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

**ELECTRICITY NETWORKS CORPORATION**

**("WESTERN POWER")**

ABN 18 540 492 861

**ERA Approved**

**31 March 2023**

Access Arrangement (AA) for the period
1 July 2023 to 30 June 2027

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# 1. Introduction

## 1.1 Purpose of this document

~~1.1.1 These revised *proposed revisions* are lodged by Western Power on 15 November 2022 for *review and approval* by the *Authority* in accordance with the processes and criteria set out in the *Electricity Networks Access Code 2004*, herein referred to as the "Code". Henceforth this document is referred to as the "access arrangement".~~

1.1.1 This document ~~*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*.

1.1.2 Henceforth this document is referred to as the "access arrangement". The *Western Power Network* is a *covered network* under the *Electricity Networks Access Code 2004*, herein after referred to as the "*Code*".

## 1.2 Definitions and interpretation

1.2.1 In sections 1 to 10 of this *access arrangement*, where a word or phrase is italicised, it has the definition given to that word or phrase as described in this *access arrangement* or section 1.3 of the *Code*, unless the context requires otherwise.

1.2.2 In each of the appendices to this *access arrangement*, a separate glossary of terms is provided where appropriate, and the definitions contained in those separate glossaries apply to the relevant appendix, unless the context requires otherwise.

1.2.3 In this *access arrangement*:

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

**"MSLA"** means the model service level agreement approved by the *Authority* under the *Metering* Code (which as at this *access arrangement start date* is the version dated 30 September 2020).

## 1.3 Proposed access arrangement revisions commencement date

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

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

1.4.1 Pursuant to section 5.31(a) of the *Code*, the *revisions submission date* for this *access arrangement* is 1 February 2026.

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

## 1.5 Composition of this access arrangement

1.5.1 This *access arrangement* comprises this document together with:

a) the *Standard Access Contract*, termed the Electricity Transfer Access Contract attached at Appendix A;

b) the *Applications and Queuing Policy* attached at Appendix B;

c) the *Contributions Policy* attached at Appendix C.1;

d) the Distribution Low Voltage Connection Scheme Methodology attached at Appendix C.2;

e) the *Multi-function Asset Policy* attached at Appendix D;

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

g) the *Tariff Structure Statement Overview* attached at F.1~~Appendix F.1~~;

h) the *Tariff Structure Statement Technical Summary* attached at F.2~~Appendix F.2~~.~~;~~

~~i) the *price lists* attached at Appendix F, which are a schedule of *reference tariffs* in effect for this *access arrangement*.~~

## 1.6 Relationship to technical rules

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

# 2. Reference services

## 2.1 Purpose

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

## 2.2 Reference services

2.2.1 *Reference services* are provided to *users* that meet and continue to meet the eligibility criteria applicable to the *reference service* provided, on the terms and conditions of the Electricity Transfer Access Contract, at the related *service standard benchmarks* and at the related *reference tariff*.

2.2.2 Western Power specifies 23 *reference services* at *exit points*:

**Table 1: Reference services at exit points**

| Reference service | Short name |
|---|---|
| Anytime Energy (Residential) Exit Service | A1 |
| Anytime Energy (Business) Exit Service | A2 |
| Time of Use Energy (Residential) Exit Service | 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 |
| Super Off-peak Energy (Residential) Exit Service | A18 |
| Super Off-peak Energy (Business) Exit Service | A19 |
| Super Off-peak Demand (Residential) Exit Service | A20 |
| Super Off-peak Demand (Business) Exit Service | A21 |

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

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

**Table 2: Reference services at entry points**

| Reference service | Short name |
|---|---|
| Distribution Entry Service | B1 |
| Transmission Entry Service | B2 |
| Entry Service Facilitating a Distributed Generation or Other Non-Network Solution | B3 |

2.2.4 Western Power specifies 24 *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 Energy (Residential) Bi-directional Service | C13 |
| Multi Part Time of Use Energy (Business) Bi-directional Service | C14 |
| Bi-directional Service Facilitating a Distributed Generation or Other Non-Network Solution | C15 |
| Super Off-peak Energy (Residential) Bi-directional Service | C16 |
| Super Off-peak Energy (Business) Bi-directional Service | C17 |

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

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

**Table 4: Reference services at connection points (ancillary)**

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

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

**Table 5: Standard metering services**

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

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

2.2.7 Appendix E of this *access arrangement* provides details of each *reference service*, including:

- a description of the *reference service*;
- the *user* eligibility criteria;
- the applicable *reference tariff*;
- the applicable *standard access contract*; and
- the applicable *service standard benchmark*.

## 2.3 Payment by users

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

# 3. Excluded services

## 3.1 Purpose

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

## 3.2 Excluded services

3.2.1 In accordance with section 6.35 of the *Code*, Western Power may at any time request the *Authority* to determine under section 6.33 of the *Code* that one or more *services* provided by means of the *Western Power Network* are *excluded services* and the *Authority* will confirm such determination to Western Power. Any capital costs incurred by Western Power for *excluded services* shall not be included in Western Power's regulated asset base.

3.2.2 At the *access arrangement revisions commencement date*, there is one *excluded service* as follows:

- Western Power owned storage devices.

# 4. Service standard benchmarks

## 4.1 Purpose

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

## 4.2 Service standard benchmarks for distribution reference services

4.2.1 For the *reference services* A1 to A10, A12 to A23, B1 and B3, C1 to C21, C23 and C24 and any applicable ancillary *reference service* D2 and D6, the *service standard benchmarks* are expressed in terms of System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI) and call centre performance.

4.2.2 In sections 4.2.3 and 4.2.5 **"distribution customer"** means a *consumer* connected to the *distribution system*.

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

4.2.3 SAIDI is applied as follows:

**Table 6: Application of SAIDI**

| | System Average Interruption Duration Index (SAIDI)<br>CBD<br>Urban<br>Rural Short<br>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:<br><br>$\frac{\sum \text{Sustained } \textit{distribution customer} \text{ interruption durations}}{\text{Number of } \textit{distribution customers} \text{ served}}$<br><br>where:<br>• 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.<br>• 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.<br>• 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.<br>• A Rural Long feeder is a feeder which is not a CBD or urban feeder with a total high voltage feeder route length greater than 200 km. |

| | System Average Interruption Duration Index (SAIDI)<br>CBD<br>Urban<br>Rural Short<br>Rural Long |
|---|---|
| | • The number of *distribution customers* served is determined by averaging the start of month values for the 12 months included in the 12-month period. |
| Exclusions | One or more of:<br>• 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.<br>• 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).<br>• Planned interruptions caused by scheduled works on the *transmission system* and *distribution system*.<br>• Interruptions caused or extended by a total fire ban or direction from a local or state government body or state or federal emergency services, provided that a fault in, or the operation of, the *network* did not cause, in whole or part, the event giving rise to the direction. |

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

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

| SAIDI | For the financial year ending 30 June 2023 | For the financial year ending 30 June 2024 and each financial year thereafter |
|---|---|---|
| CBD | 33.7 | 13.7 |
| Urban | 130.6 | 123.8 |
| Rural Short | 215.4 | 202.5 |
| Rural Long | 848.3 | 290.0~~733.5~~ |

**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)<br>CBD<br>Urban<br>Rural Short<br>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:<br><br>$\frac{\text{Number of sustained } \textit{distribution customer} \text{ interruptions}}{\text{Number of } \textit{distribution customers} \text{ served}}$<br><br>where:<br>• 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.<br>• 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.<br>• 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.<br>• 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.<br>• 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:<br>• For unplanned interruptions on the *distribution system,* a day on which the major event day threshold, applying the "2.5 beta method", is exceeded.<br>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.<br>• 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). |

