Proposed Revisions to the Access Arrangement for the South West Network owned by Western Power



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1 Introduction

Purpose of this document

- 1.1A. This document incorporates the *proposed revisions* to the current *Access Arrangement* that was approved by the *Authority* on 26 April 2007. These *proposed revisions* have been prepared in accordance with the *Code* and are submitted in accordance with section 4.48 of the *Code*. These *proposed revisions* are lodged by Western Power by 1 October 2008 for review and approval by the *Authority* in accordance with the processes and criteria set out in the *Code*. On approval by the Authority, a clean version of this document will be produced, with deleted provisions removed and renumbered. Henceforth this document is referred to as the "Access Arrangement".
- 1.1 This document is the amended proposed Access Arrangement ("Access Arrangement") setsting out the terms and conditions under which Western Power will provide users and applicants with access to the South West Interconnected Network (SWIN) from the date specified in section 1.4 of this Access Arrangement. The SWIN is the portion of the South West Interconnected System (SWIS) that is owned and operated by Western Power. The SWIN is a covered network from the Code commencement date, unless coverage has subsequently been revoked under section 3.30 of the Code.
- 1.2 The *Code* was established by the Minister for Energy for the State of Western Australia, under section 104(1) of the *Electricity Industry Act 2004*, and came into operation on 30_November 2004. This Access Arrangement has been prepared in accordance with the *Code* and is submitted in accordance with section 4.16 of the *Code*.
- 1.3 [Deleted] This Access Arrangement is lodged by Western Power on 2 April 2007 for review and approval by the Authority in accordance with the processes and criteria set out in the Code.

Proposed Access Arrangement start date

1.4 This Access Arrangement is effective from 1 July 2006-2009 or a later date as specified by the Authority in accordance with section 4.26 of the Code.

Revisions submission date and target revisions commencement date

- Pursuant to section 5.2931(a) of the *Code*, the *revisions submission date* for this *Access Arrangement* is 1 October 200811.
- 1.6 Pursuant to section 5.2931(b) of the Code, the target revisions commencement date for this Access Arrangement is 1 July 20092012.

Composition of this Access Arrangement

- 1.7 This Access Arrangement comprises this document together with:
 - (a) the Applications and Queuing Policy attached at Appendix 1;
 - (b) the Transfer and Relocation Policy attached at Appendix 2;
 - (c) the Capital Contributions Policy attached at Appendix 3;
 - (d) the Standard Access Contract, termed the Electricity Transfer Access Contract attached at Appendix 4;

- (e) the *price list* attached at Appendix 5, which describes the *reference tariff* payable under an *access contract* for each *reference service*;
- (f) the *price list information* attached at Appendix 6, which explains how Western Power derived the elements of the proposed *price list*; and demonstrates that the *price list* complies with the *Access Arrangement*;
- (g) the details of the *reference services* offered by Western Power attached at Appendix 7; and
- (h) explanatory notes regarding the price control arrangements attached at Appendix 8.

Relationship to technical rules and access arrangement information

- The technical rules do not form part of this Access Arrangement, although the technical rules are relevant in determining Western Power's target revenue. In accordance with section 12.56 of the Code, The Authority must cause a review of the technical rules approximately 6 months before the target revisions commencement date in the first access arrangement (1 July 2009). are submitted by Western Power in accordance with Chapter 12 of the Code, and processed by the Authority in parallel with this Access Arrangement.
- 1.9 Western Power will submit its 's amended revised access arrangement information is submitted by Western Power on 2 April 2007 by 1 October 2008, alongside this Access Arrangement in accordance with section 4.48 of the Code. The amended revised access arrangement information does not form part of this Access Arrangement.

2 Definitions and Interpretation

- 2.1 In sections 1 to 10 of this *Access Arrangement*, where a word or phrase is italicised it has the definition given to that word or phrase in the *Code*, unless the context requires otherwise.
- 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.

3 Reference Services, Non-Reference Services and Service Standard Benchmarks

Purpose

- Pursuant to section 5.2 of the *Code*, this section of the *Access Arrangement* describes the *reference services* offered by Western Power.
- 3.2 Pursuant to section 5.6 of the *Code*, this section also describes the *service standard* benchmarks applicable to the *reference services*.
- 3.3 This section also provides information in relation to *non-reference services*.

Reference services

- 3.4 Reference services are provided to users in accordance with the terms and conditions of the Electricity Transfer Access Contract.
- 3.5 Western Power offers 11 reference services at network exit points:

1. Anytime Energy (Residential) Exit Service	A1
2. Anytime Energy (Business) Exit Service	A2
3. Time of Use Energy (Residential) Exit Service	А3
4. Time of Use Energy (Business) Exit Service	A4
5. High Voltage Metered Demand Exit Service	A5
6. Low Voltage Metered Demand Exit Service	A6
7. High Voltage Contract Maximum Demand Exit Service	A7
8. Low Voltage Contract Maximum Demand Exit Service	A8
9. Streetlighting Exit Service	A9
10. Un-Metered Supplies Exit Service	A10
11. Transmission Exit Service	A11

3.6 Western Power offers two entry services as *reference services*:

1.	Distribution Entry Service	B1
2.	Transmission Entry Service	B2

- 3.7 Appendix 7 of this *Access Arrangement* provides details of each reference service, including:
 - a description of the reference service;
 - user eligibility criteria;
 - the applicable reference tariff;
 - the applicable standard access contract, and
 - the applicable *service standard benchmark*.

Price list and price list information

- The *price list* in respect of the financial year commencing on 1 July 2006 2009 is attached at Appendix 5.
 - 3.9 The *price list* is to be updated annually in accordance with Chapter 8 of the *Code*.
 - 3.10 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*).

Side constraints on reference tariff movements

- 3.11A To manage the overall price increases in this access arrangement period, Western Power has deferred the recovery of some revenue from this access arrangement period to the third or subsequent access arrangement periods. The deferred revenue amounts are described in sections 5.37A and 5.48A of this Access Arrangement.
- 3.11 To constrain tariff rebalancing, Ffor the second and third year each year of this access arrangement period, Western Power will not increase or decrease any reference tariff component by more than CPI_+Y_+5% or less than CPI_+Y_-5%_per annum, where Y is —the relevant percentage figure defined in section 5.35 (for transmission) and section 5.46 (for distribution) of this Access Arrangement.) For reference services A1 to A10 and B1, Western Power will give effect to this side constraint by ensuring that no tariff component increases or decreases in any financial year by more than CPI+5% per annum. For the purposes of this side constraint on tariff rebalancing, the CPI is the percentage increase in the Consumer Price Index (weighted average for eight capital cities) published by the Australian Bureau of Statistics for the most recent December quarter compared to the December quarter in the previous year.

Non-reference services

3.12 The table below lists the non-reference services provided by Western Power.

Quotation for rReloca	ation of Transmission assets at the request of a user
Quotation for Rreloca	ation of Distribution assets at the request of a user
Electricity Network P	lanning Studies
Re-inspection of a cu	ustomer's facilities and equipment by a Western Power Inspector
Rental of properties ((including commercial & residential) that are in the capital base
Profit on sale of asse	ets
Establishment and re	emoval of a Temporary Builders Supply
Planning for and prov	viding an escort for movement of high loads
Temporary removal of	of overhead service lead for work at a customer's premises
Insulate and make sa	afe aerial conductors
Disconnection/Recor customer's request	nnection of overhead service leads or underground consumer main
User Network Switch	ing Services at the request of a user (on Western Power's asset)
Jointly Owned Asset	works
Provide expertise to	enable work to be undertaken in the vicinity of power lines
Sale of network sche	ematics
Services fees for Acc	cess Applications & Access Contracts
Costs recovered from	n asset damage due to a car accident, graffiti or vandalism
Extended metering s	ervices provided under the Metering Code Service Level Agreeme
Access Billing Servic	F

Standby Access Services	
Capital Works Application Fees	

Payment by users

- 3.13 In respect of *reference services*, *users* are required to pay the relevant *reference tariffs* specified in the *price list* in accordance with their *access contract*, unless the parties agree otherwise.
- 3.14 In respect of *non-reference services*, *users* are required to pay <u>charges for services</u> in accordance with Western Power's published terms and conditions, unless the parties agree otherwise.

Service standard benchmarks

- 3.15 For the *reference services* A1 to A10 and B1 the *service standard benchmarks* are expressed in terms of System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI).
- 3.16 SAIDI is defined as follows:

Performance Indicator:	System Average Interruption Duration Index (SAIDI)		
Unit of measure:	System minutes per annum		
Definition:	Over a 12 month period, the sum of the duration of each sustained (greater than 1 minute) customer interruption (in minutes) attributable solely to distribution (after exclusions) divided by the average of the total number of connected <i>consumers</i> at the beginning and end of the period.		
Exclusions:	 Major event days in accordance with IEEE1366-2003 definitions as adopted by Steering Committee on National Regulatory Reporting Requirements (SCNRRR). 		
	 Outages shown to be caused by a fault or other event on the transmission system or a third party system (for instance, without limitation outages caused by an intertrip signal, generator unavailability or a customer installation). 		
	Planned Outages.		
	Single Customer Interruptions.		
	Force majeure events.		

