

Final Decision on Proposed Revisions to the Access Arrangement for the South West Interconnected Network

Submitted by Western Power

4 December 2009

Reprinted 17 December 2009

Incorporates corrigenda of notice dated 17 December 2009

Economic Regulation Authority



WESTERN AUSTRALIA

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CONTENTS

List of Tables	v
List of Figures	x
Final Decision	11
Summary of Required Amendments	14
Content of an Access Arrangement	23
Introduction to the Access Arrangement and Definitions	24
Access Code Requirements	24
Current Access Arrangement	24
Proposed Revisions	24
Considerations of the Authority	25
Reference Services	26
Access Code Requirements	26
Current Access Arrangement	28
Proposed Revisions	29
Considerations of the Authority	30
Eligibility Criteria for the “Time-of-Use Energy Exit Services”	30
Additional Reference Services – Connection Service	32
Additional Reference Services – Bi-directional Connection Points	33
Non-Reference Services	35
Standard Access Contracts	36
Access Code Requirements	36
Current Access Arrangement	37
Proposed Revisions	37
Considerations of the Authority	38
Requirements for Exit and Entry Services (clause 3.1(b))	39
Maximum Rate of Electricity Transfer (clause 3.1(c))	39
Modified Service (clause 3.1(d))	41
User may Select Services (clause 3.2)	41
Eligibility Criteria (clause 3.3)	42
Addition of a Connection Point (clause 3.4)	44
Deletion of a Connection Point (clause 3.6)	45
Connection Point Data (clause 3.7)	48
Contracted Capacity Not Utilised (clause 3.8)	57
Controllers (clause 6)	64
Tariffs and Charges (clause 7)	71
Invoicing and Payment (clause 8)	74
Security for Charges (clause 9)	78
Security for Contributions (clause 10)	79
Technical Rules (clause 12)	81
User’s Representations and Warranties (clause 18)	85

Liability and Indemnity (clause 19)	85
Insurances (clause 21)	90
Dispute Resolution (clause 29)	94
Assignment by the User (clause 31)	95
Confidentiality (clause 33)	98
Service Standard Benchmarks	99
Access Code Requirements	99
Current Access Arrangement	99
Proposed Revisions	100
Considerations of the Authority	103
Service Standards	103
Service Standard Benchmarks	114
Price Control	122
Introduction	122
Forecast Demand for Services	129
Western Power's Forecast	129
Considerations of the Authority	131
Tariff Equalisation Contributions	133
Access Code Requirements	133
Proposed Revisions	133
Considerations of the Authority	134
Non-Capital Costs	135
Access Code Requirements	135
Proposed Revisions	136
Considerations of the Authority	138
Capital Base and New Facilities Investment	181
Access Code Requirements	181
Proposed Revisions	183
Considerations of the Authority	186
Weighted Average Cost of Capital	224
Access Code Requirements	224
Proposed Revisions	224
Considerations of the Authority	226
Return on Working Capital	250
Access Code Requirements	250
Current Access Arrangement	250
Proposed Revisions	251
Considerations of the Authority	252
Revenue Adjustments	254
Access Code Requirements	254
Proposed Revisions	255
Considerations of the Authority	255
Total Cost and Target Revenue	263
Access Code Requirements	263

Proposed Revisions	264
Considerations of the Authority	266
Form of the Price Control	274
Access Code Requirements	274
Current Access Arrangement	275
Proposed Revisions	276
Considerations of the Authority	276
Pricing Methods, Price List and Price List Information	280
Access Code Requirements	280
Pricing Methods	280
Price List and Price List Information	282
Current Access Arrangement	282
Proposed Revisions	283
Considerations of the Authority	284
Adjustments to Target Revenue in the Next Access Arrangement Period	288
Current Access Arrangement	289
Proposed Revisions	290
Considerations of the Authority	291
Adjustment for Unforeseen Events	291
Adjustment for Changes in the Technical Rules	292
Investment Adjustment Mechanism	292
Gain Sharing Mechanism	293
Service Standards Adjustment Mechanism	300
Deferral of Revenue	315
“D-factor” Scheme	318
Trigger Events	322
Access Code Requirements	322
Current Access Arrangement	322
Proposed Revisions	323
Considerations of the Authority	323
Supplementary Matters	323
Access Code Requirements	323
Current Access Arrangement	324
Proposed Revisions	324
Considerations of the Authority	324
Applications and Queuing Policy	324
Access Code Requirements	324
Current Access Arrangement	327
Proposed Revisions	327
Considerations of the Authority	329
Effects on Investment and the Wholesale Electricity Market	330
Current Provisions of the Applications and Queuing Policy	332
Proposed Revisions to the Applications and Queuing Policy	338

