

Response to the Required Amendments
detailed in
ERA's Draft Decision on
Western Power's proposed
Access Arrangement for the Network of the
South West Interconnected System

Submitted by Western Power
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1 Introduction

This document sets out Western Power's response to the Required Amendments contained in the Draft Decision. In accordance with the format of the Draft Decision, this document is presented in two parts, A and B, and is structured as follows:

- Part A contains sections 2 and 3. Section 2 contains a table which lists each Required Amendment (numbered 1 to 63 inclusive) set out in **Part A** of the Draft Decision. These Required Amendments relate to all elements of Western Power's proposed access arrangement, with the exception of proposed contracts and policies. The table provides a very brief explanation of the way in which Western Power proposes to address the Required Amendment, as follows:
 - Where Western Power accepts a Required Amendment the table in section 2 provides appropriate cross references to direct the reader to the relevant section(s) of the revised access arrangement information and/or the revised proposed access arrangement.
 - In the case of some Required Amendments, Western Power has made changes to its access arrangement proposal that it considers adequately address the matters which prompted the Authority to require the amendments. In such cases, the table provides cross references to the relevant part of section 3 of this document, which contains a more detailed explanation of the way in which Western Power's proposed changes address the matters raised by the Authority's Required Amendment. Where applicable, the table also provides cross references to the relevant sections of the revised access arrangement information or revised proposed access arrangement.
- The explanatory information provided in section 3 will generally:
 - provide a brief re-cap of the reasoning underpinning the company's original proposal;
 - set out the company's understanding of the ERA's position, based on the reasoning contained in the Draft Decision as well as any discussion or correspondence that has taken place between the ERA and Western Power since the publication of the Draft Decision; and
 - explain the reasons for the company's current position in light of the foregoing information.
- An equivalent detailed explanation of Western Power's responses to each of the Required Amendments (numbered 64 to 193 inclusive) in Part B of the Draft Decision is provided in Part B of this document.

It is important to note that in addition to submitting this document in response to the Draft Decision, Western Power will also be submitting:

- a revised proposed access arrangement; and

- revised access arrangement information.

As noted in section 4.2 of the Code, the purpose of the access arrangement information is to enable the Authority, users and applicants to:

- (a) understand how Western Power derived the elements of the proposed access arrangement; and
- (b) form an opinion as to whether the proposed access arrangement complies with the Code.

In Western Power's view, the revised access arrangement information submitted in response to the Draft Decision meets the requirements of section 4.2.

Accordingly:

- Western Power has endeavoured to ensure that wherever possible, this document does not unnecessarily duplicate information that is set out in the separate revised access arrangement information or revised proposed access arrangement lodged as part of Western Power's response to the Draft Decision.
- The scope of this document is generally confined to setting out the reasoning underpinning Western Power's responses to the Required Amendments set out in the Draft Decision.
- As noted above, this document provides appropriate cross references to direct the reader to the relevant section(s) of the revised access arrangement information or revised proposed access arrangement.

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Part A:

**Western Power's Response to
Required Amendments 1 to 63 contained in
Part A of the Draft Decision**

2 Overview of Western Power's position on the Required Amendments (Part A of Draft Decision)

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
1	Western Power to amend clause 1.1 of its proposed access arrangement to reference only those portions of the SWIS it owns and operates and to define SWIS and SWIN.	Accepted. Western Power has amended its access arrangement in accordance with the Required Amendment.	Section 1	n/a	n/a
2	Western Power to amend clauses 1.7(c) and (d) of its proposed access arrangement to correctly list the placement of appendices.	Accepted. Western Power has amended its access arrangement in accordance with the Required Amendment.	Section 1	n/a	n/a
3	Western Power to identify its reference services so as to make clear specifically what services will be provided to customers. These reference services should be distinguished from Western Power's reference tariffs, albeit that there should be a reference tariff associated with each reference service.	Accepted. Western Power has clarified the definition of reference services in accordance with the Required Amendment.	Section 3	Part D, Section 2	n/a
4	Western Power to propose standard access contracts for RT9 (Street lighting) and RT10 (Unmetered Supplies).	Amendment addressed. The amended SAC now deals with all reference services including street lighting and unmetered supplies.	Appendix 4	n/a	n/a
5	Western Power to confirm its non-reference services and explain how they meet the Access Code requirements.	Accepted.	Section 3 and Appendix 7	Part D Section 2	n/a
6	Western Power to amend its transmission network benchmarks for circuit availability (per cent of total time) for each year of the access arrangement period to 98.74 per cent.	Amendment addressed – see section 3.1 of this document for further explanation.	Section 3	Part A, Section 5.3 and Part D, Section 3.4	Section 3.1
7	Western Power to amend its transmission network benchmarks for system minutes interrupted (all transmission network) for each year of the access arrangement period to 7.8 minutes per year.	Amendment addressed – see section 3.2 of this document for further explanation.	Section 3	Part A, Section 5.4 and Part D, Section 3.4	Section 3.2
8	Western Power to amend its list of allowable exclusions.	Amendment addressed – see section 3.3 of this document for further explanation.	Section 3	Part D, Section 3.4	Section 3.3

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
9	Western Power to adopt as a minimum transmission network service standards in accordance with the Australian Energy Regulator's Compendium of Electricity Transmission Regulatory Guidelines, as at August 2005, for transmission network service standards. These performance measures are to be determined consistent with Schedule 1 – Definitions of Performance Measures, of the AER document. Intra-regional constraints are also to adopt reporting measures on the basis of the location, duration, frequency and time of day of the constraint.	Amendment addressed – see section 3.4 of this document for further explanation.	n/a	n/a	Section 3.4
10	Western Power to apply the required service standards to all covered transmission network assets, meshed or radial, in the SWIS.	Amendment addressed – see section 3.5 of this document for further explanation.	Section 3	Part D, Section 3.4	Section 3.5
11	Western Power to amend its proposed access arrangement to adopt the National Regulatory Reporting for Electricity Distribution and Retailing Businesses guidelines and definitions and include specified distribution service standard feeder types	Amendment addressed – see section 3.6 of this document for further explanation.	n/a	Part D, Section 3.5	Section 3.6
12	Western Power to amend its proposed access arrangement clause 3.13 and related clauses to adopt SWIS total SAIDI service standard benchmarks for the reference services RT1 to RT11 for the years ending 30 June 2007, 2008 and 2009 of 219, 206 and 194 SAIDI minutes per annum respectively. Western Power to propose SAIDI service standard benchmarks for each of the CBD, Urban, Rural Short and Rural Long feeder classifications for each year of the first access arrangement period that are consistent with the SWIS total SAIDI service standard benchmarks.	Amendment addressed – see section 3.7 of this document for further explanation.	Section 3	Part D, Section 3.5	Section 3.7
13	Western Power to propose SAIFI service standard benchmarks for each of the CBD, Urban, Rural Short and Rural Long feeders for each year of the first access arrangement period, commencing from the – SWIS total – value of 3.09 minutes from the Western Power 2004/05 annual report.	Amendment addressed – see section 3.8 of this document for further explanation.	Section 3	Part D, Section 3.5	Section 3.8

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
14	Western Power to propose performance reporting on SAIDI, SAIFI, CAIDI and MAIFI for each of the CBD, Urban, Rural Short and Rural Long feeder classifications in the SWIS. The feeder type criteria to be defined and applied in accordance with the National Regulatory Reporting for Electricity Distribution and Retailing Businesses definitions. Permissible exclusions to be determined only in accordance with the Steering Committee on National Regulatory Reporting Requirements endorsed IEEE Standard 1366 application for the 2.5 Beta methodology for SAIDI, as proposed by Western Power, for each feeder type. Include Worst Performing Feeder Program performance.	Amendment addressed – see section 3.9 of this document for further explanation.	n/a	Part D, Section 3.5	Section 3.9
15	For its Worst Performing Feeder Program Western Power to: explicitly identify the 20 worst metro, 10 worst north country and 10 worst south country feeders per its proposal for this program; and report the current service levels on each of the 40 worst feeders prior to commencement of the first access arrangement period.	Accepted. WP agrees to provide the information requested on the 40 Worst Performing Feeder Program as requested.	n/a	Part D, Section 3.5	Section 3.9
16	Western Power to revise its forecast transmission energy, having regard to the Independent Market Operator's submission "sent out energy forecasts" for the period 2006/07 to 2008/09 at the expected growth rates in accordance with Table 6 above.	Accepted. WP has adopted IMO 2005 SOO data	n/a	Part B, Section 2	n/a
17	Western Power to revise its maximum demand forecasts.	Accepted. WP has adopted IMO 2005 SOO data	n/a	Part B, Section 2	n/a
18	Western Power to revise its forecast distribution energy sales in light of the reduction in forecast sent out energy.	Accepted. WP has adopted IMO 2005 SOO data	n/a	Part C, Section 2	n/a
19	Western Power to revise the reference tariffs applicable to the reference services to reflect the changes in transmission and distribution energy forecasts.	Accepted. Western Power has revised the reference tariffs applicable to the reference services to reflect the change in transmission and distribution energy forecasts.	Appendix 5	n/a	n/a
20	Western Power to amend its determination of AARR (target revenue) in accordance with Equation 3 of this draft decision and adopt a revenue cap form of price control.	Accepted. Western Power has applied the ERA's revenue model (modified to include a return on working capital). The revenue model accords with Equation 3.	n/a	Part B, Section 8.2; and Part C, Section 7.2	n/a

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
20	Western Power to amend its determination of AARR (target revenue) in accordance with Equation 3 of this draft decision and adopt a revenue cap form of price control.	Amendment addressed: Western Power's access arrangement adopts a revenue cap form of price control.	Section 5	Part D, Section 4.2.4	Section 3.10
21	Western Power to amend its "K factor" to be determined in accordance with the Authority's assessment in the annual Revenue Adjustment Mechanism. The K factor should explicitly link to approved total costs, compare target (forecast) and actual revenues and be symmetrical (in relation to over or under recoveries against target revenue) in its application.	Amendment addressed. Western Power has explained the purpose of the correction factor in more detail in the AA, Appendix 8.	Appendix 8	n/a	n/a
22	Western Power to revise the price control clauses of its access arrangement ensuring consistency throughout with the required amendments, methodology and nomenclature described in this draft decision.	Accepted. Appendix 7 of the AA has been deleted and section 5 of the access arrangement amended accordingly.	Section 5	n/a	n/a
23	Western Power to revise its access arrangement to reflect total costs and target revenues in accordance with Table 11, Table 12, Table 13, Table 14, Table 15, Table 16, Table 17 and Table 18 of the draft decision.	Amendment addressed. Western Power has revised its Access Arrangement and Access Arrangement Information to reflect total costs and target revenues in accordance with the Draft Decision updated for the best information presently available to Western Power.	Calculation of target revenue amended accordingly	Appendix 6	Section 3.11
24	Western Power to confirm its allocation of AARR (target revenue) between reference and non-reference services.	Accepted. Western Power has confirmed its allocation of target revenue between reference and non-reference services in the AAI. In addition, section 5 of the AA sets out the revenue control arrangements and how these relate to reference and non-reference services.	n/a	Part B, Section 8.3; Part C, Section 7.3; and Part D, section 2.4	n/a

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
25	Western Power to confirm the role of the "X factor" in its revenue modelling and demonstrate that it provides a present value equivalent outcome if applied as a revenue smoothing mechanism.	Accepted. Western Power has applied the ERA's revenue model (modified to include a return on working capital). The revenue model accords with Equation 3. The access arrangement now adopts a revenue cap form of price control which does not contain X factor. The only "X-factor" is the revenue-smoothing process as per the Authority's revenue model.	Section 5	Part B, Section 8.2; and Part D, Section 7.2	n/a
26	Western Power to delete from its access arrangement, access arrangement information and target revenue any revenue requirement due to a return on working capital for both its transmission and distribution networks.	Amendment addressed. Western Power has undertaken an assessment of the timing of receipts and payments, and has derived an estimate of the net working capital requirements of the business on that basis.	Appendix 11	n/a	Section 3.12
27	Western Power to amend its access arrangement Appendix 7, section 10 formula to determine in real terms the aggregate allowance proposed to be included at commencement of the next access arrangement period.	Accepted. The detail previously provided in Appendix 7 of the AA has now been removed and section 5 of the AA updated accordingly	Section 5	n/a	n/a
28	Western Power to separately identify and substantiate in its access arrangement all relevant forecast capital and non-capital costs attributable to technical rules for the first access arrangement period.	Amendment addressed. The AA now requires WP to notify the Authority of a change in costs due to a technical rule change, and the Authority will determine the adjustment to target revenue to be made at the next AA review.	Section 5	Part D, Section 4.4	n/a
29	Western Power to amend its access arrangement Appendix 7, section 9 by specifying a formula for adjusting target revenue for technical rule changes in a manner that determines in real terms the aggregate allowance proposed to be included at commencement of the next access arrangement period.	Accepted	Section 5	Part D, Section 4.4	n/a