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

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

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

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

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

**Call centre performance**

4.2.8 Call centre performance is applied as follows:

**Table 10: Application of call centre performance**

| | Call centre performance |
|---|---|
| Unit of Measure | Percentage of calls per year. |
| Definition | Over a 12 month period, in relation to interruptions and life-threatening emergencies, percentage of calls responded to in 30 seconds or less (after exclusions), that is:<br>$\frac{\text{Number of fault calls responded to in 30 seconds or less}}{\text{Total Number of fault calls}}$ |

| | Call centre performance |
|---|---|
| | where:<br>(a) "Fault calls responded to in 30 seconds or less" is:<br>(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<br>(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.<br>(b) A "fault call" is a telephone call from a caller entering the fault line or life threatening emergency line.<br>(c) A call may be placed in a queue to be responded to by a human operator when the caller:<br>(i) chooses to hold (when invited to do so) at the end of the recorded message;<br>(ii) chooses to hold (when invited to do so) rather than enter a postcode when prompted to do so; or<br>(iii) enters an invalid postcode.<br>(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<br>(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:<br>• 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.<br>• 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.<br>• All telephone calls received on a major event day which is excluded from SAIDI and SAIFI.<br>• 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 A23, B1 and B3, C1 to C21, C23 and C24 and any applicable ancillary *reference service* D2 to D6 for each year of this *access arrangement period* are shown in the following table:

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

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

## 4.3 Service standard benchmarks for transmission reference services

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

**Loss of supply event frequency**

4.3.2 Loss of supply event frequency is applied as follows:

**Table 12: Application of loss of supply event frequency**

| | Loss of supply event frequency<br>>0.1 and ≤1.0 system minutes interrupted<br>>1.0 system minutes interrupted |
|---|---|
| Unit of Measure | Number of events per year. |
| Definition | Over a 12-month period, the frequency of Unplanned consumer outage events for consumers connected to the regulated transmission circuits (after exclusions) where loss of supply:<br>• exceeds 0.1 system minutes interrupted and less than or equal to 1.0 system minutes interrupted; or<br>• exceeds 1.0 system minutes interrupted.<br>System minutes are calculated for each supply interruption by the "load integration method" using the following formula, that is:<br>$\frac{\sum (\text{MWh unsupplied} \times 60)}{\text{System Peak MW}}$<br>where:<br>• "Unplanned customer outages" relates to unplanned customer outages occurring on all parts of the regulated *transmission system*.<br>• "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.<br>• Period of the interruption starts when a loss of supply occurs and ends when Western Power offers supply restoration to the customer.<br>• "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* |

| | Loss of supply event frequency<br>>0.1 and ≤1.0 system minutes interrupted<br>>1.0 system minutes interrupted |
|---|---|
| | where the impact of an Unplanned customer outage event is excluded for the purpose of this measure. |
| Exclusions | One or more of:<br>• Planned interruptions.<br>• Momentary interruptions (less than one minute).<br>• Unregulated transmission assets.<br>• 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).<br>• *Force majeure* events affecting the *transmission system*. |

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

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

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

**Average outage duration**

4.3.4 Average outage duration is applied as follows:

**Table 14: Application of average outage duration**

| | Average outage duration |
|---|---|
| Unit of Measure | Minutes per year. |
| Definition | Over a 12-month period, the sum of the duration (in minutes) of all Unplanned outages divided by the total Number of events for consumers connected to regulated transmission circuits (after exclusions), that is:<br>$\frac{\sum \text{Duration (in minutes) of all Unplanned outages}}{\text{Total Number of events}}$<br>where:<br>• "Unplanned outages" relates to interruptions occurring on all parts of the regulated *transmission system*.<br>• "Number of events" includes all forced and fault interruptions whether or not loss of supply occurs. |

| | Average outage duration |
|---|---|
| | • 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:<br>• Planned interruptions.<br>• Momentary interruptions (less than one minute).<br>• Unregulated transmission assets.<br>• Reactive compensation plant.<br>• 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).<br>• *Force majeure* events affecting the *transmission system*.<br>• The impact of each event is capped at 14 days. |

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

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

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

## 4.4 Service standard benchmarks for street lighting reference services

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

**Street lighting repair time**

4.4.2 Street lighting repair time is applied as follows:

**Table 16: Application of street lighting repair time**

| | Street lighting repair time<br>Metropolitan area<br>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). |

| | Street lighting repair time<br>Metropolitan area<br>Regional area |
|---|---|
| | ∑ Number of *business days* to repair each faulty streetlight<br>Number of faulty streetlights repaired<br>where:<br>• In calculating the number of *business days* to repair a faulty streetlight, the first *business day* is:<br>– where a faulty streetlight is detected by, or reported to, Western Power on a *business day*, the next *business day; or*<br>– 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.<br>• 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*.<br>• In calculating the number of *business days* to repair a faulty streetlight:<br>– 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;<br>– 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.<br>• A "faulty streetlight" is defined by a recorded fault report.<br>• 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*.<br>• Regional area means all areas in the *Western Power Network* other than the metropolitan area.<br>Note:<br>• If a given streetlight is the subject of more than one fault report for the same fault, then only one fault report is recorded.<br>• 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.<br>• 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 17: Street lighting repair time service standard benchmark for reference service A9**

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

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

## 4.5 Service standard benchmark for supply abolishment reference service

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

**Supply abolishment response time**

4.5.2 Supply abolishment response time is applied as follows:

**Table 18: Application of supply abolishment response time**

| | Supply abolishment (whole current meter) response time |
|---|---|
| Unit of Measure | Number of days ~~Percentage of the time that the supply abolishment request was performed within response time~~ |
| Definition | ~~Over a 12 month period, percentage of times to abolish supply is the number of supply abolishment requests performed within the response time multiplied by 100, divided by the number of supply abolishment requests made (after exclusions).~~<br><br>~~Number of supply abolishment requests performed within response time x 100~~<br>~~Number of supply abolishment requests~~<br>~~where:~~<br>• ~~In~~To calculate~~ing~~ the number of *business days* to abolish supply, the first *business day* is:<br>– 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<br>– 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.<br>• In calculating the number of *business days* to abolish supply:<br>– 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<br>– 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<br>– 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.<br>• A "supply abolishment request" is defined as an electricity transfer application for a supply abolishment made in accordance with the *Applications and Queuing Policy* containing all information that Western Power, as a *reasonable and prudent person*, requires to abolish supply.<br>• "Abolish supply" is defined as the time when the permanent disconnection of supply and the removal of the *meter* (as defined in the *Electricity Industry (Metering) Code 2012*) is completed. |

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

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

**Table 19: Supply abolishment response time for reference service D1**

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

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

| | For each financial year ending 30 June |
|---|---|
| Supply abolishment | 15 business days~~95% of supply abolishment requests performed within the response time~~ |

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

4.6.1 For the *reference service* D8 and D9, the *service standard benchmarks* are expressed in terms of response time.

4.6.2 These *service standard benchmarks* only come into effect once the remote de-energise and remote re-energise *reference services* are provided to one or more *users*.