Contributions Policy	347
Access Code Requirements	347
Current Access Arrangement	349
Proposed Revisions	350
Considerations of the Authority	351
Current Provisions of the Capital Contributions Policy	351
Proposed Revisions to the Contributions Policy	355
Transfer and Relocation Policy	371
Access Code Requirements	371
Current Access Arrangement	372
Proposed Revisions	373
Submissions	373
Considerations of the Authority	373
APPENDICES	374
Appendix A: Target Revenue Calculation (Revenue Model)	375
Appendix B: Consultant Reports Commissioned by the Authority	376
Appendix C: Terms / Abbreviations	377
Appendix D: Confidential Annexure	378

LIST OF TABLES

Table 1	Western Power's proposed definition of a bi-directional reference service: Reference Service C1	34
Table 2	Current and proposed service standard benchmarks for transmission services	101
Table 3	Current and proposed service standard benchmarks — system average interruption duration index (SAIDI) for distribution services	102
Table 4	Current and proposed service standard benchmarks — system average interruption frequency index (SAIFI) for distribution services	102
Table 5	Western Power's proposed definition of a service standard for loss of supply event frequency	106
Table 6	Western Power's proposed definition of a service standard for average outage duration	107
Table 7	Comparison of SAIDI and SAIFI for the worst 15 per cent of customers served and for rural-long feeders	112
Table 8	Service standard benchmarks and actual performance for transmission services	115
Table 9	Actual performance and proposed service standard benchmarks for loss of supply event frequency and average outage duration	117
Table 10	Service standard benchmarks and actual performance — system average interruption duration index (SAIDI) for distribution services	118
Table 11	Service standard benchmarks and actual performance — system average interruption frequency index (SAIFI) for distribution services	119
Table 12	Revised service standard benchmarks and actual performance — system average interruption duration index (SAIDI) for distribution services	121
Table 13	Revised service standard benchmarks and actual performance — system average interruption frequency index (SAIFI) for distribution services	121
Table 14	Western Power's Area-Based Forecasts (MW) used to develop the forecasts of new facilities investment for the transmission network	130
Table 15	Western Power's forecast energy sales for the distribution network	131
Table 16	Revised forecasts of sent-out energy produced by the Independent Market Operator	132
Table 17	Revised forecasts of expected maximum demand produced by the Independent Market Operator	132
Table 18	Non-capital costs for the transmission network (real \$ million at 30 June 2009)	137
Table 19	Non-capital costs for the distribution network (real \$ million at 30 June 2009)	138
Table 20	Combined material escalators and weighted average escalators applied by Western Power in forecasts of capital and operating costs for the second access arrangement period (real annual rate of change, per cent)	148
Table 21	Labour and combined material escalators for capital and operating costs determined at May 2009 (real annual rate of change, per cent)	149
Table 22	Activity escalators for capital and operating activities determined at May 2009 (real annual rate of change, per cent)	150
Table 23	Actual and forecast business support costs (forecast of October 2008, real \$ million at 30 June 2009)	152
Table 24	Proposed, Draft Decision and revised forecasts of business support costs (real \$ million at 30 June 2009)	153