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
30	Western Power to apply the investment adjustment mechanism to transmission and distribution network new facilities investment.	Amendment addressed. Revisions to give effect to an investment adjustment mechanism that encompasses customer-initiated and demand-related transmission and distribution capital expenditure are now proposed.	Section 5	Part D, Section 4.5	n/a
31	Western Power's forecast capital expenditure categories to be in accordance with the capital expenditure categories by asset class and expenditure type as detailed in the Capital Expenditure section of this draft decision.	Accepted. Western Power has revised its forecast Capital Expenditure and detailed this within the Access Arrangement Information by asset class and expenditure type.	n/a	Part B, Section 4.4; and Part C, Section 3.4	n/a
32	Western Power to include an investment adjustment mechanism that compares forecast capital expenditure categories against actual capital expenditure by asset class and expenditure type.	Amendment addressed. Revisions give effect to an investment adjustment mechanism that encompasses transmission and distribution capital expenditure are now proposed.	Section 5	Part D, Section 4.5	Section 3.13
33	Western Power to provide a methodology for accounting between actual and forecast investment adjustment mechanism differences in real terms.	Accepted: All expenditures and revenues relating to actual and forecast investment adjustment mechanism are expressed in real terms	Section 5	n/a	n/a
34	Western Power to propose a reliability driven capital expenditure incentive mechanism.	Amendment addressed. The proposed investment adjustment mechanism (IAM) applies to customer-driven and load-related capex for distribution and transmission. Asset management related capex is excluded from the IAM.	Section 5	Part D, Section 4.5	Section 3.13
35	Western Power to amend its proposed service standard adjustment mechanism to remove the incentive payments from the transmission network service standard adjustment mechanism.	Accepted. A revised service standard adjustment mechanism has been proposed.	Section 5	Part D, Section 4.8	n/a

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
36	Western Power to amend its proposed service standard adjustment mechanism to remove the incentive payments from the distribution network service standard adjustment mechanism.	Accepted. A revised service standard adjustment mechanism has been proposed.	Section 5	Part D, Section 4.8	n/a
37	Western Power to amend its access arrangement to adopt the major asset groupings, optimised deprival values as at 1 July 2006 and estimated remaining useful lives for all network, metering and non-network assets used to provide covered services in accordance with Table 11 of this draft decision.	Accepted. Western Power has revised its Access Arrangement Information to reflect the major asset groupings, optimised deprival values as at 1 July 2006 and estimated remaining useful lives for each asset grouping consistent with Table 11 in the Draft Decision.	n/a	Part B, Section 6; and Part C, Section 5	n/a
38	Western Power to remove historical accumulated capital contributions from the initial capital base in accordance with its section 51 response, as summarised at Table 22 and Table 23 of the Network Valuation section of this draft decision and make the necessary consequential amendments to its price control formulae.	Accepted. Western Power has removed historical capital contributions from the initial capital base, and made necessary changes to the initial capital base and the price control.	Section 5	Part B, Section 6.3	n/a
39	Western Power to adopt the asset groupings for its transmission and distribution network capital expenditure in accordance with Table 31 of this draft decision.	Accepted. Western Power has revised its forecast Capital Expenditure and detailed this within the Access Arrangement Information by asset class consistent with the asset groupings in Table 31 of the Draft Decision.	n/a	Part B, Section 4.4; and Part C, Section 3.4	n/a

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
40	Western Power to adopt the capital expenditure and capital contributions in accordance with its section 51 response, subject to reviewing and amending the capital expenditure and capital contribution components of the SUPP and RPIP projects in real terms.	Accepted. Western Power has adopted the capital expenditure and capital contributions in accordance with its section 51 response, updated for the latest available information. Some variances exist between the information presented on capital contributions in the Section 51 response and the revise Access Arrangement Information, which are due to: <ul style="list-style-type: none"> • modifications to the technical rules to include an uplift in the ADMD ratings; and • commitments for “lumpy” transmission generation connections and mine site connections. 	n/a	Part B, Section 8.3; and Part C, Section 7.3	n/a
41	Western Power to present the capital expenditure and capital contribution costs by asset grouping in real terms.	Accepted. Western Power has revised the presentation of its forecast Capital Expenditure to be by asset grouping in real terms. Western Power has not included the presentation of capital contributions by asset group. In Western Power's view it is not possible to forecast which assets capital contributions relate to. In addition, in assessing and approving Western Powers target revenue and total costs a break down of capital contributions by asset group is not required.	n/a	Part B, Section 4.4 Part C, Section 3.4	n/a

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
42	Western Power to present the capital expenditure and capital contribution costs by expenditure type in real terms.	Accepted. Western Power has revised the presentation of its forecast Capital Expenditure and Capital Contributions to be by expenditure type in real terms.	n/a	Part B, Sections 4.4. and 8.3 Part C, Sections 3.4 and 7.3	n/a
43	Western Power to confirm its proposed treatment of capital contributions occurring from the commencement of the initial access arrangement period.	Accepted. Western Power's revised access arrangement confirms the proposed treatment of capital contributions	Section 5 and Appendix 8	n/a	n/a
44	Western Power to include the transmission and distribution capital contribution figures provided in its section 51 response, as summarised at Table 26 and Table 28 of the Capital Expenditure section of this draft decision and adjusted to be presented in real terms.	Accepted. Western Power has revised its forecast Capital Contributions and detailed this within the Access Arrangement Information consistent with the presentation of Tables 26 and Table 28 of the Draft Decision. Capital Contributions are detailed by expenditure type and have been updated to reflect the most current information available to Western Power.	n/a	Part B, Section 8.3 Part C, Section 7.3	n/a
45	Western Power to include a capital contributions adjustment mechanism to account for any differences between forecast and actual capital contributions over the initial access arrangement period, consistent with the objectives and application of the investment adjustment mechanism.	Amendment addressed. Western Power has implemented the required capital contributions adjustment mechanism in its revised proposed price control.	Section 5 and Appendix 8	Part D, Section 4.5	Section 3.14
46	Western Power to amend its proposed access arrangement to be consistent with its section 51 response and to identify asset groupings and economic lives for depreciation purposes in a manner consistent with Table 31 of this Depreciation section of the draft decision.	Accepted.	Section 6.2(b)	Part B, Section 6.4; Part C, Section 5.3	n/a
47	Western Power to confirm its adoption of straight line depreciation and any proposed accelerated depreciation, if applicable.	Accepted.	Section 6.2(b)	Part B, Section 6.4	n/a

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
48	Western Power to make consequential amendments to its proposed access arrangement to ensure there is no ambiguity in relation to which asset grouping applies to capital items.	Accepted. The access arrangement has been revised to ensure that there is no ambiguity in relation to which asset grouping applies to capital items.	Section 6	n/a	n/a
49	Western Power to remove the depreciation tax correction.	Accepted.	Reflected in calculation of target revenue	Part B, Section 8.2; and Part C Section 7.2	n/a
50	Western Power to amend its proposed access arrangement to adopt the transmission network operations and maintenance expenditure, in real terms, by expenditure type, in accordance with Table 36 of this draft decision.	Amendment addressed. Western Power has adopted revised expenditure forecasts based on the latest available information.	Reflected in calculation of target revenue	Part B, Section 5; and Appendix 6	Section 3.15
51	Western Power to amend its proposed access arrangement to adopt the distribution network operations and maintenance expenditure, in real terms, by expenditure type, in accordance with Table 37 of this draft decision.	Amendment addressed. Western Power has adopted revised expenditure forecasts based on the latest available information.	Reflected in calculation of target revenue	Part C, Section 4; and Appendix 6	Section 3.15
52	Western Power to amend its proposed access arrangement to reflect a pre tax real weighted average cost of capital of 6.0 per cent.	Amendment addressed. Western Power has proposed a revised WACC figure of 6.76% real pre tax based on the Authority's reasonable range, updated for the most recent risk free rate information in accordance with the Authority's WACC Methodology Determination issued in accordance with section 6.56 of the Code.	Section 7	Part B Section 7; and Part C, Section 6	n/a
53	Western Power to demonstrate that the revised price lists and price list information meet the requirements under chapter 7 of the Access Code.	Accepted.	Section 9, Appendix 5, Appendix 6	Part D, Section 5	n/a

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
54	Western Power to delete references in clauses 9.15 and 9.19 of the proposed access arrangement that require the Authority's approval of discounts.	Accepted. The relevant clauses have been deleted from the provisions relating to prudent discounts and discounts for distributed generation.	9.23 to 9.27; 9.28 to 9.30	Part D, Section 5.2	n/a
55	Western Power to specify prices for all reference services within the price list.	Accepted	Appendix 5	n/a	n/a
56	Western Power to resubmit its proposed price list and submit price list information consistent with the requirements of chapter 8 of the Access Code.	Accepted.	Section 9, Appendix 5, Appendix 6	Part D, Section 5	n/a
57	Western Power to clarify the purpose, effect and period of application of the loss factors specified in its tariff schedule relative to the Independent Market Operator's role.	Accepted. Western Power has removed the publication of loss factors from the Price List in light of the obligations of the Independent Market Operator (IMO) under section 2.27.3 of the Wholesale Electricity Market Rules. Reference is still required to loss factors in calculating the RT11 tariff, a loss adjusted DSOC is required in determining the total charges applicable. The details of the RT11 tariff have been updated to include a reference to the fact that the IMO publish loss factors.	Appendix 5	n/a	n/a
58	Western Power to confirm in its access arrangement the inclusion of the type, supply, installation and maintenance of meters applicable to reference services in accordance with the required amendments to Reference Services in this draft decision.	Accepted. The definition of Reference Services now includes "standard metering service" as per the Metering Code.	Appendix 7	n/a	n/a
59	Western Power to confirm in its access arrangement the meter reading type and frequency included in the reference services in accordance with the required amendments to the Reference Services and Standard Access Contract in this draft decision.	Accepted. The definition of Reference Services now includes "standard metering service" as per the Metering Code.	Appendix 7	n/a	n/a

Required Amendment	Amendment Wording (abridged)	Summary of Western Power's position	Further details contained in:		
			Access arrangement	AAI	This document
60	Western Power to confirm in its access arrangement the treatment for meter upgrades in accordance with the required amendments to the Capital Contributions Policy in this draft decision.	Amendment addressed. Schedule 3 of the Metering Code Model Service Level Agreement provides for no additional charge to be levied for meter upgrades. An appropriate modification has been made to the Access Arrangement.	n/a	n/a	n/a
61	Western Power to confirm in its access arrangement the elements of metering charges in reference tariffs in accordance with the required amendments to Pricing Methods and Price Lists in this draft decision.	Accepted. The definition of Reference Services now includes "standard metering service" as per the Metering Code.	Appendix 5, Appendix 7	n/a	n/a
62	Western Power to delete trigger events at clauses 8.1(a) and (b) of its proposed access arrangement.	Accepted. AA has been amended accordingly	Section 8	Part D, Section 10	n/a
63	The Authority requires Western Power to amend clause 1.5 of its access arrangement to reflect a revisions submission date of 1 October 2008.	Accepted.	Section 1.5	n/a	n/a

3 Reasons for Western Power's position: Part A Required Amendments

3.1 Required Amendment 6 – Benchmark transmission circuit availability

This amendment requires Western Power to amend its transmission network benchmarks for circuit availability (per cent of total time) for each year of the access arrangement period to 98.74 per cent.

As noted in its August 2005 access arrangement information (AAI):

- Western Power's original proposed benchmark was established following an examination of robust data relating to circuit availability over the 5 year period commencing in June 2000.
- Given the potential variability in the short term of availability performance, the proposed benchmark was chosen as the midpoint of the range of actual performance over the 5 years since June 2000.

Western Power considers that the transmission asset availability benchmark of 98.67% proposed in the August 2005 AAI was reasonable based on the information available at that time.

In preparing its response to this Required Amendment, Western Power has assessed data that has become available since July 2005, and the company is now proposing a benchmark for circuit availability of 98.2%, which is lower than in the original proposal. The reasons for this are as follows:

- Western Power has examined in further detail the impact that its planned network construction program (to extend and expand the system to meet projected load growth) will have on the availability of existing circuits.
- Planned major construction has recently required, and will continue to require, significant planned outages to facilitate this construction work.
- In undertaking these construction works, Western Power will continue to plan to manage circuit availability in an efficient and prudent manner, balancing the requirements of minimising costs of restoring circuits unnecessarily, against ensuring that system security and supply reliability are not compromised during construction outages.
- More recent data (see Table 1 below) is now showing the effect of recent major construction work on circuit availability over the first 9 months of 2005/06.

