves as an indicator for future demand pricing in the residential customer segment.

Like for RT17 and RT18, these tariffs are designed to recover the average customer costs for a comparable tariff. The pricing for these tariffs will be refined further in AA5 when further data is available.

7.1.13 RT21 – RT22

In a similar manner to the new tariffs described above, these tariffs are designed to recover the average customer costs for a comparable tariff. The pricing for these tariffs will be refined further in AA5 when further data is available.

7.1.14 Excess Network Usage Charges

The Excess Network Usage Charge (ENUC) is designed in a manner that allows Western Power to recover its forward looking efficient costs in circumstances where a user exceeds its contracted capacity in a manner that accords with the Access Code chapter 7 price requirements and in furtherance of the Access Code objective to:

> '*promote the economically efficient: investment in; and operation of and use of, networks and services of networks in Western Australia in order to promote competition in markets upstream and downstream of the networks*.'

The ENUC which applies to reference services A7, A8, A11, B1 and B2 is specified as two parts. An ENUC that applies to users connected to parts of Western Power's network that are unconstrained and an ENUC that applies to users connected to parts of Western Power's network that are constrained. Currently the Eastern Goldfields and Albany regions are constrained as per Western Power's the State of the Infrastructure Report.

Users who exceed their contracted capacity in unconstrained parts of the network have an ENUC that reflects their usual network tariff. That is because in these unconstrained parts of the network Western Power does not have any reasonable foreseeable additional costs beyond those that it usually incurs in providing network services when a user exceeds its contracted capacity (noting that there may still be damage caused by a user breaching its access contract which may result in loss to Western Power that can be pursued against the user under its access contract).

On the other hand, users who exceed their contracted capacity in constrained parts of the network have additional impacts on Western Power and are likely to incur additional costs for Western Power including:

- additional likelihood of damage to the Western Power network from exceeding network capacity;
- loss of revenue from not being able to provide network access to existing and future network users; and
- requirement to augment (or provide alternatives to augmentation such as a network control service) to facilitate the network capacity used by a user in breach of their access contract as well as other users.

On the basis of these differences the ENUC that applies in constrained parts of the Western Power network is 2.5 times the network tariff.

The following table illustrates why Western Power's ENUC in constrained areas of the network is (well within) its' forward-looking costs:

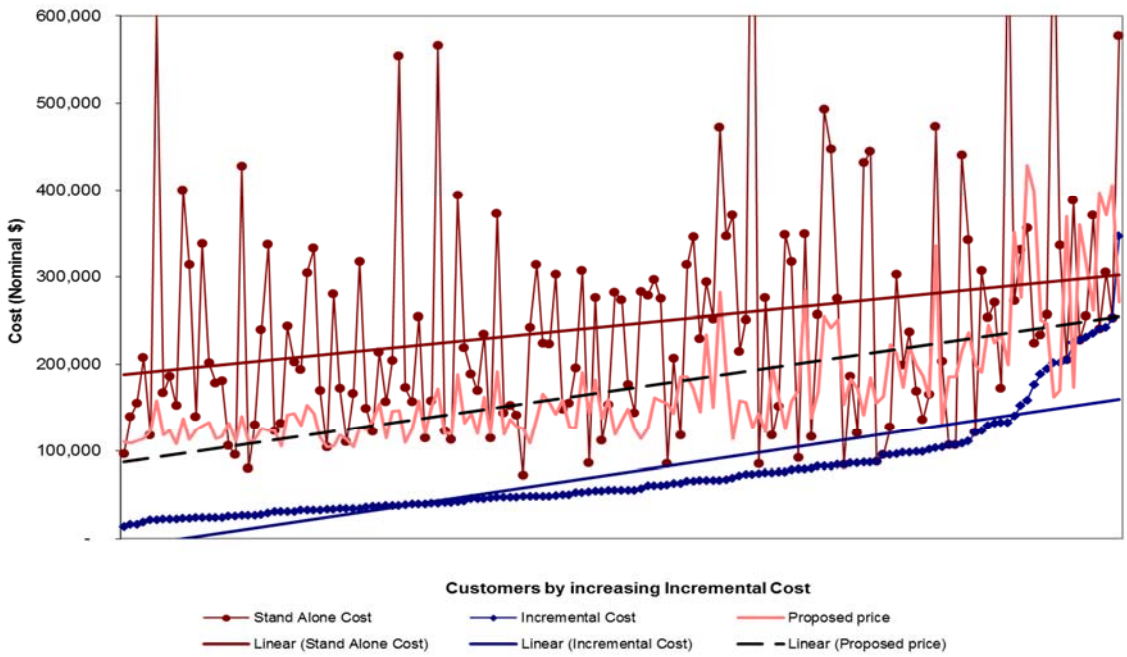
Normal network tariff payable by user for 1MWh[2]	ENUC payable by user for exceeding contracted capacity for 1MWh (i.e. 2.5 times network tariff)	The amount payable by Western Power to obtain 1MWh from a network control service[3]	Network rebuild to provide 1MWh[4]
$24	$59	circa. >$400	$500

7.2 Demonstration of Derivation of Distribution Components of Distribution Reference Tariffs

7.2.1 CMD Demand Price Graphs

The following graphs illustrate the proposed prices for the CMD tariffs are between incremental cost and stand-alone cost for the majority of customers. However, no pricing structure can be guaranteed to price between them in every individual case. The prices have been set to achieve a balance between all customers, while still meeting the requirements of section 7.3(b) of the *Code*. Compliance with section 7.3 of the *Code* is demonstrated in section 7.3.