**Remote de-energise response time**

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

**Table 21: Application of remote de-energise response time**

| | Remote de-energise response time |
|---|---|
| Unit of Measure | Number of days~~Percentage of the time that the remote de-energise request was performed within response time.~~ |

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

| | Remote de-energise response time |
|---|---|
| Definition | ~~• Over a 12 month period, percentage of times to remotely de-energise is the number of remote de-energise requests performed within the response time multiplied by 100, divided by the number of remote de-energise requests made (after exclusions).~~<br><br>~~Number of remote de-energise requests performed within response times x 100~~<br>~~Number of remote de-energise requests~~<br><br>~~where:~~<br>• To~~In~~ calculate~~ing~~ the number of *business days* to remotely de-energise, the first *business day* is:<br>– 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<br>– 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.<br>• Fridays and the *business days* occurring before a *public holiday* are not calculated as *business days* in relation to this measure.<br>• In calculating the number of *business days* to remotely de-energise:<br>– the *business day* the remote de-energise is performed is included (subject to the next point), even if the remote de-energise is performed part way through that *business day*; and<br>– 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<br>– 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.<br>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.<br>• 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.<br>• A fact or circumstance beyond the control of Western Power as a *reasonable and prudent person* affecting the ability to remote de-energise.<br>• *Force majeure* events affecting the remote de-energise service. |

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

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

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

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

| | For each financial year ending 30 June |
|---|---|
| Remote de-energise | 1 *business day* ~~95% of remote de-energise requests performed within the response time~~ |

**Remote re-energise response time**

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

**Table 24: Application of remote re-energise response time**

| | Remote re-energise response time |
|---|---|
| Unit of Measure | Number of days ~~Percentage of the time that the remote re-energise request was performed within response time.~~ |
| Definition | ~~Over a 12 month period, percentage of times to remotely re-energise is the number of remote re-energise requests performed within the response time multiplied by 100, divided by the number of remote re-energise requests made (after exclusions).~~<br>~~Number of remote re-energise requests performed within response time x 100~~<br>~~Number of remote re-energise requests~~<br>~~where:~~<br>• To~~In~~ calculate~~ing~~ the number of *business days* to remotely re-energise, the first *business day* is:<br>– 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<br>– 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.<br>• In calculating the number of *business days* to remotely re-energise:<br>– the *business day* the remote re-energise is performed is included (subject to the next point), even if the remote re-energise is performed part way through that *business day*; and<br>– 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<br>– 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 |

| | Remote re-energise response time |
|---|---|
| | *business day*, and the remote re-energise is performed on the next *business day*, that *business day* is counted as zero.<br>• 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 or where the remote re-energise request requires site visit, refer to "site visit to support remote re-energise service".<br>• 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.<br>• A fact or circumstance beyond the control of Western Power as a *reasonable and prudent person* affecting the ability to remote re-energise.<br>• *Force majeure* events affecting the remote re-energise service. |

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

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

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

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

| | For each financial year ending 30 June |
|---|---|
| Remote re-energise | 1 *business day* ~~95% of remote re-energise requests performed within the response time~~ |

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

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

**Site visit to support remote re-energise service**

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

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

| | Site visit to support remote re-energise response time |
|---|---|
| Unit of Measure | Number of days ~~Percentage of the time that the site visit to support remote re-energise request was performed within response time.~~ |

| | Site visit to support remote re-energise response time |
|---|---|
| Definition | ~~Over a 12 month period, percentage of times for a site visit to support remote re-energise is the number of site visits to support remote re-energise requests performed within the response time multiplied by 100, divided by the number of site visit to support remote re-energise requests made (after exclusions).~~<br>~~∑ Number of site visits to support remote re-energise requests performed within the response time x 100~~<br>~~Number of site visit to support remote re-energise requests~~<br>~~where:~~<br>• To~~In~~ calculate~~ing~~ the number of *business days* to site visit to support remotely re-energise, the first *business day* is:<br>– where a site visit to support remote re-energise request is made by a *user* to Western Power before 12 noon on a *business day*, the next *business day*; or<br>– where a site visit to support remote re-energise request is made by a *user* to Western Power on a day that is not a *business day*, or after 12 noon on a *business day*, the second *business day* after that day.<br>• In calculating the number of *business days* to site visit to support remotely re-energise:<br>– the *business day* the site visit to support remote re-energise is performed is included (subject to the next point), even if the manual re-energise is performed part way through that *business day*; and<br>– where a site visit to support remote re-energise request is made by a *user* to Western Power on a *business day* and the manual re-energise is performed on that *business day*, that *business day* is counted as zero; or<br>– where a site visit to support remote re-energise request is made by a user to Western Power on a day that is not a *business day*, or after 12 noon on a *business day*, and the manual re-energise is performed on the next *business day*, that *business day* is counted as zero.<br>• A site visit to support remote re-energise is deemed to have been completed at the time when a previously de-energised *meter* is re-armed by a site visit to that *meter* from a manual locality.<br>• A site visit to support remote re-energise business day is performed between the hours of 7am and 5pm on a business day. An extended after-hours service of 5pm – Midnight is offered by agreement with the *user* and Western Power.<br>• Perth metropolitan area means the areas of the State defined in Schedule 3 of the *Planning and Development Act 2005*.<br>• Metropolitan area means the areas of the State defined in Part 1.3 of the *Electricity Industry (Metering) Code 2012*.<br>• Regional area means all areas in the *Western Power Network* other than the Perth metropolitan area and metropolitan area. |

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

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

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

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

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

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

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

| | For each financial year ending 30 June |
|---|---|
| ~~Site visits to support remote re-energise~~ | ~~95% of site visits to support remote re-energise requests performed within the response time~~ |
| Standard Metropolitan area | 1 *business day* |
| Standard Regional area | 5 *business days* |
| Urgent Perth Metropolitan area | 3 hours |
| Urgent Other Metropolitan areas | 1 *business day* |
| Urgent Regional area | 1 *business day* |
| | |
| | |

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

4.8.1 For the *reference service* D12 and D13, the *service standard benchmarks* are expressed in terms of response time.

**4.8.2** These *service standard benchmarks* only come into effect once the manual de-energise and manual re-energise *reference services* are provided to one or more *users*.

**Manual de-energise response time**

Manual de-energise response time is applied as follows:

**Table 31: Application of manual de-energise response time**

| | Manual de-energise response time |
|---|---|
| Unit of Measure | Number of days ~~Percentage of the time that the manual de-energise request was performed within response time.~~ |
| Definition | ~~• Over a 12 month period, percentage of times to manually de-energise is the number of manual de-energise requests performed within the response time multiplied by 100, divided by the number of manual de-energise requests made (after exclusions).~~<br><br>~~Number of manual de-energise requests performed within response times x 100~~<br>~~Number of manual de-energise requests~~<br>~~where:~~<br>• To~~In~~ calculate~~ing~~ the number of *business days* to manually de-energise, the first *business day* is:<br>– where a manual de-energise request is made by a *user* to Western Power before 12 noon on a *business day*, the next *business day*; or<br>– where a manual de-energise request is made by a *user* to Western Power on a day that is not a *business day*, or after 12 noon on a *business day*, the second *business day* after that day.<br>• Fridays and the *business days* occurring before a *public holiday* are not calculated as *business days* in relation to this measure.<br>• In calculating the number of *business days* to manually de-energise:<br>– the *business day* the manual de-energise is performed is included (subject to the next point), even if the manual de-energise is performed part way through that *business day*; and<br>– where a manual de-energise request is made by a *user* to Western Power on a *business day* and the manual de-energise is performed on that *business day*, that *business day* is counted as zero; or<br>– where a manual de-energise request is made by a *user* to Western Power on a day that is not a *business day*, or after 12 noon on a *business day*, and the manual de-energise is performed on the next *business day*, that *business day* is counted as zero. |

| | Manual de-energise response time |
|---|---|
| | • A manual de-energise deemed to have been completed at the time when supply voltage is removed from all outgoing circuits from the *meter* on a non-permanent basis by a site visit to a *meter* from a manual locality.<br>• A manual de-energise business day is performed between the hours of 7:30am and 2:00pm (WST) on a *business day*, where the *business day* is not a Friday or a business day prior to a public holiday<br>• Metropolitan area means the areas of the State defined in Part 1.3 of the *Electricity Industry (Metering) Code 2012*.<br>• Regional area means all areas in the *Western Power Network* other than the Perth metropolitan area and metropolitan area. |
| Exclusions | • Manual de-energise requests that are cancelled or are requested to be deferred.<br>• Manual de-energisation requests received on a *business day* in relation to this measure, where the total number of de-energisation requests exceeds the maximum operational capacity of the infrastructure supporting the manual de-energisation requests.<br>• A fact or circumstance beyond the control of Western Power as a *reasonable and prudent person* affecting the ability to manual de-energise.<br>• *Force majeure* events affecting the manual de-energise service. |

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

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

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

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

| | For each financial year ending 30 June |
|---|---|
| ~~Manual de-energise~~ | ~~95% of manual de-energise requests performed within the response time~~ |
| Metropolitan area | 1 *business day* |
| Regional area | 5 *business days* |