Table 1: Circuit Availability Historical Performance

	2002/03	2003/04	2004/05	2005/06 (first 9 months)
Circuit Availability (% of total time) (Outages for major work capped to 14 days)	98.82	99.06	98.96	98.22

In Table 1, planned outages for major construction work have been capped at 14 days. This approach is consistent with an exclusion that Western Power has proposed in response to Required Amendment 8 (see below). These data are only available for the period commencing in July 2002.

Having regard to:

- the company's recent circuit availability performance;
- the impact that recent planned construction outages have had on availability; and
- the large amount of on-going transmission construction works that the company has committed to undertake over the forthcoming access arrangement period.

Western Power is now proposing a benchmark for circuit availability of 98.2% which is equal to the performance in the first nine months of the 2005/06 year.

3.2 Required Amendment 7 – Benchmark transmission system minutes interrupted

This amendment requires Western Power to amend its transmission network benchmarks for system minutes interrupted (all transmission network) for each year of the access arrangement period to 7.8 minutes per year.

In response, Western Power proposes to adopt the benchmark of 7.8 minutes, but for meshed networks only. For the reasons set out in its response to Required Amendment 8 (below) the company proposes to adopt a separate benchmark for radial networks.

3.3 Required Amendment 8 – Allowable exclusions

This amendment requires Western Power to amend its list of allowable exclusions as follows.

For circuit availability, do not include as an exclusion:

- all zone substation equipment including power transformers; and
- Tee configuration line circuits.

For system minutes interrupted, do not include as an exclusion:

- all transmission network radial connections; and
- all zone substations connected to the transmission network via radial connections.

3.3.1 Circuit availability

In relation to exclusions applying to circuit availability, Western Power's August 2005 access arrangement proposal reflected the following relevant considerations:

- The proposed exclusions are generally consistent with typical transmission system configurations, and provide a reasonable level of consistency across jurisdictions, to enable valid comparison of reported performance.
- Transmission networks regulated by the AER under the National Electricity Rules do not include sub transmission networks, and the Code's definition of transmission system includes networks operating at voltages of 66 kV and above.
- Zone substation equipment was specifically excluded since Western Power has historically not classified this as transmission equipment; however that classification is now not consistent with the definitions set out in the Code.
- Tee lines were excluded due to problems in data reporting and recording.

In response to the Required Amendment:

- Western Power proposes to maintain the exclusions for circuit availability that it proposed in its August 2005 access arrangement submission, on the basis that these remain appropriate for the first access arrangement period, given the definitions of the relevant terms in the Code and the nature of the transmission system.
- Western Power agrees to gather data for Teed lines within 12 months of the approval of the access arrangement (once reporting mechanisms have been developed and implemented) with a view to having Teed lines included in the circuit availability benchmark in the next access arrangement period.
- Western Power proposes a new exclusion for Circuit Availability, which involves capping planned outages for major construction work at 14 days. The AER has approved similar exclusions for other TNSPs. The AER's predecessor (the ACCC) found that outages relating to major line works should be treated as excluded events under its revenue cap decisions. The ACCC has agreed that the time associated with these outages should be capped at 14 days in calculating transmission line availability.

3.3.2 System Minutes Interrupted

In relation to exclusions applying to system minutes interrupted, the August 2005 access arrangement proposal was based on the following relevant considerations:

- Outages on transmission radial feeders can cause an unreasonable bias in reported performance.
- Building parallel circuits to 'maintain' service standards on radial transmission lines is typically impractical and uneconomic.

- Similarly, building meshed transmission networks for small loads would typically not meet the new facilities investment test requirements in the Code. In addition, the Technical Rules state: “the N-0 criterion may be applied to sub-networks with a peak load of less than 20 MVA and to zone substations with a peak load of less than 10 MVA.” On this basis it is not a reasonable to expect that networks which have a mandated lower design standard to perform as reliably as those with higher design standards.

Having regard to the considerations set out above, and in light of Required Amendment 7, Western Power now proposes that “System Minutes Interrupted” benchmarks be established separately for the meshed and radial parts of the transmission system. Accordingly, Western Power proposes a service standard benchmark for radial parts of the transmission network of 3.9 System Minutes Interrupted. As shown in Table 2 below, the proposed benchmarks are consistent with the average level of actual performance over the 5 year period from 2000/01 to 2004/05. Although the proposed benchmark for radial circuits is less than that for meshed circuits, actual future performance should be expected to be significantly more volatile due to the inherent differences between radial and meshed networks.

Table 2: System Minutes Interrupted Historical Performance

	2000/01	2001/02	2002/03	2003/04	2004/05	Average for 2000/01 to 2004/05
Meshed	6.5	7.8	10.8	7.9	5.8	7.8
Radial	3.4	4.4	8.3	1.7	1.5	3.9

3.4 Required Amendment 9 – Definition of transmission performance measures

This amendment requires Western Power to adopt as a minimum transmission network service standards of:

- transmission circuit availability,
- average outage duration,
- frequency of “off supply” events, and
- intra-regional constraints,

in accordance with the Australian Energy Regulator's Compendium of Electricity Transmission Regulatory Guidelines, as at August 2005, for transmission network service standards. These performance measures are to be determined consistent with Schedule 1 – Definitions of Performance Measures, of the AER document. Intra-regional constraints are also to adopt reporting measures on the basis of the location, duration, frequency and time of day of the constraint.

Western Power concurs that there is merit in broadening the suite of performance measures applied to the transmission network, subject to the existence of established data gathering systems and a reasonable time series of data against those measures.

Given the absence at present of the required data gathering systems and processes, Western Power proposes service standard benchmarks that are generally consistent with those detailed in its August 2005 access arrangement submission. However, the company also now proposes to commence gathering data within 12 months of the approval of the access arrangement (once reporting mechanisms have been developed), to facilitate the adoption in the second access arrangement period of three of four benchmarks referred to in Required Amendment 9, for the reasons set out below.

Western Power considers that its position in response to this Required Amendment gives effect to the spirit of the amendment, within the constraints of the available data and existing performance monitoring systems and processes.

The following more detailed considerations provide further substantiation of the company's position:

- The service standard benchmarks set out in Western Power's August 2005 access arrangement submission is consistent with the Code objective and is not inconsistent with the relevant AER guidelines¹.
- Western Power does not presently have historical data for all of the indicators proposed in Required Amendment 9.
- Western Power cannot be reasonably expected to offer reference services at service standard benchmarks that have not been established with reference to historical levels of performance.
- System Minutes Interrupted is a good proxy for outage duration and frequency of event indicators and Western Power has robust historical records for system minutes lost.
- With respect to intra-regional constraints, Western Power notes that in the National Electricity Market, 'transmission constraint equations' facilitate the measurement of the market impacts of intra-regional constraints. Constraint equations are usually defined, written and required when electricity markets are developed. Their development is time-consuming, technically complex and resource-intensive. With the Western Australian wholesale electricity market (WEM) being designed as a day-ahead market and operated in a manual dispatch mode, constraint equations were not considered necessary at least in the early stages of the market. After constraint equations are written they must be integrated into a 'dispatch engine' which the WEM does not have at this stage. It is with these tools that intra-regional constraints can be recorded and evaluated. The ability to report on intra-regional constraints in the WEM is consequently a least a few years away and is currently not being considered.

¹ Refer to the AER's *Compendium of Electricity Transmission Regulatory Guidelines*, August 2005.

- As already noted, Western Power agrees to gather data for the outage duration and frequency of event indicators for both radial and meshed parts of the network commencing in approximately 12 months from the date of this submission (once reporting mechanisms have been developed) with the view to having these indicators included in the second access arrangement period.

3.5 Required Amendment 10: Transmission service standards

This amendment requires Western Power to apply the required service standards to all covered transmission network assets, meshed or radial, in the SWIS.

In accordance with the matters noted in the company's responses to Required Amendments 7, 8 and 9 (above), Western Power's revised proposed service standard benchmarks for the forthcoming access arrangement period for transmission are, in summary:

- System Minutes Interrupted (meshed network): 7.8 minutes
- System Minutes Interrupted (radial network): 3.9 minutes
- Circuit Availability: 98.2%
- For measurement of circuit availability, exclusions are:
 - Non-transmission equipment (equipment operating at voltages less than 66 kV such as zone substation power transformers);
 - Tee configuration line circuits; and
 - Outages for major construction work are capped to 14 days.

3.6 Required Amendment 11 – Adoption of national regulatory reporting guidelines and definitions

This amendment requires Western Power to adopt the National Regulatory Reporting for Electricity Distribution and Retailing Businesses guidelines and definitions, and to include the following minimum distribution service standard feeder types:

- CBD;
- Urban;
- Rural Short; and
- Rural Long feeders.

In response to Required Amendment 11, Western Power will add the CBD classification; retain the Urban classification (but modify the definition as per the guidelines); and retain a single Rural classification (but modify the definition per the guidelines). Western Power believes that this response best meets the Authority's concerns, whilst meeting the Code objectives.

The rationale for Western Power's original urban and rural classifications (as set out in the 24 August 2005 access arrangement information) was as follows:

- The classification was considered most meaningful and readily understood from a customer perspective.
- Western Power's reporting systems have been set up to reflect the definitions and reporting requirements in the Customer and Reliability Codes.
- The adoption of a different basis of reporting under the access arrangement would be an on-going source of confusion.

Western Power believes that the above observations remain valid.

Western Power accepts the adoption of the CBD feeder classification to compliment the Urban and Rural classifications. Providing that Western Power can adopt the same CBD definition that it proposes to use for the Reliability Code reporting (and this has been notionally agreed with the ERA's secretariat), this information is readily obtainable. The proposed CBD definition is therefore the load area of Hay Street and Milligan Street zone substations.

In regard to the Draft Decision's proposal for the adoption of Rural Short and Rural Long classifications, Western Power would need to undertake considerable work to implement the required recording and reporting processes. The estimated cost of this work is approximately \$200,000, and would take several months to implement. Western Power does not believe that it would be practical to undertake this work in the required timeframe or that it would provide any material benefit to end-consumers. Western Power would therefore prefer not to adopt the Rural Short and Rural Long classification, and no cost allowance for this required work has been included in the revised proposed access arrangement.

In regard to the Regulatory Reporting Guidelines, these define the urban/rural classifications by energy density (customer numbers per unit length), whereas Western Power's current classifications are based on geographic areas defined in the Customer and Reliability Codes. Reporting on a different basis against these different requirements is potentially confusing for Western Power, customers and the Authority. However, it is acknowledged that the Authority and stakeholders have a legitimate desire to be able to compare Western Power's network performance with others, and the AER is moving all jurisdictions within the NEM towards a common set of performance and reporting standards. Therefore, Western Power agrees to adopt the Regulatory Reporting Guidelines definitions for the purpose of service standards established under the Access Arrangement.

3.7 Required Amendment 12 – Changes to SAIDI targets and performance classifications

This amendment requires Western Power to adopt SWIS total SAIDI service standard benchmarks for the reference services "RT1 to RT11" (as defined in the August 2005 access arrangement submission) for the years ending 30 June 2007, 2008 and 2009 of 219, 206 and 194 SAIDI minutes per annum respectively. The Required Amendment also requires Western Power to propose SAIDI service standard benchmarks for each of

the CBD, Urban, Rural Short and Rural Long feeder classifications for each year of the first access arrangement period that are consistent with the SWIS total SAIDI service standard benchmarks.

Western Power has adopted this amendment with the exception that it retains the original starting value of SAIDI and 25% improvement target (in terms of both quantum and profile) over the forthcoming access arrangement period, for the reasons set out in detail below. In addition, Western Power believes that only a single rural classification is appropriate as explained in response to Required Amendment 11.

Western Power's August 2005 access arrangement submission established that a SAIDI improvement target of 25% would be set for the first access arrangement period. Furthermore, this target would be made, tracked and measured against a 2.5 Beta exclusion arrangement as per SCNRRR guidelines and IEEE 1366.

It is emphasised that the 25% improvement target was made with reference Western Power's June 2004 SAIDI figure of 298 SAIDI minutes for the SWIS. This figure represents an "all faults" view of Western Power's performance – which includes LV and HV multiple customer faults; and excludes Major Event Days as per SCNRRR and IEEE guidelines. This view is quite different and more representative of Western Power's customers' experience than those measures used in the past (such as ESAA measures), which excluded a significant number of network outages such as HV and LV fuse operations.