Figure 6: Urban Zone



2 Hourly charge based on a 1MW A7/A8 CMD with a flat load connected 10km from a zone sub station

3 The approximate cost of network control service (approximation based on actual NCS contract)

4 The estimated cost of building a 330kv transmission line to alleviate constraints

Figure 7: CBD Zone

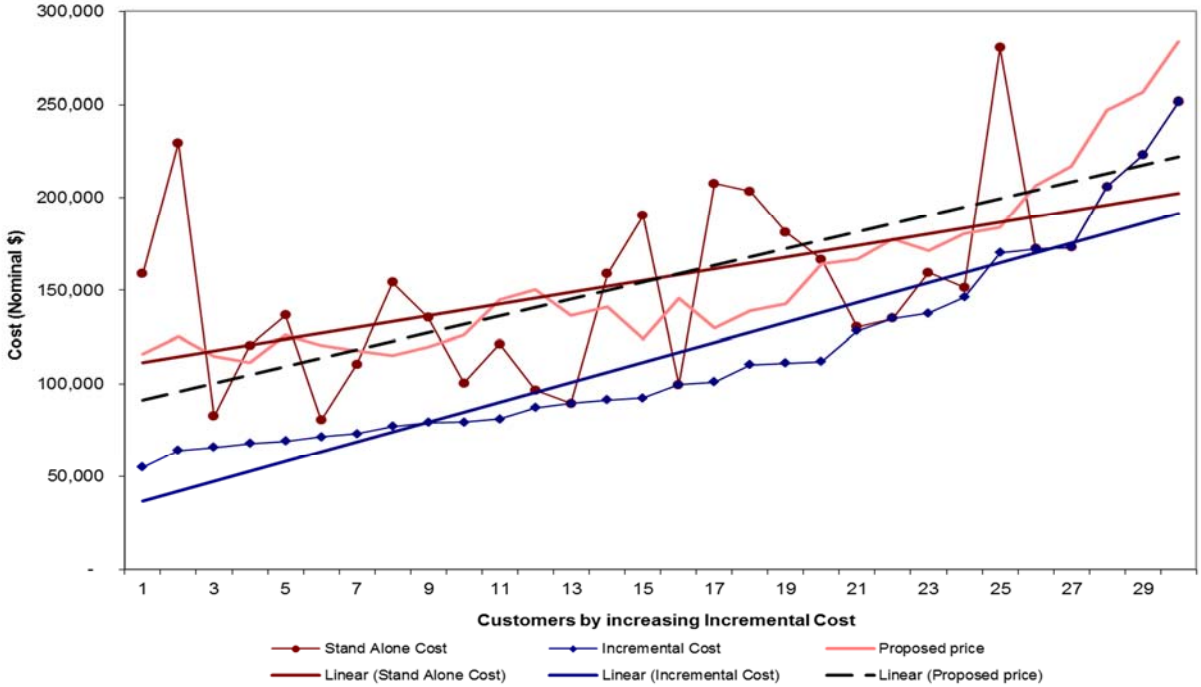


Figure 8: Mining Zone

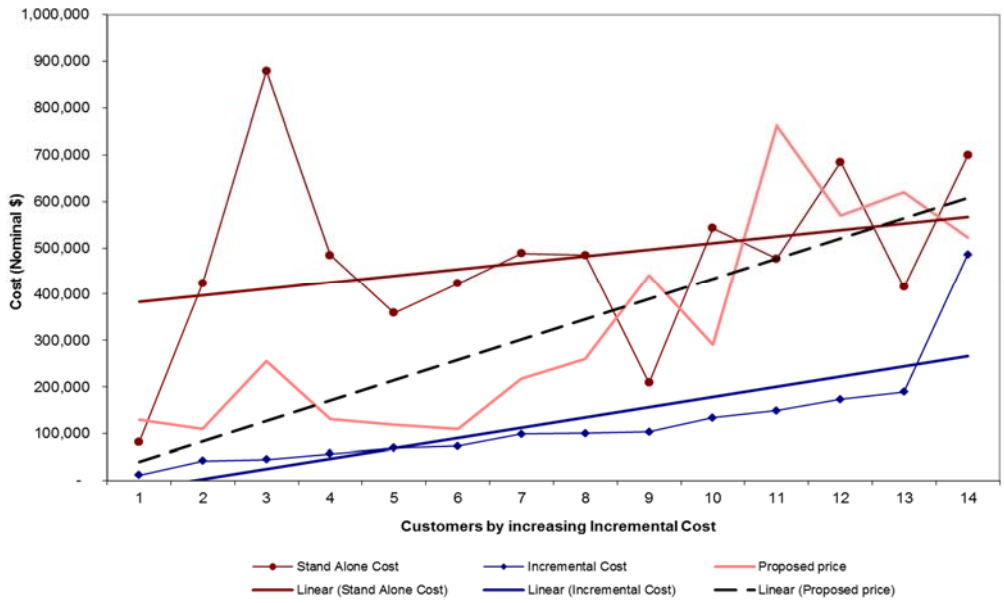


Figure 9: Mixed Zone

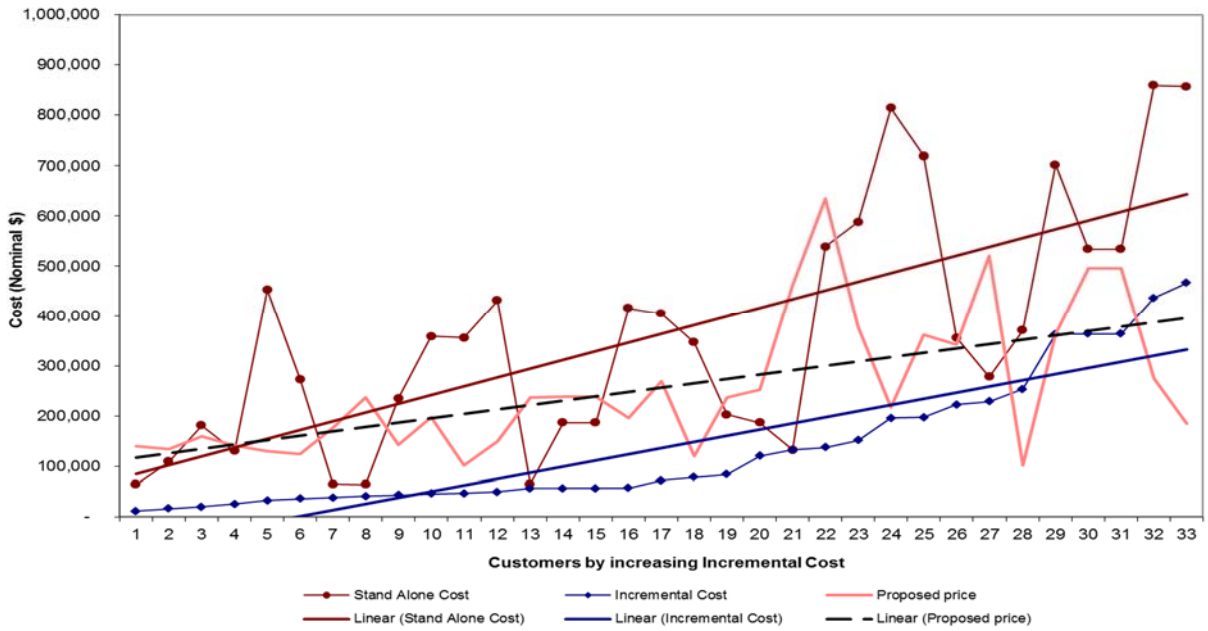
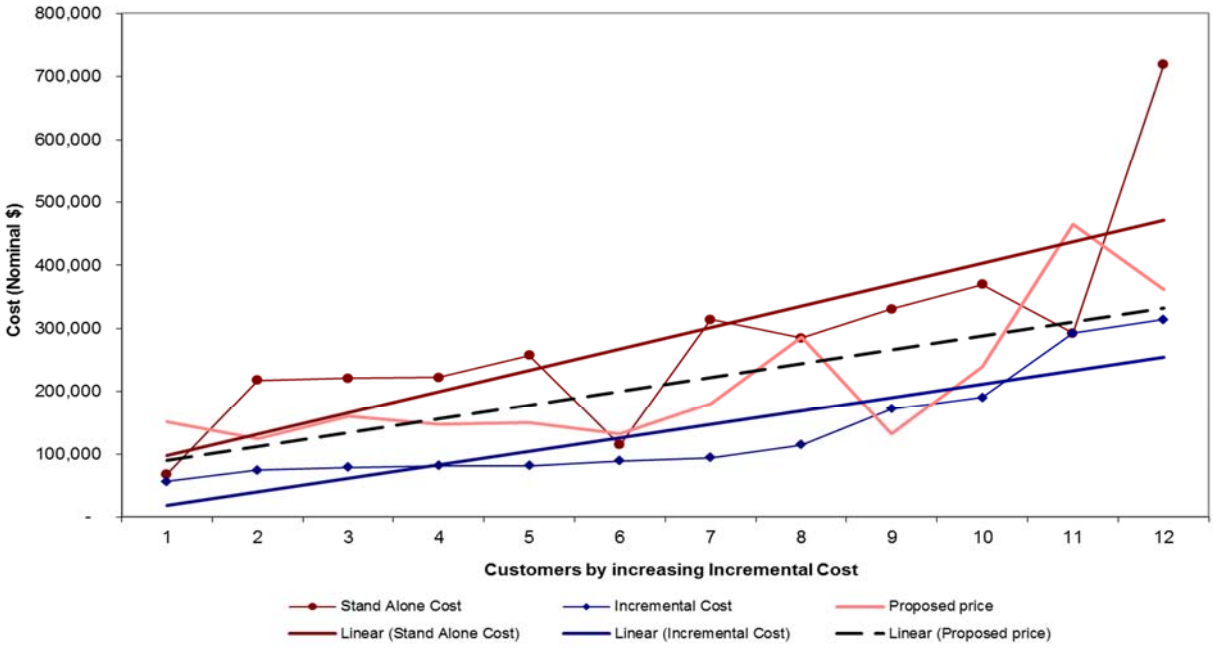
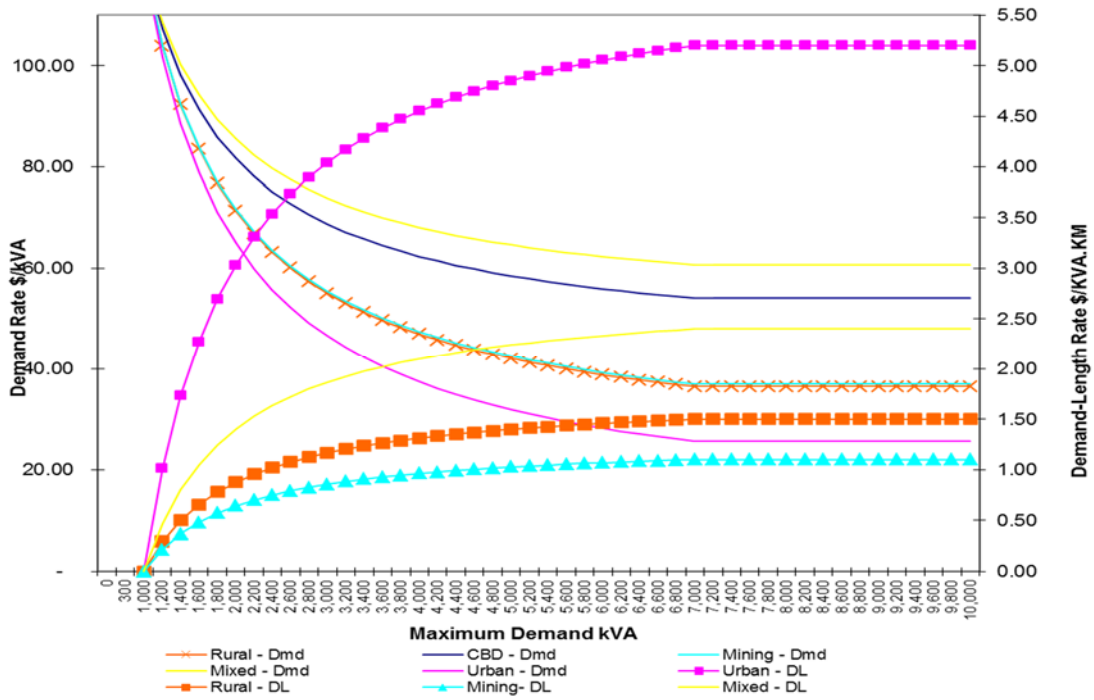