**Manual re-energise response time**

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

**Table 34: Application of manual re-energise response time**

| | Manual re-energise response time |
|---|---|
| Unit of Measure | Number of days ~~Percentage of the time that the manual re-energise request was performed within response time.~~ |
| Definition | ~~Over a 12 month period, percentage of times manual re-energise requests performed within the response time multiplied by 100, divided by the number of manual re-energise requests made (after exclusions).~~<br>~~Number of manual re-energise requests performed within response time x 100~~<br>~~Number of manual re-energise requests~~<br>~~where:~~<br>• ~~In~~To calculat~~eing~~ the number of *business days* to manually re-energise, the first *business day* is:<br>– where a manual re-energise request is made by a *user* to Western Power before 12 noon on a *business day*, the next *business day*; or<br>– where a manual re-energise request is made by a *user* to Western Power on a day that is not a *business day*, or after 12 noon on a *business day*, the second *business day* after that day.<br>• In calculating the number of *business days* to manually re-energise:<br>– the *business day* the manual re-energise is performed is included (subject to the next point), even if the manual re-energise is performed part way through that *business day*; and<br>– where a manual re-energise request is made by a *user* to Western Power on a *business day* and the manual re-energise is performed on that *business day*, that *business day* is counted as zero; or<br>– where a manual re-energise request is made by a user to Western Power on a day that is not a *business day*, or after 12 noon on a *business day*, and the manual re-energise is performed on the next *business day*, that *business day* is counted as zero.<br>• A manual re-energise is deemed to have been completed when a previously de-energised *meter* is re-armed by a site visit to that *meter* from a manual locality.<br>• A manual re-energise business day is performed between the hours 7am and 5pm on a *business day*. An extended after-hours service of 5pm – Midnight is offered by agreement with the retailer and Western Power.<br>• Perth metropolitan area means the areas of the State defined in Schedule 3 of the *Planning and Development Act 2005*.<br>• Metropolitan area means the areas of the State defined in Part 1.3 of the *Electricity Industry (Metering) Code 2012*.<br>• Regional area means all areas in the *Western Power Network* other than the Perth metropolitan area and metropolitan area. |

| | Manual re-energise response time |
|---|---|
| Exclusions | • Manual re-energise requests that are cancelled or are requested to be deferred.<br>• Manual re-energisation requests received on a *business day* in relation to this measure, where the total number of re-energisation requests exceeds the maximum operational capacity of the infrastructure supporting the manual re-energisation requests.<br>• A fact or circumstance beyond the control of Western Power as a *reasonable and prudent person* affecting the ability to manual re-energise.<br>• *Force majeure* events affecting the manual re-energise service. |

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

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

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

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

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

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

| | For each financial year ending 30 June |
|---|---|
| ~~Manual re-energise~~ | ~~95% of manual re-energise requests performed within the response time~~ |
| Standard Metropolitan area | 1 *business day* |
| Standard Regional area | 5 *business days* |
| Urgent Perth Metropolitan area | 3 hours |
| Urgent Metropolitan area | 1 *business day* |
| Urgent Regional area | 1 *business days* |

## 4.9 Service standard benchmarks for metering services

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

## 4.10 Exclusions

4.10.1 In each of the *service standard benchmarks* there is a definition of the measure and stated exclusions. Each exclusion is a circumstance in relation to which, when it occurs, the resulting units are not included in the measure. For example, for SAIDI, when a planned interruption event occurs the duration of the interruption in minutes is not included in the calculation of the measure.

4.10.2 Whether or not particular circumstances meet the criteria to be an exclusion, such that the resulting units are not included in the measure, may be considered by the *Authority* when it *publishes* Western Power's actual *service standard* performance against the *service standard benchmarks* under section 11.2 of the *Code.* Where the *Authority* accepts an exclusion in such a report, it will be an exclusion for the purposes of the application of this *access arrangement* and the *Code*.

4.10.3 Where Western Power has applied a Box-Cox transformation method to the daily unplanned SAIDI data set to determine the major event day threshold, in the *service standard performance report* provided for the financial year in which the major event day threshold is used, Western Power must:

a) Demonstrate that the natural logarithm of the data set of each unplanned SAIDI value is not normally distributed.

b) Provide the calculations that demonstrate the application of the Box-Cox transformation method to the unplanned SAIDI values.

c) Provide the data set resulting from applying the Box-Cox transformation method.

d) Demonstrate that the resulting data set is normally distributed or that the normality of the data set is improved.

# 5. Price control

## 5.1 Overview of price control

5.1.1 In this *access arrangement*:

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

a) *non-reference services* provided by Western Power by means of the *Western Power Network* other than *non-reference services* that are provided as *revenue target services*;

b) *reference services* described as *reference services* (ancillary) in Appendix E; and

c) *reference service* (metering) M16 as set out in Appendix E.

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

a) *connection service*;

b) *exit service*;

c) *entry service*;

d) bi-directional service;

e) *reference services* (metering) M1 to M15 and M17 to M20 as set out in Appendix E; and

f) streetlight maintenance.

5.1.2 In accordance with sections 6.1 and 6.2(c) of the *Code*:

a) a *price control* will apply to *revenue target services* that is set by reference to Western Power's *approved total costs*;

b) subject to paragraph (c), charges for *non-revenue target services* will be:

i. any applicable lodgement fees payable under the *Applications and Queuing Policy;*

ii. a charge set out in the Price List for, *reference service* (metering) M16;

and if not provided for in the above instruments, then the charges will be;

iii. negotiated in good faith;

iv. consistent with the *Code objective*; and

v. reasonable; and

c) charges for *access applications* will be consistent with the *Applications and Queuing Policy* and charges for extended metering services (within the meaning of the *MSLA*) will be consistent with the *MSLA* and clause 6.6(1)(e) of the *Electricity Industry (Metering) Code 2012*.

5.1.3 A single revenue target will apply in respect of the *revenue target services* provided by means of the *transmission system* and the *distribution system*. The establishment of the revenue target has been made by reference to Western Power's *approved total costs* for *revenue target services* provided by the *transmission system* and the *distribution system*.

5.1.4 The calculation of Western Power's *approved total costs* for *revenue target services* has been undertaken in accordance with the building block method for each of the *transmission system* and the *distribution system*, as contained in the revenue model.

5.1.5 Despite section 1.3.1 of this *access arrangement*, the *price control* and all incentive and cost recovery mechanisms described in this *access arrangement* operate from 1 July 2022, and therefore references to *access arrangement period* should be interpreted accordingly.

## 5.2 Capital base value

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

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

| Financial year ending: | 30 June 2018 | 30 June 2019 | 30 June 2020 | 30 June 2021 | 30 June 2022 |
|---|---|---|---|---|---|
| Opening capital base value | 3,537.3~~,396.8~~ | 3,465.8~~3,328.3~~ | 3,436.9~~3,300.5~~ | 3,539.0~~3,398.5~~ | 3,551.6~~37.3~~~~3,410.7~~ |
| less depreciation | 125.3~~120.2~~ | 132.0~~126.6~~ | ~~134.~~139.7~~0~~ | 147.3~~141.4~~ | 151.2~~145.0~~ |
| less accelerated depreciation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| less asset disposals | 9.0 | 4.0 | 12.5 | 8.7 | 16.8 |
| plus new facilities investment (net of capital contributions and asset disposals) | 62.9~~51.7~~ | 107.0~~98.9~~ | 254.3~~232.0~~ | 168.7~~153.5~~ | 180.9~~164.0~~ |
| Closing capital base value | 3,465.8~~3,328.3~~ | 3,436.9~~3,300.5~~ | 3,539.0~~3,398.5~~ | 3,551.6~~73,410.7~~ | 3,564.5~~3,429.7~~ |

