Revised Pproposed revisions to the Access Arrangement for the Western Power Network

ELECTRICITY NETWORKS CORPORATION
("WESTERN POWER")

ABN 18 540 492 861

~~September~~ May 20112

Formatted: Top: 2.5 cm

Formatted: Font: (Default) Arial, 30 pt, Bold

Formatted: Space Before: 0 pt, After: 24 pt, Line spacing: Multiple 1.2 li, Border: Top: (Single solid line, Custom Color(RGB(226,101,12)), 0.5 pt Line width), Bottom: (Single solid line, Custom Color(RGB(226,101,12)), 0.5 pt Line width)

Formatted: Space Before: 12 pt, After: 12 pt, Line spacing: Multiple 1.2 li

Formatted: Font: Arial, 14 pt

Formatted: Font: Bold

Formatted: Font: 12 pt

Formatted: Space Before: 0 pt, After: 10 pt, Line spacing: Multiple 1.2 li

Formatted: Font: (Default) Arial, 12 pt, Not Bold

Formatted: Font: (Default) Arial, 14 pt

Contents

List of Tables

1 Introduction

1.1 Purpose of this document

1.1.1 These revised *proposed revisions* are lodged by Western Power on ~~30 September 2011~~29 May 2012 for *review* and *approval* by the *Authority* in accordance with the processes and criteria set out in the Electricity Networks Access Code 2004, herein referred to as the *Code*. Henceforth this document is referred to as the "***access arrangement***".

1.1.2 This *access arrangement* is an arrangement for *access* to the *Western Power Network* from the date specified in section 1.3.1 of this *access arrangement*. The *Western Power Network* is a *covered network* under the *Code*.

1.2 Definitions and interpretation

1.2.1 In sections 1 to 9 of this *access arrangement*, where a word or phrase is italicised it has the definition given to that word or phrase as described in this *access arrangement* or section 1.3 of the *Code*, unless the context requires otherwise.

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

1.3 Proposed access arrangement revisions commencement date

1.3.1 This *access arrangement* (as revised) is effective from 1 ~~July~~ November 2012 or a later date in accordance with section 4.26 of the *Code*.

1.4 Revisions submission date and target revisions commencement date

1.4.1 Pursuant to section 5.31(a) of the *Code*, the *revisions submission date* for this *access arrangement* is 1 March 2016.

1.4.2 Pursuant to section 5.31(b) of the *Code*, the target *revisions commencement date* for this *access arrangement* is 1 July 2017.

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;

Formatted: Font: Italic

Formatted: Not Highlight

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

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

d) the distribution headworks methodology attached at Appendix C.2;

e) the distribution low voltage connection scheme methodology attached at Appendix C.3;

f) the *Transfer and Relocation Policy* attached at Appendix D;

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

h) the *price list* attached at Appendix F.1, which is a schedule of *reference tariffs* in effect for this *access arrangement*; and

i) the *price list information* attached at Appendix F.2, which explains how Western Power derived the elements of the proposed *price list*; and demonstrates that the *price list* complies with the *access arrangement*.

1.6 Relationship to technical rules and access arrangement information

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

1.6.2 Western Power's ~~revised~~ amended *access arrangement information* is submitted on ~~30 September 2011~~29 May 2012 alongside this *access arrangement* in accordance with section ~~4.48~~ 4.4 of the *Code*. The amended *access arrangement information* is to be read in conjunction with the revised *access arrangement information* that was submitted on 30 September 2011. The amended *access arrangement information* and the revised *access arrangement information* do~~es~~ not form part of this *access arrangement*.

Formatted: Font: Italic

Formatted: Font: Italic

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 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*.

2.2.2 *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*.

2.2.3 Western Power specifies 11 *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
Street lighting Exit Service (including streetlight maintenance)	A9
Un-Metered Supplies Exit Service	A10
Transmission Exit Service	A11

2.2.4 Western Power specifies two *reference services* at *entry points*:

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

Reference service	Short name
Distribution Entry Service	B1
Transmission Entry Service	B2

2.2.5 Western Power specifies four *bi-directional services* as *reference services* at connection points:

Table 3: *Bi-directional services* that are *reference services*

Reference service name	Short name
Anytime energy (residential) bi-directional service	C1
Anytime energy (business) bi-directional service	C2
Time of use (residential) bi-directional service	C3
Time of use (business) bi-directional service	C4

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

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

2.3 Payment by users

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

3 Excluded services

3.1 Purpose

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

3.2 Excluded services

3.2.1 There are no *excluded services* at the *revisions commencement date* of this *access arrangement*. In accordance with section 6.35 of the *Code*, Western Power may at any time request the *Authority* to determine under section 6.33 of the *Code* that one or more *services* provided by means of the *Western Power Network* are *excluded services*.

4 Service standard benchmarks

4.1 Purpose

4.1.1 Pursuant to section 5.1(c) of the *Code*, this section provides the *service standard benchmarks* applicable to the *reference services*. *Service standard 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, B1 and C1 to C4, 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 ~~and circuit availability~~.

4.2.2 In clauses 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 4: Application of SAIDI

	System Average Interruption Duration Index (SAIDI) **CBD** **Urban** **Rural ~~short~~Short** **Rural ~~long~~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 either or both of the *transmission system* and *distribution system* (after exclusions) divided by the number of *distribution customers* served, that is: $\frac{\sum \text{Sustained } \textit{distribution customer} \text{ interruption durations}}{\text{Number of } \textit{distribution customers} \text{ served}}$ where: • A CBD feeder is a feeder supplying predominantly commercial, high-rise buildings, supplied by a predominantly underground *distribution system* containing significant interconnection and redundancy when compared to urban areas. • An Urban feeder is a feeder, which is not a CBD feeder with actual maximum demand over the reporting period per total high voltage feeder route length greater than 0.3 MVA/km. • A Rural Short feeder is a feeder which is not a CBD or urban feeder with a total high voltage feeder route length less than 200 km. • A Rural Long feeder is a feeder which is not a CBD or urban feeder

	System Average Interruption Duration Index (SAIDI) CBD Urban Rural ~~short~~Short Rural ~~long~~Long
	with a total high voltage feeder route length greater than 200 km. • The number of *distribution customers* served is determined by averaging the start of month values for the 12 months included in the 12 month period.
Exclusions	One or more of: • For an interruption on either or both of the *transmission system* and *distribution system*, a day on which the major event day threshold, determined in accordance with IEEE1366-2003 definitions applying the "2.5 beta method", is exceeded. • Interruptions on either or both of the *transmission system* and *distribution 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). • Planned interruptions on either or both of the *transmission system* and *distribution system* caused by scheduled *works.* • *Force majeure* events affecting either or both of the *transmission system* and *distribution system*.

4.2.4 The *service standard benchmarks* expressed in terms of SAIDI for the *reference services* A1 to A10, B1 and C1 to C4 for each year of this *access arrangement period* are shown in the following table:

Table 5: SAIDI *service standard benchmarks* for *reference services* A1 to A10, B1 and C1 to C4

SAIDI	For each financial year ending 30 June
CBD	~~56~~51
Urban	200
Rural Short	~~360~~290
Rural Long	~~720~~730

System Average Interruption Frequency Index (SAIFI)

4.2.5 SAIFI is applied as follows:

Table 6: Application of SAIFI

	System Average Interruption Frequency Index (SAIFI) CBD Urban Rural ~~short~~Short Rural ~~long~~Long
Unit of Measure	Interruptions per year.
Definition	Over a 12 month period, the number of sustained (greater than 1 minute) *distribution customer* interruptions (number) attributable to either or both of the *transmission system* and *distribution system* (after exclusions) divided by the number of distribution customers served, that is: $\frac{\sum \text{Number of sustained } \textit{distribution customer} \text{ interruptions}}{\text{Number of } \textit{distribution customers} \text{ served}}$ where: • A CBD feeder is a feeder supplying predominantly commercial, high-rise buildings, supplied by a predominantly underground *distribution system* containing significant interconnection and redundancy when compared to urban areas. • An Urban feeder is a feeder, which is not a CBD feeder, with actual maximum demand over the reporting period per total high voltage feeder route length greater than 0.3 MVA/km. • A Rural Short feeder is a feeder which is not a CBD or urban feeder with a total high voltage feeder route length less than 200 km. • A Rural Long feeder is a feeder which is not a CBD or urban feeder with a total high voltage feeder route length greater than 200 km. • The number of *distribution customers* served is determined by averaging the start of month values for the 12 months included in the 12 month period.
Exclusions	One or more of: • For interruptions on either or both of the *transmission system* and *distribution system,* a day on which the major event day threshold, determined in accordance with IEEE1366-2003 definitions applying the “2.5 beta method”, is exceeded. • Interruptions on either or both of the *transmission system* and *distribution 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). • Planned interruptions on either or both of the *transmission system* and *distribution system* caused by scheduled *works*. • *Force majeure* events affecting either or both of the *transmission system* and *distribution system.*

4.2.6 The *service standard benchmarks* expressed in terms of SAIFI for the *reference services* A1 to A10, B1 and C1 to C4 for each year of this *access arrangement period* is shown in the following table:

Table 7: SAIFI *service standard benchmarks* for *reference services* A1 to A10, B1 and C1 to C4

SAIFI	For each financial year ending 30 June
CBD	0.40
Urban	~~2.30~~2.20
Rural Short	~~4.20~~3.30
Rural Long	5.70

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

Call ~~Centre~~ centre ~~Performance~~performance

4.2.8 Call centre performance is applied as follows:

Table 8: Application of call centre performance

	Call centre performance
Unit of Measure	Percentage of calls per year.
Definition	Over a 12 month period, in relation to interruptions and life threatening emergencies, percentage of calls responded to in 30 seconds or less (after exclusions), that is: Number of fault calls responded to in 30 seconds or less Total number of fault calls where: (~~a~~) ~~-~~Number of fault calls responded to in 30 seconds or less is: (i) unless paragraph (~~a~~)(ii) applies, where the caller's postcode is automatically determined or when a valid postcode is entered by the caller, the number of fault calls where a recorded message commences within 30 seconds from that determination or entry; or (ii) where the call is placed in the queue to be responded to by a human operator, the number of fault calls where the human operator commences to speak with the caller within 30 seconds of that placement. (b) ~~-~~A fault call is a telephone call from a caller entering the fault line or life threatening emergency line. (c) ~~-~~A call may be placed in a queue to be responded to by a human operator when the caller: (i) chooses to hold (when invited to do so) at the end of the recorded message; (ii) chooses to hold (when invited to do so) rather than enter a postcode when prompted to do so; (iii) enters an invalid postcode. (d) ~~-~~For a call to be counted as being responded to under paragraph (a), the caller must receive from the recorded message or the human operator information regarding power interruptions in their area and related restoration information.