Figure 10: Rural Zone



7.2.2 Demand/Length Graph

Figure 11: Demand Length Rates and CMD Rates by Zone



7.2.3 Forecast Tariff Revenue

The following table details the forecast distribution reference service revenue, by tariff, which will be collected from distribution connection points.

Table 7.2: Distribution Reference Service Revenue Recovered from Distribution Connection Points for 2019/20 ($M Nominal)

Reference Tariff	kWh	Number Customers	Forecast Distribution Revenue Recovered
RT1 - Anytime Energy (Residential)	4,035,000,000	803,312	536.7
RT2 - Anytime Energy (Business)	930,000,000	72,319	128.5
RT3 - Time of Use Energy (Residential)	53,000,000	7,465	5.7
RT4 - Time of Use Energy (Business)	829,000,000	9,421	73.3
RT5 - High Voltage Metered Demand	758,000,000	296	22.9
RT6 - Low Voltage Metered Demand	2,037,000,000	3,967	117.3
RT7 - High Voltage Contract Maximum Demand	3,109,000,000	291	60.2
RT8 - Low Voltage Contract Maximum Demand	186,000,000	58	12.7
RT9 – Streetlighting	141,000,000	288,415	40.2
RT10 - Unmetered Supplies	40,000,000	16,493	4.8
RT11 - Distribution Entry	-	-	2.2
RT13 – Anytime Energy (Residential) Bi-directional	1,051,000,000	244,678	152.0
RT14 – Anytime Energy (Business) Bi-directional	123,000,000	1,363	11.8
RT15 – Time of Use (Residential) Bi-directional	52,000,000	10,159	6.4
RT16 – Time of Use (Business) Bi-directional	161,000,000	887	13.3
RT17 - Time of Use Energy (Residential)	-	-	-
RT18 - Time of Use Energy (Business)	-	-	-
RT19 – Time of Use Demand (Residential)	-	-	-
RT20 – Time of Use Demand (Business)	-	-	-
RT21 – Multi Part Time of Use Energy (Residential)	-	-	-
RT22 – Multi Part Time of Use Energy (Business)	-	-	-
TOTAL – Reference Services	**13,505,000,000**	**1,459,194**	**1,188.0**
TOTAL – Non-Reference Services			0.7
TOTAL			**1,188.7**

7.3 Demonstration that Distribution Reference Tariffs are between incremental and stand-alone cost of service provision

In accordance with section 7.3(b) of the *Code*, reference tariffs are set to at least recover the incremental cost, but to be less than the stand-alone cost of service provision. The following table demonstrates the outcomes for 2019/20.

Table 7.3: Demonstration Reference Tariffs are between incremental and stand-alone cost of service provision for 2019/20 ($M Nominal)

Reference Service	Reference Tariff	Incremental Cost of Service	Stand-alone Cost of Service Provision	Forecast Revenue Recovered from Reference Tariff
A1	RT1	195.0	588.4	536.7
A2	RT2	47.4	350.3	128.5
A3	RT3	2.8	104.1	5.7
A4	RT4	40.2	284.7	73.3
A5, C5	RT5	18.1	491.7	22.9
A6, C6	RT6	42.6	430.4	117.3
A7, C7	RT7	20.8	74.4	60.2
A8, C8	RT8	3.6	13.9	12.7
A9	RT9	18.7	266.0	40.2
A10	RT10	0.8	293.6	4.8
C1	RT13	51.8	158.2	2.2
C2	RT14	3.3	32.0	152.0
C3	RT15	2.4	113.7	11.8
C4	RT16	5.8	22.9	6.4
A12, C9	RT17	-	-	-
A13, C10	RT18	-	-	-
A14, C11	RT19	-	-	-
A15, C12	RT20	-	-	-
A16, C13	RT21	-	-	-
A17, C14	RT22	-	-	-

7.3.1 Method to calculate incremental and stand-alone cost of service provision

Western Power has updated the method used to derive incremental cost in Table 7.3. The definition of incremental cost in the *Code* requires Western Power to consider only that portion of approved total costs that would be avoided if the customer group was not served. As most elements of total costs are fixed and relate to the Regulated Asset Base, these costs have been excluded. In any one year of an *access arrangement*, the only cost savings that would result from not serving a customer group would be the operating costs allocated to that customer group. As such, the method to determine incremental costs considers only operating costs.