Table 25	Actual and forecast preventative routine maintenance costs (forecast of October 2008, real \$ million at 30 June 2009)	155
Table 26	Actual and forecast preventative condition maintenance costs (forecast of October 2008, real \$ million at 30 June 2009)	156
Table 27	Proposed, Draft Decision and revised forecasts of preventative routine maintenance costs (real \$ million at 30 June 2009)	157
Table 28	Proposed, Draft Decision and revised forecasts of preventative condition maintenance costs (real \$ million at 30 June 2009)	158
Table 29	Actual and forecast corrective deferred maintenance costs (forecast of October 2008, real \$ million at 30 June 2009)	161
Table 30	Actual and forecast corrective emergency maintenance costs (forecast of October 2008, real \$ million at 30 June 2009)	161
Table 31	Proposed, Draft Decision and revised forecasts of corrective deferred maintenance costs (real \$ million at 30 June 2009)	163
Table 32	Proposed, Draft Decision and revised forecasts of corrective emergency maintenance costs (real \$ million at 30 June 2009)	164
Table 33	Actual and forecast network operations costs (forecast of October 2008, real \$ million at 30 June 2009)	167
Table 34	Actual and forecast SCADA & communications costs (forecast of October 2008, real \$ million at 30 June 2009)	167
Table 35	Proposed, Draft Decision and revised forecasts of network operations costs (real \$ million at 30 June 2009)	168
Table 36	Proposed, Draft Decision and revised forecasts of SCADA & communications costs (real \$ million at 30 June 2009)	169
Table 37	Actual and forecast call centre costs (forecast of October 2008, real \$ million at 30 June 2009)	170
Table 38	Proposed, Draft Decision and revised forecasts of call centre costs (real \$ million at 30 June 2009)	171
Table 39	Actual and forecast metering costs (forecast of October 2008, real \$ million at 30 June 2009)	171
Table 40	Proposed, Draft Decision and revised forecasts of metering costs (real \$ million at 30 June 2009)	172
Table 41	Actual and forecast non-recurrent costs (forecast of October 2008, real \$ million at 30 June 2009)	173
Table 42	Proposed, Draft Decision and revised forecasts of non-recurrent costs (real \$ million at 30 June 2009)	175
Table 43	Actual and forecast reliability-improvement costs (forecast of October 2008, real \$ million at 30 June 2009)	176
Table 44	Proposed, Draft Decision and revised forecasts of reliability-improvement costs (real \$ million at 30 June 2009)	177
Table 45	Actual and forecast non-reference (miscellaneous) services costs (forecast of October 2008, real \$ million at 30 June 2009)	178
Table 46	Proposed, Draft Decision and revised forecasts of non-reference service costs (real \$ million at 30 June 2009)	179
Table 47	Proposed capital base at 30 June 2009 for the transmission network (real \$ million at 30 June 2009)	184
Table 48	Proposed capital base at 30 June 2009 for the distribution network (real \$ million at 30 June 2009)	184

Table 49	Proposed notional capital base values for the second access arrangement period for the transmission network (real \$ million at 30 June 2009)	185
Table 50	Proposed notional capital base values for the second access arrangement period for the distribution network (real \$ million at 30 June 2009)	185
Table 51	Actual, forecast and anticipated-revised forecast new facilities investment to be added to the capital base (real \$ million at 30 June 2009)	186
Table 52	Originally proposed, Draft Decision and revised proposed values of new facilities investment in the first access arrangement period to be added to the capital base for the transmission network (real \$ million at 30 June 2009)	190
Table 53	Originally proposed, Draft Decision and revised proposed values of new facilities investment in the first access arrangement period to be added to the capital base for the distribution network (real \$ million at 30 June 2009)	190
Table 54	Calculation of adjusted amounts of new facilities investment in the first access arrangement period to be added to the capital base (real \$ million at 30 June 2009)	202
Table 55	Amended value of redundant assets in the first access arrangement period (real \$ million at 30 June 2009)	205
Table 56	Authority's revised capital base at 30 June 2009 for the transmission network (real \$ million at 30 June 2009)	206
Table 57	Authority's revised capital base at 30 June 2009 for the distribution network (real \$ million at 30 June 2009)	206
Table 58	Proposed forecast of new facilities investment for the second access arrangement period for the transmission network (proposal of October 2008, real \$ million at 30 June 2009)	208
Table 59	Proposed forecast of new facilities investment for the second access arrangement period for the distribution network (proposal of October 2008, real \$ million at 30 June 2009)	209
Table 60	Original and revised forecast of new facilities investment for the second access arrangement period for the transmission network (real \$ million at 30 June 2009)	212
Table 61	Original and revised forecast new facilities investment for the second access arrangement period for the distribution network (real \$ million at 30 June 2009)	213
Table 62	Actual and forecast capital contributions (real \$ million at 30 June 2009)	216
Table 63	Amended forecast new facilities investment for the transmission network (real \$ million at 30 June 2009)	218
Table 64	Amended forecast new facilities investment for the distribution network (real \$ million at 30 June 2009)	219
Table 65	Value of redundant assets proposed for the second access arrangement period (real \$ million at 30 June 2009)	220
Table 66	Assumptions of asset lives applied for calculation of depreciation allowances	222
Table 67	Final Decision: Authority's revised notional capital base values for the second access arrangement period for the transmission network (real \$ million at 30 June 2009)	223
Table 68	Final Decision: Authority's revised notional capital base values for the second access arrangement period for the distribution network (real \$ million at 30 June 2009)	223
Table 69	WACC Values for the Current Access Arrangement and Proposed Access Arrangement Revisions	225
Table 70	Estimates at 30 October 2009 of debt margins for 10-Year corporate bonds with credit ratings of BBB+ (percentage points)	233
Table 71	Estimates of the market risk premium over a range of different periods	236