Formatted: Indent: Left: 0 cm, Hanging: 1.19 cm

Formatted: Indent: Left: 0 cm, Hanging: 1.19 cm

	Call centre performance
	~~-~~(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.~~Number of fault calls responded to in 30 seconds or less is the number of fault calls where a caller receives confirmation regarding power interruptions in their area and related restoration information, through either:~~ o First speaking with a person in 30 seconds or less, or o First receiving an automated interactive message service message in 30 seconds or less. ~~-~~A fault call is a telephone call from a caller entering the fault line or life threatening emergency line. ~~-~~The fault call response time commences when the postcode is automatically determined or when a valid postcode is entered by the caller or when the call is placed in the queue to be responded to by a human operator.~~
Exclusions	One or more of: • Calls abandoned by a caller in 4 seconds or less of their postcode being automatically determined or when a valid postcode is entered by the caller. • Calls abandoned by a caller in 30 seconds or less of the call being placed in the queue to be responded to by a human operator. • All telephone calls received on a major event day which is excluded from SAIDI and SAIFI. • A fact or circumstance beyond the control of Western Power affecting the ability to receive calls to the extent that Western Power could not contract on reasonable terms to provide for the continuity of service.

Formatted: Indent: Left: 0 cm, Hanging: 1.19 cm

Formatted: Bullets and Numbering

4.2.9 The *service standard benchmarks* expressed in terms of call centre performance for the *reference services* A1 to A10, B1 and C1 to C4 for each year of this *access arrangement period* is shown in the following table:

Table 9: Call centre performance *service standard benchmarks* for *reference services* A1 to A10, B1 and C1 to C4

	For each financial year ending 30 June
Call centre performance	75.0%

~~**Circuit availability**~~

~~4.2.10Circuit availability is applied as follows:~~

Formatted: Bullets and Numbering

~~**Table 10: Application of circuit availability**~~

	~~**Circuit availability**~~
~~Unit of Measure~~	~~Percentage of hours per year.~~
~~Definition~~	~~Over a 12 month period, the actual hours transmission circuits are~~

	Circuit availability
	available divided by the total possible hours available for transmission circuits (after exclusions), that is: Number of hours transmission circuits are available × 100 Total possible hours available for transmission circuits where: •A **"transmission circuit"** is an arrangement of primary transmission elements on the *transmission system* that is overhead lines, underground cables, and bulk transmission power transformers used to transport electricity.
Exclusions	One or more of: •Zone substation power transformers. •Interruptions affecting the *transmission system* shown to be caused by a fault or other event on a third party system (for instance, without limitation interruptions caused by an intertrip signal, generator unavailability or a consumer installation). •*Force majeure* events affecting the *transmission system*. •Hours exceeding 14 days for planned interruptions for major construction *work*.

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

4.2.11 The *service standard benchmarks* expressed in terms of circuit availability for the *reference services* A1 to A10, B1 and C1 to C4 for each year of this *access arrangement period* is shown in the following table:

Table 11: Circuit availability *service standard benchmarks* for *reference services* A1 to A10, B1 and C1 to C4 and A11 and B2

	For each financial year ending 30 June
Circuit availability	97.3%

4.3 Service standard benchmarks for transmission reference services

4.3.1 For the *reference services* A11 and B2, the *service standard benchmarks* are expressed in terms of circuit availability and the individual customer service measure.

Circuit availability

Formatted: Bullets and Numbering

4.3.2 The circuit availability measure is defined in section 4.2.10 of this *access arrangement*.

4.3.3 The *service standard benchmarks* expressed in terms of circuit availability for the *reference services* A11 and B2 for this *access arrangement period* is set out in section 4.2.11 of this *access arrangement*.

4.3.2 Circuit availability is applied as follows:

Table 10: Application of circuit availability

	Circuit availability
Unit of Measure	Percentage of hours per year.
Definition	Over a 12 month period, the actual hours transmission circuits are available divided by the total possible hours available for transmission circuits (after exclusions), that is: $\frac{\text{Number of hours transmission circuits are available} \times 100}{\text{Total possible hours available for transmission circuits}}$ where: • A **"transmission circuit"** is an arrangement of primary transmission elements on the *transmission system* that is overhead lines, underground cables, and bulk transmission power transformers used to transport electricity.
Exclusions	One or more of: • Zone substation power transformers. • Interruptions affecting the *transmission system* shown to be caused by a fault or other event on a third party system (for instance, without limitation interruptions caused by an intertrip signal, generator unavailability or a consumer installation). • *Force majeure* events affecting the *transmission system*. • Hours exceeding 14 days for planned interruptions for major construction *work*.

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

4.3.3 The *service standard benchmarks* expressed in terms of circuit availability for the *reference services* A11 and B2 for each year of this *access arrangement period* is shown in the following table:

Table 11: Circuit availability *service standard benchmarks* for *reference services* A11 and B2

	For each financial year ending 30 June
Circuit availability	97.6%

~~**Individual customer service measure**~~

~~4.3.4The individual customer service measure is applied as follows:~~

Formatted: Bullets and Numbering

~~**Table 12: Application of Individual customer service measure**~~

	~~**Individual customer service measure**~~
~~Unit of Measure~~	~~Percentage of *users*.~~
~~Definition~~	~~Over a 12 month period, percentage of *users* procuring a *reference service* A11 or B2 (after exclusions) that have:~~ ~~(a) an account manager for the full 12 month period, and~~ ~~(b) an annually reviewed customer service management plan, and~~ ~~(c) an invitation to participate in an annual satisfaction survey~~
~~Exclusions~~	~~One or more of:~~ ~~•Where a new *user* commences procuring a *reference service* A11 or B2~~

Formatted: Bullets and Numbering

	Individual customer service measure
	during the 12 month period, the measure only applies from the time procurement commences. •If a *user* procures *reference service* A11 but the energy exited from the *network* for the 12 month period is zero. •If a *user* procures *reference service* B2 but the energy entered into the *network* for the 12 month period is zero.

4.3.5The *service standard benchmarks* expressed in term of the individual customer service measure for the *reference services* A11 and B2 for each year of this *access arrangement period* is set out in the following table:

Formatted: Bullets and Numbering

Table 13: Individual customer service measure *service standards benchmarks* for *reference services* A11 and B2

	For each financial year ending 30 June
Individual customer service measure	100%

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 12: Application of street lighting repair time

	Street lighting repair time Metropolitan area Regional area
Unit of Measure	Average number of *business days.*
Definition	Over a 12 month period, average number of *business days* to repair faulty streetlights is the sum of the number of *business days* to repair each faulty streetlight divided by the number of faulty streetlights repaired (after exclusions). $\frac{\sum \text{Number of } \textit{business days} \text{ to repair each faulty streetlight}}{\text{Number of faulty streetlights repaired}}$ where: • In calculating the number of *business days* to repair a faulty streetlight, the first *business day* is: o where a faulty streetlight is detected by, or reported to, Western Power on a *business day*, the next *business day* o where a faulty streetlight is detected by, or reported to, Western Power on a day that is not a *business day*, the

	Street lighting repair time Metropolitan area Regional area
	second *business day* after that day • In calculating the number of *business days* to repair a faulty streetlight, the *business day* a fault is repaired is included (subject to the next point) even if the repair is effected part way through that *business day*. • In calculating the number of *business days* to repair a faulty streetlight: o 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 o 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. • The period of a *business day* is the time period from one midnight to the following midnight. • A faulty streetlight is defined by a recorded fault report. • Metropolitan area means the areas of the State defined in Part 1.5 of the Code of Conduct for the Supply of Electricity to Small Use Customers 2008. • Regional area means all areas in the *Western Power Network* other than the metropolitan area. Note: • if a given streetlight is the subject of more than one fault report for the same fault, then only one fault report is recorded • if a given streetlight is the subject of multiple fault reports that relate to different faults then one report relating to each distinct fault is recorded
Exclusions	• *Force majeure* events. • Streetlights for which Western Power is not responsible for streetlight maintenance.

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

Table 13: Street lighting repair time *service standard benchmark* for *reference service* A9

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

4.5 Exclusions

4.5.1 In each of the *service standard benchmarks* there is a definition of the measure and stated exclusions. Each exclusion is a circumstance in relation

to which, when it occurs, the resulting units are not included in the measure. For example, for SAIDI, when a *force majeure* event occurs the duration of the related interruption in minutes is not included in the calculation of the measure.

4.5.2 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*. ~~Exclusions are usually first considered when the *Authority publishes* its *service standard performance report* under section 11.2 of the *Code*. An exclusion accepted by the *Authority* in such a report will be an exclusion for the purposes of this *access arrangement* and the *Code*.~~

5 Price control

5.1 Overview of price control

5.1.1 In this *access arrangement*:

*"**non-revenue cap services**"* means *non-reference services* provided by Western Power by means of the *Western Power Network* other than *non-reference services* that are provided as *revenue cap services*.

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

~~j)~~a) *connection service*;

~~k)~~b) *exit service*;

~~l)~~c) *entry service*;

~~m)~~d) bi-directional service (within the meaning of section 2.2.1 of this *access arrangement*); and

~~n)~~e) the metering *services* provided ancillary to the *services* in paragraphs (a) to (d) that are defined as standard metering services in the most recent Model Service Level Agreement approved by the *Authority* under the Electricity Industry Metering Code 2005; and

~~o)~~f) streetlight maintenance.

Formatted: Indent: Left: 3.25 cm, Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

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

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

b) charges for *non-revenue cap services* will be:

i. negotiated in good faith;

ii. consistent with the *Code objective*; and

iii. reasonable.

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

5.1.4 The calculation of Western Power's *approved total costs* for *revenue cap 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 2012, 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 2012.