3.17 SAIFI is defined as follows:

Performance Indicator:	System Average Interruption Frequency Index (SAIFI)			
Unit of measure:	Supply interruptions per annum			
Definition:	Over a 12 month period, the total number of sustained (greater than 1 minute) customer interruptions (number) attributable solely to distribution (after exclusions) divided by the average of			

	the total number of connected <i>consumers</i> at the beginning and end of the period.
Exclusions:	 Major event days in accordance with IEEE1366-2003 definitions as adopted by Steering Committee on National Regulatory Reporting Requirements (SCNRRR).
	 Outages shown to be caused by a fault or other event on the transmission system or a third party system (for instance, without limitation outages caused by an intertrip signal, generator unavailability or a customer installation).
	Planned Outages.
	Single Customer Interruptions.
	Force majeure events.

3.18 The service standard benchmarks expressed in terms of SAIDI for the reference services A1 to A10 and B1 for each year of the first-access arrangement period are shown in the following table:

SAIDI	SWIN total	CBD	Urban	Rural Short	Rural Long
Year ending June 20072010	<u>225 277</u>	<u>38</u> <u>21.4</u>	<u>161 222</u>	<u>253</u> 4 25	<u>599</u> 741
Year ending June 20 08 11	<u>210 259</u>	<u>38 20.0</u>	<u>150 208</u>	<u>233</u> 398	<u>567</u> 693
Year ending June 201209	<u>201 224</u>	<u>38 </u> 17.3	<u>142 179</u>	<u>222 343</u>	<u>548</u> 598

3.19 The *service standard benchmarks* expressed in terms of SAIFI for the *reference* services A1 to A10 and B1 for each year of the *first-access arrangement period* are shown in the following table:

SAIFI	SWIN total	CBD	Urban	Rural Short	Rural Long
Year ending June 20 07 10	<u>2.44</u> 3.44	<u>0.24 </u>	<u>1.88</u> 3.12	3.05 4.89	<u>4.89</u> <u>5.58</u>
Year ending June 201108	<u>2.29</u> 3.22	<u>0.24</u> 0.30	<u>1.76</u> 2.91	<u>2.83</u> 4.58	<u>4.64</u> 5.22
Year ending June 201209	<u>2.18</u> 2.78	<u>0.24</u> 0.26	<u>1.67</u> 2.51	<u>2.70</u> 3.95	<u>4.47</u> <u>4.50</u>

- 3.20 For the purpose of this *Access Arrangement*, the definitions of CBD, Urban, Rural Short and Rural Long feeder classification are consistent with those applied by the Steering Committee on National Regulatory Reporting Requirements (SCNRRR).
- 3.21 In respect of the *reference services* A11 and B2 available to *users* directly connected to the transmission network, the *service standard benchmarks* are expressed in terms of Circuit Availability and System Minutes Interrupted as defined below:

Performance Indicator:	Circuit Availability
Unit of measure:	Percentage of total possible hours available.

Source of data:	SCADA and System Operation Databases				
Definition/Formula:	Error! Objects cannot be created from editing field codes.				
	Definition: The actual circuit hours available for transmission circuits divided by the total possible defined circuit hours available.				
Exclusions:	 Non-transmission primary equipment (primary equipment operating at voltages less than 66 kV, including zone substation power transformers) 				
	•Tee configuration line circuits				
	 Unregulated transmission assets. 				
	 Outages shown to be caused by a fault or other event on a '3rd party system' e.g. intertrip signal, generator outage, customer installation. 				
	Force majeure events.				
	 Duration of planned outages for major construction work, including periods where availability is temporarily restored, is to be capped at 14 days in calculating transmission line availability. 				
Inclusions:	 'Circuits' includes primary transmission equipment such as overhead lines, underground cables and bulk transmission power transformers. 				
	 Circuit 'unavailability' to include outages from all causes including planned, forced and emergency events, including extreme events, but not including the events defined as exclusions. 				
Performance Indicator:	System Minutes Interrupted (for both Meshed and Radial Transmission Network)				
Unit of measure:	Minutes				
Source of data:	SCADA and System Operation Databases				
Definition/Formula:	MW Minutes of Unserved Energy System Peak MW				
	System Peak MW				
	(for both Meshed and Radial Transmission Network separately)				
	Definition: System Minutes Interrupted (Meshed)- The summation of MW Minute of unserved energy at substations which are connected to the meshed.				
	transmission network divided by the system peak MW. System Minutes Interrupted (Radial)- The summation of MW Minutes of unserved energy at substations which are connected to the radial transmission network divided by the system peak MW.				
Exclusions:	transmission network divided by the system peak MW. System Minutes Interrupted (Radial)- The summation of MW Minutes of unserved energy at substations which are connected to the radial				
Exclusions:	transmission network divided by the system peak MW. System Minutes Interrupted (Radial)- The summation of MW Minutes of unserved energy at substations which are connected to the radial transmission network divided by the system peak MW.				
Exclusions:	transmission network divided by the system peak MW. System Minutes Interrupted (Radial)- The summation of MW Minutes of unserved energy at substations which are connected to the radial transmission network divided by the system peak MW. • Unregulated transmission assets. • Outages shown to be caused by a fault or other event on a '3rd party system' e.g. intertrip signal, generator outage, customer				
Exclusions: Inclusions:	transmission network divided by the system peak MW. System Minutes Interrupted (Radial)- The summation of MW Minutes of unserved energy at substations which are connected to the radial transmission network divided by the system peak MW. • Unregulated transmission assets. • Outages shown to be caused by a fault or other event on a '3rd party system' e.g. intertrip signal, generator outage, customer installation.				

The service standard benchmarks for the reference services A11 and B2 available to users directly connected to the transmission network for each year of the first_access arrangement period are set out in the following table.

3.22

	First access arrangement period					
	Year endingYear endingYear endingJune 2007June 2008June 2009					
Circuit Availability (% of total time)	<u>98.0 98.2</u>	<u>98.0 98.2</u>	<u>98.0 98.2</u>			
System Minutes Interrupted (meshed network)	<u>9.3 7.8</u>	<u>9.3 7.8</u>	<u>9.3 7.8</u>			
System Minutes Interrupted (radial network)	<u>1.4</u> 3.9	<u>1.4</u> 3.9	<u>1.4</u> 3.9			

3.23 In respect of *reference service* A9 ("Streetlighting Exit Service"), where Western Power is responsible for the repair of faulty streetlights, the following *service standard benchmark* will apply in relation to repair times for reported faults (in addition to the *service standard benchmarks* in section 3.18 and 3.19 of this *Access Arrangement*).

	First access arrangement period					
	Year ending Year ending Year ending June 20072010 June 200811 June 2					
Perth Metropolitan area	5 days	5 days	5 days			
Major regional towns	5 days	5 days	5 days			
Remote and rural towns	9 days	9 days	9 days			

4 Excluded Services

There are no excluded services at the start 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 that one or more services provided by Western Power are excluded services. For the purpose of this Access Arrangement, there are no excluded services.

5 Price Control

Form of price control

- 5.1 In accordance with sections 6.31 and 6.2(c) of the Code:
 - (a) , Western Power proposes a revenue cap will apply tofor reference covered services that is set by reference to Western Power's approved total costs; and
 - (b) charges for *non-reference services* will be:
 - (i) negotiated in good faith;
 - (ii) consistent with the Code objective; and
 - (iii) reasonable.
- The calculation of Western Power's approved total costs in relation to reference services has been undertaken in accordance with the methodology contained in the Authority's revenue model, with the exception of working capital where Western Power has included an allowance. The financial parameters set out in this Access Arrangement have been derived using this methodology, which calculates approved total costs in accordance with the Code requirements.
- 5.3 Explanatory notes to the price control arrangements are set out in Appendix 8 of this *Access Arrangement* should the need for further explanation of these arrangements arise.

Adjusting target revenue for unforeseen events

If a force majeure event occurs which results in Western Power incurring unrecovered costs during the first access arrangement period then Western Power will, as part of its

proposed access arrangement for the next access arrangement period, provide a report to the Authority setting out:

- (a) a description of the nature of the force majeure event;
- (b) a description of the insurance cover that Western Power had in place at the time of the force majeure event; and
- (c) a fair and reasonable estimate of the *unrecovered costs* borne by Western Power during the *first-access arrangement period* as a result of the occurrence of the *force majeure event*.
- Pursuant to sections 6.6 to 6.8 of the *Code*, an amount will be added to the *target revenue* for the *covered network* for the next *access arrangement period* in respect of the *unrecovered costs* relating to a *force majeure event* which occurred in the *first access arrangement period*, calculated in accordance with the methodology described in section 34 of Appendix 8 of this *Access Arrangement*.
- For the avoidance of doubt, a force majeure event includes but is not limited to any costs arising from the introduction of an emissions trading scheme; full retail contestability; and the roll-out of Advanced Interval Meters to the extent that such costs were not included in the calculation of target revenue for the access arrangement period or otherwise addressed through the Trigger Event provisions in section 8 of this Access Arrangement.