Table 72	Allen Consulting Group equity beta estimates and 95 per cent confidence intervals for individual Australian electricity and gas network businesses (1990 – 1998 and 2002 – 2008)	239
Table 73	Allen Consulting Group equity beta estimates and 95 per cent confidence intervals for portfolios of Australian and USA electricity and gas network businesses (1990 – 1998 and 2002 – 2008)	240
Table 74	Henry equity beta estimates and 95 per cent confidence intervals for individual Australian electricity and gas network businesses (2002 – 2008)	241
Table 75	Henry/AER equity beta estimates and 95 per cent confidence intervals for portfolios of Australian electricity and gas network businesses (2002 – 2008)	241
Table 76	Parameter values determined by the Authority for estimation of the WACC for the SWIN	247
Table 77	Estimated cost of equity from ranges in WACC parameter values	248
Table 78	Estimated WACC values from ranges in WACC parameter values	248
Table 79	Proposed Cost of Working Capital – Transmission Network (\$ million, dollar values of 30 June 2009)	251
Table 80	Proposed Cost of Working Capital – Distribution Network (\$ million, dollar values of 30 June 2009)	252
Table 81	Authority's revised cost of working capital – transmission network (real \$ million at 30 June 2009)	253
Table 82	Revised cost of working capital – distribution network (real \$ million at 30 June 2009)	254
Table 83	Proposed adjustments to target revenue under the investment adjustment mechanism – transmission network (real \$ million at 30 June 2009)	257
Table 84	Proposed adjustments to target revenue under the investment adjustment mechanism – distribution network (real \$ million at 30 June 2009)	258
Table 85	Authority's amended adjustments to target revenue under the investment adjustment mechanism – transmission network by asset class (real \$ million at 30 June 2009)	260
Table 86	Authority's amended adjustments to target revenue under the investment adjustment mechanism – distribution network by asset class (real \$ million at 30 June 2009)	261
Table 87	Proposed adjustments to target revenue under the capital contributions adjustment mechanism – transmission network (real \$ million at 30 June 2009)	262
Table 88	Proposed adjustments to target revenue under the capital contributions adjustment mechanism – distribution network (real \$ million at 30 June 2009)	262
Table 89	Proposed target revenue for the transmission network (real \$ million at 30 June 2009)	265
Table 90	Proposed target revenue for the distribution network (real \$ million at 30 June 2009)	265
Table 91	Western Power forecast costs and revenue for the provision of non-reference services (real \$ million at 30 June 2009)	267
Table 92	Authority's revised target revenue for the transmission network (real \$ million at 30 June 2009)	271
Table 93	Authority's revised target revenue for the distribution network (real \$ million at 30 June 2009)	272
Table 94	Transmission network target revenue comparison: Western Power's proposal and Final Decision	273

Table 95	Distribution network target revenue comparison: Western Power's proposal and Final Decision	273
Table 96	Total transmission and distribution network target revenue comparison: Western Power's proposal and Final Decision	274
Table 97	Performance limits and incentive rates proposed to apply under the service standard adjustment mechanism for the transmission network	301
Table 98	Performance limits and incentive rates proposed to apply for SAIDI under the service standard adjustment mechanism for the distribution network	302
Table 99	Performance limits and incentive rates proposed to apply for SAIFI under the service standard adjustment mechanism for the distribution network	303
Table 100	Original and revised incentive rates proposed to apply under the service standard adjustment mechanism	314