Table 14: Derivation of Transmission Initial Capital Base (net) ($ million real as at 30 June 2012)

Financial year ending:	30 June 2009	30 June 2010	30 June 2011	30 June 2012
Opening capital base value		2,321.42,350.0	2,443.82,502.9	2,535.02,575.5
less depreciation		-74.475.3	-79.680.5	-90.091.1
less accelerated depreciation		0.00.0	0.00.0	0.00.0
plus new facilities investment (net of capital contributions and asset disposals)		196.8228.2	170.8153.1	146.5221.6
plus investment from prior periods				53.5135.0
Closing capital base value	2,321.42,350.0	2,443.82,502.9	2,535.02,575.5	2,645.12,840.8

Table 15: Derivation of Distribution Initial Capital Base (net) ($ million real as at 30 June 2012)

Financial year ending:	30 June 2009	30 June 2010	30 June 2011	30 June 2012
Opening capital base value		3,005.23,042.3	3,288.43,338.4	3,561.43,625.2
less depreciation		-152.8154.7	-166.1168.2	-183.7186.0
less accelerated depreciation		-4.24.2	-4.14.1	-4.04.0
plus new facilities investment (net of capital contributions and asset disposals)		440.2455.1	443.2459.1	485.1619.2
plus investment from prior periods				95.4202.8
Closing capital base value	3,005.23,042.3	3,288.43,338.4	3,561.43,625.2	3,954.24,257.2

5.2.2 The *capital base* value as at 30 June 2012 reflects a forecast of *new facilities investment* for the year ending 30 June 2012 (2011/12) and a forecast of inflation of 2.51.25% for the year ending 30 June 2012. To ensure that Western Power is remunerated only for actual *new facilities investment* that is undertaken in the year ending 30 June 2012 and actual inflation, the opening *capital base* at the commencement of the next *access arrangement period* will be adjusted and the *target revenue* in the next *access arrangement period* will be adjusted as follows:

Formatted: Not Highlight

c)a) the *capital base* value at the commencement of the next *access arrangement period* will be adjusted (in real terms) for any difference between the actual *new facilities investment* and the forecast of *new facilities investment* for the 2011/12 year that was used to establish the opening *capital base* value at 30 June 2012 (the 2011/12 new facilities investment forecast error);

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left

~~d)~~b) the *capital base* value at the commencement of the next *access arrangement period* will also be adjusted for any difference between the actual inflation (using the *CPI*) and the forecast inflation for the 2011/12 year that was used to establish the opening *capital base* value at 30 June 2012 (the 2011/12 inflation forecast error); and

~~e)~~c) an adjustment to the *target revenue* in the next *access arrangement period* will be made to compensate Western Power (or *users*) for the revenue foregone (or additional revenue recovered) by Western Power over this *access arrangement period* in respect of the 2011/12 new facilities investment forecast error and the 2011/12 inflation forecast error.

5.2.3 For the avoidance of doubt:

a) under the arrangements set out in section 5.2.2 of this *access arrangement* the *target revenue* for this *access arrangement period* will not be adjusted for the 2011/12 new facilities investment forecast error or the 2011/12 inflation forecast error;

b) the intended effect of the arrangements set out in section 5.2.2 of this *access arrangement* is to hold Western Power and *users* financially neutral in the event that there is a 2011/12 new facilities investment forecast error or 2011/12 inflation forecast error by taking account of:

i. the effects of actual inflation; and

ii. the time value of money as reflected by Western Power's *weighted average cost of capital* for the *Western Power Network*

and

c) adjustments made pursuant to section 5.2.2 of this *access arrangement* will have the effect of ensuring that the total revenue recovered by Western Power over this *access arrangement period* and subsequent *access arrangement periods* will be equivalent in present value terms to the amount that would be recovered if there were no 2011/12 new facilities investment forecast errors and no 2011/12 inflation forecast error.

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:

~~d)~~a) the straight line depreciation method;

~~e)~~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 2012; and

~~f)~~c) for *new facilities investment* forecast for this *access arrangement period* the weighted average lives for each of the *transmission system* and

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left

distribution system based on the asset lives for each group of *network assets* as set out in the following tables:

Table 16: Transmission asset groupings and economic lives for depreciation purposes

Asset group	Economic Life (years) for depreciation purposes
Transmission transformers	50 years
Transmission reactors	50 years
Transmission capacitors	40 years
Transmission circuit breakers	50 years
Transmission lines – steel towers	60 years
Transmission lines - wood poles	45 years
Transmission cables	55 years
Transmission metering	40 years
Transmission SCADA and communications	11 years
Transmission IT	6 years
Transmission other, non-network assets	16.85 years

Table 17: Distribution asset groupings and economic lives for depreciation purposes

Asset group	Economic Life (years) for depreciation purposes
Distribution lines - wood poles	41 years
Distribution lines - steel poles	50 years
Distribution underground cables	60 years
Distribution transformers	35 years
Distribution switchgear	35 years
Street lighting	20 years
Distribution meters and services	25 years
Distribution IT	6 years
Distribution SCADA & communications	10.16 years
Distribution other, non-network	10.16 years

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

5.3.4 In respect of *network assets* for the *distribution system*, Western Power will apply accelerated depreciation in respect of those *network assets* that will be decommissioned as a result of the State Underground Power Program undertaken by Western Power on behalf of the Western Australian government as set out in the following table.:

Table 18: Distribution accelerated depreciation by asset class ($ million real as at 30 June 2012)

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
Distribution lines - wood poles	2.6	0.3	0.0	0.0	0.0
Distribution lines - steel poles	0.0	0.0	0.0	0.0	0.0
Distribution underground cables	0.0	0.0	0.0	0.0	0.0
Distribution transformers	0.7	0.1	0.0	0.0	0.0
Distribution switchgear	0.2	0.0	0.0	0.0	0.0
Street lighting	0.0	0.0	0.0	0.0	0.0
Distribution meters and services	0.0	0.0	0.0	0.0	0.0
Distribution IT	0.0	0.0	0.0	0.0	0.0
Distribution SCADA & communications	0.0	0.0	0.0	0.0	0.0
Distribution Other, non-network	0.0	0.0	0.0	0.0	0.0
Distribution Land & Easements	0.0	0.0	0.0	0.0	0.0
TOTAL	3.4	0.5	0.0	0.0	0.0

5.3.5 ~~Subject to section 5.3.6 of this *access arrangement*, t~~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 this *access arrangement period* ~~will be determined based on a straight line basis using the actual *new facilities investment* over this *access arrangement period* and the economic lives detailed in Table 18 and Table 19. will be based on the forecast depreciation contained in the *target revenue* for this *access arrangement period*.~~

~~5.3.6 For the categories of *new facilities investment* set out in section 7.3.7 of this *access arrangement*, the depreciation of the opening *capital base* at the commencement of the next *access arrangement period* will be based on the forecast depreciation contained in the *target revenue* for this *access arrangement period*. will be determined based on a straight line basis using the actual *new facilities investment* over this *access arrangement period* and the economic lives detailed in Table 18 and Table 19.~~

5.4 Weighted average cost of capital

5.4.1 Pursuant to section 6.64 of the *Code* the *weighted average cost of capital* for the *Western Power Network* is ~~8.82~~6.39% real ~~pre~~post-tax.

5.5 Deferred revenue from the second 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 2012 to be recovered so that Western Power is financially neutral compared to a situation where revenue deferral had not occurred.

Table 19: Derivation of *transmission system* deferred revenue ($ million real as at 30 June 2012)

Financial year ending:	30 June 2009	30 June 2010	30 June 2011	30 June 2012
Opening deferred revenue value		69.770.5	75.276.2	81.282.2
plus time value of money		5.65.6	6.06.1	6.56.6
Closing deferred revenue value	69.770.5	75.276.2	81.282.2	87.788.8

Table 20: Derivation of *distribution system* deferred revenue ($ million real as at 30 June 2012)

Financial year ending:	30 June 2009	30 June 2010	30 June 2011	30 June 2012
Opening deferred revenue value		523.4529.9	565.2572.2	610.3617.9
plus time value of money		41.842.3	45.145.7	48.749.3
Closing deferred revenue value	523.4529.9	565.2572.2	610.3617.9	659.0667.2

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:

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

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

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*.

5.5.4 The amounts that will be added to the *target revenue* for the *transmission system* and *distribution system* and recovered during this *access arrangement period* are detailed in the table below.

Table 21: Amount to be added to the *target revenue* due to the recovery of deferred revenue ($ million real as at 30 June 2012)

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
Transmission system	12.122.7	12.122.7	12.122.7	12.122.7	12.122.7
Distribution system	91.2170.7	91.2170.7	91.2170.7	91.2170.7	91.2170.7

5.5.5 The deferred revenue value as at 30 June 2012 reflects a forecast of inflation of 2.51.25% for the year ending 30 June 2012. To ensure that Western Power is remunerated only for actual inflation, the *target revenue* in the next *access arrangement period* will be adjusted to compensate Western Power (or *users*) for the revenue foregone (or additional revenue recovered) by Western Power

Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Highlight
Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left
Formatted: Not Highlight

over this *access arrangement period* in respect of the 2011/12 inflation forecast error.

5.6 Transmission system revenue cap for revenue cap services

5.6.1 The *transmission system* revenue cap for *revenue cap services* determines the maximum transmission *revenue cap service* revenue (MTR_t) for Western Power's *transmission system* for each financial year t. ~~Western Power will use its reasonable endeavours to ensure that the actual transmission *revenue cap service* revenue in financial year t is within a reasonable margin of MTR_t.~~

5.6.2 The operation of the correction factor, TK_t, as described in sections 5.6.7 and 5.6.8 of this *access arrangement* will ensure that the MTR in financial year t is adjusted for any shortfall or over-recovery of actual transmission *revenue cap service* revenue compared to the MTR in preceding years.

5.6.3 For the purposes of this *transmission system* revenue cap for *revenue cap services*, Western Power's actual *transmission system* revenue in financial year t is transmission revenue earned in relation to the provision of *revenue cap services* in financial year t, subject to section 5.6.4 of this *access arrangement*. Where a *revenue cap service* is provided jointly by Western Power's *transmission system* and *distribution system*, the revenue earned must be allocated between the systems in a fair and reasonable manner.

5.6.4 Revenue received by Western Power for *excluded services*, *non-revenue cap services* and *capital contributions* will not be treated as actual revenue for the purposes of this *transmission system* revenue cap for *revenue cap services*.