Once this adjustment to total costs for incremental costs has been made, the values in Table 7.3 are derived during the cost of supply modelling process. For the stand-alone costs, each service is allocated a combination of fixed and variable cost pools calculated as per this document. Table 7.4 demonstrates the allocations made.

Table 7.4 – Cost pools used to determine stand-alone cost

Stand-alone cost
Fixed and variable transmission costs allocated to the service
Metering costs allocated to the service
Variable distribution costs allocated to the service
The relevant fixed distribution costs allocated to the service

7.4 Demonstration that incremental costs are recovered through variable components

Section 7.6 of the *Code* states that the incremental cost of service provision should be recovered by the variable components of tariffs. Western Power has had regard to this requirement in setting tariffs. The following table shows that the variable components for 2019/20 tariffs exceeds the incremental cost calculated in section 7.3 for all tariffs.

Table 7.5: Demonstration that variable costs exceed incremental costs ($M Nominal)

Reference Service	Reference Tariff	Incremental Cost of Service	Variable tariff components
A1	RT1	195.0	340.0
A2	RT2	47.4	105.2
A3	RT3	2.8	4.1
A4	RT4	40.2	81.6
A5, C5	RT5	18.1	31.7
A6, C6	RT6	42.6	139.9
A7, C7	RT7	20.8	71.8

Reference Service	Reference Tariff	Incremental Cost of Service	Variable tariff components
A8, C8	RT8	3.6	6.7
A9	RT9	18.7	34.3
A10	RT10	0.8	1.8
C1	RT13	51.8	88.6
C2	RT14	3.3	13.9
C3	RT15	2.4	3.8
C4	RT16	5.8	16.1
A12, C9	RT17		
A13, C10	RT18		
A14, C11	RT19		
A15, C12	RT20		
A16, C13	RT21		
A17, C14	RT22		

7.5 Annual Price Review

Distribution prices can be volatile due to matters beyond the control of any one user. In order to minimise this volatility and reduce the commercial uncertainty for users, revenues are subject to an annual 'side constraint' (effectively a limit on annual reference tariff revenue changes) as detailed in the *access arrangement*. This side constraint will, by extension, have a controlling effect on price movements.

7.6 TEC in the Distribution Components of Distribution Reference Tariffs

This section details the amounts associated with TEC that are embedded within the distribution reference tariff components.

Western Power pays TEC to the WA State Government to contribute towards maintaining the financial viability of Horizon Power under Part 9A of the *Electricity Industry Act 2004*. The purpose of TEC is to enable the regulated retail tariffs for electricity that is not supplied from the South West Interconnected System (SWIS) to be, so far as is practicable, the same as the regulated retail tariffs for electricity that is supplied from the SWIS.

The graphs and tables detailed in previous sections are inclusive of TEC. The tables that follow in this section separate out the amounts of TEC that are embedded within the distribution reference tariff components.

7.6.1 TEC Forecast Revenue

The following table details the forecast TEC, by tariff, which will be collected from distribution connection points.

Table 7.6 - TEC Recovered from Distribution Connection Points for 2019/20 ($M Nominal)

Reference Tariff	kWh	Number Customers	Forecast TEC Recovered
RT1 - Anytime Energy (Residential)	4,035,000,000	803,312	62.3
RT2 - Anytime Energy (Business)	930,000,000	72,319	14.7
RT3 - Time of Use Energy (Residential)	53,000,000	7,465	0.7
RT4 - Time of Use Energy (Business)	829,000,000	9,421	12.4
RT5 - High Voltage Metered Demand	758,000,000	296	8.2
RT6 - Low Voltage Metered Demand	2,037,000,000	3,967	34.4
RT7 - High Voltage Contract Maximum Demand	3,109,000,000	291	5.3
RT8 - Low Voltage Contract Maximum Demand	186,000,000	58	1.6
RT9 – Streetlighting	141,000,000	288,415	0.9
RT10 - Unmetered Supplies	40,000,000	16,493	0.3
RT11 - Distribution Entry	-	-	-
RT13 – Anytime Energy (Residential) Bi-directional	1,051,000,000	244,678	16.2
RT14 – Anytime Energy (Business) Bi-directional	123,000,000	1,363	1.9
RT15 – Time of Use (Residential) Bi-directional	52,000,000	10,159	0.6
RT16 – Time of Use (Business) Bi-directional	161,000,000	887	2.5
RT17 - Time of Use Energy (Residential)	-	-	-
RT18 - Time of Use Energy (Business)	-	-	-
RT19 – Time of Use Demand (Residential)	-	-	-
RT20 – Time of Use Demand (Business)	-	-	-
RT21 – Multi Part Time of Use Energy (Residential)	-	-	-

RT22 – Multi Part Time of Use Energy (Business)	-	-	-
TOTAL	**13,505,000,000**	**1,459,124**	**162.0**

7.6.2 TEC Tariff Components – Use of System

The following table details the amounts associated with TEC that are embedded within the distribution reference tariff use of system components.

Table 7.7: TEC Tariff Components – UOS

		Fixed TEC	Variable TEC		
		c/day	c/kWh	On-Peak c/kWh	Off-Peak c/kWh
Reference tariff 1 - RT1					
	TEC	-	1.545	-	-
Reference tariff 2 - RT2					
	TEC	-	1.582	-	-
Reference tariff 3 - RT3					
	TEC	-	-	2.254	0.644
Reference tariff 4 - RT4					
	TEC	-	-	2.319	0.663
Reference tariff 9 – RT9					
	TEC	-	0.608	-	-
Reference tariff 10 – RT10					
	TEC	-	0.642	-	-
Reference tariff 13 – RT13					
	TEC	-	1.545	-	-
Reference tariff 14 – RT14					
	TEC	-	1.582	-	-
Reference tariff 15 – RT15					
	TEC	-	-	2.254	0.644
Reference tariff 16 – RT16					
	TEC	-	-	2.319	0.663

Table 7.8: TEC Tariff Components – RT17 – RT20

		Fixed TEC	Variable TEC			
		c/day	c/kWh	On-Peak c/kWh	Shoulder c/kWh	Off-Peak c/kWh
Reference tariff 17 - RT17						
	TEC	-	-	1.700	1.545	1.405
Reference tariff 18 - RT18						
	TEC	-	-	1.740	1.582	1.438
Reference tariff 19 - RT19						
	TEC	-	-	1.870	1.545	1.277
Reference tariff 20 - RT20						
	TEC	-	-	1.914	1.582	1.308

Table 7.9: TEC Tariff Components – RT21 – RT20

		Fixed TEC	Variable TEC					
		c/day	c/kWh	On-Peak c/kWh	Shoulder c/kWh	Off-Peak c/kWh	Overnight c/kWh	Super Off-Peak c/kWh
Reference tariff 21 - RT21								
	TEC	-	-	1.700	1.545	1.405	1.405	1.264
Reference tariff 22 - RT22								
	TEC	-	-	1.740	1.582	1.438	1.438	1.294

7.6.3 TEC Tariff Components – Metered Demand

The following table details the amounts associated with TEC that are embedded within the distribution reference tariff metered demand components.

Table 7.10: TEC Tariff Components – Metered Demand

	RT5 – TEC		RT6 – TEC	
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
0 to 300	17.284	14.517	17.284	17.284
300 to 1000	16.673	5199.626	16.673	16.673
1000 to 1500	6.065	16870.944	6.065	6.065

7.6.4 TEC Tariff Components – Demand Prices

The following table details the amounts associated with TEC that are embedded within the distribution reference tariff demand components.