LIST OF FIGURES

Figure 1	Transmission cost per line km for 2007/08 of non-capital costs for Western Power and other Australian electricity network businesses	141
Figure 2	Distribution cost per line km for 2007/08 of non-capital costs for Western Power and other Australian electricity network businesses	142
Figure 3	Distribution cost per customer for 2007/08 of non-capital costs for Western Power and other Australian electricity network businesses	142
Figure 4	Distribution cost per kWh for 2007/08 of non-capital costs for Western Power and other Australian electricity network businesses	143

FINAL DECISION

1. On 1 October 2008, the Electricity Networks Corporation (**Western Power**) submitted to the Economic Regulation Authority (**Authority**) proposed revisions to its access arrangement for the South West Interconnected Network (**SWIN**) (**proposed access arrangement revisions**).¹ The revised access arrangement was submitted in accordance with the requirements of section 4.48 of the *Electricity Networks Access Code 2004* (**Access Code**) and the revisions submission date specified in the current access arrangement.² The proposed access arrangement revisions and revised access arrangement information are available on the Authority's web site.³
2. Under sections 4.52 and 4.28 of the Access Code, the Authority is required to determine whether the proposed access arrangement revisions meet the "Code objective" and the requirements set out in Chapter 5 of the Access Code and in Chapter 9, if applicable.
3. The Code objective is set out in section 2.1 of the Access Code:
 - 2.1 The objective of this Code ("Code objective") is to promote the economically efficient:
 - (a) investment in; and
 - (b) operation of and use of,
 networks and services of networks in Western Australia in order to promote competition in markets upstream and downstream of the networks.
4. Chapter 5 of the Access Code sets out the required content of an access arrangement.
5. Chapter 9 of the Access Code sets out requirements for the regulatory test for major augmentation proposals of electricity networks. Western Power has made no major augmentation proposals under Chapter 9 as part of its proposed access arrangement revisions, and so Chapter 9 is not applicable to the Authority's determination.
6. On 16 July 2009, the Authority issued a Draft Decision in accordance with the requirements of sections 4.52 and 4.12 of the Access Code.⁴ The Draft Decision of the Authority was to not approve the proposed access arrangement revisions on the grounds that it did not satisfy the requirements of the Access Code. In its reasons for the Draft Decision, the Authority provided details of 46 amendments required to

¹ Western Power, 1 October 2008, Proposed Revisions to the Access Arrangement for the South West Network owned by Western Power (hereafter cited as "proposed access arrangement revisions"); Western Power, 1 October 2008, Revised Access Arrangement Information for the Network of the South West Interconnected System (hereafter cited as "revised access arrangement information").

² The revisions submission date is specified under the current access arrangement as 1 October 2008 (Western Power, 2 April 2007, Amended Proposed Access Arrangement for the South West Interconnected Network owned by Western Power, clause 1.5).

³ Economic Regulation Authority web site: http://www.era.wa.gov.au/3/718/48/western_powers_.pm

⁴ Economic Regulation Authority, 16 July 2009, Draft Decision on Proposed Revisions to the Access Arrangement for the South West Interconnected Network (Reprinted 13 August 2009 to incorporate corrigenda of notice dated 13 August 2009).

the proposed access arrangement revisions before the Authority would approve the revisions.

7. At the time of issuing its Draft Decision, the Authority invited submissions from interested parties on the Draft Decision, with a requirement to lodge submissions by 13 August 2009. On 11 August 2009, the Authority issued a notice extending the deadline for submissions to 10 September 2009. To assist interested parties in understanding the Draft Decision and making submissions, the Authority held a roundtable discussion on 5 August.⁵
8. Submissions on the Draft Decision were received from the following parties:
 - Alinta Sales Pty Ltd (**Alinta Sales**) (10 September 2009)
 - Australian Pipeline Industry Association Ltd (**APIA**) (11 August 2009)
 - Conservation Council of Western Australia Inc (20 October 2009)⁶
 - Department of Treasury and Finance (10 September 2009)
 - Extension Hill Pty Ltd (21 August 2009)
 - Financial Investor Group⁷ (September 2009)
 - Landfill Gas and Power (**LGP**) (9 September 2009)
 - Synergy (1 October 2009 and 4 November 2009)⁸
 - Western Australia Major Energy Users (**WAMEU**) (17 August 2009)
 - Western Australian Council of Social Services (**WACOSS**) (6 August 2009)
9. Two submissions were also made by Western Power on 13 August 2009 and 10 September 2009. A third submission was made by Western Power on 5 October 2009.⁹ Western Power's submissions have not included revised proposed access arrangement revisions, as allowed for under section 4.16 of the Access Code.
10. In its submission of 13 August 2009, Western Power proposed revisions to the electricity transfer access contract (which forms part of an access arrangement) that were not contemplated in the proposed access arrangement revisions as submitted in October 2008.¹⁰ On 28 August 2009, the Authority issued a notice