5.6.5 Despite section 1.3.1 of this *access arrangement* the *transmission system* revenue cap for *revenue cap services* commences on 1 July 2012. This revenue cap applies annually on a financial year basis for the duration of this *access arrangement*.

5.6.6 For this *access arrangement period*, the maximum transmission *revenue cap service* revenue MTR_t is determined as follows:

$$MTR_t = TR_t + TAA2_t + TK_t$$

where:

TR_t is the dollar amount for the financial year t calculated from the dollar amounts (expressed in 30 June 2012 prices) set out in the table below. For the avoidance of doubt, the dollar amounts set out in the table below include the amounts due to the recovery of deferred revenue detailed in section 5.5.4 of this *access arrangement* for the *transmission system*.

Table 22: Transmission *revenue cap service* revenues to be used for calculating TR_t ($ million real as at 30 June 2012)

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
TR_t	435.7~~486.5~~	445.6~~523.7~~	467.7~~559.2~~	492.9~~597.3~~	513.4~~638.2~~

TAA2$_t$ is a positive or negative amount for the financial year t calculated to correct for any errors in the amounts included in the calculation of TR_t to give effect to the following adjustments (if applicable) arising from the operation of the previous *access arrangement*:

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

$TAA2_t$ must take account of inflation, the time value of money and estimates (if any) of the above adjustments that have been included in the calculation of TR_t in this section 5.6.6 of this *access arrangement*. Western Power will provide model outputs to the *Authority* to demonstrate that the above adjustments have been made in accordance with the previous *access arrangement*.

TK$_t$ is the correction factor calculated in accordance with sections 5.6.7 and 5.6.8 of this *access arrangement*.

For the purpose of calculating TR_t, TK_t and therefore MTR_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.

5.6.7 For the financial years ending on 30 June 2013 ~~to 30 June 2017~~:

$$TK_{2012/13} = (FTR_{2010/11} - ATR_{2010/11}) * (1+ 7.98\%) * (1+WACC_{pre\text{-}tax post\text{-}tax\ real}) + (MTR_{2011/12} - FTR_{2011/12}) * (1+WACC_{pre\text{-}tax post\text{-}tax\ real})$$

For financial years ending on 30 June 2014 to 30 June 2017:

$$TK_t = (FTR_{t-2} - ATR_{t-2}) * (1+WACC_{pre\text{-}tax post\text{-}tax\ real})^2 + (MTR_{t-1} - FTR_{t-1}) * (1+WACC_{pre\text{-}tax post\text{-}tax\ real})$$

where:

FTR$_{2010/11}$ is $355.6 million (real as at 30 June 2012)

ATR$_{2010/11}$ is $356.1 million (real as at 30 June 2012)

MTR$_{2011/12}$ is $418.9 million (real as at 30 June 2012)

FTR$_{2011/12}$ is $397.7 million (real as at 30 June 2012)

FTR$_{t-2}$ is the forecast transmission *revenue cap services* revenue in the financial year t-2 as calculated in the financial year t-2.

ATR$_{t-2}$ is the actual transmission *revenue cap services* revenue in the financial year t-2 as defined in accordance with section 5.6.3 of this *access arrangement*.

MTR$_{t-1}$ is the maximum *revenue cap services* revenue for Western Power's *transmission system* in the financial year t-1.

FTR$_{t-1}$ is the forecast transmission *revenue cap services* revenue in the financial year t-1.

Formatted: Subscript
Formatted: Subscript
Formatted: Subscript
Formatted: Subscript
Formatted: Subscript
Formatted: Subscript
Formatted: Subscript
Formatted: Subscript
Formatted: Subscript
Formatted: Indent: Left: 2.54 cm
Formatted: Font: Bold
Formatted: Not Superscript/ Subscript
Formatted: Font: Bold
Formatted: Not Superscript/ Subscript
Formatted: Font: Bold
Formatted: Not Superscript/ Subscript
Formatted: Font: Bold
Formatted: Font: Not Bold

WACC~~pre-tax~~post-tax real is the *weighted average cost of capital* for the *Western Power Network* as detailed in section 5.4.1 of this *access arrangement*.

This formula reflects that the annual tariff-setting process for financial year t typically takes place before the end of financial year t-1. Therefore, TK_t will need to be estimated in the first instance, and then recalculated in the subsequent financial year when ATR_{t-2} is known. ~~Where t is the financial year ending on 30 June 2012, TK_t will be calculated in accordance with the previous *access arrangement* adjusted to leave Western Power financially neutral 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*.~~

5.6.8 The correction factor, TK_t, will also apply:

~~i)~~a) in the first year of the next *access arrangement period* to adjust for any difference between maximum transmission *revenue cap services* revenue and forecast transmission *revenue cap services* revenue, in relation to the financial year ending on 30 June 2017 and for any difference between forecast transmission *revenue cap services* revenue and actual transmission *revenue cap services* revenue, in relation to the financial year ending on 30 June 2016; and

~~i)~~b) in the second year of the next *access arrangement period* to adjust for any difference between forecast transmission *revenue cap services* revenue and actual transmission *revenue cap services* revenue, in relation to the financial year ending on 30 June 2017.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left

5.7 Distribution system revenue cap for revenue cap services

5.7.1 The *distribution system* revenue cap for *revenue cap services* determines the maximum distribution *revenue cap service* revenue (MDR_t) for Western Power's *distribution system* for each financial year t. ~~Western Power will use its reasonable endeavours to ensure that the actual distribution *revenue cap service* revenue in financial year t is within a reasonable margin of MDR_t.~~

5.7.2 The operation of the correction factor, DK_t, as described in sections 5.7.7 and 5.7.8 of this *access arrangement* will ensure that the MDR in financial year t is adjusted for any shortfall or over-recovery of actual distribution *revenue cap service* revenue compared to the MDR in preceding years.

5.7.3 For the purposes of this *distribution system* revenue cap, Western Power's actual *distribution system* revenue in financial year t is distribution revenue earned in relation to the provision of *revenue cap services* in financial year t, subject to section 5.7.4 of this *access arrangement*. Where a *revenue cap service* is provided jointly by Western Power's *transmission system* and *distribution system*, the revenue earned must be allocated between the systems in a fair and reasonable manner.

5.7.4 Revenue received by Western Power for *excluded services*, *non-revenue cap services* and *capital contributions* will not to be treated as actual revenue for the purposes of this *distribution system* revenue cap for *revenue cap services*.

5.7.5 Despite section 1.3.1 of this *access arrangement* the *distribution system* revenue cap for *revenue cap services* commences on 1 July 2012. This revenue cap applies annually on a financial year basis for the duration of this *access arrangement*.

5.7.6 For this *access arrangement period*, the maximum regulated distribution revenue MDR_t is determined as follows:

$$MDR_t = DR_t + TEC_t + DAA2_t + DK_t$$

where:

DR_t is the dollar amount for the financial year t calculated from the dollar amounts (expressed in 30 June 2012 prices) set out in the table below. For the avoidance of doubt, the dollar amounts set out in the table below include the amounts due to the recovery of deferred revenue detailed in section 5.5.4 of this *access arrangement* for the *distribution system*.

Table 23: Distribution *revenue cap service* revenues to be used for calculating DR_t ($ million real as at 30 June 2012)

Formatted: Font: Arial Bold, Subscript

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
DR_t	808.4~~903.7~~	957.91~~,081.7~~	1,132.21~~,289.1~~	1,356.51~~,530.5~~	1,618.81~~,811.8~~

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

$DAA2_t$ is a positive or negative amount for the financial year t calculated to correct for any errors in the amounts included in the calculation of DR_t to give effect to the following adjustments (if applicable) arising from the operation of the previous *access arrangement*:

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

$DAA2_t$ must take account of inflation, the time value of money and estimates (if any) of the above adjustments that have been included in the calculation of DR_t in this section 5.7.6 of this *access arrangement*. Western Power will provide model outputs to the *Authority* to demonstrate that the above adjustments have been made in accordance with the previous *access arrangement*.

DK_t is the correction factor calculated in accordance with sections 5.7.7 and 5.7.8 of this *access arrangement*.

For the purpose of calculating DR_t, DK_t and therefore MDR_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.

5.7.7 For the financial years ~~to 30 June 2017~~ ending on 30 June 2013:

$$DK_{2012/13} = (FDR_{2010/11} - ADR_{2010/11}) * (1+7.98\%) * (1+WACC_{pre\text{-}tax\ post\text{-}tax\ real}) + (MDR_{2011/12} - FDR_{2011/12}) * (1+WACC_{pre\text{-}tax\ post\text{-}tax\ real}) + (TEC_{2010/11} - TEC'_{2010/11}) * (1+7.98\%) * (1+WACC_{post\text{-}tax\ real}) + (TEC_{2011/12} - TEC'_{2011/12}) * (1+WACC_{post\text{-}tax\ real})$$

For financial years ending on 30 June 2014 to 30 June 2017:

$$DK_t = (FDR_{t-2} - ADR_{t-2}) * (1+WACC_{pre\text{-}tax\ post\text{-}tax\ real})^2 + (MDR_{t-1} - FDR_{t-1}) * (1+WACC_{pre\text{-}tax\ post\text{-}tax\ real}) + (TEC_{t-2} - TEC'_{t-2}) * (1+WACC_{post\text{-}tax\ real})^2 + (TEC_{t-1} - TEC'_{t-1}) * (1+WACC_{post\text{-}tax\ real})$$

where:

$FDR_{2010/11}$ is $736.6 million (real as at 30 June 2012)

$ADR_{2010/11}$ is $733.3 million (real as at 30 June 2012)

$MDR_{2011/12}$ is $862.3 million (real as at 30 June 2012)

$FDR_{2011/12}$ is $852.0 million (real as at 30 June 2012)

$TEC_{2010/11}$ is $166.1 million (real as at 30 June 2012)

$TEC'_{2010/11}$ is $165.3 million (real as at 30 June 2012)

$TEC_{2011/12}$ is $166.3 million (real as at 30 June 2012)

$TEC'_{2011/12}$ is $166.3 million (real as at 30 June 2012)

FDR_{t-2} is the forecast distribution *revenue cap services* revenue in the financial year t-2 as calculated in the financial year t-2.

ADR_{t-2} is the actual *revenue cap service* distribution revenue in the financial year t-2 as defined in accordance with section 5.7.3 of this *access arrangement*.

MDR_{t-1} is the maximum *revenue cap service* revenue for Western Power's *distribution system* in the financial year t-1.