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

| Financial year ending: | 30 June 2018 | 30 June 2019 | 30 June 2020 | 30 June 2021 | 30 June 2022 |
|---|---|---|---|---|---|
| Opening capital base value | 6,605.1~~6,337.2~~ | 6,658.8~~6,388.0~~ | 6,743.9~~6,468.8~~ | 6,896.7~~6,613.2~~ | 7,063.1~~6,772.7~~ |
| less depreciation | 293.5~~281.6~~ | 313.9~~301.3~~ | 318.1~~305.7~~ | 306.5~~294.4~~ | 298.3~~286.3~~ |
| less accelerated depreciation | 4.4 | 6.9 | 4.4 | 0.0 | 0.0 |
| less asset disposals | 1.6 | 0.6 | 0.7 | 1.7 | 0.2 |
| Plus, new facilities investment (net of capital contributions and asset disposals) | 353.2~~336.8~~ | 406.6~~389.1~~ | 475.9~~454.5~~ | 474.7~~453.9~~ | 456.6~~452.7~~ |
| Closing capital base value | 6,658.8~~6,388.0~~ | 6,734.9~~06,468.8~~ | 6,896.6~~76,613.2~~ | 7,063.1~~6,772.7~~ | 7,221.2~~6,939.2~~ |

## 5.3 Depreciation

5.3.1 Pursuant to section 6.70 of the *Code*, the *price control* set out in this *access arrangement* provides for the depreciation of the *network assets* that comprise the *capital base*. References to depreciation in this *access arrangement* relate solely to regulatory depreciation for the purposes of calculating the *target revenue*, and do not relate to the calculation of depreciation for accounting or taxation purposes.

5.3.2 The depreciation provision contained in the *target revenue* for each year of this *access arrangement period* is calculated using:

a) the straight-line depreciation method;

b) the existing weighted average lives for each of the *transmission system* and *distribution system* that comprise the *capital base* value as at 30 June 2022; and

c) for *new facilities investment* forecast for this *access arrangement period* the weighted average lives for each of the *transmission system* and *distribution system* based on the asset lives for each group of *network assets* as set out in the following tables:

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

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

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

| Asset group | Economic Life (years) for depreciation purposes |
|---|---|
| Distribution lines - wood poles | 41 years |
| Distribution underground cables | 60 years |
| Distribution transformers | 35 years |
| Distribution switchgear | 35 years |
| Street lighting | 20 years |
| Distribution meters and services | 15 years |
| Distribution IT | 6 years |
| Distribution SCADA & communications | 10.16 years |
| Distribution other, non-network assets | 27 years |
| Stand-alone power systems | 20 years |
| Storage | 20 years |

5.3.3 Western Power is not proposing any accelerated depreciation in this *access arrangement period* in relation to *network assets* for the ***transmission*** *system*.

5.3.4 Western Power is not proposing any accelerated depreciation in this *access arrangement period* in relation to *network assets* for the ***distribution*** *system*.

5.3.5 The depreciation of the opening *capital base* at the commencement of the next *access arrangement period* will be the forecast depreciation contained in the *target revenue* for the *access arrangement period.*

## 5.4 Weighted average cost of capital

5.4.1 Pursuant to section 6.64 of the *Code* the *weighted average cost of capital* for the ~~for the~~ financial year ending 30 June 2023 is 7.05~~10~~% nominal post tax, derived using the following formula:

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

where:

- $r_e$ is the cost of equity, being 8.00~~16~~%
- $r_d$ is the cost of debt, being 6.28~~4~~% for the financial year ended 30 June 2023
- $E$ is the proportion of equity used to finance regulated assets by a benchmark electricity network service provider (45%)
- $D$ is the proportion of debt used to finance regulated assets by a benchmark electricity network service provider (55%)

5.4.2 Pursuant to section 6.64 of the *Code* the *weighted average cost of capital* for the financial year ending 30 June 2024 is 7.02% nominal post tax, which updates the debt risk premium, derived using the following formula:

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

where:

- $r_e$ is the cost of equity, being 8.00%
- $r_d$ is the cost of debt, being 6.22% for the financial year ended 30 June 2024
- ***E*** is the proportion of equity used to finance regulated assets by a benchmark electricity network service provider (45%)
- ***D*** is the proportion of debt used to finance regulated assets by a benchmark electricity network service provider (55%)

~~5.4.2~~5.4.3 The cost of debt ($r_d$) in section 5.4.1 and 5.4.2 will be updated annually to give effect to the annual update of the trailing average debt risk premium~~cost of debt approach~~ described in section 5.4.5~~5.4.4~~ to 5.4.7~~5.4.6~~. The annual update of the debt risk premium~~cost of debt~~ will give rise to an annual update of *the weighted average cost of capital*. The update of the debt risk premium ~~cost of debt~~ and *weighted average cost of capital* will apply to the financial years ending ~~30 June 2024,~~ 30 June 2025, 30 June 2026 and 30 June 2027.

~~5.4.3~~5.4.4 The updated debt risk premium ~~cost of debt~~ and resulting updated *weighted average cost of capital* will be reflected in the update of the *price list* in accordance with sections 6.4.1 and 6.4.2.

**Trailing average debt risk premium~~cost of debt~~ variation**

5.4.5 The automatic formula for the simple, equally-weighted 10-year trailing average debt risk premium is:

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

where

*TA DRP*$_0$ is the equally weighted trailing average of the debt risk premium to apply in the following year as the annual update of the estimate used in the current year; and

*DRPt* is the debt risk premium estimated for each of the 10 regulatory years t=0, -1, -2…,-9.

(a) The estimated trailing average debt risk premium for the final decision is follows:

| Year | Debt risk premium (%) |
|---|---|
| 2014/15 | 2.634 |
| 2015/16 | 1.640 |
| 2016/17 | 2.352 |
| 2017/18 | 1.656 |
| 2018/19 | 1.241 |
| 2019/20 | 1.724 |
| 2020/21 | 1.497 |

| Year | Debt risk premium (%) |
|---|---|
| 2021/22 | 1.219 |
| 2022/23 | 2.103 |
| 2023/24 | 2.179 |
| **Trailing average debt risk premium** | **1.825** |

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

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

~~Where;~~

~~$rd_t$ is the cost of debt in financial year t~~

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

~~$BY_i$ is the Bond Yield estimated for each of the 10 regulatory years~~

~~$i = -1, -2 \ldots, -10$~~

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

~~The forward looking estimators for the financial years ending 30 June 2022, 30 June 2023, 30 June 2024, 30 June 2026 and 30 June 2027 estimated during the 20 *business day* averaging period, using the method set out in section 5.4.5 or as otherwise set in accordance with section 5.4.6; or~~

~~The following estimates, derived as follows:~~

~~financial year 2012/13: $BY_{2012/13}$: 7.034 per cent;~~

~~financial year 2013/14: $BY_{2013/14}$: 5.666 per cent;~~

~~financial year 2014/15: $BY_{2014/15}$: 5.167 per cent;~~

~~financial year 2015/16: $BY_{2015/16}$: 4.508 per cent;~~

~~financial year 2016/17: $BY_{2016/17}$: 4.491 per cent;~~

~~financial year 2017/18: $BY_{2017/18}$: 4.522 per cent;~~

~~financial year 2018/19: $BY_{2018/19}$: 3.474 per cent;~~

~~financial year 2019/20: $BY_{2019/20}$: 3.072 per cent;~~

~~financial year 2020/21: $BY_{2020/21}$: 3.025 per cent.~~

~~Where an estimate of $BY_i$ is not available, a placeholder value of the most recently available estimate will be used.~~

~~5.4.4~~5.4.6 Western Power will nominate an averaging period for the purposes of determining the ~~cost of deb~~ updated debt risk premium values, for the purposes of price variation,~~t~~ for each of the financial years ending 30 June 2024, 30 June 2025, 30 June 2026 and 30 June 2027. The averaging periods are a nominated 20 *business days* (based on NSW public holidays) during the period 1 November to 1 March in the financial year prior to the relevant financial year. The nominated 20 *business day* averaging period does not need to be identical in each year.