⁵ Roundtable Discussion: Draft Decision on Proposed Revisions to the Access Arrangement for the South West Interconnected Network, 5 August 2009, Parmelia Hilton Perth.

⁶ The Council's submission of 20 October was accepted by the Authority as late submission under section 4.53 of the Access Code.

⁷ The Financial Investor Group is an affiliation of eight major investors in Australian energy transmission and distribution networks. The Group's submission has been made on the behalf of five members: APA Group, Babcock and Brown Infrastructure, Duet Group, Hastings Funds Management and Singapore Power.

⁸ Synergy's submissions of 1 October and 4 November 2009 were accepted by the Authority as late submissions under section 4.53 of the Access Code. A further submission was submitted by Synergy to the Authority on 17 November 2009; however, the Authority did not accept this submission as a late submission.

⁹ Western Power's submission was accepted by the Authority as a late submission under section 4.53 of the Access Code.

¹⁰ Western Power's proposed additional revisions to the electricity transfer access contract include additional proposed changes to clause 3.7, clause 9 and the addition of a new "change in control" clause (clause

advising interested parties that submissions could be made on these revisions during the submission period on the Authority's Draft Decision.

11. In its submission of 10 September 2009, Western Power proposed a further revision to the periods for which price lists will be submitted during the second access arrangement period. This revision was not contemplated in the proposed access arrangement revisions as submitted in October 2008. On 24 September 2009, the Authority issued a notice inviting interested parties to make submissions on this further proposed revision by 9 October 2009.
12. Under sections 4.52 and 4.17 of the Access Code, the Authority is required to consider any submissions made on the Draft Decision and to issue a final decision that either:
 - approves the proposed access arrangement revisions; or
 - does not approve the proposed access arrangement revisions, in which case the Authority must provide details of the amendments required before the Authority will approve the revisions.
13. The Final Decision of the Authority is to not approve the proposed access arrangement revisions. The amendments that are required to be made to the proposed access arrangement revisions before the Authority will approve are listed below. For the purposes of clarity, the required amendments are also indicated in the reasons for this Final Decision at the point at which each relevant element of the proposed access arrangement revisions is considered.
14. Under sections 4.52 and 4.19 of the Access Code, Western Power may submit amended proposed access arrangement revisions to the Authority within 20 business days of this Final Decision.
15. As the Authority's Final Decision is to not approve Western Power's proposed access arrangement revisions, the Authority will issue a further final decision as required under sections 4.52 and 4.21 of the Access Code. The Authority's further final decision may:
 - if amended proposed access arrangement revisions are submitted by Western Power, approve or not approve the amended proposed access arrangement revisions; or
 - if no amended proposed access arrangement revisions are submitted by Western Power, either approve or not approve the proposed access arrangement revisions that are the subject of this Final Decision.
16. In the event that the further final decision of the Authority is to not approve either amended proposed access arrangement revisions or the proposed access arrangement revisions, the Authority will proceed to draft and approve its own access arrangement revisions in accordance with the provisions of sections 4.52, 4.24 and 4.25 of the Access Code.

37.4). Details of these additional proposed revisions are contained in Attachments A, G and H of Western Power's submission of 13 August 2009.

Summary of Required Amendments

Required Amendment 1

The proposed access arrangement revisions should be amended such that one or more reference services provide for single connection points to function both as entry points and exit points. The reference service or services must cater for the requirements for network services that arise where small-scale renewable energy systems connect to the network and where electricity consumers participate in the Renewable Energy Buyback Scheme.