Table 7.11: TEC Tariff Components – Demand Prices

Pricing Zone	RT 7 and RT 8 – TEC
	Fixed charge (c per day)
CBD	5,000.00
Goldfields Mining	5,000.00
Mixed	5,000.00
Rural	5,000.00
Urban	5,000.00

7.6.5 TEC Tariff Components – LV prices

The following table details the amounts associated with TEC that are embedded within the distribution reference tariff RT8.

Table 7.12: TEC Tariff Components – LV prices

	Fixed	Demand (c/day)
LV Prices	0.00	1671/kVA

8. Derivation of Other Tariff Components

The following tariffs are provided on a fee for service basis and the revenue does not count towards the revenue target.

8.1 RT25, RT28 and RT29

Western Power has determined pricing for supply abolishment, remote de-energise and remote re-energise services using a bottom up build 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.

8.2 RT26 and RT27

For the 19/20 Price List, the tariffs have been set at zero, as input costs are unknown. Further work is needed, in consultation with users, to understand the costs involved in delivering this service. Once this work has been completed, future updates to the Price List will include revised pricing that better reflects the costs involved in providing these services.

9. Price Changes

9.1 Side Constraint Demonstration

The following table demonstrates compliance with the side constraint as detailed in sections 6.5 of the *access arrangement*. The side constraints are reproduced below.

$$\frac{\sum_{y=1}^{n} p_t^{xy} q_t^{xy}}{\sum_{y=1}^{n} p_{t-1}^{xy} q_t^{xy}} \leq (1+CPI_t)(1-X_t) + A'_t + 0.02$$

where:

$$A'_t = \frac{(DAA3_t + TAA3_t + \triangle TEC_t + DTEC_t)}{(DR'_t + TR'_t)}$$

The following values have been used to calculate the right-hand side of each side constraint in 2019/20:

Table 9.1: 2019/20 Side Constraint Components

Variable	Value	Variable	Value
CPI_t	1.89%	ΔTEC_t	-$36M
X_t	-3.85%	TR'_t	$358.2M
$DAA3_t$	0	DR'_t	$1,026.7M
$TAA3_t$	0	A'_t	-2.6%

Side constraint values:

Table 9.2: Side constraint values

	Constraint
$(1+CPI_t)(1-X_t)+A'_t+0.02$	5.2%

Table 9.3: Demonstrates compliance with these constraints on all tariffs

Tariff	Change in weighted average prices	Constraint compliance
RT1	2.1%	✓
RT2	1.7%	✓

Tariff	Change in weighted average prices	Constraint compliance
RT3	-0.5%	✓
RT4	3.5%	✓
RT5	4.4%	✓
RT6	5.1%	✓
RT7	5.1%	✓
RT8	5.2%	✓
RT9	-2.7%	✓
RT10	2.4%	✓
RT11	2.3%	✓
RT13	2.6%	✓
RT14	-1.3%	✓
RT15	0.2%	✓
RT16	3.3%	✓
RT17	N/A	✓
RT18	N/A	✓
RT19	N/A	✓
RT20	N/A	✓
RT21	N/A	✓
RT22	N/A	✓
TRT1	5%	✓
TRT2	5%	✓

9.2 Individual component changes

The following tables detail the % change in the 2019/20 tariff components when compared to the 2016/17 tariff components (noting that there was no 2017/18 Price List).

9.2.1 Use of System Prices

The % changes in the following table are applicable for reference tariffs: RT1, RT2, RT3, RT4, RT9, RT10, RT13, RT14, RT15 and RT16.

Table 9.4: System Prices RT1, RT2, RT3, RT4, RT9, RT10, RT13, RT14, RT15 and RT16[5]

		Fixed Price	Energy Rates		
		% Change	Anytime % Change	On-Peak % Change	Off-Peak % Change
Reference tariff 1 - RT1					
	Transmission		35.5%		
	Distribution	5.3%	-0.8%		
	Bundled Tariff	5.3%	6.1%		
Reference tariff 2 – RT2					
	Transmission		37.9%		
	Distribution	8.1%	-1.3%		
	Bundled Tariff	8.1%	5.2%		
Reference tariff 3 - RT3					
	Transmission			35.5%	35.4%
	Distribution	5.3%		-1.1%	-0.6%
	Bundled Tariff	5.3%		6.1%	6.0%
Reference tariff 4 - RT4					
	Transmission			35.5%	35.4%
	Distribution	2.2%		-1.2%	-0.8%
	Bundled Tariff	2.2%		5.6%	6.4%
Reference tariff 9 – RT9					
	Transmission		35.4%		

[5] Note for 2019/20, the approach to metering prices has changed and so the comparison is no longer appropriate. The changes will be reported annually from 2019/20 based on the new approach to pricing. In general, metering prices have reduced significantly in AA4.

		Fixed Price	Energy Rates		
		% Change	Anytime % Change	On-Peak % Change	Off-Peak % Change
	Distribution	3.8%	-1.8%		
	Bundled Tariff	3.8%	6.2%		
Reference tariff 10 – RT10					
	Transmission		35.5%		
	Distribution	1.8%	-1.8%		
	Bundled Tariff	1.8%	3.5%		
Reference tariff 13 – RT13					
	Transmission		35.5%		
	Distribution	5.3%	-0.8%		
	Bundled Tariff	5.3%	6.1%		
Reference tariff 14 – RT14					
	Transmission		37.9%		
	Distribution	8.1%	-1.3%		
	Bundled Tariff	8.1%	5.1%		
Reference tariff 15 – RT15					
	Transmission			35.5%	35.4%
	Distribution	5.3%		-1.1%	-0.6%
	Bundled Tariff	5.3%		6.1%	6.0%
Reference tariff 16 – RT16					
	Transmission			35.5%	35.5%
	Distribution	2.2%		-1.2%	-0.8%
	Bundled Tariff	2.2%		5.6%	6.4%

9.2.2 Streetlight Asset Prices

The % changes in the following table are applicable for reference tariff: RT9.

Table 9.5: Streetlight Asset Prices RT9

Light Specification	Annual Charge % Change
42W CFL SE	-7.0%
42W CFL BH	-7.0%
42W CFL KN	-7.0%
70W MH	-7.0%
70W HPS	-7.0%
125W MV	-7.0%
150W MH	-7.0%
150W HPS	-7.0%
250W MH	-7.0%
250W HPS	-7.0%
Standard LED 20W	-
Standard LED 36W	-
Standard LED 53W	-
Standard LED 80W	-
Standard LED 160W	-
Standard LED 170W	-
Decorative BH LED 17W	-
Decorative KN LED 17W	-
Decorative LED 34W	-
Decorative LED 42W	-
Decorative LED 80W	-
Decorative LED 100W	-

Table 9.6: Streetlight Asset Prices RT9

Light Specification	Annual Charge % Change
50W MV	-4.3%
70W MV	-4.3%
80W MV	-4.3%
150W MV	-4.3%
250W MV	-4.3%
400W MV	-4.3%
40W FLU	-4.3%
80W HPS	-4.3%
125W HPS	-4.3%
100W INC	-4.3%
80W MH	-4.3%
125W MH	-4.3%
22W LED	0.0%

9.2.3 Metered Demand Prices

The % changes in the following table are applicable for reference tariff: RT5.