Adjusting target revenue for technical rule changes

- 5.7 If the technical rules are amended during the *first-access arrangement period*, Western Power will, as part of its proposed *access arrangement* 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 operating and capital costs for the first-access arrangement period; and
 - (b) a fair and reasonable estimate of the additional costs (or cost savings) accruing to Western Power as a result of that technical rule change.
 - Pursuant to sections 6.9 to 6.12 of the *Code*, an amount will be added to the *target revenue* for the *covered network* for the next *access arrangement period* in respect of the costs arising from a technical rule change which occurred in thise *first-access arrangement period*, calculated in accordance with the methodology described in section 54 of Appendix 8 of this *Access Arrangement*.
 - 5.9 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 *covered network* for the next *access arrangement period*, calculated in accordance with the methodology described in section <u>5</u>4 of Appendix 8 of this *Access Arrangement*.
 - 5.10 [Deleted]

Investment adjustment mechanism

In accordance with sections 6.13 to 6.18 of the Code, an *investment adjustment mechanism* applies in relation to this *Access Arrangement*. The calculation of the

investment adjustment mechanism is explained in sections 5.49 to 5.53 and in Appendix 8 of this *Access Arrangement*.

Capital contributions adjustment mechanism

5.12 [Deleted] A capital contributions adjustment mechanism applies in relation to this Access Arrangement. The purpose and operation of the capital contributions adjustment mechanism is explained in sections 5.32, 5.43 and Appendix 8 of this Access Arrangement.

Gain sharing mechanism and efficiency and innovation benchmarks

- In accordance with sections 5.25 and 6.20 of the Code, a gain sharing mechanism and efficiency and innovation benchmarks will net apply with respect to this Access Arrangement. The operation of the gain sharing mechanism and the definition of the efficiency and innovation benchmarks are explained in sections 5.14A to 5.14G and in Appendix 8 of this Access Arrangement.
- 5.14 [Deleted] In accordance with section 5.25 of the Code, no efficiency and innovation benchmarks will apply to this Access Arrangement.
- 5.14A In accordance with section 6.21 of the Code, this gain sharing mechanism has the objectives of:
 - (a) <u>achieving an equitable allocation over time between users and Western Power of innovation and efficiency gains in excess of efficiency and innovation benchmarks;</u>
 - (b) <u>being objective, transparent, easy to administer and replicable from one access</u> arrangement period to the next; and
 - (c) giving Western Power an incentive to reduce costs to efficient sustainable levels, or otherwise improve productivity in a way that is neutral in its effect on the timing of such initiatives.
- 5.14B In accordance with section 6.23 of the Code and subject to section 5.14C of this Access Arrangement, a surplus arises to the extent that:
 - (a) <u>returns actually achieved by the service provider from the sale of covered</u> services during the previous access arrangement period; exceeded
 - (b) the level of returns from the sale of covered services which at the start of the access arrangement period was forecast to occur during the access arrangement period.

For the avoidance of doubt, for the purposes of this *Access Arrangement* the operation of the gain sharing mechanism does not require the *surplus* to be calculated. It is noted, however, that an *above benchmark surplus* is calculated in accordance with section 5.14C of this *Access Arrangement*.

5.14C To ensure that the gain sharing mechanism is objective, transparent, easy to administer and replicable from one access arrangement period to the next, for this access arrangement an above benchmark surplus only arises in this access arrangement period if and only if:

- (a) the approved aggregate forecast operating expenditure for this access arrangement period adjusted for inflation, plus any operating expenditure adjustments allowed by the Authority in respect of that year (including trigger events, the D factor scheme, unforeseen events, or technical rule changes), exceeds
- (b) Western Power's aggregate actual operating expenditure in this access arrangement period (which excludes any penalty amount payable under the service standard adjustment mechanism).

For the purposes of this access arrangement, (a) is defined as the efficiency and innovation benchmark. In calculating the efficiency and innovation benchmark for a particular year, the approved aggregate forecast operating expenditure is the total amount allowed by the Authority in its final decision or further final decision (as appropriate) to approve Western Power's proposed access arrangement; or in its own approved access arrangement in accordance with section 4.24 of the Code.

- 5.14D The gain sharing mechanism will determine the efficiency gain attributed to management effort for this access arrangement period to be following amount:
 - (a) the value of the above benchmark surplus in this access arrangement period in accordance with section 5.14C of this Access Arrangement; minus
 - (b) <u>any aggregate penalty, if any, being the sum of any annual bonuses and penalties incurred by Western Power in respect of the service standard adjustment mechanism for this access arrangement period.</u>

For the avoidance of doubt, the efficiency gain calculated for this access arrangement period cannot be negative.

- 5.14E An average annual efficiency bonus will be calculated by taking the efficiency gain attributed to management effort in accordance with section 5.14D and dividing this amount by three, being the duration in years of this access arrangement period. Western Power's target revenue for each of the 5 years following the target revisions commencement date will be increased by the average annual efficiency bonus, whether or not this 5 year period spans one or more subsequent access arrangement periods.
- 5.14F For the avoidance of doubt, the *gain sharing mechanism* does not affect the ordinary operation of the revenue cap (absent the *gain sharing mechanism*), which already provides for Western Power to retain 100% of any efficiency gains achieved during the access arrangement period. This characteristic is consistent with section 6.24 of the Code which ensures that such prior surpluses are retained by the service provider.
- 5.14G A numerical example illustrating the operation of the *gain sharing mechanism* is set out in section 3 of Appendix 8 of this *Access Arrangement*.

Service standards adjustment mechanism ("SSAM")

- 5.15 In accordance with section 6.30 of the Code, a service standards adjustment mechanism applies in relation to this Access Arrangement.
 - 5.16 In accordance with section 6.29 of the *Code, Western Power's* performance during this access arrangement period will be measured against <u>each of the service standard</u> benchmarks described in sections 3.15 to 3.23 of this Access Arrangement, as

- <u>appropriate</u>. the performance ranges defined by the tables in sections 5.22, 5.23 and 5.24 of this Access Arrangement.
- 5.17 [Deleted] The tables in sections 5.22, 5.23 and 5.24 of this Access Arrangement define the lower and upper limits of normal network performance for the transmission and distribution networks. These upper and lower limits establish the range of network performance for these networks which is, for the purpose of the service standard adjustment mechanism, defined as normal performance.
- 5.18 [Deleted] Where Western Power's actual performance falls within the normal performance range, no action is required by Western Power or the Authority.
- 5.19 [Deleted] Where Western Power's actual performance falls outside the low or high limits of the normal performance range for any performance measure, Western Power is required to make a submission to the Authority within 40 business days of the end of the relevant financial year as follows:
 - (a)where performance is superior, Western Power will explain the actions taken by Western Power's management, staff and contractors and any other factors that have led to the service improvement; or
 - (b)where performance is inferior, Western Power will explain the reasons for the poor performance and the corrective action taken or to be taken by Western Power to ensure that future performance is improved; and
 - (c)in either case, Western Power will indicate whether performance is expected to fall outside the *normal performance* range in future financial years.
- 5.20 [Deleted] At the next access arrangement review, the Authority will consider the submissions made by Western Power in setting new benchmarks and approving related capital and operating expenditure for the next access arrangement period.
- 5.21 [Deleted] For the avoidance of doubt, no financial penalties or bonuses will apply in the first or subsequent access arrangement period as a result of this service standard adjustment mechanism.
- 5.22 [Deleted] The table below establishes the *normal performance* range for transmission network performance.

Transmission service standard - normal performance

		Low Limit	High Limit
Circuit Availability	2006/07	97.7%	98.7
(%)	2007/08	97.7%	98.7
	2008/09	97.7%	98.7
System Minutes	2006/07	7.0	8.6
Interrupted (meshed network)	2007/08	7.0	8.6
	2008/09	7.0	8.6

System Minutes	2006/07	3.5	4.3
Interrupted (radial network)	2007/08	3.5	4.3
	2008/09	3.5	4.3

5.23 [Deleted] The table below establishes the normal performance range for distribution performance as measured by SAIDI.