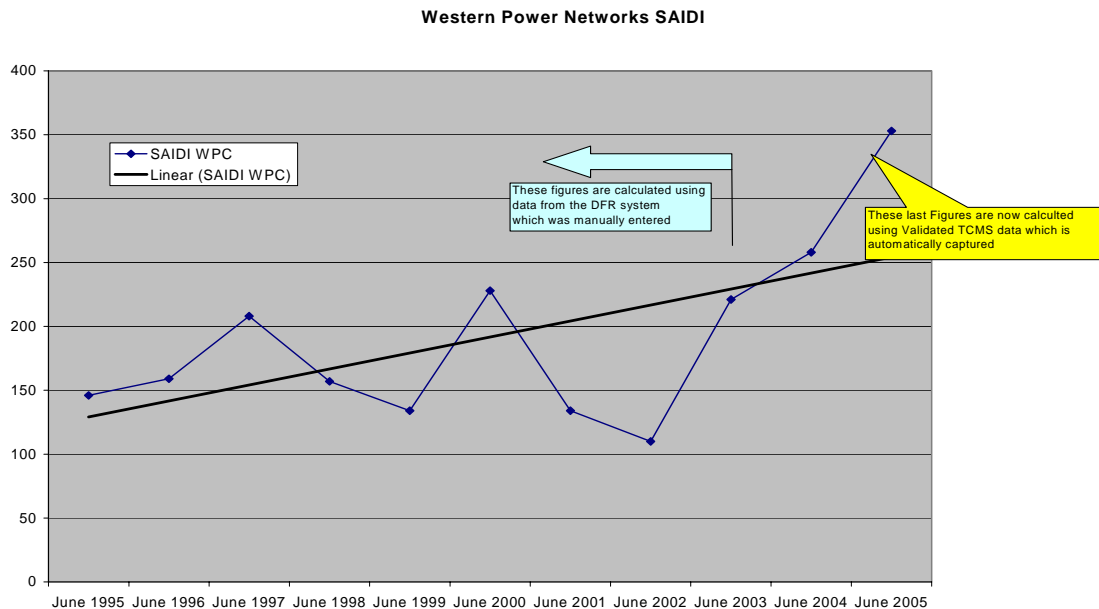
The 298 SAIDI figure quoted throughout Western Power's August 2005 access arrangement submission is based on June 2004 data – validated through a rigorous and lengthy process to ensure accuracy and correctness. This figure establishes Western Power's initial position with respect to SCNRRR endorsed IEEE 1366 and cannot be used for comparison purposes with other reporting regimes such as ESAA, Technical Regulations, All Faults etc. This figure (i.e. 298 SAIDI minutes) is consistent with Reliability figures presented (but wrongly labelled as "Targets" as opposed to "Actual") in Western Power Corporation's 2004/2005 Annual Report. Western Power Corporation's 2003/2004 Annual Report did not make reference to (nor imply) SCNRRR endorsed IEEE figures – ESAA figures were historically used for these reports, up to and including 2003/2004.

The SWIS SAIDI figure of 298 minutes is based on a total Customer Interruption Minutes (CIM) of 247,627,368 and a customer base of 830,503. The SAIDI figure excludes two major event days that exceeded the TMED for the preceding year (9.13 minutes): 3 August 2003 (11.81 minutes) due to storms and 9 February 2004 (10.90 minutes) due pole top fires.

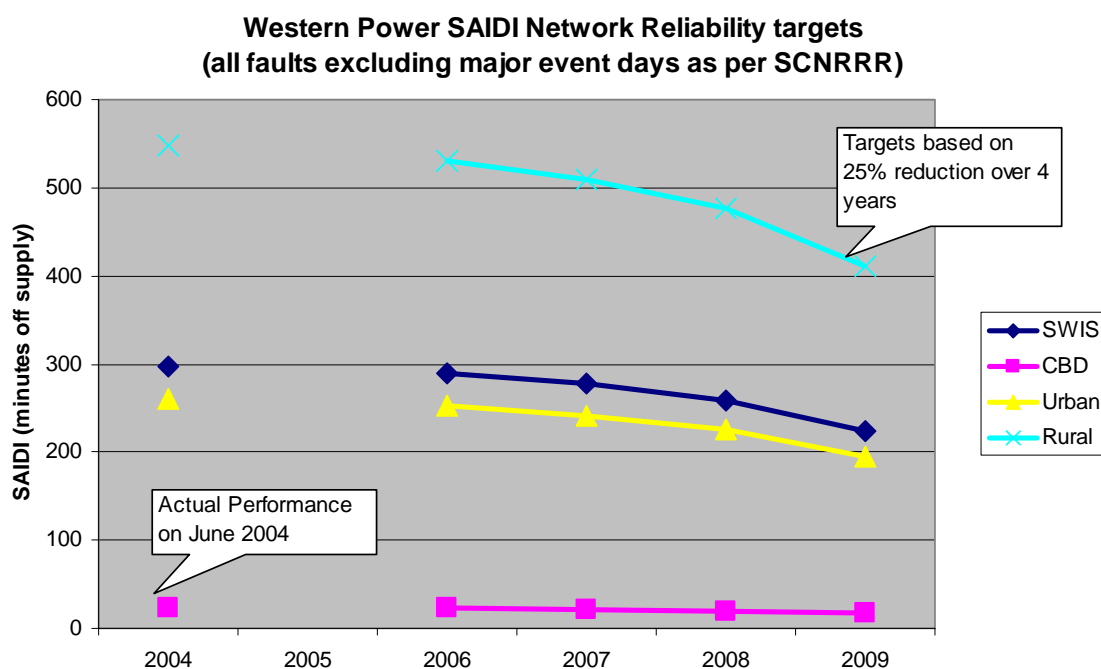
Figure 23 (reproduced below) in Western Power's August 2005 access arrangement information explains how historical data (pre Jun 2004) from the DFR system was used to examine a worsening reliability trend over a number of years. An attempt is also made to translate reliability data from a newer system, TCMS, to a level where the figures are comparable. This translation is only possible by applying the same standard and/or regime that DFR used to report to – which in this case is ESAA. As already noted, ESAA figures – as they are commonly known – do not include HV and LV fuse operations and therefore cannot be compared to SCNRRR/IEEE figures. As such, information in Figure 23 was never intended to be used to establish performance targets

and/or represent an accurate representation of Western Power's performance from a customer's viewpoint. Western Power acknowledges it could have possibly explained this more clearly to avoid any confusion about the intent.

Figure 23 - Western Power Networks SAIDI (Based on ESAA reporting guidelines)



On the other hand Figure 20, (reproduced below) in Western Power's August 2005 access arrangement information, not only established Western Power's position with respect to an "All faults minus 2.5 Beta events" perspective, but also presents WP's challenging performance improvement targets over a 4 year period, which includes the first access arrangement period.

Figure 20 - Western Power Networks Reliability Targets (SAIDI)

In relation to the delivery of the performance improvement profile, the improvement in SAIDI performance is one that would be gradual and cumulative towards the final year of the access arrangement period. In other words, the majority of the 25% improvement is expected to take place in the final year due to the time delay inherent in a lag indicator such as SAIDI (which is a 12 month rolling average). It is therefore important to highlight that strategies implemented over the next 12 months can be expected to generate a tangible improvement in SAIDI during the following 12 to 24 months after implementation. Table 3 below summarises Western Power's SAIDI reliability targets for each performance category to June 2009.

Table 3: Western Power Networks Reliability Targets (SAIDI) – MED Exclusions as per SCNRRR

SAIDI	SWIS	Urban	Rural	CBD
June 2007	277	244	509	21.4
June 2008	259	229	476	20.0
June 2009	224	197	410	17.3

Notes:

- A. Initial expenditure profiles (produced to demonstrate the stated 25% improvement targets) not only indicated a much larger capital investment requirement than that which Western Power now proposes to undertake, but also highlighted the requirement to invest up to 67% of the total Reliability Improvement capex allocation for the 3 years of the regulatory period over the first two years. Final budget allocations not only considerably reduced the overall

capex allocation (due to resource constraints) but also resulted in a reduction in expenditure to 47% (of total) in the first 2 years – making it extremely challenging to deliver on the target over the stated period, particularly when coupled with the fact that the amount of asset replacement capex is also sub-optimal (due to resource constraints) - a point Wilson Cook acknowledges.

- B. The change in definition of “urban” and “rural” feeder classifications will effectively migrate a number of feeders from one classification to the other (compared with the original geographic definitions). This will obviously alter the calculated outcomes of both actual and forecast performance for these classifications. While it is impossible to accurately quantify this at this stage, it is expected that the net effect will be to slightly decrease and increase the number of feeders in urban and rural respectively, leading to some reduction in calculated performance in both categories. However, this effect is not expected to be material and no alteration to the SAIDI targets (i.e. based on the original classification definitions) is proposed.

3.8 Required Amendment 13 – adoption of SAIFI service standards

This amendment requires Western Power to propose SAIFI service standard benchmarks for each of the CBD, Urban, Rural Short and Rural Long feeders for each year of the first access arrangement period, commencing from the value of 3.09 minutes for the SWIS from Western Power's 2004/05 annual report.

Western Power agrees to adopt SAIFI as an additional service standard but will set the starting point and profile to be consistent with Western Power's definition of this measure, and the company's proposed SAIDI service standards for the first access arrangement period.

Western Power accepts the introduction and implementation of SAIFI service standard benchmarks for CBD, Urban and Rural feeder classifications for the first access arrangement period. However, Western Power believes that only one classification is appropriate in relation to rural feeders for the reasons provided in the company's response to Required Amendment 11.

The starting point for SAIFI must also be consistent with the SAIDI starting point, where the corresponding June 2004 SAIFI figure is 3.7. This figure is consistent with Western Power's 2004/05 annual report. (Please note that all figures in the annual report are made with reference to end of financial year positions – i.e. 2004/05 actual figures represent June 2005 figures. Furthermore, as noted earlier, the 2004/05 annual report figures were wrongly labelled “Target” – the label should have read “Actual”). The June 2004 figures are shown in Table 4 below:

Table 4: Western Power Networks Performance Figures – June 2004 (ACTUAL) - MED Exclusions as per SCNRRR

Region	SAIFI	SAIDI	CAIDI
Urban	3.63	263	72
Rural	4.43	547	124
CBD	0.34	23	67
SWIS	3.70	298	81

Following the above discussion in relation to Required Amendment amendments 11 and 13, Western Power proposes the SAIFI targets with identical percentage improvements as for SAIDI over the period, as set out in Figure 1 and Table 5 below.

Figure 1

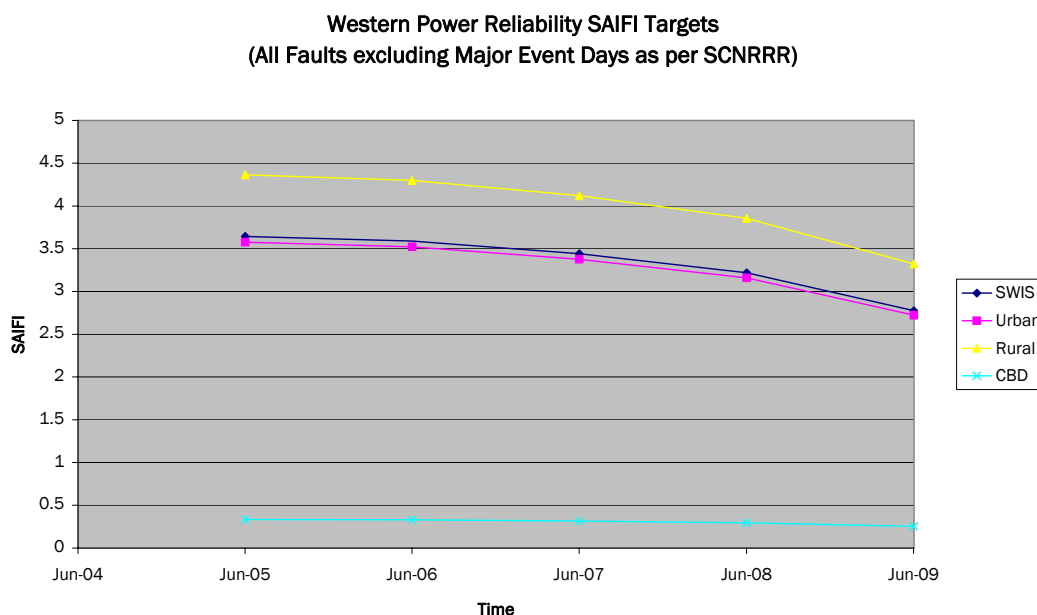


Table 5: Western Power Networks Reliability (SAIFI) Targets² - MED Exclusions as per SCNRRR

SAIFI	SWIS	Urban	Rural	CBD
June 2007	3.44	3.38	4.12	0.32
June 2008	3.22	3.16	3.85	0.30
June 2009	2.78	2.72	3.32	0.26

² All faults excluding major event days in accordance with SCNRRR and IEEE1366 definitions.

The SAIFI performance indicator 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 consumers at the beginning and end of the period.
Exclusions:	<ul style="list-style-type: none"> 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).- <i>Force majeure</i> events.

3.9 Required Amendments 14 and 15 – Adoption of SAIDI, SAIFI, CAIDI and MAIFI for each of the CBD, Urban, Rural Short and Rural Long feeder classifications in the SWIS; and reporting on worst performing feeders

Required amendment 14 requires Western Power to propose performance reporting on SAIDI, SAIFI, CAIDI and MAIFI for each of the CBD, Urban, Rural Short and Rural Long feeder classifications in the SWIS.