Table 9.7: Metered Demand Prices RT5

	Transmission		Distribution		Bundled Tariff	
Demand (kVA) (Lower to upper threshold)	Fixed % Change	Demand (in excess of lower threshold) % Change	Fixed % Change	Demand (in excess of lower threshold) % Change	Fixed % Change	Demand (in excess of lower threshold) % Change
0 to 300		35.47%	-2.1%	1.6%	-2.1%	9.3%
300 to 1000	35.47%	35.47%	-0.4%	2.2%	7.7%	9.9%
1000 to 1500	35.47%	35.46%	0.1%	1.8%	8.3%	11.5%

The % changes in the following table are applicable for reference tariff: RT6.

Table 9.8: Percent changes for reference tariff RT6

	Transmission		Distribution		Bundled Tariff	
Demand (kVA) (Lower to upper threshold)	Fixed % Changes	Demand (in excess of lower threshold) % Changes	Fixed % Change	Demand (in excess of lower threshold) % Change	Fixed % Change	Demand (in excess of lower threshold) % Change
0 to 300		32.00%	-2.6%	1.6%	-2.6%	8.3%
300 to 1000	32.00%	32.00%	-0.6%	2.0%	6.3%	8.5%
1000 to 1500	32.00%	32.00%	-0.1%	1.4%	6.8%	8.7%

9.2.4 Demand Prices

The % changes in the following table are applicable for reference tariff: RT7 and RT8.

Table 9.9: Percent changes for reference tariff RT7 and RT8

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)
Cook Street	WCKT	CBD	18.50%	11.34%	12.30%	0.0%	-4.0%	-2.7%	5.4%	4.4%	4.6%
Forrest Avenue	WFRT	CBD	18.50%	11.34%	12.30%	0.0%	-4.0%	-2.7%	5.4%	4.4%	4.6%
Hay Street	WHAY	CBD	18.50%	11.34%	12.30%	0.0%	-4.0%	-2.7%	5.4%	4.4%	4.6%
Milligan Street	WMIL	CBD	18.50%	11.34%	12.30%	0.0%	-4.0%	-2.7%	5.4%	4.4%	4.6%
Wellington Street	WWNT	CBD	18.50%	11.34%	12.30%	0.0%	-4.0%	-2.7%	5.4%	4.4%	4.6%
Black Flag	WBKF	Goldfields Mining	18.50%	11.81%	12.30%	0.0%	-5.1%	-2.7%	5.4%	8.7%	8.1%
Boulder	WBLD	Goldfields Mining	18.50%	11.77%	12.30%	0.0%	-5.1%	-2.7%	5.4%	8.5%	7.9%
Bounty	WBNY	Goldfields Mining	18.50%	12.02%	12.30%	0.0%	-5.1%	-2.7%	5.4%	10.1 %	9.5%
West Kalgoorlie	WWKT	Goldfields Mining	18.50%	11.71%	12.30%	0.0%	-5.1%	-2.7%	5.4%	8.1%	7.6%
Albany	WALB	Mixed	18.50%	11.79%	12.30%	0.0%	-3.8%	-2.7%	5.4%	6.5%	6.3%
Boddington	WBOD	Mixed	18.50%	11.25%	12.30%	0.0%	-3.8%	-2.7%	5.4%	3.5%	3.9%
Bunbury Harbour	WBUH	Mixed	18.50%	11.22%	12.30%	0.0%	-3.8%	-2.7%	5.4%	3.4%	3.9%
Busselton	WBSN	Mixed	18.50%	11.57%	12.30%	0.0%	-3.8%	-2.7%	5.4%	5.0%	5.1%
Byford	WBYF	Mixed	18.50%	11.31%	12.30%	0.0%	-3.8%	-2.7%	5.4%	3.8%	4.1%
Capel	WCAP	Mixed	18.50%	11.47%	12.30%	0.0%	-3.8%	-2.7%	5.4%	4.5%	4.7%
Chapman	WCPN	Mixed	18.50%	11.68%	12.30%	0.0%	-3.8%	-2.7%	5.4%	5.7%	5.7%
Darlington	WDTN	Mixed	18.50%	11.41%	12.30%	0.0%	-3.8%	-2.7%	5.4%	4.2%	4.5%

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)
Durlacher Street	WDUR	Mixed	18.50%	11.61%	12.30%	0.0%	-3.8%	-2.7%	5.4%	5.3%	5.3%
Eneabba	WENB	Mixed	18.50%	11.57%	12.30%	0.0%	-3.8%	-2.7%	5.4%	5.1%	5.1%
Geraldton	WGTN	Mixed	18.50%	11.61%	12.30%	0.0%	-3.8%	-2.7%	5.4%	5.3%	5.3%
Marriott Road	WMRR	Mixed	18.50%	11.19%	12.30%	0.0%	-3.8%	-2.7%	5.4%	3.3%	3.8%
Muchea	WMUC	Mixed	18.50%	11.41%	12.30%	0.0%	-3.8%	-2.7%	5.4%	4.2%	4.4%
Northam	WNOR	Mixed	18.50%	11.64%	12.30%	0.0%	-3.8%	-2.7%	5.4%	5.5%	5.4%
Picton	WPIC	Mixed	18.50%	11.31%	12.30%	0.0%	-3.8%	-2.7%	5.4%	3.8%	4.1%
Rangeway	WRAN	Mixed	18.50%	11.65%	12.30%	0.0%	-3.8%	-2.7%	5.4%	5.6%	5.5%
Sawyers Valley	WSVY	Mixed	18.50%	11.57%	12.30%	0.0%	-3.8%	-2.7%	5.4%	5.1%	5.1%
Yanchep	WYCP	Mixed	18.50%	11.40%	12.30%	0.0%	-3.8%	-2.7%	5.4%	4.2%	4.4%
Yilgarn	WYLN	Mixed	18.50%	11.76%	12.30%	0.0%	-3.8%	-2.7%	5.4%	6.2%	6.1%
Baandee	WBDE	Rural	18.50%	11.81%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.8%	8.2%
Beenup	WBNP	Rural	18.50%	11.84%	12.30%	0.0%	-5.2%	-2.7%	5.4%	9.0%	8.4%
Bridgetown	WBTN	Rural	18.50%	11.56%	12.30%	0.0%	-5.2%	-2.7%	5.4%	7.4%	6.9%
Carrabin	WCAR	Rural	18.50%	11.85%	12.30%	0.0%	-5.2%	-2.7%	5.4%	9.0%	8.4%
Collie	WCOE	Rural	18.50%	11.66%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.0%	7.4%
Coolup	WCLP	Rural	18.50%	11.74%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.4%	7.8%
Cunderdin	WCUN	Rural	18.50%	11.77%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.5%	7.9%
Katanning	WKAT	Rural	18.50%	11.72%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.2%	7.7%
Kellerberrin	WKEL	Rural	18.50%	11.80%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.7%	8.1%
Kojonup	WKOJ	Rural	18.50%	11.46%	12.30%	0.0%	-5.2%	-2.7%	5.4%	6.9%	6.5%
Kondinin	WKDN	Rural	18.50%	11.52%	12.30%	0.0%	-5.2%	-2.7%	5.4%	7.2%	6.8%
Manjimup	WMJP	Rural	18.50%	11.55%	12.30%	0.0%	-5.2%	-2.7%	5.4%	7.3%	6.9%