Distribution service standard as measured by SAIDI - normal performance

		Low Limit	High Limit
SAIDI - SWIN	2006/07	249	305
(Minutes)	2007/08	233	285
	2008/09	202	246
SAIDI - CBD	2006/07	19	2 4
(Minutes)	2007/08	18	22
	2008/09	16	19
SAIDI - Urban	2006/07	220	268
(Minutes)	2007/08	206	252
	2008/09	177	217
SAIDI - Rural	2006/07	458	560
(Minutes)	2007/08	428	52 4
	2008/09	369	451

5.24 [Deleted] The table below establishes the *normal performance* range for distribution performance as measured by SAIFI.

Distribution service standard as measured by SAIFI - normal performance

		Low Limit	High Limit
SAIFI - SWIN (Average	2006/07	3.10	3.78
interruptions per annum)	2007/08	2.90	3.54
	2008/09	2.50	3.06
SAIFI - CBD (Average	2006/07	0.29	0.35
interruptions per	2007/08	0.27	0.33
annum)	2008/09	0.23	0.29

SAIFI - Urban (Average	2006/07	3.0 4	3.72
interruptions per annum)	2007/08	2.84	3.48
difficility	2008/09	2.45	2.99
SAIFI - Rural (Average	2006/07	3.71	4.53
interruptions per	2007/08	3.47	4.24
annum)	2008/09	2.99	3.65

SSAM applying to transmission network

- 5.24A At the next access arrangement review the Authority will apply a financial reward or penalty to Western Power in relation to Western Power's actual performance in providing transmission reference services. The reward for good performance or penalty for poor performance is to be calculated in accordance with the table and notes below:
 - (a) Western Power's actual performance will be calculated on the basis of the service standard definitions in section 3.21 of this Access Arrangement.
 - (b) No reward or penalty will be made if actual performance falls within the Deadband.
 - (c) The reward for good performance or penalty for poor performance is remunerated at the incentive rate, calculated from the "Lower Bound" or "Upper Bound" of the Deadband as the case may be, for each year of the access arrangement period.
 - (d) Where actual performance is outside the Low Limit or High Limit, the total reward or penalty is calculated as if actual performance was equal to the Low Limit or High Limit as the case may be.

			<u>Deadband</u>				Incentive Rate (\$ real_as at 30 June 2009)
		<u>Low</u> <u>Limit</u>	Lower bound	<u>Target</u>	Upper bound	<u>High</u> <u>Limit</u>	per 0.1% Circuit Availability , and per 0.1 System Minutes Interrupted
6 : "	2009/10	<u>97.0</u>	<u>97.5</u>	<u>98</u>	<u>98.5</u>	<u>99.0</u>	<u>\$165,094</u>
Circuit Availability (%)	2010/11	<u>97.0</u>	<u>97.5</u>	<u>98</u>	<u>98.5</u>	<u>99.0</u>	<u>\$218,255</u>
	2011/12	<u>97.0</u>	<u>97.5</u>	<u>98</u>	<u>98.5</u>	<u>99.0</u>	<u>\$288,532</u>
System Minutes	2009/10	<u>7.4</u>	<u>8.4</u>	9.3	<u>10.2</u>	<u>11.2</u>	<u>\$84,322</u>
Interrupted	2010/11	<u>7.4</u>	<u>8.4</u>	9.3	<u>10.2</u>	<u>11.2</u>	<u>\$111,474</u>
(meshed network)	2011/12	<u>7.4</u>	<u>8.4</u>	9.3	<u>10.2</u>	<u>11.2</u>	<u>\$147,369</u>
System Minutes	2009/10	<u>1.1</u>	<u>1.3</u>	<u>1.4</u>	<u>1.5</u>	<u>1.7</u>	<u>\$29,481</u>
Interrupted (radial	2010/11	<u>1.1</u>	<u>1.3</u>	<u>1.4</u>	<u>1.5</u>	<u>1.7</u>	<u>\$38,974</u>
<u>network)</u>	2011/12	<u>1.1</u>	<u>1.3</u>	<u>1.4</u>	<u>1.5</u>	<u>1.7</u>	<u>\$51,524</u>

An amount must be added to or subtracted from Western Power's target revenue for the third access arrangement period which, in present value terms, is equal to the aggregate of the bonuses and penalties calculated in accordance with this section 5.24A. The intention of this present value calculation is to ensure that the amount added to or subtracted from Western Power's target revenue has the same financial effect as if the rewards or penalties applied in each year immediately following the relevant performance year.

SSAM applying to distribution network

- 5.24B At the next access arrangement review the Authority will apply a financial reward or penalty to Western Power in relation to Western Power's actual performance in providing reference services to users connected to the distribution network. The reward for good performance or penalty for poor performance is to be calculated in accordance with the tables and notes below:
 - —(a) Western Power's actual performance will be calculated on the basis of the service standard definitions set out in sections 3.16 and 3.17 of this Access Arrangement.
 - (b) No reward or penalty will be made if actual performance falls within the Deadband.
 - (c) The reward for good performance or penalty for poor performance is remunerated at the incentive rate, calculated from the "Lower Bound" or "Upper Bound" of the Deadband as the case may be.
 - (d) Where actual performance is outside the Low Limit or High Limit, the total reward or penalty is calculated as if actual performance was equal to the Low Limit or High Limit as the case may be.

<u>SAIDI</u>			<u>Deadband</u>				Incentive Rate (\$ real_as at 30
		Low				<u>High</u>	June 2009)
		Limit Lower bound	<u>Target</u>	<u>Upper</u> <u>bound</u>	<u>Limit</u>	(Portion of distribution revenue per SAIDI minute)	
0.1101 000	2009/10	<u>30</u>	<u>34</u>	<u>38</u>	<u>42</u>	<u>46</u>	<u>\$89,845</u>
SAIDI - CBD (Minutes)	2010/11	<u>30</u>	<u>34</u>	<u>38</u>	<u>42</u>	<u>46</u>	<u>\$118,877</u>
<u>(</u>	2011/12	<u>30</u>	<u>34</u>	<u>38</u>	<u>42</u>	<u>46</u>	<u>\$155,200</u>
SAIDI - Urban	2009/10	<u>129</u>	<u>145</u>	<u>161</u>	<u>177</u>	<u>193</u>	<u>\$89,845</u>
(Minutes)	2010/11	<u>120</u>	<u>135</u>	<u>150</u>	<u>165</u>	<u>180</u>	<u>\$118,877</u>
	2011/12	<u>114</u>	<u>128</u>	<u>142</u>	<u>156</u>	<u>170</u>	<u>\$155,200</u>
SAIDI – Rural	2009/10	<u>202</u>	<u>228</u>	<u>253</u>	<u>278</u>	<u>304</u>	<u>\$3,416</u>
<u>Short</u>	2010/11	<u>186</u>	<u>210</u>	<u>233</u>	<u>256</u>	<u>280</u>	<u>\$4,548</u>

(Minutes)	2011/12	<u>178</u>	<u>200</u>	<u>222</u>	<u>244</u>	<u>266</u>	<u>\$5,906</u>
SAIDI - Rural	2009/10	<u>479</u>	<u>539</u>	<u>599</u>	<u>659</u>	<u>719</u>	<u>\$3,416</u>
<u>Long</u> (Minutes)	2010/11	<u>454</u>	<u>510</u>	<u>567</u>	<u>624</u>	<u>680</u>	<u>\$4,548</u>
	2011/12	<u>438</u>	<u>493</u>	<u>548</u>	<u>603</u>	<u>658</u>	<u>\$5,906</u>

<u>SAIFI</u>				Deadband	<u> </u>		Incentive Rate (\$ real_as at 30 June 2009) (Portion of distribution revenue per SAIFI minute)
			Lower bound	Target	Upper bound	High Limit	
0.4151 .000	2009/10	<u>0.19</u>	0.22	0.24	<u>0.26</u>	0.29	<u>\$4,216,767</u>
SAIFI - CBD (Minutes)	2010/11	<u>0.19</u>	0.22	0.24	<u>0.26</u>	0.29	<u>\$5,587,216</u>
<u> </u>	2011/12	<u>0.19</u>	0.22	0.24	0.26	0.29	<u>\$7,313,110</u>
SAIFI - Urban	2009/10	<u>1.50</u>	<u>1.69</u>	<u>1.88</u>	2.07	<u>2.26</u>	<u>\$4,216,767</u>
(Minutes)	2010/11	<u>1.41</u>	<u>1.58</u>	<u>1.76</u>	<u>1.94</u>	<u>2.11</u>	<u>\$5,587,216</u>
	2011/12	<u>1.34</u>	<u>1.50</u>	<u>1.67</u>	<u>1.84</u>	2.00	<u>\$7,313,110</u>
SAIFI – Rural	2009/10	<u>2.44</u>	<u>2.75</u>	3.05	<u>3.36</u>	<u>3.66</u>	<u>\$183,284</u>
Short	2010/11	<u>2.26</u>	<u>2.55</u>	2.83	<u>3.11</u>	<u>3.40</u>	<u>\$243,520</u>
(Minutes)	2011/12	<u>2.16</u>	2.43	<u>2.7</u>	2.97	3.24	<u>\$317,136</u>
SAIFI - Rural	2009/10	<u>3.91</u>	<u>4.40</u>	<u>4.89</u>	<u>5.38</u>	<u>5.87</u>	<u>\$183,284</u>
<u>Long</u> (Minutes)	2010/11	<u>3.71</u>	<u>4.18</u>	4.64	<u>5.10</u>	<u>5.57</u>	<u>\$243,520</u>
<u>,</u>	2011/12	3.58	4.02	4.47	4.92	<u>5.36</u>	<u>\$317,136</u>

(e) An amount must be added to or subtracted from Western Power's target revenue for the third access arrangement period which, in present value terms, is equal to the aggregate of the bonuses and penalties calculated from the above table. The intention of this present value calculation is to ensure that the amount added to or subtracted from Western Power's target revenue has the same financial effect as if the rewards or penalties applied in each year immediately following the performance year.