~~5.4.5~~5.4.7 Estimation of $DRP_t$ ~~$BY_t$~~ will be undertaken based on the method set out by the Economic Regulation Authority ~~Australian Energy Regulator~~ in the 2022 Final Gas Rate of~~18~~ Rate of Return Instrument.[2] ~~relying solely on data from the Reserve Bank of Australia.~~

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

5.5.1 Western Power deferred the recovery of some transmission and distribution revenue from the second *access arrangement period* to the third or subsequent *access arrangement periods*.

5.5.2 The tables below show the derivation of the *deferred revenue* value as at 30 June 2022 to be recovered so that Western Power is financially neutral compared to a situation where revenue deferral had not occurred.

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

| Financial year ending: | 30 June 2018 | 30 June 2019 | 30 June 2020 | 30 June 2021 | 30 June 2022 |
|---|---|---|---|---|---|
| Opening deferred revenue value | 105.7 ~~101.4~~ | 104.8~~100.6~~ | 103.9 ~~99.7~~ | 102.9~~98.7~~ | 101.9 ~~97.7~~ |
| less principal recovered | 0.9 ~~0.8~~ | 0.9 | 1.0 | 1.1 ~~1.0~~ | 1.1 |
| Closing deferred revenue value | 104.8 ~~100.6~~ | 103.9 ~~99.7~~ | 102.9 ~~98.7~~ | 101.9 ~~97.7~~ | 100.8 ~~96.7~~ |

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

| Financial year ending: | 30 June 2018 | 30 June 2019 | 30 June 2020 | 30 June 2021 | 30 June 2022 |
|---|---|---|---|---|---|
| Opening deferred revenue value | 780.3 ~~748.7~~ | 770.7~~739.4~~ | 760.7 ~~729.8~~ | 749.8 ~~719.4~~ | 738.5 ~~708.5~~ |
| less principal recovered | 9.6 ~~9.3~~ | 10.0 ~~9.6~~ | 10.9 ~~10.4~~ | 11.4 ~~10.9~~ | 11.9 ~~11.4~~ |
| Closing deferred revenue value | 770.7 ~~739.4~~ | 760.7 ~~729.8~~ | 749.8 ~~719.4~~ | 738.5~~708.5~~ | 726.6 ~~697.1~~ |

5.5.3 Western Power will recover the *deferred revenue* amounts detailed in section 5.5.2 of this *access arrangement* as a real annuity amount over:

a) a 50 year period for the *transmission system deferred revenue* commencing 1 July 2012; and

b) a 42 year period for the *distribution system deferred revenue* commencing 1 July 2012.

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.

[2] ERA, *2022 final gas rate of return instrument, 16 December 2022.* ~~https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-instrument-2018~~

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

| Financial year ending: | 30 June 2023 | 30 June 2024 | 30 June 2025 | 30 June 2026 | 30 June 2027 |
|---|---|---|---|---|---|
| Transmission system | 5.374.9 | 5.344.9 | 5.344.9 | 5.344.9 | 5.344.9 |
| Distribution system | 42.5539.1 | 42.3839.1 | 42.3839.1 | 42.3839.1 | 42.3839.1 |

## 5.6 Price control – period of application

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

## 5.7 Price control for revenue target services

5.7.1 The *price control* for *revenue target services* is used to determine the maximum total network revenue target ($TNR_t$) for each financial year t, where t is financial years ending 30 June 2023 2024 through to 30 June 2027.

5.7.2 $TNR_t$is determined as follows:

$$TNR_t = NR_t + TEC_t + DTEC_t$$

where:

**$TNR_t$** is the maximum total network revenue target services revenue for each financial year, t, of this *access arrangement* period

**$NR_t$** is the annual revenue target services revenue in financial year t

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

**$DTEC_t$** 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 5.7.4 of this access arrangement.

5.7.3 Not used [Notwithstanding section 5.7.2 for the financial year ending 30 June 2025, $TNR_t$ will also include an additional term TK' as follows:

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

where:

$FTNR_{2022/23}$ = $1,734.6M nominal

$ATNR_{2022/23}$ is the actual network revenue received in 2022/23.

$WACC_{2022/23}$ is as defined in section 5.4.

$WACC_{2023/24}$ is as defined in section .]

5.7.4 $DTEC_t$ is determined as follows:

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

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.

**Table 45: Annual revenue target service revenues to be used for calculating $TNR_t$ ($ million real as at 30 June 2022)**

| Financial year ending: | 30 June 2023 | 30 June 2024 | 30 June 2025 | 30 June 2026 | 30 June 2027 |
|---|---|---|---|---|---|
| $NR_t$ | 1,428.6~~1,516.7~~ | 1,475.3~~1,497.0~~ | 1,512.5~~1,469.5~~ | 1,562.3~~1,451.0~~ | 1,610.3~~1,424.9~~ |

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

# 6. Pricing methods, price lists and price information

## 6.1 Purpose

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

## 6.2 Network pricing objectives

6.2.1 Western Power's *pricing methods* are designed to achieve the *pricing objective* set out in section 7.3 of the *Code* and comply with the *pricing principles* in sections 7.3D to 7.3J of the *Code*.

6.2.2 In accordance with the *pricing objective* and the *pricing principles*, Western Power's *pricing methods* seek to recover the costs of providing *reference services* from *users* in a manner that is simple, practical and equitable.

## 6.3 Overview of pricing methods

6.3.1 *Reference tariffs* are derived from an analysis of the cost of *reference service* provision which entails:

a) identifying the costs of providing *revenue target services*;

b) determining the expected *non-reference service* revenue within the costs of providing *revenue target services*;

c) deducting the expected *non-reference service* revenue from the costs of providing *revenue target services* to determine the costs of providing *reference services*;

d) allocating the costs of providing *reference services* to particular *reference service* customer groups;

e) translating the costs of serving particular *reference service* customer groups to the costs of providing *reference tariffs*; and

f) determining a structure of *reference tariffs* in a manner that reflects the underlying cost structure, in accordance with section 7.6 of the *Code*.

6.3.2 The costs relating to *reference services* A1 to A10, A12 to A23 and C1 to C21, C23 and C24 are allocated so that these costs can determine the relevant *reference tariff* in a cost reflective manner.

6.3.3 *Reference tariffs* for *reference services* A11, B1 to B3 and C22 are location-specific and are published for each electrical node.

## 6.4 *Price list* and tariff structure statement

6.4.1 Not used ~~The *price list* in respect of the pricing year commencing on 1 July 2022 is attached at Appendix F.3.~~

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

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

**Table 46: Pricing years for this access arrangement period**

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

6.4.4 Chapter 7 of the *Code* requires Western Power to prepare a *tariff structure statement*. Western Power's Reference Tariff ForecastStructure Statement Overview and Tariff Structure Statement Technical Summary are attached at Appendices F.1 and F.2 respectively.