Required Amendment 2

The proposed access arrangement revisions should be amended to include a new clause 3.3(b) of the electricity transfer access contract that reads “Where the user has sought to change the reference service in respect of a connection point under clause 3.2(a), its obligation under clause 3.3(a) in relation to that connection point is subject to compliance by Western Power with clause 3.2(b)”.

Required Amendment 3

The proposed access arrangement revisions should be amended to include a new clause 3.6(d) of the electricity transfer access contract that reads “Subject to the Customer Transfer Code, Western Power must not delete a connection point other than in accordance with a notice given by a user under clause 3.6”.

Required Amendment 4

The proposed access arrangement revisions should be amended to include a new clause 3.6(e) of the electricity transfer access contract that reads: “If Western Power commits a breach of clause 3.6(d) in circumstances that constitute wilful default it is liable to the user for any damage caused by, consequent upon or arising out of the wilful default. In this case, the exclusion of indirect damage in clause 19.3 does not apply”.

The electricity transfer access contract should also be amended to include a definition of wilful default as:

- a) *a deliberate and purposeful act or omission carried out with a calculated regard for the consequences of the act or omission, or*
 - b) *a reckless or wilful disregard for the consequences of the act or omission,*
- but does not include any error of judgment, mistake, act or omission, whether negligent or not, which is made in good faith.*

Required Amendment 5

The proposed access arrangement revisions should be amended such that clause 3.7 of the electricity transfer access contract is clear on whether schedule 3 and, where relevant, the metering database, is to be updated only by Western Power, or by either Western Power or the user.

Required Amendment 6

The proposed access arrangement revisions should be amended such that clause 3.7 of the electricity transfer access contract requires Western Power to provide the user with such access to schedule 3 and the metering database as is reasonably required for the user to obtain information or to change relevant information.

Required Amendment 7

The proposed access arrangement revisions should be amended so that the electricity transfer access contract indicates which records of connection point data will have precedence, to the extent of any inconsistency between schedule 3 of the electricity transfer access contract, the metering database and any connection point data contained in the price list.

Required Amendment 8

The proposed access arrangement revisions should be amended to delete clause 3.8 of the electricity transfer access contract.

Required Amendment 9

The proposed access arrangement revisions should be amended such that clause 6.1(a) of the electricity transfer access contract provides for the user to nominate a controller as soon as reasonably practical, but in all cases within 30 business days, after the commencement of the service.

Required Amendment 10

The proposed access arrangement revisions should be amended such that clause 6.1(e) of the electricity transfer access contract requires only that the user uses reasonable endeavours to procure that a controller enter into a connection contract with Western Power.

Required Amendment 11

The proposed access arrangement revisions should be amended such that clause 6.2(a) of the electricity transfer access contract is made subject to a provision that, for a connection point other than as contemplated by clause 6.1 of the electricity transfer access contract, the user is not required to commence, maintain or continue legal proceedings to procure compliance of a controller with obligations under the access contract, unless Western Power provides an indemnity for all of the user's costs of and relating to such proceedings.

Required Amendment 12

The proposed access arrangement revisions should be amended such that clause 7.1 of the electricity transfer access contract includes a provision dealing with the determination of amounts payable by the user where there is a change in the charges payable under a reference tariff during a billing period. The provision must represent a reasonable balance between the interests of the user and Western Power.

Required Amendment 13

The proposed access arrangement revisions should be amended such that clause 10 of the electricity transfer access contract:

- clearly applies only in respect of a contribution to be made by the user; and
- applies where the requirement for security has been determined in accordance with the contributions policy.

Required Amendment 14

The proposed access arrangement revisions should be amended such that clause 12.1 of the electricity transfer access contract states only that Western Power and the user must each comply with the Technical Rules.

Required Amendment 15

The proposed access arrangement revisions should be amended such that clause 12.2 of the electricity transfer access contract provides that an act or omission of the user that causes Western Power to incur extra costs for compliance with the Technical Rules only causes the user to be liable for those costs where:

- the act or omission of the user is in breach of the access contract; and
- Western Power has not already recovered, and will not recover, the costs from another party.