Overview Form of Price Control: Revenue Cap

- 5.25 In accordance with sections 6.1, 6.2(<u>ca</u>) and 6.4 of the *Code*, the form of price control <u>for reference services</u>—will be "revenue cap", which has the objectives (amongst other things) of giving Western Power an opportunity to earn *target revenue* for the access arrangement period from the provision of *covered services*.
- 5.26 Separate revenue caps will apply in respect of the <u>reference services provided by means of the</u> transmission network and the distribution network. The establishment of both revenue caps has been made by reference to <u>the</u>-Western Power's *approved total costs* for <u>reference services</u>.

Transmission Network Revenue Cap for Reference Services

5.27 The Transmission Network Revenue Cap <u>for Reference Services</u> determines the maximum <u>regulated</u> transmission <u>reference service</u> revenue (MTR_t) for Western Power's transmission network for each financial year t. Subject to the annual side constraints on reference tariff movements set out in section 3.11 of this *Access Arrangement*, Western Power will use its reasonable endeavours to ensure that the actual transmission <u>reference serviceregulated</u> revenue in financial year t does not

- exceed the maximum transmission <u>reference serviceregulated</u> revenue in financial year t.
- 5.28 The operation of the correction factor, TK_t, as described in sections 5.36 and 5.37 of this *Access Arrangement* will ensure that the MTR in year t is adjusted for any shortfall or over-recovery of actual transmission <u>reference serviceregulated</u> revenue compared to the MTR in preceding years.
- 5.29 For the purposes of this Transmission Network Revenue Cap<u>for Reference Services</u>, Western Power's actual regulated transmission revenue in financial year t comprises:
 - transmission revenue earned in relation to the provision of *reference* and non-reference—services in financial year t, subject to section 5.33 of this *Access Arrangement*. Where a *reference* or *non-reference*-service is provided jointly by Western Power's transmission and distribution networks—businesses, the revenue earned must be allocated between the <u>networks_businesses</u>-in a fair and reasonable manner.
 - (b) [Deleted] "Deemed capital contributions" in financial year t in respect of the transmission network, as set out in the table below. The deemed capital contributions equals the forecast capital contributions in this access arrangement period, which have been used by Western Power in its calculation of target revenue for this access arrangement period.

Deemed capital contributions in financial year t in respect of the transmission network (\$ million real as at 30 June 06)

2006/07	2007/08	2008/09
16.1	27.4	13.4

- 5.30 [Deleted]
- 5.31 [Deleted] No adjustments will be made to MTR in this access arrangement period to reflect any differences between the deemed capital contributions in respect of the transmission network and the actual capital contributions received during this access arrangement period.
- [Deleted] An adjustment (positive or negative), termed the Capital Contributions Adjustment Mechanism, will be made to the target revenue for the next and, if appropriate, subsequent access arrangement periods to reflect any difference between the deemed capital contributions in respect of the transmission network and the actual capital contributions received during this access arrangement period. The purpose of this adjustment is to correct for any under or over-recovery of actual capital contributions received compared to the forecast of capital contributions (the deemed capital contributions) in this access arrangement period. To give effect to this purpose, the adjustment (positive or negative) to the target revenue for the next and, if appropriate, subsequent access arrangement periods must leave Western Power economically neutral as a result of any difference between the deemed capital contributions in respect of the transmission network and the actual capital contributions received during this access arrangement period by taking account of:
 - (a) The effects of inflation, both in this access arrangement period and the next and, if appropriate, subsequent access arrangement periods;

- (b)The time value of money as reflected by the real pre-tax WACC as applied in this access arrangement period and the next and, if appropriate, subsequent access arrangement periods; and
- (c)The difference in the timing of the deemed and actual capital contributions received in this access arrangement period, and the period over which any adjustment to target revenue is to be made.

Western Power will determine whether it is appropriate to apply the Capital Contributions Adjustment Mechanism across a number of access arrangement periods, having regard to the objectives of the Code. The number of regulatory periods over which an adjustment can be made will be no greater than the assumed regulatory-depreciation lives for the assets to which the capital contributions relate.

- 5.33 For the avoidance of doubt, revenue received by Western Power for *excluded services*, non-reference services and capital contributions must not be treated as actual regulated revenue for the purposes of this Transmission Network Revenue Cap for Reference Services.
- 5.34 The Transmission Network Revenue Cap for Reference Services commences on 1 July 20062009, even if this Access Arrangement is approved after that date. This revenue cap applies annually on a financial year basis for the duration of this Access Arrangement.
- 5.35 For this access arrangement period, the maximum regulated transmission reference service revenue MTR_t is determined as follows:

$$MTR_t = TR_t + \underline{AA\#1_t + }TK_t$$

Where:

 TR_t is the dollar amount in money of the day terms (current prices) for the financial year t calculated from the dollar amounts (expressed in 30 June 20096 prices) set out in the table below.

Transmission reference service revenues to be used for calculating TR_t and value of Y to be used for calculation of tariff side constraint (\$ million real as at 30 June 20096)

	2006/07 2009/10	2007/08 <u>2010/11</u>	2008/09 2011/12
<u>TR</u> _t	<u>338.0</u> 223.5	<u>446.8</u> 230.6	227.1 <u>590.6</u>
Y	<u>n/a</u>	32.2%	32.2%

TK_t is the correction factor calculated in accordance with sections 5.36 and 5.37 of this *Access Arrangement*, which takes account of any difference between the maximum regulated transmission reference servicenetwork revenue in financial year t-1 and the actual regulated transmission reference servicenetwork revenue in financial year t-1.

AA#1_t is a positive or negative smoothed amount for the financial year t calculated to give effect to the following adjustments (if applicable) in accordance with the previous access arrangement:

- Adjusting target revenue for unforeseen events;
- Adjusting target revenue for technical rule changes;
- Investment adjustment mechanism; and
- · Capital contributions adjustment mechanism.

For the avoidance of doubt, AA#1_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 5.35 of this *Access Arrangement*. Western Power will provide model outputs to the Authority to demonstrate that the above smoothed adjustments have been made in accordance with the previous *access arrangement*.

For the purpose of determining compliance with this revenue cap and 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 relevant March quarters.

5.36 For financial years commencing on 1 July 2007–2010 and 1 July 20082011:

$$TK_t = (MTR_{t-1} - ATR_{t-1}) * (1+WACC_{pre-tax real})$$

Where:

 MTR_{t-1} is the maximum <u>reference service-regulated</u> revenue for Western Power's transmission network in the previous financial year.

ATR_{t-1} is the actual <u>regulated</u> transmission <u>reference service</u> revenue in the previous financial year as defined in accordance with section 5.29 of this *Access Arrangement*.

WACC_{pre-tax real} is <u>8.95%.0.0676</u>

For the financial year commencing on 1 July 20062009, TK_t will be calculated in accordance with the previous access arrangement. =0.

For the avoidance of doubt, it should be noted 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-1} is known.

- 5.37 The correction factor, TK_t, will also apply in the first year of the next *access* arrangement period to adjust for any difference between maximum regulated transmission reference servicenetwork revenue and actual transmission reference service network—revenue, in relation to the financial year commencing on 1 July 20082011.
- 5.37A To manage the overall price increases in this access arrangement period, Western Power has deferred the recovery of some transmission reference service revenue from this access arrangement period to the third or subsequent access arrangement periods. The deferred amount of revenue is \$X14.6 million (\$ real as at 30 June 2009) expressed in present value terms as at 30 June 2009. An amount must be added to the target revenue for the transmission network in the third access arrangement period or subsequent access arrangement periods such that the present value (at 30 June 2009) of the total amount added to target revenue (taking account of inflation and the time value of money) is equal the present value of the deferred transmission reference service revenue (at 30 June 2009). For the avoidance of doubt, the addition to target revenue in the third and subsequent access arrangement periods must leave Western Power financially neutral compared to a situation where transmission reference service revenue deferral had not occurred.