6.4.5 For the purposes of the p*rice list* and *tariff structure statement* in the financial years ending 30 June 2024, 30 June 2025, 30 June 2026 and 30 June 2027, Western Power will use the customer information in the table below to determine prices:

**Table 47: Customer numbers and energy volumes**

| Customer segment | Tariffs | 2023/24 | | 2024/25 | | 2025/26 | | 2026/27 | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Customer numbers** | **Energy volumes GWh** | **Customer numbers** | **Energy volumes GWh** | **Customer numbers** | **Energy volumes GWh** | **Customer numbers** | **Energy volumes GWh** |
| Residential | RT1, RT3, RT13, RT15, RT17, RT19, RT21, RT35, RT37 | 1,103,159 | 5,205 | 1,112,494 | 5,073 | 1,122,457 | 4,989 | 1,133,184 | 4,878 |
| LV business – small | RT2, RT4, RT14, RT16, RT18, RT20, RT22, RT34, RT36 | 100,629 | 2,247 | 107,187 | 2,206 | 113,743 | 2,145 | 119,913 | 2,037 |
| LV business – large | RT6, RT8 | 3,749 | 1,933 | 3,774 | 1,933 | 3,800 | 1,940 | 3,827 | 1,942 |
| HV business | RT5, RT7 | 686 | 4,013 | 711 | 4,021 | 737 | 4,042 | 764 | 4,053 |
| Streetlights | RT9 | 293,180 | 138 | 297,685 | 140 | 302,467 | 142 | 307,357 | 144 |
| Unmetered | RT10 | 19,811 | 47 | 20,162 | 48 | 20,513 | 49 | 20,864 | 49 |
| Electric vehicle chargers | RT40, RT41 | 12 | 0 | 24 | 0 | 36 | 1 | 50 | 1 |
| CMD | TRT1 | 42 | 4,430 | 42 | 4,431 | 42 | 4,431 | 42 | 4,431 |

## 6.5 Pricing methods

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

## 6.6 Policy on prudent discounting

6.6.1 In accordance with section 7.9 of the *Code and section 10.6 of the applications and queuing policy*, if a *user* seeks to implement initiatives to promote the economically efficient investment in and operation of the *Western Power Network,* Western Power must reflect in the *user's tariff*, by way of a *discount*, a share of any reductions in either or both of the *capital-related costs* or *non-capital costs* which arise as a direct result of such initiatives by:

a) entering into an agreement with a *user* to apply a *discount* to the equivalent *tariff* to be paid by the *user* for a *reference service* or *non-reference service*; and

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

6.6.2 In exercising its discretion with regard to prudent discounting, Western Power will have regard to the *pricing objective* in section 7.3 of the *Code*.

6.6.3 Western Power may offer a prudent discount if the existing *user* or *applicant* seeking *access* to the *Western Power Network* is able to demonstrate that another supply option arising as the result of its initiative will directly provide a reduction in Western Power's future capital related costs or non-capital *costs*.

6.6.4 The existing *user* or *applicant* must pay the appropriate fee and satisfy the discount criteria published on Western Power's website from time to time in order to qualify for the *discount*.

6.6.5 Western Power's discounted price offer will be as described and calculated under the *price list* and set to reflect the higher of:

a) the cost of the other option; or

b) the *incremental cost of service provision*.

## 6.7 Policy on discounts for distributed generation

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

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

## 7.1 Adjusting target revenue for unforeseen events

7.1.1 If a *force majeure* event occurs which results in Western Power incurring unrecovered costs (within the meaning of the *Code*) during this *access arrangement period* then Western Power will, as part of its *proposed revisions* for the next *access arrangement period*, provide a report to the *Authority* setting out:

a) a description of the nature of the *force majeure* event;

b) a description of the insurance cover that Western Power had in place at the time of the *force majeure* event;

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* undertaken for *augmentation* of:

(a) the *transmission system* and *distribution system* under the current or succeeding underground power program;

~~(b)~~ the *distribution system* under the standalone power systems program; ~~and~~

(b) ~~the *distribution system* under the Distribution – Capacity Expansion program.~~

(c) the transmission network expansion projects identified by Government to support the announced closures of coal fired generation as set out in the AA5 final decision; and

~~(c)~~(d) the allowance for developing and implementing an overall plan to address regional reliability, including implementing solutions that improve reliability in pilot areas, as set out in the AA5 final decision.

## 7.4 Gain sharing mechanism and efficiency and innovation benchmarks

7.4.1 In accordance with sections 6.20 and 5.25 of the *Code*, a *gain sharing mechanism* and *efficiency and innovation benchmarks* will apply with respect to the *access arrangement*.

7.4.2 An *above-benchmark surplus* or a *below-benchmark deficit* (within the meaning of the *Code*) is to be calculated for each of the financial years of the access arrangement period as follows:

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

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

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

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

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

where:

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

**$EIB_t$** is the *efficiency and innovation benchmark* for financial year t as set out in Table 48.

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

| Financial year ending: | 30 June 2023 | 30 June 2024 | 30 June 2025 | 30 June 2026 | 30 June 2027 |
|---|---|---|---|---|---|
| Efficiency and innovation benchmark - $EIB_t$ ~~Network~~ | 422.2~~288.4~~ | 416.2~~295.3~~ | 405.6~~296.2~~ | 402.3~~298.4~~ | 400.8~~298.7~~ |

and

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

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

B. in accordance with the *demand management innovation allowance* mechanism in the *access arrangement;*

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

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

E. in relation to *non-revenue target services.*

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

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

where:

$$GSMA_1 = (SD_{t1} + SD_{t2} + SD_{t3} + SD_{t4} + SD_{t5})$$

$$GSMA_2 = (SD_{t2} + SD_{t3} + SD_{t4} + SD_{t5})$$

$$GSMA_3 = (SD_{t3} + SD_{t4} + SD_{t5})$$

$$GSMA_4 = (SD_{t4} + SD_{t5})$$

$$GSMA_5 = (SD_{t5})$$

where:

**$GSMA_n$** is the total *above-benchmark surplus* (if positive) or the *below-benchmark deficit* (if negative) for the equivalent financial year of the *access arrangement period*; and

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

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

## 7.5 Service standards adjustment mechanism

7.5.1 In accordance with section 6.30 of the *Code*, a *service standards adjustment mechanism* applies to the *access arrangement*.

7.5.2 An amount will be added to, or deducted from, the *target revenue* for each of the *transmission system* and the *distribution system* for the next *access arrangement period* in accordance with the *service standards adjustment mechanism* set out below.

7.5.3 The *service standards adjustment mechanism* will apply to the "**SSAM Measures**" meaning the units of measure for each of SAIDI, call centre performance, loss of supply event frequency and average outage duration as defined in section 4.

7.5.4 In relation to actual service performance for each financial year of the access arrangement period, a reward (a positive amount) or a penalty (a negative amount) will be calculated for each SSAM Measure by applying the applicable incentive rate specified in section 7.5.12 to the relevant Service Standard Difference ("SSD"). SSDt is calculated as $SSB - SSA_t$.

where:

**$SSD_t$** is the Service Standard Difference in financial *year* t;

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

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

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

7.5.6 The rewards and penalties are applied to the performance *in each financial year* of the *access arrangement period* and:

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

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

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

(d) the reward or penalty for average outage duration will be allocated to the performance of the *transmission system*.

7.5.7 The rewards and penalties applied to each *financial year* as allocated to each of the *transmission system* and *distribution system* are summed for each of the *transmission system* and *distribution system*.

7.5.8 Notwithstanding section 7.5.7 of this *access arrangement*, the sum of the rewards and penalties for the *transmission system* applied to each financial year is capped at 1% of the total average revenue applicable to reference service customers connected to the *transmission system* for this *access arrangement period* which is $1,000,000~~953,338~~ (real dollars values as at 30 June 2022). For the avoidance of doubt, the amount will not be updated as a result of the annual updates to *weighted average cost of capital* as determined in section 5.4.

7.5.9 Notwithstanding section 7.5.7 of this *access arrangement*, the sum of the rewards and penalties for the *distribution system* applied to each financial year is capped at 1% of the total average revenue applicable to reference service customers connected to the *distribution system* for this *access arrangement period* which is $~~14,980,300~~14,173,593 (real dollars values as at 30 June 2022). For the avoidance of doubt, the amount will not be updated as a result of the annual updates to *weighted average cost of capital* as determined in section 5.4.

7.5.10 The amount that will be added to, or deducted from, the *target revenue* for each of the *transmission system* and the *distribution system* is equal to the present value of the sum of the amounts for each of the *transmission system* and the *distribution system* calculated under section 7.5.7 of this *access arrangement* (as subject to sections 7.5.8 and 7.5.9 of this *access arrangement*).

7.5.11 Notwithstanding sections 7.5.1 to 7.5.10 of this *access arrangement*, providing Western Power can demonstrate that it has spent the allowance included in the AA5 final decision to effectively develop and implement an overall plan to address regional reliability, including implementing solutions that improve reliability in pilot areas, the penalty relating to the difference between 290 minutes and the service standard benchmark Western Power proposed in its revised proposal for AA5 (733.5 minutes) will not be imposed.