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)
Margaret River	WMRV	Rural	18.50%	11.72%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.2%	7.7%
Merredin	WMER	Rural	18.50%	11.75%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.4%	7.8%
Moora	WMOR	Rural	18.50%	11.56%	12.30%	0.0%	-5.2%	-2.7%	5.4%	7.4%	6.9%
Mount Barker	WMBR	Rural	18.50%	11.75%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.4%	7.8%
Narrogin	WNGN	Rural	18.50%	11.81%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.8%	8.1%
Pinjarra	WPNJ	Rural	18.50%	11.25%	12.30%	0.0%	-5.2%	-2.7%	5.4%	6.0%	5.8%
Regans	WRGN	Rural	18.50%	11.57%	12.30%	0.0%	-5.2%	-2.7%	5.4%	7.5%	7.0%
Three Springs	WTSG	Rural	18.50%	11.55%	12.30%	0.0%	-5.2%	-2.7%	5.4%	7.4%	6.9%
Wagerup	WWGP	Rural	18.50%	11.19%	12.30%	0.0%	-5.2%	-2.7%	5.4%	5.8%	5.7%
Wagin	WWAG	Rural	18.50%	11.73%	12.30%	0.0%	-5.2%	-2.7%	5.4%	8.3%	7.7%
Wundowie	WWUN	Rural	18.50%	11.64%	12.30%	0.0%	-5.2%	-2.7%	5.4%	7.8%	7.3%
Yerbillon	WYER	Rural	18.50%	11.85%	12.30%	0.0%	-5.2%	-2.7%	5.4%	9.0%	8.3%
Amherst	WAMT	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Arkana	WARK	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Australian Paper Mills	WAPM	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Balcatta	WBCT	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Beechboro	WBCH	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Belmont	WBEL	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Bentley	WBTY	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Bibra Lake	WBIB	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
British Petroleum	WBPM	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Canning Vale	WCVE	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)
Clarence Street	WCLN	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Clarkson	WCKN	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Cockburn Cement	WCCT	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Collier	WCOL	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Cottesloe	WCTE	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Edmund Street	WEDD	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Forrestfield	WFFD	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Gosnells	WGNL	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Hadfields	WHFS	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Hazelmere	WHZM	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Henley Brook	WHBK	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Herdsman Parade	WHEP	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Joel Terrace	WJTE	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Joondalup	WJDP	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Kalamunda	WKDA	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Kambalda	WKBA	Urban	18.50%	11.77%	12.30%	0.0%	-8.4%	-2.7%	5.4%	9.9%	8.9%
Kewdale	WKDL	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Landsdale	WLDE	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Maddington	WMDN	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Malaga	WMLG	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Mandurah	WMHA	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Manning Street	WMAG	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Mason Road	WMSR	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)
Meadow Springs	WMSS	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Medical Centre	WMCR	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Medina	WMED	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Midland Junction	WMJX	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Morley	WMOY	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Mullaloo	WMUL	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Mundaring Weir	WMWR	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Munday	WMDY	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Murdoch	WMUR	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Myaree	WMYR	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Nedlands	WNED	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
North Beach	WNBH	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
North Fremantle	WNFL	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
North Perth	WNPH	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
O'Connor	WOCN	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Osborne Park	WOPK	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Padbury	WPBY	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Piccadilly	WPCY	Urban	18.50%	11.74%	12.30%	0.0%	-8.4%	-2.7%	5.4%	9.8%	8.8%
Riverton	WRTN	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Rivervale	WRVE	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Rockingham	WROH	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Shenton Park (old)	WSPA	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)	Fixed charge for first 1000 kVA (c per annum)	Demand charge for 1000<kVA<7000 (c/kVA/annum)	Demand Charge for kVA > 7000 (c/kVA/annum)
Shenton Park (new)	WSPK	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Sth Ftle Power Station	WSFT	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Southern River	WSNR	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Tate Street	WTTS	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
University	WUNI	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Victoria Park	WVPA	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Waikiki	WWAI	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Wangara	WWGA	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Wanneroo	WWNO	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Welshpool	WWEL	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Wembley Downs	WWDN	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Willetton	WWLN	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%
Yokine	WYKE	Urban	18.50%	11.37%	12.30%	0.0%	-8.4%	-2.7%	5.4%	8.3%	7.4%

9.2.5 Demand-Length Prices

The % changes 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 9.10: Demand Length Prices RT5, RT6, RT7, RT8 and RT11

Pricing Zone	For kVA >1000 and first 10 km length % Change	For kVA >1000 and length in excess of 10 km % Change
CBD	N/A	N/A
Urban	2.6%	3.6%
Mining	3.7%	3.7%
Mixed	3.7%	2.4%
Rural	3.3%	2.7%

The % changes in the following table are applicable for reference tariffs: RT7, RT8 and RT11 and the CMD/DSOC is at least 7,000 kVA.

Table 9.11: Demand-Length Charge RT7, RT8 and RT11

Pricing Zone	For first 10 km length % Change	For length in excess of 10 km % Change
CBD	N/A	N/A
Urban	2.5%	2.8%
Mining	4.7%	4.3%
Mixed	4.1%	3.3%
Rural	**4.6%**	**2.4%**

9.2.6 Administration Prices

The % changes in the following table are applicable for reference tariffs: RT7 and RT8.

Table 9.12: Administration Prices RT7 and RT8

Peak Demand	% Change
>=7,000 kVA	2.6%
<7,000 kVA	2.8%

9.2.7 Low Voltage Prices

The % changes in the following table are applicable for reference tariff: RT8.

Table 9.13: Low Voltage Prices RT8

	% Change
Fixed	4.8%
Demand	6.9%

9.2.8 Connection Prices

The % changes in the following table are applicable for reference tariff: RT11.

Table 9.14: Connection Prices RT11

	% Change
Connection Price	10.0%

9.2.9 Transmission Use of System Prices

The % changes in the following table are applicable for reference tariff: TRT1.

Table 9.15: Transmission Use of System Prices TRT1

Substation	TNI	% Change
Albany	WALB	5.0%
Alcoa Pinjarra	WAPJ	5.0%
Amherst	WAMT	5.0%
Arkana	WARK	5.0%
Australian Fused Materials	WAFM	5.0%
Australian Paper Mills	WAPM	5.0%
Baandee (WC)	WBDE	5.0%
Balcatta	WBCT	5.0%
Beckenham	WBEC	5.0%
Beechboro	WBCH	5.0%
Beenup	WBNP	5.0%
Belmont	WBEL	5.0%
Bentley	WBTY	5.0%
Bibra Lake	WBIB	5.0%
Binningup Desalination Plant	WBDP	5.0%

Substation	TNI	% Change
Black Flag	WBKF	5.0%
Boddington Gold Mine	WBGM	5.0%
Boddington	WBOD	5.0%
Boulder	WBLD	5.0%
Bounty	WBNY	5.0%
Bridgetown	WBTN	5.0%
British Petroleum	WBPM	5.0%
Broken Hill Kwinana	WBHK	5.0%
Bunbury Harbour	WBUH	5.0%
Busselton	WBSN	5.0%
Byford	WBYF	5.0%
Canning Vale	WCVE	5.0%
Capel	WCAP	5.0%
Carrabin	WCAR	5.0%
Cataby Kerr McGee	WKMC	5.0%
Chapman	WCPN	5.0%
Clarence Street	WCLN	5.0%
Clarkson	WCKN	5.0%
Cockburn Cement	WCCT	5.0%
Cockburn Cement Ltd	WCCL	5.0%
Collie	WCOE	5.0%
Collier	WCOL	5.0%
Cook Street	WCKT	5.0%
Coolup	WCLP	5.0%
Cottesloe	WCTE	5.0%
Cunderdin	WCUN	5.0%
Darlington	WDTN	5.0%
Edgewater	WEDG	5.0%