FDR_{t-1} is the forecast distribution *revenue cap services* revenue in the financial year t-1.

TEC_{t-2} is the tariff equalisation contribution in accordance with section 6.37A of the *Code* for the financial year t-2 as expressed in 30 June 2012 real dollar terms as calculated at the start of year t-1.

TEC'_{t-2} is the tariff equalisation contribution in accordance with section 6.37A of the *Code* for the financial year t-2 as expressed in 30 June 2012 real dollar terms as calculated at the start of year t.

TEC_{t-1} is the tariff equalisation contribution in accordance with section 6.37A of the *Code* for the financial year t-1 as expressed in 30 June 2012 real dollar terms as calculated at the start of year t-1.

TEC'_{t-1} is the tariff equalisation contribution in accordance with section 6.37A of the *Code* for the financial year t-1 as expressed in 30 June 2012 real dollar terms as calculated at the start of year t.

Formatted: English (Australia), Subscript
Formatted: English (Australia), Subscript
Formatted: English (Australia), Subscript
Formatted: English (Australia), Subscript
Formatted: English (Australia), Subscript
Formatted: Body Text,Char, Indent: Left: 3.25 cm, Hanging: 0.75 cm
Formatted: English (Australia), Subscript
Formatted: English (Australia), Subscript
Formatted: English (Australia), Subscript
Formatted: English (Australia), Subscript
Formatted: Body Text,Char, Indent: Left: 2.54 cm
Formatted: English (Australia)

WACC$_{\text{pre-tax post-tax real}}$ is the *weighted average cost of capital* for the *Western Power Network* as detailed in section 5.4.1 of this *access arrangement*.

This formula reflects that the annual tariff-setting process for financial year t typically takes place before the end of financial year t-1. Therefore, DK_t will need to be estimated in the first instance, and then recalculated in the subsequent financial year when ADR_{t-2} is known. Where t is the financial year ending on 30 June 2012, DK_t will be calculated in accordance with the previous *access arrangement* adjusted to leave Western Power financially neutral 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*.

5.7.8 The correction factor, DK_t, will also apply:

a) in the first year of the next *access arrangement period* to adjust for any difference between maximum distribution *revenue cap services* revenue and forecast distribution *revenue cap services* revenue, in relation to the financial year ending on 30 June 2017 and for any difference between forecast distribution *revenue cap services* revenue and actual distribution *revenue cap services* revenue, in relation to the financial year ending on 30 June 2016; and

b) in the second year of the next *access arrangement period* to adjust for any difference between forecast distribution *revenue cap services* revenue and actual distribution *revenue cap services* revenue, in relation to the financial year ending on 30 June 2017.

6 Pricing methods, price lists and price information

6.1 Purpose

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

6.2 Network pricing objectives

6.2.1 Western Power's *pricing methods* are designed to achieve the objectives set out in sections 7.3 and 7.4 of the *Code*.

6.2.2 In accordance with the objectives set out in sections 7.3 and 7.4 of the *Code*, Western Power's *pricing methods* seeks 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 cap services*;

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

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

~~a) identifying the costs of providing *reference services*;~~

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

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

~~d)~~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 and C1 to C4 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 and B2 are location-specific and are published for each electrical node.

Formatted: Font: Italic

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

Formatted: Font: Italic

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

Formatted: Font: Italic

Formatted: Font: Italic

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left

Formatted: Bullets and Numbering

Formatted: Font: Italic

Formatted: Font: Italic

6.4 Price list and price list information

6.4.1 The *price list* in respect of the *pricing year* ending on 30 June 2013 is attached at Appendix F.1. The *price list information* for this *price list* is attached at Appendix F.2.

6.4.2 The *price list* is to be updated in accordance with Chapter 8 of the Code. The *pricing years* for this *access arrangement* period are defined in the table below:

Table 24: *Pricing years* for this *access arrangement period*

Pricing year	Start date	End date
1	Effective date under section 1.3.1 of this *access arrangement*	30 June 2013
2	1 July 2013	30 June 2014
3	1 July 2014	30 June 2015
4	1 July 2015	30 June 2016
5	1 July 2016	30 June 2017

6.4.3 In accordance with section 8.1 of the *Code* this *access arrangement* requires Western Power to submit a proposed *price list*, together with *price list information*, to the *Authority* for approval at least 45 *business days* before the start of each *pricing year* (except for the first *pricing year*).

6.5 Pricing methods

6.5.1 This section of the *access arrangement* explains how the *pricing methods* comply with sections 7.3 and 7.4 of the *Code*. In accordance with the *Code* requirements, the *price list information* provided as Appendix F.2 to this *access arrangement* explains the *pricing methods* that underpinned the development of *reference tariffs* for this *access arrangement period*.

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

6.5.2 In accordance with section 7.3(a) of the *Code*, *reference tariffs* are designed to recover the forward-looking efficient costs of providing *reference services*. Further information is provided in the *price list information*, Appendix F.2 to this *access arrangement*.

6.5.3 Western Power, as a *reasonable and prudent person*, will set the reference tariffs in the *price list* so that the forecast *transmission system* revenue for *revenue cap services* for year t is equal to MTR_t and the forecast *distribution system* revenue for *revenue cap services* for year t is equal to MDR_t.

~~6.5.3~~6.5.4 *Non-revenue cap services* revenue is recovered on a fee-for-service basis.

Formatted: Indent: Left: 0 cm, First line: 0 cm

Formatted: Bullets and Numbering

Formatted: Font: Italic

~~6.5.4~~6.5.5 *Capital contributions* are charged in accordance with Western Power's *contributions policy*. In general terms, such *contributions* seek to recover in net present value terms any shortfall between the expected revenue from *reference tariffs* and the costs of connection.

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

~~6.5.5~~6.5.6 In accordance with section 7.3(b)(i) and (ii) of the *Code*, *reference tariffs* are set to at least recover the *incremental cost of service provision*, but to be less than the *stand-alone cost of service provision*. Further information is provided in the *price list information*, Appendix F.2 to this *access arrangement*.

Formatted: Indent: Left: 0 cm

Formatted: Bullets and Numbering

Formatted: Indent: Left: 0 cm

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

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

6.5.76.5.8 Each of the *reference tariffs* takes into account the metering information available for each *reference service*, and therefore contains components that vary with usage or demand. In addition *reference tariffs* for *reference services* A5, A6, A7, A8, A11, B1 and B2 vary with location. Within the requirements of section 7.4(a) and 7.7 of the *Code*, these components reflect the differences in the average cost of different *users* of the same *reference service*. Further information is provided in the *price list information*, Appendix F.2 to this *access arrangement*.

Reasonable requirements of *users*

6.5.86.5.9 In accordance with section 7.4(b) of the *Code*, the structure of *reference tariffs* has been set to reasonably accommodate the requirements of *users* collectively. This has been achieved by developing the *reference tariffs* through a consultative process that involved Government and industry stakeholders. Most *reference tariffs* have been in place since 2001 and are accepted as being appropriate for the provision of *reference services*.

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

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

Formatted: Bullets and Numbering

Formatted: Indent: Left: 0 cm, First line: 0 cm

Formatted: Bullets and Numbering

Formatted: Indent: Left: 0 cm, First line: 0 cm

Formatted: Bullets and Numbering

Formatted: Indent: Left: 0 cm, First line: 0 cm

Avoidance of price shock

~~6.5.10~~6.5.11 The *transmission system* and *distribution system* revenue caps for *revenue cap services* have been smoothed across this *access arrangement period* so that price movements will be smoothed from year to year.

~~6.5.11~~6.5.12 In accordance with section 7.4(d) of the *Code*, rebalancing of *reference tariffs* is constrained by the imposition of side constraints on annual revenue movements.

~~6.5.12~~6.5.13 To constrain *reference tariff* rebalancing the maximum change in *reference tariff* revenue for the *transmission system* from each *reference tariff* when the *price list* is updated is:

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

where:

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

t is the financial year ~~(being a financial year after the financial year ending on 30 June 2013)~~ in which the *reference tariffs* as varied will apply;

$t-1$ is the financial year immediately preceding financial year t ~~(being a financial year after the financial year ending on 30 June 2012)~~;

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

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

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

~~q_{t-1}^{xy} is the estimated quantity of component y of a given *reference tariff* x that was sold in financial year $t-1$;~~

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

TX_t is the annual percentage change in TR_t and is determined to be:

Formatted: Bullets and Numbering

Formatted: Font color: Custom Color(RGB(70,30,15))

Table 25: TXt

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
TX_t	-4.9%	~~-7.6%~~ 2.3%	~~-6.8%~~ 5.0%	~~-6.8%~~ 5.4%	~~-6.8%~~ 4.1%

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

$$B'_t = \frac{TK_t + TAA2_t}{TR'_t}$$

TK_t is as defined in section 5.6.6 of this *access arrangement*;

$TAA2_t$ is as defined in section 5.6.6 of this *access arrangement*;

TR'_t is TR_t (as set out in section 5.6.6 of this *access arrangement*), converted to nominal dollars.

~~6.5.13~~6.5.14 To constrain *tariff* rebalancing the maximum change in *reference tariff* revenue for the *distribution system* from each *reference tariff* when the *price list* is updated is:

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

where:

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

t is the financial year ~~(being a financial year after the financial year ending on 30 June 2013)~~ in which the *reference tariffs* as varied will apply;

$t-1$ is the financial year immediately preceding financial year t ~~(being a financial year after the financial year ending on 30 June 2012)~~;

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

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

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

Formatted: Bullets and Numbering

Formatted: Font color: Custom Color(RGB(70,30,15))

~~q_{t-1}^{xy} is the estimated quantity of component y of a given *reference tariff* x that was sold in financial year $t-1$;~~

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

DX_t is the annual percentage change in DR_t and is determined to be:

Table 26: DXt

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
DX_t	-15.6%	~~-19.7%~~ 18.5%	~~-19.2%~~ 18.2%	~~-18.7%~~ 19.8%	~~-18.4%~~ 19.3%

A'_t is the annual correction factor in financial year t determined as follows~~ where Western Power has r *reference tariffs* with n tariff components~~:

$$A'_t = \frac{DK_t + DAA2_t + TEC_t}{(1+CPI_t)(1-DX_t)\sum_{x=1}^{r}\sum_{y=1}^{n} p_{t-1}^{xy} q_t^{xy}}$$

$$A'_t = \frac{DK_t + DAA2_t + \Delta TEC_t}{DR'_t}$$

DK_t is as defined in section 5.7.6~~5.7.6~~ of this *access arrangement*;

$DAA2_t$ is as defined in section 5.7.6~~5.7.6~~ of this *access arrangement*;

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

~~TEC_t is as defined in section 5.7.6 of this *access arrangement*.~~

DR'_t is DR_t (as set out in section 5.7.6~~5.7.6~~ of this access arrangement), converted to nominal dollars.