~~7.5.10~~7.5.12 The incentive rates for the *SSAM Measures* are as follows:

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

| | Reward side incentive rate ($ per SAIDI minute) | Penalty side incentive rate ($ per SAIDI minute) |
|---|---|---|
| SAIDI - CBD (minutes) | 22,591~~21,195~~ | 22,591~~21,195~~ |
| SAIDI - Urban (minutes) | 419,383~~393,457~~ | 419,383~~393,457~~ |
| SAIDI - Rural Short (minutes) | 169,547~~159,066~~ | 169,547~~159,066~~ |
| SAIDI - Rural Long (minutes) | 52,141~~48,918~~ | 52,141~~48,918~~ |

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

| | Reward side incentive rate ($ per 0.01 event) | Penalty side incentive rate ($ per 0.01 event) |
|---|---|---|
| SAIFI - CBD (events) | 9,845~~9,237~~ | 9,845~~9,237~~ |
| SAIFI - Urban (events) | 275,785~~258,737~~ | 275,785~~258,737~~ |
| SAIFI - Rural Short (events) | 109,524~~102,754~~ | 109,524~~102,754~~ |
| SAIFI - Rural Long (events) | 22,653~~53,755~~ | 22,653~~53,755~~ |

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

| | Reward side incentive rate ($ per 0.1%) | Penalty side incentive rate ($ per 0.1%) |
|---|---|---|
| Call centre performance (Percentage of calls responded to within 30 seconds) | 56,694~~-59,921~~ | 56,694~~-59,921~~ |

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

| | Reward side incentive rate ($ per event) | Penalty side incentive rate ($ per event) |
|---|---|---|
| Loss of supply event frequency >0.1 and ≤1.0 system minutes interrupted (number of events) | 150,000~~143,008~~ | 150,000~~143,008~~ |
| Loss of supply event frequency >1.0 system minutes interrupted (number of events) | 300,000~~286,017~~ | 300,000~~286,017~~ |

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

| | Reward side incentive rate ($ per minute) | Penalty side incentive rate ($ per minute) |
|---|---|---|
| Average outage duration (minutes) | 487~~464~~ | 487~~464~~ |

## 7.6 D factor

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

For the avoidance of doubt, this definition of "network control service" applies exclusively in relation to this *access arrangement* and does not apply in any other context (including but not limited to the Wholesale Electricity Market Rules ("**WEM Rules**") ).

7.6.2 This D factor scheme applies separately to each of:

a) *non-capital costs* for the *transmission system*; and

b) *non-capital costs* for the *distribution system*.

7.6.3 In the next *access arrangement period*, the *Authority* will add to Western Power's *target revenue* an amount so that Western Power is in a financially neutral position as the result of:

a) any additional *non-capital costs* incurred by Western Power as a result of deferring a *new facilities investment* projects during this *access arrangement period,* net of any amounts previously included in *target revenue* in relation to the deferred *new facilities investment* (other than such amounts included in the calculation of the *capital-related costs* due to any *investment difference* under section 7.3.5); and

b) any additional *non-capital costs* incurred by Western Power in relation to demand management initiatives or *network control services;*

7.6.4 In relation to section 7.6.3(a), the *new facilities investment* project that has been deferred must have been included in the *forecast new facilities investment* for this *access arrangement period*.

7.6.5 In relation to sections 7.6.3(a) and 7.6.3(b), an amount will only be added to *target revenue* for the next *access arrangement period* if there is an approved business case for the relevant expenditure, and this business case is made available to the *Authority*. The business case must demonstrate to the *Authority's* satisfaction that the proposed *non-capital costs* satisfy the requirements of sections 6.40 and 6.41 of the *Code*, as relevant.

7.6.6 In relation to sections 7.6.3(a) and 7.6.3(b), the adjustment to the *target revenue* for the next *access arrangement period* must leave Western Power in a financially neutral position by taking account of:

a) the effects of inflation; and

b) the time value of money as reflected by Western Power's *weighted average cost of capital* for the *Western Power Network* as determined in section 5.4.

## 7.7 Deferred revenue

7.7.1 For the purposes of sections 6.5A to 6.5E of the *Code* an amount must be added to the target revenue for the *distribution system* in the sixth *access arrangement period* or subsequent *access arrangement periods* such that the present value (at 30 June 2022) of the total amount added to *target revenue* (taking account of inflation and the time value of money) is equal to $667.2~~637.1~~ million (real dollars values as at 30 June 2022).

7.7.2 For the purposes of sections 6.5A to 6.5E of the *Code* an amount must be added to the *target revenue* for the *transmission system* in the sixth *access arrangement period* or subsequent *access arrangement periods* such that the present value (at 30 June 2022) of the total amount added to *target revenue* (taking account of inflation and the time value of money) is equal to $95.4~~91.2~~ million ( real dollars values as at 30 June 2022).

7.7.3 The timeframe for recovering the deferred revenue amounts in section 7.7.1 will be 27 years and in section 7.7.2 will be 35 years at the end of this *access arrangement*.

# 8. Trigger events

8.1.1 For the purposes of sections 4.37 and 5.34 of the *Code,* a *trigger event* in this *access arrangement* is any significant unforeseen event which has a materially adverse impact on Western Power, and which is:

a) outside the control of Western Power; and

b) not something that Western Power, acting in accordance with *good electricity industry practice*, should have been able to prevent or overcome; and

c) so substantial that the advantages of making a variation to this *access arrangement* before the end of this *access arrangement period* would outweigh the disadvantages of doing so, having regard to the impact of the variation on regulatory certainty.

8.1.2 The *designated date* by which Western Power must submit *proposed revisions* to the *Authority* is 90 *business days* after a *trigger event* has occurred. If the costs associated with the *trigger event* are uncertain at the time of the *designated date*, Western Power's proposed revision submitted to the *Authority* under sections 4.37 and 5.34 of the *Code* must incorporate an appropriate mechanism for cost recovery having regard to the *Code objective*.

# 9. Demand management innovation allowance mechanism

9.1.1 Pursuant to section 6.32A of the *Code* a *demand management innovation allowance* mechanism applies to this fifth access arrangement period and subsequent access arrangement periods.

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

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

| Pricing year | FY23 | FY24 | FY25 | FY26 | FY27 |
|---|---|---|---|---|---|
| Target Revenue smoothed less *demand management innovation allowance* | 1,583.71~~,683.57~~ | 1631.21~~,664.61~~ | 1,677.21~~,635.84~~ | 1,734.31~~,612.52~~ | 1,786.21~~,612.52~~ |
| *Demand management innovation allowance* | 1.26~~1.35~~ | 1.29~~1.33~~ | 1.32~~1.31~~ | 1.35~~1.29~~ | 1.38~~1.27~~ |

9.1.3 Pursuant to section 6.32F of the *Code*, if any amount of the *demand management innovation allowance* is not used or not approved by the *Authority* over the *access arrangement period*, this amount must not be carried over into the subsequent *access arrangement period* or reduce the amount of the *demand management innovation allowance* for the next *access arrangement period*.

9.1.4 The *demand management innovation allowance* mechanism will operate as per the demand management innovation allowance guideline published by the *Authority* in accordance with sections 6.32D, 6.32J and 6.32K of the *Code*.

# 10. Supplementary matters

## 10.1 General

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

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

## 10.2 Line losses

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

## 10.3 Metering

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

## Appendix A: Electricity transfer access contract

## Appendix B: Applications and queuing policy

# Appendix C: Contributions policy

## C.1 Contributions policy

## C.2 Distribution low voltage connection scheme methodology

## Appendix D: Multi-function asset policy

## Appendix E: Reference services

# Appendix F: Tariff structure statement

## F.1 Tariff Structure Statement Overview

## F.2 Tariff Structure Statement Technical Summary

## ~~F.3 2022-23 *Price List*~~