Western Power will implement the reporting arrangements specified in Required Amendment 14, with the following exceptions:

- One Rural classification only will be implemented (for the reasons set out in response to Required Amendment 11); and
- MAIFI reporting will not be implemented.

Western Power accepts the requirement to report on SAIDI, SAIFI and CAIDI for each of the CBD, Urban and Rural feeder type classifications in the SWIS – and for all data models being requested (i.e. Raw, 2.5 Beta, etc). However, Western Power believes that it is more appropriate for these reporting requirements to be established as an operating licence condition, as opposed to an access arrangement requirement.

Data and system limitations make it impossible at this point to report on MAIFI across the network with any degree of integrity. There are many switching devices on the network that are not telemetered and are not suitable for telemetering. A multi-million dollar investment would be required to enable an accurate measurement of MAIFI. Because of the degree of automation in the CBD, it should be possible to provide MAIFI for the CDB feeder classification – however, due to the nature of the CBD network (i.e.

mainly underground) MAIFI figures would be insignificant as the network consists primarily of underground cables – where Auto Reclose functionality is not used.

Western Power believes that the concept, definition, and value of such an indicator needs to be carefully considered – including the implications associated with managing service standards against an indicator that may result in negative impact(s) on other indicators such as SAIDI and SAIFI. (For instance, Western Power could introduce line fuses to minimise MAIFI, to the detriment of SAIDI and SAIFI).

Western Power does not believe that the cost of establishing a MAIFI reporting capability can be justified at this time.

In relation to Required Amendment 15, Western Power agrees to provide the information requested on the 40 Worst Performing Feeder Program as requested. However, for the reasons set out in relation to Required Amendment 14, Western Power does not believe that reporting requirements should formally form part of the access arrangement. The type of information that Western Power intends to submit to the Authority is set out below. It should be noted that this information is presented strictly for illustrative purposes only.

Geographical Area	40 Worst Feeders	Feeder SAIDI 2004-06	Feeder SAIFI 2004-06
Metro	RO509 BROUGHTON	1588.25	14.18
Metro	H514 SCADDEN ST	767.66	8.75
Metro	MH516 THOMPSON	834.58	12.40
Metro	CC501 RUSSELL RD WEST	698.20	5.23
Metro	SV501 CHIDLOW	774.77	8.75
Metro	RO522 MCLEAN	445.04	5.22
Metro	CVE516 NICHOLSON RD	472.80	9.63
Metro	TT514 TATE ST	440.78	4.69
Metro	YP514 KAROBORUP RD	592.83	9.19
Metro	BYF505 ALEXANDER RMU	631.51	7.48
Metro	D501 VICTOR ROAD EAST	922.49	9.26
Metro	MH517 DOWER.N	274.91	4.14
Metro	MH501 ELIZABETH	246.68	3.99
Metro	YP505 WANNEROO RD NTH	1395.83	11.77
Metro	MED514 LITTLEMORE RD	269.15	4.82
Metro	A506 WADHURST ST	264.38	3.97
Metro	BYF503 ALEXANDER/GEOR	477.97	6.10
Metro	MJ510 SWANVIEW	221.98	3.78
Metro	A503 ARKANA RD EAST	248.77	4.65
Metro	NB504 BRADWELL ST	169.94	2.73
North Country	NOR540 YORK	547.45	2.43
North Country	NOR535 TOODYAY	604.32	6.66
North Country	MOR610 DALWALLINU	1284.85	9.82
North Country	ENB614 JURIEN	618.32	3.67
North Country	GTN602 NORTHAMPTON	663.29	7.88
North Country	KDN603 CORRIGIN	1022.66	8.49

Geographical Area	40 Worst Feeders	Feeder SAIDI 2004-06	Feeder SAIFI 2004-06
North Country	GTN610 DONGARA	317.26	1.75
North Country	KDN611 KULIN	832.94	5.49
North Country	TS611 MORAWA	681.40	5.62
North Country	GTN620 MULLEWA	382.62	2.56
South Country	ALB514 WILLYUNG	1982.34	12.43
South Country	NGN513 BROOKTON	1330.41	5.64
South Country	BUH525 BUNBURY SOUTH	371.71	3.34
South Country	BNP521 BEENUP	834.24	9.80
South Country	PIC513 KIRUP	601.01	4.57
South Country	BTN516 BOYUP BROOK	1340.55	7.89
South Country	KAT509 GNOWANGERUP	1095.47	9.16
South Country	MJP507 PEMBERTON	1369.14	8.85
South Country	BUH514 CAREY PARK	154.84	3.30
South Country	CLP508 DWELLINGUP	559.43	6.99

3.10 Required Amendment 20: Form of price control

This amendment requires Western Power to adopt a revenue cap form of price control. Western Power does not accept that the Code requires the company to adopt a revenue cap form of price control. However, Western Power is prepared to accept Required Amendment 20 on the basis of expediency.

Western Power accepts the application of the revenue cap for the first access arrangement period, noting the Authority's comments in relation to the uncertainty associated with capital expenditure and energy forecasts at this time. However, Western Power reserves its right to reconsider the form of price control for subsequent access arrangement periods.

3.11 Required Amendment 23: Revision of operating and capital costs and target revenues

This amendment requires Western Power to revise its access arrangement to reflect total operating and capital costs and target revenues in accordance with values specified in the Draft Decision.

In response, Western Power notes that its revised access arrangement proposal now contains increased expenditure levels compared with those contained in its August 2005 access arrangement proposal and the expenditure levels proposed in the Draft Decision. This section provides a brief overview and explanation of the changes to the proposed expenditure levels for the forthcoming access arrangement period.

Since the preparation of the expenditure forecasts for the August 2005 access arrangement submission a number of significant events have occurred that have impacted on Western Power's forecast expenditure requirements for the period. These events include:

- separation of Western Power Corporation into separate network, generation and retail businesses;
- further development of the Technical Rules;
- release of an updated Statement of Opportunities including significantly revised demand forecasts;
- a number of possible customer-driven projects have become firm commitments;
- agreements have been made regarding future wage increases for Western Power staff;
- investigations into resourcing capital works have progressed with various contractors; and
- 2005/06 actual expenditure levels are now largely known (with 80% of that period now complete).

Each of the above events has allowed Western Power to review its August 2005 expenditure plans with increased certainty regarding:

- the structure and functions of the newly-established network business;
- the corporate functions and staff that have been transferred to Western Power;
- the costs of performing those functions, based on:
 - actual staff numbers and agreed future increases in labour rates; and
 - up-to-date contractor rates;
- network growth requirements; and
- re-assessment of resourcing capability in view of work-plan achievements during the first 10 months of 2005/06.

Sections 3.11.1 and 3.11.2 below provide an overview of Western Power's revised capital and operating expenditure plans respectively, with reference to those set out in its August 2005 access arrangement proposal (and which were largely accepted by the Authority in the Draft Decision).

3.11.1 Capital Expenditure

The capital expenditure plans proposed by Western Power in the August 2005 access arrangement submission were reviewed and accepted as reasonable by the Authority. Table 6 below provides a summary of changes to the proposed level of capital expenditure for the first access arrangement period. The total increase in proposed expenditure is \$247.0 million.

Table 6: Summary of changes to the proposed capital expenditure

Category	Access Arrangement 24/8/05			Revised Access Arrangement			Change	Reason
	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	All costs are Nominal \$M	
Distribution Capex								
Capacity	30.2	34.0	40.3	31.3	34.0	40.3	+1.12	Carryover of projects from 05/06
Customer Driven	84.5	84.5	84.5	92.7	110.5	129.1	+78.9	Incremental Changes to Technical Rules, legislation etc.
Reliability	7.7	12.0	21.9	7.7	12.0	21.5	-0.5	Minor adjustments
Safety, Environmental & Statutory	28.2	40.0	44.7	30.2	41.7	44.7	+3.7	Adjustments to various programs as listed below.
IT (incl market reform)	15.2	11.4	13.0	25.7	18.3	15.6	+20.11	Logistics and Metering added + HiREPS and cost increases to existing projects.
RPIP	10.3	10.6	-	10.3	10.6	12.0	+12.0	Extension of RPIP program to 08/09
Transmission Capex								
Customer Driven – Bulk Loads	-	-	-	11.8	52.6	12.2	+76.6	Boddington Gold Mine – new Project approved by Cabinet committee
Customer Driven - Generation	47.9	25.7	20.1	68.3	40.8	24.7	+40.04	Addition of Neerabup project and rescheduling of other projects.
Generation Tariff Meters	-	-	-	4.0	5.3	-	+9.3	Revenue class metering for generation power stations to enable market operation.
Wholesale Market	-	-	-	0.1	3.7	1.9	+5.72	IT software to manage market when full scale wholesale market introduced
TOTAL Capex change							247.0	

The reasons for the increases are outlined for each expenditure category below:

Distribution Capacity: There has been an increase in the Distribution Capacity budget of \$1.12 million in 2006/07 due to the carry-over of a small amount of planned project work from the 2005/06 period.

Distribution Customer Driven: The forecast increase of \$26.3 million per annum (average; escalated in 2007/08 and 2008/09) is related to changes to be implemented in the new Technical Rules and other legislation and standards with which Western Power must comply. The individual items are detailed in the "Capital and Operating Expenditure Program" document (at Appendix 6 of the access arrangement information) and in summary consist of:

- Transformer noise enclosures \$0.84M per annum
- Reduced number of customers on radial feeds \$5.4M per annum
- Increased ADMDs for residential subdivisions \$19.1M per annum
- Increased loads for commercial & industrial subdivisions \$5.2M per annum
- Pole to pillar connections mandatory \$8.0M per annum
- Distribution Remote Control Monitoring \$6.8M per annum
- Streetlighting – increased lighting levels & decorative fittings \$1.8M per annum
- Fire proof construction \$2.3M per annum

NOTE: The costs shown above relate to the full implementation of these changes. The expenditure forecasts of \$8.2 million, \$26.0 million and \$44.7 million for 2006/07, 2007/08 and 2008/09 respectively are based on progressive implementation of the new Technical Rules and other legislation and standards over the regulatory term.

Cost estimates are based on expected costs in 2006/07 and have been escalated by 3% per annum for 2007/08 and 2008/09 to account for increases in labour and materials costs.

Distribution Reliability: There is a decrease of \$0.5 million over the 3 year access arrangement period in the reliability budget due to minor changes to the project forecasts.

Distribution Safety, Environmental and Statutory: There is an increase of \$3.7 million over the 3 year access arrangement period in the Safety, Environmental and Statutory budget due to adjustments to the programs for the following activities:

- Overhead customer service connections - Replacement of suspect overhead service wire connectors: +\$2.6 million;
- Metal SL poles - Upgrade earthing of metal streetlight poles: +\$0.08 million;
- URD pits - Replacement of suspect service connection pits in residential areas budget reduced by \$0.7 million;

- Cattle Care - Installation of concrete pads around rural poles: reduced by \$0.06 million;
- TX poles - Replacement of transformer poles with inadequate steel reinforcing: +\$0.5 million;
- River Crossings - Upgrade power line clearances over river crossings: +0.01 million;
- Bushfire mitigation - Upgrade low voltage lines to mitigate risk of conductor clashing: +\$0.4 million; and
- Power Quality Compliance – Targeted upgrading of network to resolve various power quality issues: +\$0.7 million.

Distribution Information Technology (IT): There is an increase of \$20.11 million over the 3 year period in the IT budget due to:

- one strategic project addition (HiREPS) of \$3.4 million. This expenditure is for the development and implementation of a high-level resource and work planning tool;
- the addition of the logistics service group including relevant projects, with a value \$3.0 million;
- increases in project costs following a review of original cost estimates along with re-forecasting of timing for implementation schedules: \$9.0 million; and
- a significant amount of support work relating to post-reform implementation: \$4.0 million.

Distribution RPIP: There is an increase in the Rural Power Improvement Program budget of \$12.0 million in 2008/09 representing the continuation of this program in 2008/09 at the current funding level of \$12 million per annum. Western Power expects that this government-sponsored program will be extended beyond the current program which is due to be completed in 2007/08.

Transmission Customer Driven – Bulk Loads: Network augmentations are required to enable the connection of the expanded Boddington Gold Mine with a peak demand of 172.5 MW. The existing 132 kV transmission network in the Boddington area does not have adequate capacity to supply the new load. The total project cost is currently estimated at approximately \$76.95 million. Initial costs will be incurred in 2005/06 with the remaining \$76.65 million projected over the 2006/07 to 2008/09 period.

Transmission Customer Driven - Generation: There is an increase of \$40.4 million over the 3 year access arrangement period in the Customer Driven Generation projects due to the inclusion of the Neerabup terminal station project that has become a firm commitment since the previous forecast was prepared for the August 2005 access arrangement submission. A number of other adjustments have also been made to the existing project list to account for changes to budgets and timing, the overall increase in the budget is \$40.4 million.