Tariff components

6.5.146.5.15 In accordance with section 7.6 of the *Code*, *reference tariffs* have been designed so that the *incremental cost of service provision* is to be recovered by *tariff* components that vary with usage, and the costs in excess of the *incremental cost of service provision* are to be recovered through *tariff* components that do not vary with usage. Further information is provided in the *price list information*, Appendix F.2 to this *access arrangement*.

Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Font: Italic, Font color: Custom Color(RGB(70,30,15))
Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Indent: Left: 3.25 cm, Hanging: 1.5 cm
Formatted: Font: Italic, Font color: Custom Color(RGB(70,30,15))
Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Indent: Left: 3.25 cm, Hanging: 1.5 cm
Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Font color: Custom Color(RGB(70,30,15))
Formatted: Indent: Left: 0 cm, First line: 0 cm
Formatted: Bullets and Numbering
Formatted: Font: Italic
Formatted: Font: Italic

6.6 Policy on prudent discounting

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

~~e)~~g) entering into an agreement with a *user* to apply a *discount* to the *equivalent tariff* to be paid by the *user* for a *covered service*; and

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

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left

Formatted: Font: Italic

6.6.2 In exercising its discretion with regard to prudent discounting, Western Power will have regard to the pricing objectives in sections 7.3 and 7.4 of the *Code*.

6.6.3 Western Power may offer a prudent discount if the existing *user* or *applicant* seeking *access* to the *Western Power Network* is able to demonstrate that another supply option will provide a comparable *service* at a lower price than that offered by Western Power's *reference services* and *reference tariffs*.

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

6.6.5 Western Power's discounted price offer will be set to reflect the higher of:

a) the cost of the other option, or

b) the *incremental cost of service provision*.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left

6.7 Policy on discounts for distributed generation

6.7.1 In accordance with section 7.10 of the *Code*, Western Power will offer to a *user* who *connects distributed generating plant* to the *Western Power Network*, a share of any reductions in either or both of Western Power's *capital-related costs* or *non-capital costs* which arise as a result of the *entry point* for *distributed generating plant* being located in a particular part of the *Western Power Network* by:

~~c)~~a) entering into an agreement with a *user* to apply a *discount* to the *equivalent tariff* to be paid by the *user* for a *covered service*; and

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

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

Formatted: Font: Italic

6.7.2 The amount of the total *discount* available under section 6.7.1 of this *access arrangement* will be determined by Western Power as the forecast *capital-related costs* and *non-capital costs* that would be incurred if the *distributed generating plant* were not to *connect* minus the forecast *capital-related costs* and *non-capital costs* that would be incurred if the *distributed generating plant* were to *connect*. The cost analysis will be conducted over a period of at least 10 years, depending on the availability and accuracy of data. A *discount* will only be payable if the amount calculated in accordance with this section 6.7.2 of this *access arrangement* is greater than zero.

6.7.3 The *discount* calculated in accordance with section 6.7.2 of this *access arrangement* will be calculated in present value terms and, using the *weighted average cost of capital* for the *Western Power Network* as set out in section 5.4.1 of this *access arrangement*, converted to an equivalent annualised *discount* for a defined period of time, as agreed by the parties. Nothing in this calculation prevents the *discount* exceeding 100% of the equivalent tariff.

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:

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

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

~~g)~~c) the unrecovered costs borne, or an estimate of the unrecovered costs likely to be borne, by Western Power during this *access arrangement period* as a result of the occurrence of the *force majeure* event.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left

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:

~~h)~~a) the effects of inflation; and

~~i)~~b) the time value of money as reflected by Western Power's *weighted average cost of capital* for the *Western Power Network*.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left

7.1.4 A *force majeure* event includes but is not limited to any costs arising from the introduction of any scheme or mechanism with respect, directly or indirectly, to emissions of greenhouse gases and with respect to any activity including pricing, reduction, cessation, offset and sequestration (including the Carbon Pricing Mechanism announced by the Commonwealth in February 2011), full retail contestability, and the mandated roll-out of Advanced Interval Meters to the extent that such costs were not included in the calculation of *target revenue* for this *access arrangement period* or otherwise addressed through the *trigger event* provisions in section 8 of this *access arrangement.*

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

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

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:

~~c)~~a) the effects of inflation; and

~~d)~~b) the time value of money as reflected by Western Power's *weighted average cost of capital* for the *Western Power Network*.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

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:

~~c)~~a) the effects of inflation;

~~d)~~b) the time value of money as reflected by Western Power's *weighted average cost of capital* for the *Western Power Network*; and

~~e)~~c) the *capital-related costs* due to any *investment difference* in this *access arrangement period*.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

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*:

~~c)~~a) arising from the connection of new generation capacity to the *transmission system* or *distribution system* from 1 July 2012;

~~d)~~b) arising from the connection of new *load* to the *transmission system* or *distribution system* from 1 July 2012;

~~e)~~c) in relation to all *augmentations* to provide additional capacity to the *transmission system* or *distribution system* for the provision of *covered services* from 1 July 2012;

~~f)~~d) undertaken for *augmentation* of the *distribution system* under the rural power improvement program; ~~and~~

~~g)~~e) undertaken for *augmentation* of the *distribution system* under the state underground power program; and~~.~~

f) in relation to wood pole management (including non-complying stays, underrated stay wires and stay insulation programs) for the provision of *covered services* from 1 July 2012.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

Formatted: Bullets and Numbering

7.4 Gain sharing mechanism and efficiency and innovation benchmarks

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

7.4.2 Subject to section 7.4.3 of this *access arrangement*, an ~~*above-*~~*above-benchmark surplus* (within the meaning of the *Code*) is to be calculated for each of the years 2012/13 to 2016/17 as follows:

$$ABS_{2012/13} = EIB_{2012/13} - A_{2012/13}$$

$$ABS_{2013/14} = (EIB_{2013/14} - A_{2013/14}) - (EIB_{2012/13} - A_{2012/13})$$

$$ABS_{2014/15} = (EIB_{2014/15} - A_{2014/15}) - (EIB_{2013/14} - A_{2013/14})$$

$$ABS_{2015/16} = (EIB_{2015/16} - A_{2015/16}) - (EIB_{2014/15} - A_{2014/15})$$

$$ABS_{2016/17} = (EIB_{2016/17} - A_{2016/17}) - (EIB_{2015/16} - A_{2015/16})$$

where:

$\mathbf{ABS}_t$ is the *above-benchmark surplus* in year t;

EIB_t is the *efficiency and innovation benchmark* for financial year t as set out in Table 27~~Table 27~~Table 27~~Table 29~~, adjusted for:

~~h)~~a) any difference between the actual scale escalation factors in each financial year and the forecast scale escalation factors used to establish the *non-capital costs* component of *approved total costs* for that financial year, in accordance with section 7.4.7 of this *access arrangement*. The scale escalation factors are a customer growth rate based on growth in customer numbers and a network growth rate based on increases in line length, increases in ~~zone~~ substation capacity and increases in the number of ~~feeders~~distribution transformers; and

~~i)~~b) the effects of inflation.

Table 27: *Efficiency and innovation benchmarks* ($M real as at 30 June 2012)

Financial year ending:	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017
***Efficiency and innovation benchmark* - EIB_t**	463.3~~471.1~~	480.7~~484.0~~	490.1~~513.6~~	500.3~~534.5~~	520.6~~574.6~~

and

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

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

ii. in accordance with any adjustment made under section 7.1 of this *access arrangement*

iii. in accordance with any adjustment made under section 7.2 of this *access arrangement*

iv. in relation to superannuation for defined benefits schemes

v. in relation to *non-revenue cap services*

vi. in relation to licence fees

vii. in relation to the energy safety levy

viii. in relation to network control services

7.4.3 In any year in which an *above-benchmark surplus* is calculated to be a positive value the *above-benchmark surplus* does not exist to the extent that Western Power achieved efficiency gains or innovation in excess of the *efficiency and innovation benchmarks* during this *access arrangement period* by failing to provide *reference services* at a *service standard* at least equivalent to the *service standard benchmarks* for that year as set out in section 4 of this *access arrangement*.

7.4.4 Subject to section 7.4.5 of this *access arrangement*, the following amounts $GSMA_t$ will be added to *target revenue* for one or more *access arrangement periods* covering the years 2017/18 to 2021/22:

$$GSMA_{2017/18} = ABS_{2012/13} + ABS_{2013/14} + ABS_{2014/15} + ABS_{2015/16} + ABS_{2016/17}$$

Formatted: Not Highlight
Field Code Changed
Formatted: Not Highlight
Formatted: Indent: Left: 4 cm, Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: Not at 3.25 cm
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Font: Italic, Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Bullets and Numbering

$GSMA_{2018/19} = ABS_{2013/14} + ABS_{2014/15} + ABS_{2015/16} + ABS_{2016/17}$

$GSMA_{2019/20} = ABS_{2014/15} + ABS_{2015/16} + ABS_{2016/17}$

$GSMA_{2020/21} = ABS_{2015/16} + ABS_{2016/17}$

$GSMA_{2021/22} = ABS_{2016/17}$

where:

$GSMA_t$ is the *gain sharing mechanism* adjustment to *target revenue* for year t.

7.4.5 In any year where the amount of an adjustment to *target revenue* determined under section 7.4.4 of this *access arrangement* is a negative value, the amount of the adjustment to *target revenue* in that year is zero.

7.4.6 The *gain sharing mechanism* does not affect the ordinary operation of the transmission system and distribution system revenue caps (absent the *gain sharing mechanism*), which already provides for Western Power to retain 100% of any efficiency gains achieved during this *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 this *access arrangement period*.