Distribution Network Revenue Cap for Reference Services

- 5.38 The Distribution Network Revenue Cap for Reference Services determines the maximum regulated distribution reference service revenue (MDR_t) for Western Power's distribution network for each financial year t. Subject to the annual side constraints on reference tariff movements set out in section 3.11 of this Access Arrangement, Western Power will use its reasonable endeavours to ensure that the actual distribution reference serviceregulated revenue in financial year t does not exceed the maximum distribution reference serviceregulated revenue in financial year t.
- 5.39 The operation of the correction factor, DK_t, as described in sections 5.47 and 5.48 of this *Access Arrangement* will ensure that the MDR in year t is adjusted for any shortfall or over-recovery of actual distribution reference service regulated revenue compared to the MDR in preceding years.
- For the purposes of this Distribution Network Revenue Cap, Western Power's actual regulated distribution revenue in financial year t comprises:
 - (a) distribution revenue earned in relation to the provision of *reference* and *non-reference*-services in financial year t, subject to section 5.44 of this *Access Arrangement*. Where a *reference* or *non-reference*-service is provided jointly by Western Power's transmission and distribution networks businesses, the revenue earned must be allocated between the <u>networks</u> businesses in a fair and reasonable manner.
 - (b) [Deleted] "Deemed capital contributions" in financial year t in respect of the distribution network, as set out in the table below. The deemed capital contributions equals the forecast capital contributions in this access arrangement period, which have been used by Western Power in its calculation of target revenue for this access arrangement period.

Deemed capital contributions in financial year t in respect of the distribution network (\$ million real as at 30 June 96)

2006/07	2007/08	2008/09
91.6	106.8	122.3

5.41 **[Deleted]**

- 5.42 [Deleted] No adjustments will be made to MDR in this access arrangement period to reflect any differences between the deemed capital contributions in respect of the distribution network and the actual capital contributions received during this access arrangement period.
- [Deleted] An adjustment (positive or negative), termed the Capital Contributions Adjustment Mechanism, will be made to the target revenue for the next and, if appropriate, subsequent access arrangement periods to reflect any difference between the deemed capital contributions in respect of the distribution network and the actual capital contributions received during this access arrangement period. The purpose of this adjustment is to correct for any under- or over-recovery of actual capital contributions received compared to the forecast of capital contributions (the deemed capital contributions) in this access arrangement period. To give effect to this purpose, the adjustment (positive or negative) to the target revenue for the next and, if appropriate, subsequent access arrangement periods must leave Western Power economically neutral as a result of any difference between the deemed capital contributions in respect of the distribution network and the actual capital contributions received during this access arrangement period by taking account of:
 - 1.The effects of inflation, both in this access arrangement period and the next and, if appropriate, subsequent access arrangement periods;
 - 2.The time value of money as reflected by the real pre-tax WACC as applied in this access arrangement period and the next and, if appropriate, subsequent access arrangement periods; and
 - 3. The difference in the timing of the deemed and actual capital contributions received in this access arrangement period, and the period over which any adjustment to target revenue is to be made.

Western Power will determine whether it is appropriate to apply the Capital Contributions Adjustment Mechanism across a number of access arrangement periods, having regard to the objectives of the Code. The number of regulatory periods over which an adjustment can be made will be no greater than the assumed regulatory-depreciation lives for the assets to which the capital contributions relate.

For the avoidance of doubt, revenue received by Western Power for excluded services, non-reference services and capital contributions must not to be treated as actual regulated revenue for the purposes of this Distribution Network Revenue Cap for Reference Services.

As such, this adjustment performs a similar function to the correction factor, TK_t, but this adjustment applies only to capital contributions and the adjustment itself is applied from the commencement of the next access arrangement period. For an explanation of the rationale for this approach, please refer to Appendix 8 of this Access Arrangement.

- The Distribution Network Revenue Cap for Reference Services commences on 1 July 20062009, even if this Access Arrangement is approved after that date. This revenue cap applies annually on a financial year basis for the duration of this Access Arrangement.
- 5.46 For this *access arrangement period*, the maximum regulated distribution revenue MDR_t is determined as follows:

$$MDR_t = DR_t + TEC_t + AA#1_t + DK_t$$

Where:

 DR_t is the dollar amount in money of the day terms (current prices) for the financial year t calculated from the dollar amounts (expressed in 30 June 20096 prices) set out in the table below.

Distribution reference service revenues to be used for calculating DR_t and value of Y to be used for calculation of tariff side constraint

(\$ million real as at 30 June 20096)

	2006/07 2009/10	2007/08 <u>2010/11</u>	2008/09 <u>2011/12</u>
<u>DR</u> _t	<u>640.7</u> 352.4	<u>800.8</u> 4 37.7	<u>1,001.0</u> 4 75.3
Y	<u>n/a</u>	<u>25.0%</u>	<u>25.0%</u>

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

AA#1_t is a positive or negative smoothed amount for the financial year t calculated to give effect to the following adjustments (if applicable) in accordance with the previous access arrangement:

- Adjusting target revenue for unforeseen events;
- Adjusting target revenue for technical rule changes;
- Investment adjustment mechanism; and
- Capital contributions adjustment mechanism.

For the avoidance of doubt, AA#1_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 5.46 of this *Access Arrangement*. Western Power will provide model outputs to the Authority to demonstrate that the above smoothed adjustments have been made in accordance with the previous *access arrangement*.

 DK_t is the correction factor calculated in accordance with sections 5.47 and 5.48 of this *Access Arrangement*, which takes account of any difference between the maximum regulated distribution network revenue in financial year t-1 and the actual regulated distribution network revenue in financial year t-1.

For the purpose of determining compliance with this revenue cap and 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 relevant March quarters.

5.47 For financial years commencing on 1 July 2007–2010 and 1 July 20082011:

$$DK_t = (MDR_{t-1} - ADR_{t-1}) * (1+WACC_{pre-tax real})$$

Where:

 $\mathsf{MDR}_{\mathsf{t-1}}$ is the maximum regulated revenue for Western Power's distribution network in the previous financial year.

ADR_{t-1} is the actual regulated distribution revenue in the previous financial year as defined in accordance with section 5.40 of this *Access Arrangement*.

WACC_{pre-tax real} is <u>0.0676</u> 8.95%.

For the financial year commencing on 1 July 20062009, DK_t will be calculated in accordance with the previous access arrangement.=0.

For the avoidance of doubt, it should be noted 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-1} is known.

- 5.48 The correction factor, DK_t, will also apply in the first year of the next *access* arrangement period to adjust for any difference between maximum distribution reference service revenue and actual distribution reference service revenue, in relation to the financial year commencing on 1 July 20082011.
- 5.48A To manage the overall price increases in this access arrangement period, Western Power has deferred the recovery of some distribution reference service revenue from this access arrangement period to the third or subsequent access arrangement periods. The deferred amount of revenue is \$\frac{\text{\$Y177.3 million}}{\text{\$Y177.3 million}}\$ (\$\frac{\text{\$real as at 30 June 2009}}{\text{\$Q009}}\$) expressed in present value terms as at 30 June 2009. An amount must be added to the target revenue for the distribution network in the third access arrangement period or subsequent access arrangement periods such that the present value (at 30 June 2009) of the total amount added to target revenue (taking account of inflation and the time value of money) is equal the present value of the deferred distribution reference service revenue (at 30 June 2009). For the avoidance of doubt, the addition to target revenue in the third and subsequent access arrangement periods must leave Western Power financially neutral compared to a situation where revenue deferral had not occurred.

Investment adjustment mechanism

- In the next access arrangement period, the Authority will make an allowance (positive or negative) in Western Power's target revenue in accordance with the investment adjustment mechanism set out below.
- The *investment adjustment mechanism* will apply to both transmission and distribution capital expenditure. 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 forecasting errors in relation to particular categories of capital expenditure (the

investment difference) in this access arrangement period. In order to give effect to this purpose, the *investment adjustment mechanism* must take account of:

- (a) The effects of inflation, both in this access arrangement period and the next access arrangement period;
- (b) The time value of money as reflected by the real pre-tax WACC as applied in this access arrangement period and the next access arrangement period; and
- (c) The cost of depreciation and the value of capital additions to the *capital base* at the next *access arrangement* period.
- Given the requirements of the *investment adjustment mechanism* as described in section 5.50 above, Western Power's approach is: (a) Authoto calculate the difference in present value terms between:
 - i-(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 capital expenditure categories that are subject to the investment adjustment mechanism); and
 - ii.(b) The target revenue that actually applied in this access arrangement period.

The adjustment to *target revenue* in the next *access arrangement period* should be such that its present value is equal to the present value of the difference described in (a) above.