Substation	TNI	% Change
Edmund Street	WEDD	5.0%
Eneabba	WENB	5.0%
Forrest Ave	WFRT	5.0%
Forrestfield	WFFD	5.0%
Geraldton	WGTN	5.0%
Glen Iris	WGNI	5.0%
Golden Grove	WGGV	5.0%
Gosnells	WGNL	5.0%
Hadfields	WHFS	5.0%
Hay Street	WHAY	5.0%
Hazelmere	WHZM	5.0%
Henley Brook	WHBK	5.0%
Herdsman Parade	WHEP	5.0%
Joel Terrace	WJTE	5.0%
Joondalup	WJDP	5.0%
Kalamunda	WKDA	5.0%
Katanning	WKAT	5.0%
Kellerberrin	WKEL	5.0%
Kewdale	WKDL	5.0%
Kojonup	WKOJ	5.0%
Kondinin	WKDN	5.0%
Kwinana Alcoa	WAKW	5.0%
Kwinana Desalination Plant	WKDP	5.0%
Kwinana PWS	WKPS	5.0%
Landsdale	WLDE	5.0%
Maddington	WMDN	5.0%
Malaga	WMLG	5.0%
Mandurah	WMHA	5.0%

Substation	TNI	% Change
Manjimup	WMJP	5.0%
Manning Street	WMAG	5.0%
Margaret River	WMRV	5.0%
Marriott Road Barrack Silicon Smelter	WBSI	5.0%
Marriott Road	WMRR	5.0%
Mason Road	WMSR	5.0%
Mason Road CSBP	WCBP	5.0%
Mason Road Kerr McGee	WKMK	5.0%
Meadow Springs	WMSS	5.0%
Medical Centre	WMCR	5.0%
Medina	WMED	5.0%
Merredin 66kV	WMER	5.0%
Midland Junction	WMJX	5.0%
Milligan Street	WMIL	5.0%
Moora	WMOR	5.0%
Morley	WMOY	5.0%
Mt Barker	WMBR	5.0%
Muchea Kerr McGee	WKMM	5.0%
Muchea	WMUC	5.0%
Muja PWS	WMPS	5.0%
Mullaloo	WMUL	5.0%
Munday	WMDY	5.0%
Murdoch	WMUR	5.0%
Mundaring Weir	WMWR	5.0%
Myaree	WMYR	5.0%
Narrogin	WNGN	5.0%
Nedlands	WNED	5.0%
North Beach	WNBH	5.0%

Substation	TNI	% Change
North Fremantle	WNFL	5.0%
North Perth	WNPH	5.0%
Northam	WNOR	5.0%
Nowgerup	WNOW	5.0%
O'Connor	WOCN	5.0%
Osborne Park	WOPK	5.0%
Padbury	WPBY	5.0%
Parkeston	WPRK	5.0%
Parklands	WPLD	5.0%
Piccadilly	WPCY	5.0%
Picton 66kv	WPIC	5.0%
Pinjarra	WPNJ	5.0%
Rangeway	WRAN	5.0%
Regans	WRGN	5.0%
Riverton	WRTN	5.0%
Rivervale	WRVE	5.0%
Rockingham	WROH	5.0%
Sawyers Valley	WSVY	5.0%
Shenton Park	WSPA	5.0%
Southern River	WSNR	5.0%
South Fremantle	WSFT	5.0%
Summer St	WSUM	5.0%
Sutherland	WSRD	5.0%
Tate Street	WTTS	5.0%
Three Springs	WTSG	5.0%
Three Springs Terminal	WTST	5.0%
Tomlinson Street	WTLN	5.0%
University	WUNI	5.0%

Substation	TNI	% Change
Victoria Park	WVPA	5.0%
Wagerup	WWGP	5.0%
Wagin	WWAG	5.0%
Waikiki	WWAI	5.0%
Wangara	WWGA	5.0%
Wanneroo	WWNO	5.0%
Wellington Street	WWNT	5.0%
Welshpool	WWEL	5.0%
Wembley Downs	WWDN	5.0%
West Kalgoorlie	WWKT	5.0%
Western Collieries	WWCL	5.0%
Western Mining	WWMG	5.0%
Westralian Sands	WWSD	5.0%
Willetton	WWLN	5.0%
Worsley	WWOR	5.0%
Wundowie	WWUN	5.0%
Yanchep	WYCP	5.0%
Yerbillon	WYER	5.0%
Yilgarn	WYLN	5.0%
Yokine	WYKE	5.0%

The % changes in the following table are applicable for reference tariffs: RT11 and TRT2.

Table 9.16 Transmission Use of System Prices RT11 and TRT2

Substation	TNI	% Change
Albany	WALB	5.0%
Badgingarra	BGA	N/A
Boulder	WBLD	5.0%
Bluewaters	WBWP	5.0%
Cockburn PWS	WCKB	5.0%
Collgar	WCGW	5.0%
Collie PWS	WCPS	5.0%
Emu Downs	WEMD	5.0%
Geraldton	WGTN	5.0%
Greenough Solar Farm	TMGS	5.0%
Kemerton PWS	WKEM	5.0%
Kwinana Alcoa	WAKW	5.0%
Kwinana Donaldson Road	WKND	5.0%
Kwinana PWS	WKPS	5.0%
Landwehr (Alinta)	WLWT	5.0%
Mason Road	WMSR	5.0%
Merredin Power Station	TMDP	5.0%
Muja PWS	WMPS	5.0%
Mumbida Wind Farm	TMBW	5.0%
Mungarra GTs	WMGA	5.0%
Newgen Kwinana	WNGK	5.0%
Newgen Neerabup	WGNN	5.0%
Oakley (Alinta)	WOLY	5.0%
Parkeston	WPKS	5.0%
Pinjar GTs	WPJR	5.0%
Alcoa Pinjarra	WAPJ	5.0%

Substation	TNI	% Change
Tiwest GT	WKMK	5.0%
Wagerup	WWGP	5.0%
Walkaway Windfarm	WWWF	5.0%
West Kalgoorlie GTs	WWKT	5.0%
Worsley	WWOR	5.0%

9.2.10 Common Service Prices

The % changes in the following table are applicable for reference tariff: TRT1.

Table 9.17: Common Service Prices TRT1

	% Change
Common Service Price	7.6%

9.2.11 Control System Service Prices

The % changes in the following table are applicable for reference tariff: RT11 and TRT2.

Table 9.18: Control System Service Prices RT11 and TRT2

	% Change
Control System Service Price (Generators)	5.8%

The % changes in the following table are applicable for reference tariff: TRT1.

Table 9.19: Control System Service Prices TRT1

	% Change
Control System Service Price (Loads)	7.6%

9.2.12 Metering Prices

The % changes in the following table are applicable for reference tariffs: TRT1 and TRT2.

Table 9.20: Metering Prices TRT1 and TRT2

	% Change
Transmission Metering	-76.1

Appendix A

A.1 Price Setting for New Transmission Nodes Policy

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 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 of no greater than (plus or minus) the annual pricing side constraint as detailed in the *access arrangement*. (Thus, the nominated TUOS price will converge over time with and future price based on future T-Price runs.)
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 all 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 does select 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.