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

a) deflating EIB_t for financial year t by using:

i. the scale escalation factors assumed for financial year t when setting the forecast *non-capital cost* component of *approved total costs* for that financial year, compounded to that financial year, as set out in Table 28;

ii. the applicable scale escalation factor for financial year t assumed for each category of expenditure as set out in Table 29; and

b) inflating the value determined under section 7.4.7a) for financial year t using:

i. the scale escalation factors recalculated for financial year t using actual data for each scale escalation driver in each financial year, compounded to that financial year, and following the calculation method set out in Table 28;

ii. the applicable scale escalation factor for financial year t assumed for each category of expenditure as set out in Table 29.

Table 28: Forecast scale escalation assumptions

Item	Calculation	2012/13	2012/14	2014/15	2015/16	2016/17
Customer numbers factor	Year on year growth	2.59%	2.62%	2.66%	2.69%	2.72%
Distribution line length (a)	Year on year growth	1.28%	1.19%	1.25%	1.27%	1.33%

Formatted: Bullets and Numbering
Formatted: Subscript
Formatted: Font: Italic
Formatted: Font: Italic
Formatted: List Number 2 indented, Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm
Formatted: List Number 2 indented, Numbered + Level: 3 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Right + Aligned at: 4.1 cm + Tab after: 4.42 cm + Indent at: 4.42 cm
Formatted: List Number 2 indented
Formatted: List Number 2 indented, Numbered + Level: 3 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Right + Aligned at: 4.1 cm + Tab after: 4.42 cm + Indent at: 4.42 cm
Formatted Table

Item	Calculation	2012/13	2012/14	2014/15	2015/16	2016/17
Transmission line length (b)	Year on year growth	3.90%	3.11%	0.00%	0.46%	1.18%
Distribution transformers (c)	Year on year growth	2.97%	2.80%	2.86%	2.96%	2.97%
Substation capacity (d)	Year on year growth	2.56%	1.25%	7.33%	5.36%	12.51%
Distribution network factor	Average of a, c and d	2.27%	1.75%	3.82%	3.19%	5.60%
Transmission network factor	Average of b, c and d	3.14%	2.39%	3.40%	2.92%	5.55%

Table 29: Scale escalation factor for each category of expenditure

Cost category	Scale escalation factor
Transmission	
Operations	
SCADA & Communications	Transmission network factor
Non-revenue cap services	N/A
Network Operations	Transmission network factor
Maintenance	
Maintenance Strategy	N/A
Preventive Condition	Transmission network factor
Preventive Routine	Transmission network factor
Corrective Deferred	Transmission network factor
Corrective Emergency	Transmission network factor
Customer service and billing	
N/A	N/A
Corporate	
Business Support	N/A
Other	
Non-recurring Opex	N/A
Distribution	
Operations	
Reliability Improvement	Distribution network factor
SCADA & Communications	Distribution network factor
Non-revenue cap services	N/A
Network Operations	Distribution network factor
Smartgrid	N/A
Maintenance	
Maintenance Strategy	N/A

Cost category	Scale escalation factor
Preventive Condition	Distribution network factor
Preventive Routine	Distribution network factor
Corrective Deferred	Distribution network factor
Corrective Emergency	Distribution network factor
Customer service and billing	
Call Centre	Customer numbers
Metering	Customer numbers
Guaranteed Service Level Payments	N/A
Distribution Quotations	N/A
Corporate	
Business Support	N/A
Other	
Non-recurring Opex	N/A

7.5 Service standards adjustment mechanism

7.5.1 In accordance with section 6.30 of the *Code*, a *service standards adjustment mechanism* applies in relation to this *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:

a) the ***"SSAM SSBs"*** meaning the *service standard benchmarks* for SAIDI, SAIFI, call centre performance and circuit availability as defined in section 4 of this *access arrangement*; and

b) the ***"~~transitional~~ 2011/12 SSAM SSBs"*** meaning the *service standard benchmarks* for 2011/12 being*:*

i. SAIDI and SAIFI as defined in section 4 of this *access arrangement* with the additional exclusion of the interruptions shown to be caused by a fault or other event on the *transmission system;* ~~and~~

ii. Circuit availability as defined in section 4 of this *access arrangement*; and~~.~~

iii. System Minutes Interrupted as defined in section 3.21 of the previous *access arrangement*.

7.5.4 In relation to actual service performance for each year of this *access arrangement period* for each *SSAM SSB* a reward (a positive amount) or penalty (a negative amount) will be calculated by applying the applicable

Formatted Table
Formatted: Indent: Left: 2.54 cm
Formatted: Indent: Left: 2.54 cm
Formatted: Indent: Left: 2.54 cm
Formatted: Indent: Left: 2.54 cm
Formatted: Font: Bold
Formatted: Indent: Left: 1.27 cm
Formatted: Indent: Left: 2.54 cm
Formatted Table
Formatted: Indent: Left: 2.54 cm
Formatted: Indent: Left: 2.54 cm
Formatted: Indent: Left: 2.54 cm
Formatted Table
Formatted: Font: Bold
Formatted: Indent: Left: 1.27 cm
Formatted: Indent: Left: 2.54 cm
Formatted: Font: Bold
Formatted: Indent: Left: 1.27 cm
Formatted: Indent: Left: 2.54 cm
Formatted Table
Formatted: Body Text,Char
Formatted: Indent: Left: 3.25 cm, Hanging: 0.75 cm, Numbered + Level: 3 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Right + Aligned at: 4.1 cm + Tab after: 4.42 cm + Indent at: 4.42 cm, Tab stops: Not at 4.42 cm
Formatted: Bullets and Numbering
Formatted: Font: Italic

incentive rate to the relevant Service Standard Difference ("**SSD**"). The *SSD* is calculated as follows:

~~c)~~a) if SSA_t < SSB for SAIDI and SAIFI; or

SSA_t > SSB for call centre performance and circuit availability then

$SSD_t = (SST - SSA_t)$

~~d)~~b) if $SSA_t \geq$ SSB for SAIDI and SAIFI; or

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

$SSD_t = (SST - SSB)$

where:

SSD_t is the service standard difference in year t;

SST is the SSAM target detailed in section 7.5.12~~7.5.12~~7.5.12~~7.5.12~~ of this *access arrangement*;

SSB is the *service standard benchmark* for the *SSAM SSBs* as defined in section 7.5.3(a) of this *access arrangement*; and

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

~~7.5.5In relation to actual service performance in the financial year ending 30 June 2012 a reward or penalty for each *transitional SSAM SSB* will be calculated by applying the applicable transitional incentive rate to the relevant Service Standard Adjustment Difference ("**$SSAdj_{2012/13}$**"). The *$SSAdj_{2012/13}$* is calculated as follows:~~

~~$SSAdj_{2012/13} = SSA_{2011/12} - TSST$~~

~~where:~~

~~**$SSAdj_{2012/13}$** is the service standard adjustment difference to transition the *service standards adjustment mechanism* from the previous *access arrangement period*~~

~~**TSST** is the transitional SSAM target detailed in section 7.5.147.5.13 of this *access arrangement*~~

~~**$SSA_{2011/12}$** is the actual service performance in the financial year ending 30 June 2012 for the *transitional SSAM SSBs*.~~

7.5.5 In relation to the difference between forecast and actual service performance in the financial year ending 30 June 2012 a reward or penalty for each *2011/12 SSAM SSB* will be calculated by applying the applicable adjustment incentive rate to the relevant Service Standard Adjustment Difference ("**$SSAdj_{2011/12}$**"). The *$SSAdj_{2011/12}$* is calculated as follows:

$SSAdj_{2011/12} = SSF_{2011/12} - SSA_{2011/12}$

where:

$SSAdj_{2011/12}$ is the service standard adjustment for the difference between forecast and actual service performance of the *2011/12 SSAM SSBs*;

$SSF_{2011/12}$ is the forecast service performance for the *2011/12 SSAM SSBs* for the financial year ending 30 June 2012 set out in Table 30~~Table 30Table 30Table 32~~;

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

Formatted: Bullets and Numbering

Formatted: Subscript

Field Code Changed

Formatted: Bullets and Numbering

Formatted: Font: Italic

Formatted: Font: Italic

$SSA_{2011/12}$ is the actual service performance in the financial year ending 30 June 2012 for the *2011/12 SSAM SSBs* as reported in the *service standard performance report* for that year.

Table 30: Forecast service performance for the year ending June 2012

Service standard benchmark	Forecast service performance for year ending June 2012
SAIDI - CBD (minutes)	23
SAIDI - Urban (minutes)	157
SAIDI - Rural Short (minutes)	221
SAIDI - Rural Long (minutes)	599
SAIFI - CBD (events)	0.14
SAIFI - Urban (events)	1.61
SAIFI - Rural Short (events)	2.47
SAIFI - Rural Long (events)	4.21
Circuit availability (Percentage of total possible hours available)	98.0
System Minutes Interrupted – meshed network (minutes)	8.7
System Minutes Interrupted – radial network (minutes)	1.8

~~In relation to actual service performance in the financial year ending 30 June 2012 an adjustment to provide a service standard adjustment mechanism revenue adjustment for the difference between forecast 2011/12 and actual 2011/12 performance as follows:~~

~~$SSAdj_{2011/12\ difference} = SSA_{2011/12\ forecast} - SSA_{2011/12\ actual}$~~

7.5.6 In relation to SAIDI and SAIFI, the rewards or penalties are calculated as the sum of the application of the formulae in sections ~~7.5.4~~7.5.4 and 7.5.5~~7.5.5~~ of this *access arrangement* to each component of SAIDI and SAIFI.

7.5.7 The rewards and penalties are applied to the performance year in this *access arrangement period* (the rewards or penalties for the ~~*transitional*~~ *2011/12 SSAM SSBs* are applied to the financial year ending 30 June 2012~~3~~) and:

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

~~f~~)b) the reward or penalty for SAIDI and SAIFI will be allocated between the performance of the *transmission system* and *distribution system* in a fair and reasonable manner except for the reward or penalty for the ~~*transitional*~~ *2011/12 SSAM SSBs* which will be allocated to the performance of the *distribution system*;

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

d) the reward or penalty for System Minutes Interrupted for the *2011/12 SSAM SSBs* will be allocated to the performance of the *transmission system.*

Formatted: Font: Italic
Formatted: Table Caption
Formatted Table
Formatted: Centered
Formatted: Centered
Formatted: Centered
Formatted: Centered
Formatted: Centered
Formatted: Centered
Formatted: Centered
Formatted: Centered
Formatted: Centered
Formatted: Centered
Formatted: Centered
Formatted: Bullets and Numbering
Formatted: Indent: Left: 3.25 cm, Hanging: 6.5 cm, Tab stops: Not at 4 cm
Formatted: English (Australia), Subscript
Formatted: Subscript
Formatted: English (Australia), Subscript
Formatted: Subscript
Formatted: English (Australia), Subscript
Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left
Formatted: Space Before: 12 pt
Formatted: Bullets and Numbering

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

7.5.9 Notwithstanding section 7.5.8~~7.5.87.5.87.5.8~~ of this *access arrangement*, the sum of the rewards or penalties for the *transmission system* applied to each year is capped at 1% of TR_t for that year as defined in section 5.6.6.