Generation Tariff Meters: Generation Tariff Meters is a new expenditure category that has been added to the budget since the August 2005 access arrangement submission due to the requirements of the new electricity market. The total expected expenditure is \$9.3 million over the 3 year access arrangement period and this relates to the installation of 132 kV and 330 kV revenue class metering equipment for generation power stations now operated by VERVE to cater for more sophisticated market operation. Accurate measurement of generation output is essential for financial settlements and market management purposes.

Wholesale Market: This is a new expenditure item that has been added since the August 2005 access arrangement submission due to the requirements of the new electricity market. The total expected expenditure of \$5.7 million over the 3 year access arrangement period relates to the IT software “balancing engine” which is required to manage the Western Power system management functions of generation dispatch and settlement when a full scale wholesale market is introduced in Western Australia which is expected to occur in 2008.

3.11.2 Operating Expenditure

In the August 2005 access arrangement submission Western Power proposed operating expenditure levels in line with its planned operational requirements and anticipated changes due to the separation of Western Power Corporation. Since that time the separation has occurred and there is now greater certainty over actual staffing levels and other operating costs. The Wilson Cook review (commissioned by the Authority) recommended that operating costs proposed in the August 2005 access arrangement submission were reasonable and well supported with the exception of Transmission and Distribution Network Operations and Distribution Network Support Costs where reductions to historical levels were recommended.

Western Power's revised access arrangement (submitted in response to the Draft Decision) includes operating expenditure forecasts that are \$126.2 million higher than those assessed by Wilson Cook and adopted in the Draft Decision. Table 7 below outlines the increases in proposed operating expenditure compared with the Authority's Draft Decision and Wilson Cook's recommendations.

Table 7: Overview of increases in proposed operating expenditure

Category	Access Arrangement 24/8/05			Revised Access Arrangement			Change	Reason
	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	All costs are Nominal \$M	
Distribution								
Maintenance (TOTAL)	77.3	76.0	76.8	99.3	98.0	98.8	64.8	Overall increase in maintenance budget due to escalation of labour costs and unit rates for maintenance activities.
Misc Network Services	-	-	-	2.0	2.0	2.1	6.1	Provision of various network services (e.g. asset relocations) as non-reference services
Network Operations	7.4	7.6	7.8	8.8	9.3	9.7	5.0	Centralised control functions and increased operations to cater for capex/opex increases.
IT&T	11.2	12.8	15.1	13.3	14.9	18.8	7.9	New depreciation cost and other minor project adjustments
Network Support	25.8	26.4	27.1	45.8	50.1	53.5	70.1	Restructure of WPC. Allocation between T & D based on % labour & material for non support activities
Transmission								
Maintenance (TOTAL)	21.2	21.3	21.7	21.8	21.9	22.4	1.9	Escalation of labour costs and unit rates for maintenance activities.
Misc Network Services	-	-	-	4.2	4.4	4.5	13.1	Provision of various network services (e.g. asset relocations) as non-reference services
IT&T	6.6	7.3	7.8	7.5	8.2	8.8	2.8	As for Distribution
Network Support	29.1	30.0	30.8	13.6	15.2	15.5	-45.6	Restructure of WPC. Allocation between T & D based on % labour & materials for non support activities
TOTAL							126.23	

Note: Figures in italics in Table 7 are based on the ERA Assessments given in Tables 36 & 37 of the Draft Decision (expressed in real \$ terms) and have been escalated by 2.6% per annum to approximate nominal \$ to be compared against values from Western Power's forecasting process.

The reasons for the increases are outlined for each expenditure category:

Distribution Maintenance TOTAL: There has been an increase in the Distribution Maintenance overall forecast of \$64.8 million over the 3 year access arrangement period (approximately \$21.6 million per annum) to allow for required increases in both preventive and corrective maintenance programs, now made possible by re-assessment of available resources, and cost increases, as evidenced in the actual work-plan achievements in the 2005/06 financial year. The specific areas in which expenditure will increase include:

- Preventive Condition – Vegetation Management (+\$7.8 million per annum average) to enable improved performance in fire risk areas and improve safety management.
- Preventive Condition - Pole Maintenance (+\$1.3 million per annum average). Improved inspection techniques are expected to identify a greater amount of remedial work than originally estimated.
- Preventive Routine – Pole Base Inspection (+\$1.5 million per annum average) to allow for increased inspection costs and inclusion of additional 23,000 pole inspections not included in previous estimates.
- Preventive Routine – Insulator Siliconing (+\$0.6 million per annum average) to mitigate the incidence of pole top fires.
- Preventive Routine – Service Connection Inspections (+\$0.3 million per annum average) costs per inspection has increased, leading to an increase in the overall cost of this program.
- Preventive Routine – Bulk Globe Replacement (+\$1.1 million per annum average) due to increase in the number of globes required to be replaced under contract with Synergy.
- Preventive Routine – Pole Top Inspection and Line Patrols (+\$0.63 million per annum average). Updated information from contractor indicates that the cost of this program will be slightly higher than original estimates.
- Preventive Routine – Vegetation Inspection (+\$1.3 million per annum average). Forecast increase to reduce vegetation inspection cycle in medium risk areas from 3 to 2 years, as now proven necessary.
- Preventive Routine – Fuse Pole Clearing (+\$1.55 million per annum average) at an additional 3000 sites in fire risk areas.
- Corrective Deferred - Perth One Call (+\$0.45 million per annum average). Increased level of construction in Perth requires additional resources to service the “Dial before you Dig” callers.

- Corrective Deferred - Graffiti Cleanup (+\$0.08 million per annum average). Expected increases in contract costs are associated with meeting a Government directive issued in May 2006 to ensure graffiti is cleaned up within 48 hours.
- Corrective Emergency – Primary Emergency response (+\$4.9 million per annum average). New forecasts reflect new expectations in view of recent actual activity levels and expenditures to date in this financial year, particularly given the extremely mild weather conditions during this period.

Distribution Miscellaneous Network Services: This is a new expenditure category that has been added since the June 2005 access arrangement proposal was submitted. The total proposed expenditure is \$6.1 million over the 3 year access arrangement period and the expenditure covers the provision of a number of miscellaneous distribution network services to customers, including:

- Requested relocation of assets;
- Network planning studies;
- Requested network switching/isolation;
- Temporary builders supplies; and
- Safety escorts for transport of high loads.

The proposed expenditure reflects historical levels of service provision, noting that the associated costs and revenues were not previously included in the regulatory forecasts.

Distribution Network Operations: There has been an increase in the Distribution Network Operations of \$5.0 million over the 3 year access arrangement period compared with the expenditure level recommended by Wilson Cook and adopted by the Draft Decision. The Draft Decision stated that insufficient supporting information was provided to assess the reasonableness of the increased expenditure in this area and therefore recommended a level based on the forecast expenditure for 2005/06.

The “Capital and Operating Expenditure Program” document (provided at Appendix 6 of the revised Access Arrangement Information) now includes detailed supporting data for the forward estimates and explains the reasons for increases in this category including centralisation of network operations in line with best practice to improve safety, consistency and quality of the work. Increased operations activities are also required to allow safe access to the network for the increased level of capital and operating expenditure activities.

Distribution IT&T: There has been an increase in the Distribution IT&T forecast of \$7.9M over the 3 year period. This is due to minor project adjustments and a new depreciation cost related to capitalized IT system modifications required for disaggregation of Western Power Corporation.

Transmission & Distribution Network Support: There has been an increase in the Distribution Network Support of \$70.1 million, and a reduction of \$45.6 million in the Transmission Network Support over the 3 year period compared with the expenditure

levels recommended by Wilson Cook and adopted by the Draft Decision. Between transmission and distribution there is a net increase of \$24.5 million. The Draft Decision stated that insufficient supporting information was provided to assess the reasonableness of the increased expenditure in this area and therefore recommended a level based on the forecast expenditure for 2005/06.

The "Capital and Operating Expenditure Program" document (provided at Appendix 6 of the revised Access Arrangement Information) now includes detailed supporting data for the forward estimates and explains how Western Power has been restructured to cater for previously centralised business support functions. Each of the activities and costs associated with these activities are detailed in that document.

Transmission Maintenance TOTAL: There has been an increase in the Transmission Maintenance overall budget of \$1.9 million over the 3 year access arrangement period. The increase is due to escalation of labour rates and unit rates for maintenance activities.

Transmission Miscellaneous Network Services: This is a new expenditure category that has been added since the August 2005 access arrangement proposal was submitted. The total proposed expenditure is \$13.1 million over the 3 year regulatory period and the expenditure covers the provision of a number of miscellaneous distribution network services to customers, including:

- Requested relocation of assets;
- Network planning studies; and
- Requested network switching/isolation;

The proposed expenditure reflects historical levels of service provision, noting that the associated costs and revenues were not previously included in the regulatory forecasts.

Transmission IT&T: There has been an increase in the Transmission IT&T forecast of \$2.8M over the 3 year period. This is due to minor project adjustments and a new depreciation cost related to capitalized IT system modifications required for disaggregation of Western Power Corporation.

3.12 Required Amendment 26 - Return on working capital

This amendment requires Western Power to delete from its access arrangement, access arrangement information and target revenue any revenue requirement due to a return on working capital for both its transmission and distribution networks.

In response, Western Power notes that in its *Further Final Decision and Final Approval of the Proposed Revisions to the Access Arrangement for the Mid-West and South-West Gas Distribution Systems* (of 10 August 2005), the Authority approved the inclusion of a return on working capital allowance in the revenue requirement of AlintaGas Networks. Western Power has undertaken an analysis of its working capital requirements using the same approach applied by AlintaGas Networks in its recently approved access arrangement.

In addition, it is noted that provision of an allowance for a return on the working capital employed in providing covered services is consistent with section 6.4(a)(i) of the Code, which allows for Western Power to recover the forward-looking and efficient costs of providing covered services.

Western Power has estimated its working capital requirement based on:

- the typical payment cycle of the business (with reference to internal processes); and
- the receipt cycle implied by the relevant provisions of the Electricity Transfer Access Contract.

The working capital formula applied by Western Power assumes a period of 45 days applies to covered service revenue collection, and 20 days applies to the payment of both capital and operating costs incurred to provide the covered services, on following basis:

Receipts

Western Power has derived 45 days based on the metering reading cycles and the payment terms detailed in the Electricity Transfer Access Contract.

Payments

Credit is provided to Western Power by its workforce, and by external material and service providers.

Material supplied from Western Power's own logistic store has no credit allocation because the store is a ring-fenced business that provides materials for the regulated and unregulated parts of Western Power. Materials purchased from the store are paid for immediately. Materials and services purchased from external providers are normally paid on 30-day terms.

Western Power workforce is paid fortnightly in arrears and the payment is made mid the following weeks. On this basis 10 days credit has been assigned to internal labour.

Table 8 below summarises the payment arrangements for Western Power creditors.

Table 8 below summarises the payment arrangements for Western Power creditors

	Percent Expenditure		Days Allowed	
	Distribution	Transmission	Distribution	Transmission
% Labour	18%	23%	10	10
% Materials & Services (Direct)	35%	63%	30	30
% Materials & Services (Internal)	34%	6%	0	0
% Other	13%	10%	0	0

On the basis of the above data the average days for Western Power credit across its operating and capital expenditure is 20 days.

Working Capital

The working capital calculated on this basis for Western Power is set out in Table 9 below.

Table 9: Western Power's working capital (real \$ at 30 June 2006)

	2006/07	2007/08	2008/09
Transmission (\$M)	8.6	7.7	14.9
Distribution (\$M)	21.6	19.9	18.1

3.13 Required Amendments 32 and 34– Investment Adjustment Mechanism

These amendments require Western Power to:

- include an investment adjustment mechanism that compares forecast capital expenditure categories against actual capital expenditure by asset class and expenditure type for both transmission and distribution; and
- propose a reliability-driven capital expenditure incentive mechanism.

Western Power originally proposed that only large customer-driven transmission projects should be included in the investment adjustment mechanism (IAM) on the basis these projects are relatively uncertain investments which are beyond the control of the company, and are significant in terms of overall financial outcomes. In the Draft Decision, the ERA expressed a view that the IAM should apply to all distribution and transmission capital expenditure, with the exception of reliability-related expenditure (which is a relatively small component of the overall capital expenditure).

Western Power notes the intent of the Required Amendments, and understands that a major issue underpinning these particular amendments is the relatively high level of uncertainty surrounding the forecasting of network capital expenditure over which Western Power has limited ability to influence: namely, customer-related and demand-related (capacity) capital expenditure.

Western Power has therefore proposed a revised access arrangement that addresses the matters which prompted the Authority to draft Required Amendments 32 and 34.