- 5.52 [Deleted] For the avoidance of doubt, the target revenue that actually applied in this access arrangement period includes the deemed capital contributions as set out in sections 5.29 and 5.40 of this Access Arrangement, and not the actual capital contributions received.
- 5.53 For the purposes of calculating the *investment adjustment mechanism*, the categories of capital expenditure that are used in calculating the *investment difference* are:
 - (a) *new facilities investment* arising from the connection of new generation capacity to the transmission or distribution network from 1 July 20062009;
 - (b) *new facilities investment* arising from the connection of new load to the *transmission system* or *distribution system* from 1 July 20062009;
 - (c) new facilities investment in relation to the augmentation of the capacity of the transmission system or distribution system for the provision of covered services from 1 July 20062009; and
 - (d) new facilities investment undertaken for augmentation of the distribution system under the regional power improvement program and state underground power program.

D factor Scheme

- 5.54 This D factor scheme applies to both transmission and distribution expenditure.
- 5.55 <u>In the next access arrangement, the Authority will make an allowance in Western</u> Power's *target revenue* so that Western Power is financially neutral as a result of:

- (a) any additional operating expenditure incurred by Western Power as a result of deferring a capital expenditure project during this access arrangement period; and
- (b) <u>any additional operating or capital expenditure incurred by Western Power in</u> relation to demand management initiatives.
- 5.56 In relation to 5.55(a), the capital expenditure project that has been deferred must have been included in Western Power's forecast capital expenditure in its revised access arrangement information or supporting documentation, and in the Authority's allowed capital expenditure for this access arrangement period.
- 5.57 In relation to 5.55(a) and 5.55(b), an additional amount will only be allowed if there is an approved business case for the relevant expenditure, and this business case is made available to the Authority.

6 Capital Base Value and Depreciation

Capital base value

6.1 The table below shows the derivation of the capital base value as at 30 June $\frac{20062009}{1}$.

Derivation of Transmission Initial Capital Base (net) (net) (\$ million real as at 30 June 20069)

Financial year ending:	30 June 200 4 <u>2006</u>	30 June 2005 2007	30 June 20062008	30 June 2009
Opening capital base value		1,523.2 1,205.9	1,776.5 1,274.6	<u>2,035.2</u>
less Depreciation		<u>-53.6</u> 43.4	45.7 - <u>58.3</u>	<u>-63.3</u>
plus Capital Expenditure (net)		306.9 112.2	317.0 149.5	<u>443.6</u>
less Redundant Assets		0.00.0	0.0 0.0	<u>0.0</u>
plus Corporate Assets allocated to Western Power		0.0	8.1	
Closing capital base value	1,523.2 1,386.6 1,205.9	1,776.5 1,274.6	2,035.2 1,386.6	<u>2,415.5</u>

Derivation of Distribution Initial Capital Base (net) (\$ million real as at 30 June 20069)

Financial year ending:	30 June 200 4 <u>2006</u>	30 June 2005 2007	30 June 2006	30 June 2009
Opening capital base value		1,751.7 1,401.5	2,088.7 1,470.0	<u>2,454.1</u>
less Depreciation		<u>-</u> 106.8 <mark>86.5</mark>	<u>-</u> 111.991.0	<u>-121.4</u>
plus Capital Expenditure		448.0 158.2	481.3 209.1	<u>582.9</u>
less Redundant Assets		<u>-4.2</u> 3.2	<u>-4.0</u> 1.8	<u>-3.9</u>
plus Corporate Assets allocated to Western Power		0.0	8.1	
Closing capital base value	<u>1,751.7</u> <u>1,594.5</u> 1,401.5	2,088.7 1,470.0	2,454.1 1,594.5	<u>2,911.7</u>

- 6.2 For the avoidance of doubt, the capital base value as at 30 June 2006 reflects the actual capital expenditure for the year ending 30 June 2006 ("2005/06"). The capital base value as at 30 June 2009 reflects a forecast of capital expenditure for the year ending 30 June 2009 ("2008/09") and a forecast of inflation of 3.0% for the year ending 30 June 2009. To ensure that Western Power is remunerated only for actual capital investment that is undertaken in the year ending 30 June 2009 and actual inflation:
 - (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 capital expenditure and the forecast of capital expenditure for the 2008/09 year that was used to establish the opening capital base value at 30 June 2009 (the "2008/09 capital expenditure forecast error");
 - (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 weighted average for eight capital cities) and the forecast inflation for

- the 2008/09 year that was used to establish the opening capital base value at 30 June 2009 (the "2008/09 inflation forecast error"); and
- (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 2008/09 capital expenditure forecast error or the 2008/09 inflation forecast error.

6.3 For the avoidance of doubt:

- (a) under the arrangements set out in section 6.2 of this Access Arrangement the target revenue for this access arrangement period will not be adjusted for the 2008/09 capital expenditure forecast errors or the 2008/09 inflation forecast error,
- (b) the intended effect of the arrangements set out in section 6.2 of this Access Arrangement is to hold Western Power and users economically neutral in the event that there are any 2008/09 capital expenditure forecast errors or 2008/09 inflation forecast error, and
- (c) adjustments made at the next access arrangement review pursuant to section 6.2 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 2008/09 capital expenditure forecast errors or no 2008/09 inflation forecast error.

Depreciation

- 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. For the avoidance of doubt, the annual depreciation provision contained in the *target revenue* represents a return of the *capital base* value to the providers of capital.
- The annual depreciation provision contained in the *target revenue* for each year of the *first*-access *arrangement period* is calculated using:
 - (a) the straight line depreciation method; and
 - (b) weighted average lives for each of the transmission and distribution networks based on the asset lives for each group of network assets as set out in the following tables:

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	34.15 years
Transmission IT&T	16.85 years
Transmission Other, non-network assets	16.85 years

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&T	10.16 years
Distribution SCADA & communications	10.16 years
Distribution Other, non-network	10.16 years

6.6 For the avoidance of doubt, Western Power confirms that it is adopting a straight-line approach to depreciation and is not proposing any accelerated depreciation in the *first* access arrangement period in relation to transmission assets. In respect of distribution assets, Western Power will apply accelerated depreciation in respect of those distribution assets that will be decommissioned as a result of the retrospective undergrounding project undertaken by Western Power on behalf of the Western Australian government.

Distribution redundant capital by asset class (\$ million real as at 30 June 20062009)

Financial year ending:	30 June 20 <u>10</u> 07	30 June 20 <u>11</u> 08	30 June 20 <u>12</u> 09
Distribution lines - wood poles	2. <u>8</u> 9	2.8	2.7
Distribution lines - steel poles	0.0	0.0	0.0
Distribution underground cables	0.0	0.0	0.0
Distribution transformers	0.8	0.7	0.7
Distribution switchgear	0.2	0.2	0.2
Street lighting	0.0	0.0	0.0
Distribution meters and services	0.0	0.0	0.0
Distribution IT&T	0.0	0.0	0.0
Distribution SCADA & communications	0.0	0.0	0.0
Distribution Other, non-network	0.0	0.0	0.0
Distribution Land & Easements	0.0	0.0	0.0
TOTAL	3.8	3.7	3.6

7 Weighted Average Cost of Capital

7.1 Pursuant to section 6.64 of the *Code* the *weighted average cost of capital* for Western Power's *covered network* is-6.76 8.95% real pre-tax.

8 Trigger Events

- 8.1 Pursuant to section 4.37 of the Code the following event is a trigger event is: (a) Aany significant unforeseen development which has a materially adverse impact on the service provider and which is:
 - (i)(a) outside the control of the service provider, and
 - (ii)(b) not something that the service provider, acting in accordance with good electricity industry practice, should have been able to prevent or overcome; and
 - (iii)(c) an event the impact of which is so substantial that the advantages of making the variation before the end of the access arrangement period outweigh the disadvantages, having regard to the impact of the variation on regulatory certainty.
 - 8.1A For the avoidance of doubt, a *trigger* event may include without limitation the introduction of an emissions trading scheme; full retail contestability; and the roll-out of Advanced Interval Meters to the extent that such costs were not included in the calculation of *target* revenue for the access arrangement period or otherwise addressed through the Unforseen Event provisions in sections 5.4 to 5.6 of this Access Arrangement.
 - 8.2 The designated date by which Western Power must submit proposed revisions to the Authority is 30 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 Pricing Methods

Purpose

9.1 Pursuant to section 5.1(e) of the *Code* and Chapter 7 of the *Code*, this section describes the *pricing method* applied by Western Power.

Network pricing objectives

- 9.2 Western Power's *pricing method* is designed to achieve the objectives set out in sections 7.3 and 7.4 of the *Code*.
- 9.3 Without compromising the objectives set out in sections 7.3 and 7.4 of the *Code*, Western Power's *pricing method* seeks to recover the costs of providing *reference* services from *users* in a manner that is simple, practical and equitable.