7.5.10 Notwithstanding section 7.5.8~~7.5.87.5.87.5.8~~ of this *access arrangement*, the sum of the rewards or penalties for the *distribution system* applied to each year is capped at 5% of DR_t for that year as defined in section 5.7.6.

7.5.11 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 7.5.8~~7.5.87.5.87.5.8~~ of this *access arrangement* (as subject to sections 7.5.9~~7.5.97.5.97.5.9~~ and 7.5.10~~7.5.107.5.107.5.10~~ of this *access arrangement*).

7.5.12 The *SSAM targets* and incentive rates for the *SSAM SSBs* are as follows:

Table 31: SAIDI SSAM targets (for year ending 30 June) and incentive rates ($ real as at 30 June 2012)

	SSAM target (SST_t)	Reward side incentive rate ($ per SAIDI minute)	Penalty side incentive rate ($ per SAIDI minute)
SAIDI - CBD (minutes)	26	68,34669,897	69,897
SAIDI - Urban (minutes)	169	535,400488,756	535,400
SAIDI - Rural Short (minutes)	235	219,734199,256	219,734
SAIDI - Rural Long (minutes)	621	66,26362,535	66,263

Table 32: SAIFI SSAM targets (for year ending 30 June) and incentive rates ($ real as at 30 June 2012)

	SSAM target (SST_t)	Reward side incentive rate ($ per 0.01 event)	Penalty side incentive rate ($ per 0.01 event)
SAIFI - CBD (events)	0.232	7,691,08468,895	68,895
SAIFI - Urban (events)	1.8090	43,177,909519,575	519,575
SAIFI - Rural Short (events)	2.6891	208,99018,879,174	208,990
SAIFI - Rural Long (events)	4.6377	96,5998,779,766	96,599

Table 33: Call centre performance SSAM target (for year ending 30 June) and incentive rate ($ real as at 30 June 2012)

	SSAM target (SST_t)	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)	88.0%	-54,246	-60,190-32,781

Table 34: Circuit availability SSAM target (for year ending 30 June) and incentive rate ($ real as at 30 June 2012)

	SSAM target (SST_t)	Reward side incentive rate ($ per 0.1%)	Penalty side incentive rate ($ per 0.1%)
Circuit availability (Percentage of total possible hours available)	98.07.7%	-712,798-1,181,191	-598,550

Formatted Table
Formatted: English (Australia)
Formatted: English (Australia)
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted Table
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted Table
Formatted: Not Highlight
Formatted Table
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight

7.5.13 The ~~*transitional adjustmentSSAM targets* and transitional~~ incentive rates for the ~~*transitional*~~ *2011/12 SSAM SSBs* are as follows:

Table 35: SAIDI ~~transitional SSAM targets (for year ending 30 June) and transitional~~adjustment incentive rates ($ real as at 30 June 2012)

	~~Transitional~~ Adjustment incentive rate ($ per SAIDI minute)
SAIDI - CBD (minutes)	~~240,758~~237,822
SAIDI - Urban (minutes)	237,822~~240,758~~
SAIDI - Rural Short (minutes)	~~8,974~~8,864
SAIDI - Rural Long (minutes)	8,864~~8,974~~

Table 36: SAIFI ~~transitional~~ adjustment~~SSAM targets (for year ending 30 June) and transitional~~ incentive rates ($ real as at 30 June 2012)

	~~Transitional~~ Adjustment incentive rate ($ per 0.01 event)
SAIFI - CBD (events)	~~11,271,870~~111,344
SAIFI - Urban (events)	111,344~~11,271,870~~
SAIFI - Rural Short (events)	~~492,460~~4,865
SAIFI - Rural Long (events)	~~492,460~~4,865

Table 37: Circuit availability ~~transitional SSAM target (for year ending 30 June) and transitional~~adjustment incentive rate ($ real as at 30 June 2012)

	~~Transitional~~ Adjustment incentive rate ($ per 0.1%)
Circuit availability (Percentage of total possible hours available)	~~410,384~~ 405,379

Table 38: System Minutes Interrupted adjustment incentive rates ($ real as at 30 June 2012)

	Adjustment incentive rate ($ per system minute)
System Minutes Interrupted – meshed network (minutes)	81,076
System Minutes Interrupted – radial network (minutes)	27,025

7.6 D factor

7.6.1 This D factor scheme applies separately to each of:

~~h)~~a) *new facilities investment* and *non-capital costs* for the *transmission system*; and

Formatted: Centered
Formatted Table
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Centered
Formatted Table
Formatted: Not Highlight
Formatted: Centered
Formatted Table
Formatted: Highlight
Formatted: Centered
Formatted Table
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm, Tab stops: 3.25 cm, Left

i)b) *new facilities investment* and *non-capital costs* for the *distribution system*.

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

j)a) any additional *non-capital costs* incurred by Western Power as a result of deferring a *new facilities investment* project during this *access arrangement period*; and

k)b) any additional *non-capital costs* or *new facilities investment* incurred by Western Power in relation to demand management initiatives.

7.6.3 In relation to 7.6.2a), the *new facilities investment* project that has been deferred must have been included in either the D-factor Project List (provided to the *Authority* as *confidential material)* and or the Transmission Network Development Plan.

7.6.4 In relation to 7.6.2a), and 7.6.2b), 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:

l)a) the proposed *non-capital costs* satisfy the requirements of sections 6.40 and 6.41 of the *Code*, as relevant; and

m)b) the proposed *new facilities investment* satisfies the requirements of section 6.51A of the *Code*.

7.6.5 In relation to 7.6.2a), and 7.6.2b), the adjustment to the *target revenue* for the next *access arrangement period* must leave Western Power economically financially neutral by taking account of:

n)a) the effects of inflation; and

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

7.7 Deferred revenue

7.7.1 For the purposes of clauses 6.5A to 6.5E of the *Code* an amount must be added to the target revenue for the *distribution system* in the fourth *access arrangement period* or subsequent *access arrangement periods* such that the present value (at 30 June 2012) of the total amount added to *target revenue* (taking account of inflation and the time value of money) is equal to $278.9 million ($ real as at 30 June 2012).

7.7.2 For the purposes of clauses 6.5A to 6.5E of the *Code* an amount must be added to the target revenue for the *transmission system* in the fourth *access arrangement period* or subsequent *access arrangement periods* such that the present value (at 30 June 2012) of the total amount added to *target revenue* (taking account of inflation and the time value of money) is equal to $37.1 million ($ real as at 30 June 2012).

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 2.5 cm + Tab after: 3.25 cm + Indent at: 3.25 cm

Formatted: Heading 2, Indent: Left: 0 cm, Hanging: 1.52 cm

Formatted: Heading 3

Formatted: Bullets and Numbering

Formatted: Font: Italic

Formatted: Font: Italic

Formatted: Font: Italic

Formatted: Font: Italic

Formatted: Font: Italic

Formatted: Not Highlight

Formatted: Font: Italic

Formatted: Not Highlight

Formatted: Not Highlight

7.7.3 The timeframe for recovering the deferred revenue amounts in sections 7.7.1 and 7.7.2 will be five years.

Formatted: Heading 3

Formatted: Bullets and Numbering

Formatted: English (Australia)

Formatted: Body Text,Char, Indent: Left: 0 cm

8 Trigger events

8.1.1 Pursuant to section 4.37 of the *Code* a *trigger event* is any significant unforeseen event which has a materially adverse financial impact on Western Power and which is:

a) outside the control of Western Power; and

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

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

8.1.2 A *trigger event* may include without limitation the introduction of any scheme or mechanism with respect, directly or indirectly, to emissions of greenhouse gases and with respect to any activity including pricing, reduction, cessation, offset and sequestration (including the Carbon Pricing Mechanism announced by the Commonwealth in February 2011), full retail contestability, and the mandated roll-out of Advanced Interval Meters to the extent that such costs were not included in the calculation of *target revenue* for this *access arrangement period* or otherwise addressed through the unforeseen event provisions in sections 7.1.1 to 7.1.4 of this *access arrangement*.

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

9 Supplementary matters

9.1 Balancing

9.1.1 Balancing requirements under the *access arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

9.2 Line losses

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

9.3 Metering

9.3.1 Metering requirements under the *access arrangement* shall be in accordance with the Electricity Industry Metering Code 2005 and the Metering Code Model Service Level Agreement.

9.4 Ancillary services

9.4.1 Requirements for the treatment of ancillary services under the *access arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

9.5 Stand-by

9.5.1 Under the Wholesale Electricity Market Rules there is no requirement for stand-by generation.

9.6 Trading

9.6.1 Trading requirements under the *access arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

9.7 Settlement

9.7.1 Settlement requirements under the *access arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

Formatted: Body Text,Char

Formatted: Body Text,Char, Centered

[This page intentionally left blank]

Formatted: English (Australia)

APPENDICES

Formatted: Body Text,Char

Formatted: English (Australia)

Appendix A. Electricity transfer access contract

Formatted: Body Text,Char

Formatted: English (Australia)

Appendix B. Applications and queuing policy

Formatted: Body Text,Char

Formatted: English (Australia)

Appendix C. Contributions policy

C.1 Contributions policy

C.2 Distribution headworks methodology

C.3 Distribution low voltage connection scheme methodology

Formatted: Body Text,Char

Formatted: English (Australia)

Appendix D. Transfer and relocation policy

Formatted: Body Text,Char

Formatted: English (Australia)

Appendix E. Reference services

Formatted: Body Text,Char

Formatted: English (Australia)

Appendix F. Reference tariffs

F.1 2012/13 price list

F.2 2012/13 price list information