Western Power remains committed to ensuring that its proposed access arrangement maximises the company's incentives to seek and achieve efficiency improvements. In this regard, Western Power considers it is appropriate for the company to face financial incentives to deliver efficiently the planned refurbishment and renewal of the existing transmission and distribution networks. Importantly, Western Power's asset

management plans provide a reasonable degree of clarity regarding the scope and timing of these works, and the execution of these plans is largely within Western Power's control. As such, Western Power believes that the Code objectives (particularly in relation to efficient investment in the network) are best served by imposing a financial discipline on the company to deliver these plans efficiently. On this basis, Western Power proposes that the IAM would not adjust for differences between forecast and actual refurbishment and renewals capital expenditure.

In contrast, capital expenditure in relation to transmission and distribution network augmentations and customer connections is less predictable and is driven by the decisions of third parties rather than Western Power. Western Power's view is that the IAM should apply to these relatively uncertain categories of capital expenditure. This approach will ensure that Western Power and its customers are insulated against the financial effects of forecasting error. Western Power believes that this approach is consistent with the Code objectives, and addresses the matters that have given rise to Required Amendments 32 and 34.

Together, customer driven and demand driven projects for both transmission and distribution comprise approximately 65% of total capex.

3.14 Required Amendment 45 – Capital Contributions Adjustment Mechanism

This amendment requires Western Power to include a capital contributions adjustment mechanism to account for any differences between forecast and actual capital contributions over the first access arrangement period, consistent with the objectives and application of the investment adjustment mechanism.

Western Power agrees with this required amendment, noting that a capital contributions adjustment mechanism (CCAM) is now provided for within the proposed revenue cap design. Under the CCAM, there is no annual "true-up" for differences between forecast and actual capital contributions. Instead, forecast and actual capital contributions will be reconciled at the end of the first access arrangement period, with the variance accounted for via a commensurate adjustment of target revenues during the next access arrangement period to ensure economic neutrality.

This approach is consistent with the application of the investment adjustment mechanism to customer-driven and demand-driven capital expenditure (for both transmission and distribution), as the level of expenditure in these categories is, like capital contributions, substantially influenced by factors beyond Western Power's reasonable control: namely, customer demand and customers' new connection decisions. In addition, the operation of the CCAM and the IAM together ensure that in relation to capital contributions received (the CCAM) and capital expenditure (IAM) Western Power and customers are economically neutral as a result of forecasting errors.

3.15 Required Amendments 50 and 51 – Transmission and distribution operating expenditure

These amendments require Western Power to amend its proposed access arrangement to adopt the transmission and distribution network operations and maintenance expenditure, in real terms, by expenditure type, in accordance with values specified in the draft decision.

The Wilson Cook review (commissioned by the Authority) found that the operating costs proposed by Western Power in its August 2005 access arrangement submission were reasonable and well supported, with the exception of Transmission and Distribution Network Operations and Distribution Network Support Costs where reductions to historical levels were recommended.

As noted in Western Power's response to Required Amendment 23, Western Power's revised access arrangement now includes operating expenditure forecasts for the access arrangement period that are \$126.2 million higher than those assessed as being reasonable by Wilson Cook and adopted in the Draft Decision. The "Capital and Operating Expenditure Program" document (at Appendix 6 of the access arrangement information) provides details of Western Power's revised expenditure forecasts. In addition to that information, further details are set out below in relation to three specific aspects of Western Power's revised operating expenditure forecasts. These are:

- changes in business support costs;
- changes in network operations costs; and
- changes in distribution maintenance expenditure.

Each of these aspects is discussed in further detail below.

3.15.1 Business support costs

The Western Power network business has recently been separated from the generation and retail arms of the former Western Power Corporation. As a result, significant changes were required to the structure of the network business in order to manage corporate functions such as finance, accounting, human resources, and business systems which were previously centralised.

Western Power has implemented new organisation arrangements designed to meet its strategic objectives and to ensure the delivery of the outcomes sought by the State Government's ongoing electricity reform program.

The organisation structure has been implemented in support of an Operating Model comprising a "Works Engine", System Management and the support Divisions. The Works Engine comprises three operational divisions:

- Asset Management Division has accountability for the work plan requirements;
- Works Delivery Division is responsible for the delivery of the work program; and
- Field Services Division provides field workforce capability to support this.

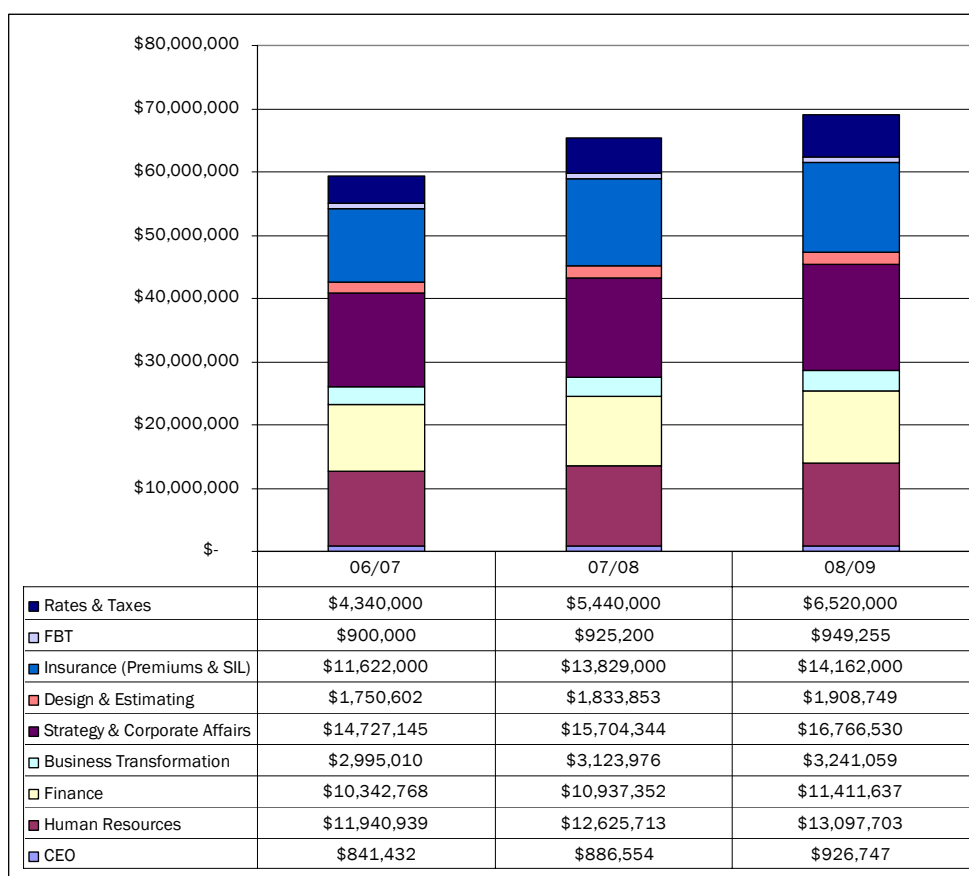
The principal role of the Works Engine is to collaboratively deliver the work program over the access arrangement period, agree the future program and position future capability.

The supporting Divisions include Strategy and Corporate Affairs, Human Resources, Finance and Business Transformation. Their role is to enable the long term positioning of the Works Engine with a focus on the strategic development of the organisation.

The forecast business support costs support both the transmission and distribution businesses that are operated by Western Power. An allocation between the transmission and distribution components is made based on the percentage of labour and materials for the non support activities in the overall transmission and distribution forecast. The exception to this allocation method is insurance, rates and taxes which are allocated to the districts based on the specific policies. The resulting allocation of overall business support costs is approximately 25% to transmission and 75% to distribution.

Support costs can be split into a number of high level categories including: Human Resources, Finance, Strategy and Corporate Affairs, Capital Planning, Design and Estimating, Insurance, Rates and Taxes. An overview of forecasts for each area is provided in Figure 2. It is noted that Western Power presently provides some corporate services to the business entities Synergy, Verve Energy and Horizon Energy such as payroll services and head office accommodation. While the costs for these are included in Western Power's forecast Support costs, the associated revenue is recognised as an offset in the regulated revenue forecasts.

Figure 2: Western Power Business Support Costs Overview



An overview of each of the areas' business support function is provided in the following Table 10 below.

Table 10: Overview of network business support functions

Support function	Key responsibilities and activities
Human Resources	<ul style="list-style-type: none"> • Administrative services (including security, cleaning, mailroom, switchboard, ground floor reception & general maintenance & accommodation coordination and execution) • Employee relations • HR Operations and Organisational Development (including Payroll Services, Health Services & HR Consulting) • Safety and Health (including development of safety & health policies & practices and the facilitation of policy across the business, management of the OHS Strategy for Western Power, OHS reporting and the development of safety training programs) • Workforce capability (including organisational and talent development, employee resourcing and engagement, and employee development)
Finance	<ul style="list-style-type: none"> • Business Analysis (including capital and operating financial budgeting process, financial and economic modelling and interfaces to Dept of Treasury & Finance, business performance reporting, forecasting, business operational and strategic planning, KPI development, regulatory support and management accounting) • Financial control (including financial and compliance reporting, financial policy creation, review, maintenance and implementation, asset accounting, accounts receivable, accounts payable, credit management and taxation) • Risk Management (including risk management framework and reporting, business continuity and crisis management plans) • Treasury (including Treasury analysis, economic modelling, insurance and claims management)
IT Strategy	<ul style="list-style-type: none"> • Strategic IT development (systems and service provision) • Document management, library, research and archiving services
Insurance	<ul style="list-style-type: none"> • Workers Compensation insurance • Motor Vehicle insurance • Directors & Officers insurance • Fire & Perils insurance • Public Liability insurance • Self Insured Loss insurance
Business Transformation	<ul style="list-style-type: none"> • Development and delivery of an organisational change program that ensures the business is positioned to be a customer focused, best in class, networks services and infrastructure corporation
Strategy and Corporate Affairs	<ul style="list-style-type: none"> • Audit • Corporate affairs • Legal and secretariat • Pricing, regulation and access development

Design and Estimating	<ul style="list-style-type: none"> Design and estimating costs covers an allowance for the expending of capital project design costs which do not proceed to the construction stage.
Rates and Taxes and Fringe Benefits Tax	<ul style="list-style-type: none"> Rates & Taxes includes water rates, shire rates, FESA Levy, Land Tax and Local Government rates equivalent for all substations, depots & other Western Power owned properties Fringe Benefits Tax

In order to verify the reasonableness of its corporate costs and allocations for the network businesses, Western Power has reviewed corporate costs in other Australian states where information is publicly available. The most comparable sources of corporate overhead data were identified for NSW electricity distribution businesses, as well as information for Victorian gas distributors in reports prepared by IPART. The following table shows the ratio of corporate costs to total operating and maintenance costs for a range of utility businesses.

Table 11 - Corporate Cost Allocation Rates
(Ratio of corporate costs to total operating and maintenance costs)

Electricity Distribution³	
Energy Australia (2003)	26.70%
Country Energy (2003)	49.35%

Gas distribution (2000)⁴	
Multinet	20.50%
Westar	29.10%
Stratus	27.90%

The above figures would appear to indicate that corporate cost allocations of between 20% and 30% of overall operating and maintenance costs would be consistent with industry practice.

By comparison, Western Power's distribution corporate costs, including network management and administrative costs are shown in Table 10 below.

³ Electricity distribution figures extracted from regulatory accounting information available on the IPART and QCA websites.

⁴ Gas ratios quoted in IPART 1999 Draft Gas Access Decision for AGLGN.

Table 12 – Western Power Distribution Corporate Costs and Overhead Proportion

Distribution	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Total Corporate Costs	22.2	26.2	26.6	25.1	45.8	50.1	53.5
Total Operating and Maintenance Costs	112.5	115.4	149.5	155.2	195.5	200.9	210.3
Corporate Overhead Rate	19.8%	22.7%	17.8%	16.2%	23.5%	25.0%	25.4%

Table 12 shows that Western Power's Network distribution corporate overhead costs are expected to be well within the 20-30% range during the forthcoming access arrangement period, and were significantly below this range over the last 4 years when Western Power was operating as a vertically integrated business. The forecast levels for the access arrangement period commencing in July 2006 reflect the costs associated with the operation of Western Power as a stand-alone network business. These costs compare favourably with those presented by IPART for NSW and Victorian businesses, and indicate that Western Power's Network corporate cost allocations are similar to those determined in other jurisdictions.