Overview of Pricing Method

- 9.4 Reference tariffs are derived from an analysis of the cost of service provision which entails:
 - (a) identifying the costs of providing *reference services*;
 - (b) allocating the costs of providing *reference services* to particular customer groups;
 - (c) translating the costs of serving particular customer groups to the costs of providing *reference tariffs*; and
 - (d) determining a structure of *reference tariffs* in a manner that reflects the underlying cost structure, in accordance with section 7.6 of the *Code*.
- The costs relating to *reference services* A1 to A10 are expressed so that these costs can be incorporated in the relevant *reference tariff* in a cost reflective manner.
- 9.6 Reference tariffs for reference services A11, B1 and B2 are location-specific and are published for each electrical node.

Pricing method and price list information - compliance with Code requirements

This section of the Access Arrangement explains how the pricing method complies with the Code requirements. As noted in paragraph 3.11A of this Access Arrangement, for the forthcoming access arrangement period Western Power has deferred the recovery of some revenue to the third or subsequent access arrangement periods. To give effect to this deferral, the reference tariffs for 2008/09 will be scaled in each year to recover the appropriate amount of revenue from reference services. The effect of this scaling is to preserve the cost allocations that were established in the first access arrangement period. In accordance with the Code requirements, the price list information provided as Appendix 6 to this Access Arrangement explains the pricing method that underpinned the development of reference tariffs in the first access arrangement period, which, in turn, forms the basis of the reference tariffs for the forthcoming access arrangement period.

Recovery of forward-looking efficient costs of providing reference services

- 9.8 In accordance with section 7.3(a) of the *Code*, reference tariffs are designed to recover forward-looking costs of providing reference services. It is recognised that the total forward-looking costs for the provision of network services relate to the provision of reference and non-reference services. Further information is provided in the price list information, Appendix 6 to this Access Arrangement.
- 9.9 Non-reference service revenue is recovered on a fee-for-service basis and reflects that component of the forecast costs related to the provision of non-reference services.
- 9.10 Capital contributions are charged in accordance with Western Power's capital contributions policy. In general terms, capital 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.

- 9.11 In accordance with section 7.3(b)(i) and (ii) of the *Code*, reference tariffs are set to at least recover the incremental cost, but to be less than the stand-alone cost of service provision. Further information is provided in the *price list information*, Appendix 6 to this *Access Arrangement*.
- 9.12 [Deleted]The incremental and stand-alone cost of service for each of the reference services A5, A6, A7, A8, and B1 are determined by calculation at a customer level. The following table gives the sum of the incremental costs, the sum of the stand-alone costs, and the sum of the forecast revenue recovered from the customers for each of these reference tariffs.

Reference Service	Reference Tariff	Of Service (\$000 per annum)	Stand-Alone Cost of Service Provision (\$000 per annum)	Forecast Revenue Recovered from Reference Tariff (\$000 per annum)
A5	RT5	4,965	57,965	6,825
A6	RT6	20,281	79,329	27,839
A 7	RT7	41,537	58,652	51,809
A8	RT8	4,697	8,582	7,298
B1	RT11	555	58,652	555

9.13[Deleted]The incremental cost of service for reference services A1, A2, A3, A4, A9, and A10 are determined by allocation of incremental costs for the network to each tariff. The following table gives the sum of the incremental costs, the sum of the stand-alone costs, and the sum of the forecast revenue recovered from the customers for each of these reference tariffs.

Reference Service	Reference Tariff	Incremental Cost Of Service (\$000 per annum)	Stand-Alone Cost of Service Provision (\$000 per annum)	Forecast Revenue Recovered from Reference Tariff (\$000 per annum)
A1	RT1	206,221	-269,840	251,122
A2	RT2	78,822	-136,771	86,939
A3	RT3	6,322	-63,646	7,002
A4	RT4	72,266	-129,734	72,641
A9	RT9	12,632	-68,642	13,098
A10	RT10	800	-67,975	1,507

9.14 [Deleted] For the transmission reference tariffs TRT1 and TRT2 (refer to Appendix 7 of this Access Arrangement for more detail), location specific nodal prices are derived using the T-Price computer model. T-Price is a transmission network pricing software package provided by Rolib Pty Ltd and is used by all Australian utilities and the National Electricity Market Management Company (NEMMCO). This model establishes a price reflecting average costs at each network node. On the basis that T-price is used to derive prices and is the industry standard, it is considered that the prices are efficient and consistent with the objectives of the Code and in particular the objectives of chapter 7 of the Code.

Charges paid by different users of a reference service

- 9.15 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.
- 9.16 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 RT5, RT6, RT7, RT8, RT11, TRT1 and TRT2 vary with location. Within the requirements of section 7.7 of the *Code*, these components reflect the differences in average cost of different users of the same reference service. Further information is provided in the price list information, Appendix 6 to this Access Arrangement.

Reasonable requirements of users

9.17 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 tariff structure through a consultative process that involved Government and industry stakeholders. Most 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 the likely annual changes.

9.18 In accordance with section 7.4(c) of the *Code*, users can predict the likely annual changes in reference tariffs. All reference tariffs are defined for the first year of the *Access Arrangement*. For the remainder of the *access arrangement* period side constraints limit the variation of any tariff component. In addition the forecast tariff revenue has been smoothed across the *access arrangement* period to facilitate smooth price movements.

Avoidance of price shock

- 9.19A In accordance section 3.11A of this Access Arrangement, to manage the overall price increases in this access arrangement period, Western Power has deferred the recovery of some revenue from this access arrangement period until the third or subsequent access arrangement periods. The deferred revenue amounts are described in section 5.37A and 5.48A of this Access Arrangement. In addition, the forecast tariff revenue has been smoothed across the access arrangement period so that price movements will be smoothed across each year. The chosen rate of smoothing is also intended to minimise the likelihood of price shock at the start of the third access arrangement period.
- 9.19 In accordance with section 7.4(d) of the *Code*, rebalancing of the structure of reference tariffs is designed to avoid price shock, principallyconstrained by the imposition of side constraints on annual price movements. In addition the forecast tariff revenue has been smoothed across the access arrangement period so that price movements will be smoothed across each year. The chosen rate of smoothing also ensures that the initial tariff movements in year 1 (compared with current published tariffs) are similar to tariff increases in the second and third years.

Tariff components

- 9.20 In accordance with section 7.6 of the *Code*, reference tariffs have been designed to recover the cost of service provision in a cost reflective manner. The *Code* requires the incremental cost of service provision to be recovered by tariff components that vary with usage, and the costs in excess of the incremental costs to be recovered through tariff components that do not vary with usage. Further information is provided in the price list information, Appendix 6 to this *Access Arrangement*.
- 9.21 [Deleted] This requirement has been achieved through the method described in the "Price List Information" document, in which, subject to section 7.7 of the Code, price components have been derived to recover the cost of service provision in accordance with the objectives set out in sections 7.3 and 7.4 of the Code.
- 9.22 Reference tariffs are structured so that usage-related charges properly reflect the incremental costs to Western Power of providing reference services, in accordance with section 7.6 of the Code.

Policy on prudent discounting

- 9.23 <u>In accordance with section 7.9 of the Code,</u> Western Power may discriminate between *users* in its pricing of *services* to the extent that it is necessary to do so to aid economic efficiency, by:
 - (a) entering into an agreement with a *user* to apply a *discount* to the *equivalent tariff* to be paid by the *user* for a *covered service*; and
 - (b) then, recovering the amount of the *discount* from other *users* of *reference* services through *reference tariffs*.
- 9.24 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*.
- 9.25 Western Power may offer a prudent discount if the existing *user* or *applicant* seeking *access* to the *SWIN* 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.
- 9.26 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.
- 9.27 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.

Policy on discounts for distributed generation

- 9.28 In accordance with section 7.11 of the *Code*, Western Power will offer to a *user* who connects distributed generating plant to the *SWIS*, 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 *SWIN* by:
 - (a) entering into an agreement with a *user* to apply a discount to the *equivalent tariff* to be paid by the *user* for a *covered service*; and
 - (b) then, recovering the amount of the discount from other *users* of *reference* services through *reference tariffs*.
- 9.29 The amount of the total discount available under section 9.28 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 9.29 is greater than zero.
- 9.30 The discount calculated in accordance with section 9.29 will be calculated in present value terms and, using the real pre-tax *WACC*, 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*.

9.30

10 Supplementary Matters

Balancing

10.1 Balancing requirements under the *Access Arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

Line Losses

10.2 Requirements for the treatment of line losses under the *Access Arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

Metering

10.3 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.

Ancillary Services

10.4 Requirements for the treatment of ancillary services under the *Access Arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

Stand-by

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

Trading

10.6 Trading requirements under the *Access Arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

Settlement

10.7 Settlement requirements under the *Access Arrangement* shall be in accordance with the Wholesale Electricity Market Rules.

Possible Interim Arrangements

- 10.8 [Deleted]
- 10.9 [Deleted]