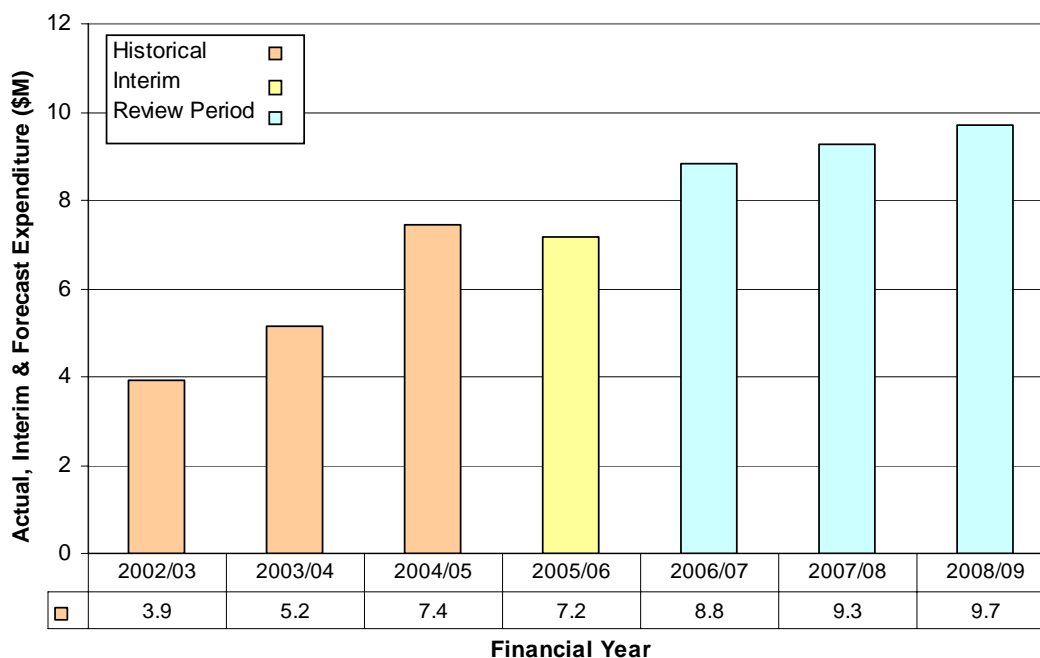
3.15.2 Network operations costs

The System Operations group provides control, switching, operations planning and monitoring for the Western Power transmission and distribution networks.

Government mandated reforms will impact significantly upon the future expenditures of the System Operations group with the need to facilitate the implementation of an Independent Market Operator and other industry changes.

Western Power is also proposing the implementation of additional SCADA assets, resulting in an associated increase in System Operations operating costs.

The Network Operations expenditures (shown in Figure 3 below) exhibit a steady increase into the forthcoming access arrangement period. The increases are in part based on the overall increase in business as usual activities as well as fuel costs and market reforms.

Figure 3 – System Operations Distribution Operating Expenditure**Distribution - Network Operations Operating Expenditure**

Business as usual activities are impacted by a projected increase in labour costs and material costs of 4% and 1% respectively. Fuel costs associated with Bremer Bay have been included in the Network Operating expense.

As indicated by the increase in expenditure levels, there have been significant changes to Network Operations since 2003. Network Operations has incorporated some of these changes and is currently operating with a staffing level of 39 FTEs. There is a further requirement to increase staffing levels by a further 13 FTE's by the end of the access arrangement period in order to fully manage the changes to network operations activities required. Implementation of the following changes and improvements is in progress:

- centralising monitoring and control;
- centralising switching schedule writing;
- increased network operations resources to provide safe access to the electricity network to accommodate the proposed increased level of capital and operating expenditure programs such as RPIP, customer funded work and network reinforcement;
- significant increase in the workload of Network Operations due to the outsourcing of maintenance programs such as pole top switch maintenance and vegetation management;
- improved coverage of Call Centre activities; and

- regulatory and market reform changes.

A detailed outline of each of these activities and its impact on network operations expenditure is provided in The "Capital and Operating Expenditure Program" document (at Appendix 6 of the access arrangement information).

3.15.3 Distribution maintenance expenditure

Since the submission of the August 2005 access arrangement proposal, ongoing review of the performance of the network, market conditions and changes to the regulatory environment have necessitated a number of changes to the Distribution operating expenditure forecast, in order to ensure that Western Power is able to:

- meet its obligations with respect to public safety; and
- meet its commitment to improve the reliability of the network by 25% over the access arrangement period.

The changes are primarily safety-driven, and the resulting impacts on Western Power's expenditure forecasts are outlined below.

Vegetation Management

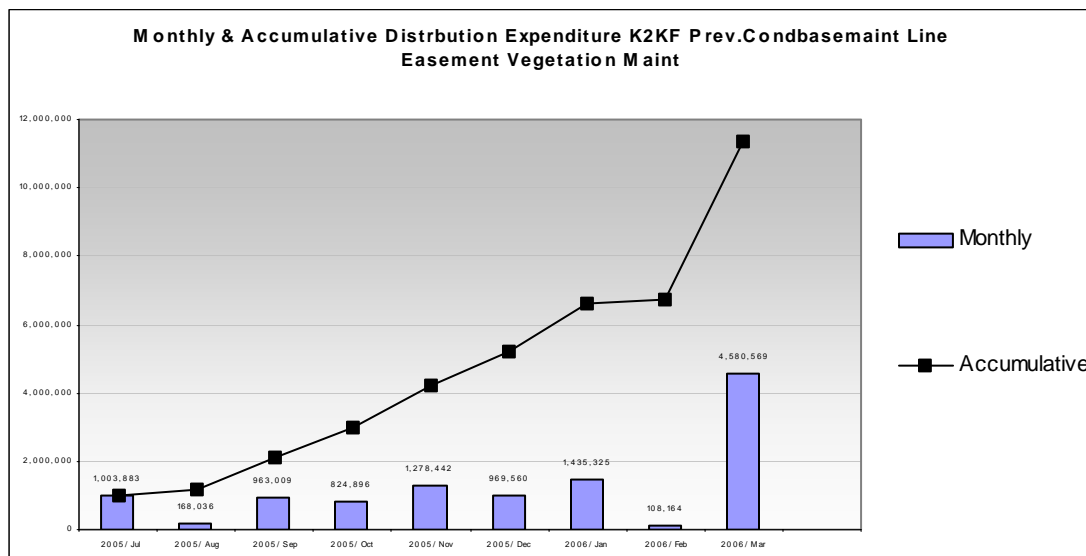
Cutting

Effective management of vegetation is vital from a public safety perspective and can be a key contributor to reducing the number of faults on the network.

In June 2005, Western Power changed its vegetation management process, outsourcing its entire operation to a professional vegetation management company. Since that time there have been significant improvements in the quality of work, as follows:

- performance requirements have been met in high and extreme risk fire zones; and
- dramatic improvements have been achieved in the visibility and accuracy of cost or work information through the introduction of a proprietary knowledge management system.

From the data collected over the last 10 months, it is clear that the budget estimates for vegetation related activities has been significantly underestimated. Based on recent analysis of the average cutting factor per bays inspected and actual costs to date it is now estimated that an additional \$23.4 M over the regulatory period will be required for vegetation cutting. (This analysis is shown in Figure 4 below.) While this represents a substantial increase, these costs compare favourably with other utilities with similar environmental conditions.

Figure 4

This additional cost also includes the impact of additional bays to be cut as a result of an increase in the number of bays inspected on an annual basis.

Inspection

Western Power has reviewed the fire performance of the network with respect to vegetation related faults and it has identified a significant improvement in the high and extreme fire risk zones. This is due in part to the recent change to an annual inspection regime.

Moderate and some low risk zones have an inspection frequency of 3 years and this has now been assessed as inadequate. It is proposed to reduce this frequency to 2 years. One of the key drivers of this decision is the confirmation that Western Power is unable to reliably clear enough vegetation to withstand 3 years of growth penetrating the clearance zone. Unlike transmission lines (that have dedicated easements) the amount of clearing that can be undertaken on distribution lines is limited, with minimum requirements about to be established in a new edition of Energy Safety Directorate guidelines. These requirements will result in an additional 220,000 bays requiring annual inspection at an additional cost of \$4.0M over the access arrangement period.

The expected outcome of this work is a reduction in the number of fires in moderate risk zones of 50% by the end of the access arrangement period.

Fuse Poles

An additional \$4.65 million over the regulatory period is also required for additional fuse pole clearing. It is a mandatory requirement to clear vegetation from around fuse poles. Further detailed reviews completed recently by Western Power have identified an additional 3,000 fuse poles that are to be included from a fire risk perspective and as a result of data errors in the GIS system. As a result of an explosive failure of a drop out fuse, where debris fell outside the specified clearance area, the specification for clearing has been updated to include an additional 5 square meters of clearing.

Pole Inspections

At the time of the August 2005 access arrangement submission, a unit rate of \$30 per pole was used to determine the budget. A review of the latest contracts let for this work showed an average actual unit rate of \$38 per pole. As a result of an efficiency improvement project and a change to the contracting strategy it is estimated that the cost per pole can be reduced to an average of \$33.60. This will result in an increase in cost of \$4.4 million compared to the forecast provided in the August 2005 access arrangement submission. It is understood that an average industry figure of \$35 plus per pole is the norm in the rest of Australia.

Western Power's revised expenditure forecast also includes allowance for an additional 23,000 non wood poles which were wrongly omitted in the August 2005 access arrangement submission.

Insulator Siliconing

Siliconing is a best practice approach employed to mitigate the incidence of pole top fires which have significant public safety and reliability implications. Tenders for this work were issued at the beginning of 2006 with only one company choosing to participate. The resulting price was approximately 25% higher than the estimates contained in Western Power's August 2005 access arrangement submission. While it is anticipated that a change to the contracting strategy in the future may stimulate greater market interest, insulator siliconing is a rather specialist activity and is therefore considered prudent to use the current market rate as a basis for estimating costs of this activity for the forthcoming access arrangement period. This results in an additional cost of \$1.86 million over the access arrangement period.

Service Connection Inspections

Following a tragic incident in the north of the state where children were fatally injured after touching a failed PVC service connection, a replacement project has been initiated to change out these service connections to an XLPE type over the next 8 years. In the meantime, a management regime has been established for annual metropolitan and biannual county inspections for compromised connections. In the last month Western Power has just completed the first cycle of country inspections. This has enabled the company to finalise estimates of work volumes and costs. As a result, the unit rate has been increased from an average \$1.10 per service to \$2.00 per service leading to an increase of \$970,000 over the access arrangement period.

This increased expenditure will lead to improved public safety outcomes.

Bulk Globe Replacements

Contractual arrangements exist between Synergy and Western Power for the bulk replacement of streetlights every 4 years for the majority of the streetlight asset base. Industry experience and a recent independent review has confirmed this as a best practice approach.

Synergy has recently advised that an additional 6,000 units are to be replaced.

In addition, the latest contract rates have shown a significant increase. Despite potential efficiency savings, an increase of \$3.32 million over the regulatory period will be required. This expenditure is the subject of contractual commitments and is not discretionary.

Pole top inspection and line patrols

The existing maintenance policy requires feeder inspections every 4 years. Approximately 200,000 pole tops per year are to be inspected.

Western Power has been working with a local company to provide concurrent thermographic, corona and digital video inspection and analysis of feeders. Over the last six months, this presently unique capability has exhibited a step improvement in identification of actual and potential faults. Continuation of this initiative is considered key to meeting Western Power's reliability improvement targets, and will also lead to better public safety outcomes.

Improvements in the thermographic, corona and digital video inspection technology results in increases in the costs, as well as the effectiveness, of this activity. Accordingly, Western Power expects to incur additional costs of \$1.89 million over the estimates set out in the August 2005 access arrangement submission (which reflected the costs of traditional ground based inspection only).

Pole Maintenance

Better inspection techniques are expected to identify a greater than previously estimated amount of remedial work. This will result in an additional \$4.12 million of expenditure over the access arrangement period, and equates to a remedial cost of \$40/bay inspected. This additional expenditure will make a key contribution to the achievement of Western Power's reliability improvement targets and will also lead to better public safety outcomes.

Perth One Call

Western Power is a member of the WA Dial Before You Dig Association. Given the continued high level of construction activity it has become necessary to engage more contract staff and provide additional training in order to meet Western Power's service standard commitments of 2 day turnaround under this arrangement.

This is an essential activity and has significant public safety and business benefits.

The increase in the scope of this activity will result in additional expenditure of \$1.36 million over the regulatory period.

Graffiti cleanup

A government directive issued in May 2006 requires all agencies to meet a maximum 48 hour graffiti removal service standard.

As Western Power's current service standard is 5 days, this new standard is expected to increase compliance costs by an additional \$230,000 when the new contract is tendered.

Emergency Maintenance

The application of additional preventive maintenance expenditure will result in reduced corrective and emergency maintenance.

However, based on the current condition of the network and the historic amounts spent on this category over the last few years, it is estimated that additional costs of \$14.8 million over the regulatory period will be required to be expended on emergency response related maintenance.

Resourcing capability

Resourcing capability has been reviewed and it has been determined that resources are available to undertake the increased work. In many cases the expenditures are reflective of the actual level of work being currently performed.

Part B:

Western Power's Response to Required Amendments 64 to 193 contained in Part B of the Draft Decision