Required Amendment 16

The proposed access arrangement revisions should be amended such that the calculation of liability under clause 19.5 of the electricity transfer access contract is limited to a cap on liabilities with the effect that the maximum liability of both the user and the indemnifier collectively to Western Power is limited to an amount of \$80 million in the aggregate, except that the liabilities for access charges and liabilities described in clause 20 are not counted for the purpose of both the user's and the indemnifier's collective maximum liability.

Required Amendment 17

The proposed access arrangement revisions should be amended to delete clause 19.5(c) of the electricity transfer access contract.

Required Amendment 18

The proposed access arrangement revisions should be amended so that Part 1(a)(i)A of schedule 5 of the electricity transfer access contract provides for the insurance requirement to be limited in the aggregate to \$50 million in each 12 months or the maximum liability under clause 19.5 of the electricity transfer access contract, whichever is the greater.

Required Amendment 19

The proposed access arrangement revisions should be amended so that the requirements for workers compensation, motor vehicle and third-party property insurance under Part 1(a)(ii) and Part 1(a)(iii) of schedule 5 of the electricity transfer access contract apply only where these insurances are reasonably requested by Western Power.

Required Amendment 20

The proposed access arrangement revisions should be amended so that clause 29.3(b) of the electricity transfer access contract requires that Western Power act reasonably in determining a location for a meeting for resolution of a dispute.

Required Amendment 21

The proposed access arrangement revisions should be amended so that clause 33.1 of the electricity transfer access contract extends the requirement for confidentiality of

information to encompass information exchanged in negotiations preceding the contract and information about, or relating to, a proposed controller.

Required Amendment 22

The proposed access arrangement revisions should be amended to include service standard benchmarks for:

- loss of supply event frequency, specified as a number of loss of supply events in a one year period with benchmarks specified for events of low and high duration measured as system minutes interrupted; and
- average outage duration, measured in minutes.

Required Amendment 23

The proposed access arrangement revisions should be amended such that definitions of SAIDI and SAIFI:

- do not make provision for the exclusion of single customer interruptions;
- exclude reference to definitions as definitions adopted by the Institute of Electrical and Electronics Engineers' (IEEE) in specification of "major event days".

Required Amendment 24

The proposed access arrangement revisions should be amended to reflect a forecast of non-capital costs as follows (real \$ million at 30 June 2009):

	2009/10	2010/11	2011/12
Transmission:	75.46	96.32	103.40
Distribution:	280.84	357.11	414.11
Total:	356.29	453.43	517.51

Required Amendment 25

The proposed access arrangement revisions should be amended so that the total amounts of new facilities investment added to the capital base are as follows (real \$ million at 30 June 2009):

	2006/07	2007/08	2008/09
Transmission:	265.85	274.87	280.64
Distribution:	394.80	426.70	581.50
Total:	660.65	701.56	862.15

Required Amendment 26

The proposed access arrangement revisions should be amended to add the value of any revenues from disposal of assets in the first access arrangement period to the value of redundant assets applied in calculation of the capital base at the commencement of the second access arrangement period.

Required Amendment 27

The proposed access arrangement revisions should be amended to reflect a forecast of new facilities investment for the second access arrangement period as set out by Western Power in its submission to the Authority dated 10 September 2009.

Required Amendment 28

The target revenue should be revised to reflect a real pre-tax WACC value of 7.98 per cent.

Required Amendment 29

The target revenue should be revised to reflect an allowance for a cost of working capital as follows (real \$ million at 30 June 2009):

	2009/10	2010/11	2011/12
Transmission:	19.25	10.47	12.59
Distribution:	42.32	45.54	53.12
Total:	61.57	56.00	65.71

Required Amendment 30

The proposed access arrangement revisions should be amended to determine the target revenue for reference services taking into account forecast revenues from non-reference services as follows (real \$ million at 30 June 2009):

	2009/10	2010/11	2011/12
Transmission:	0.86	0.92	0.93
Distribution:	10.13	10.85	11.39

Required Amendment 31

The proposed access arrangement revisions should be amended to provide for deferral of an amount of \$64.5 million of revenue for the transmission network and \$484.2 million of revenue for the distribution network (in present value terms and in real dollar values of 30 June 2009) from the second to the third and subsequent access arrangement periods, being an amount that fully offsets the effect of the change in the treatment of capital contributions in the determination of target revenue.

Required Amendment 32

The proposed access arrangement revisions should be amended such that clauses 3.11, 5.35 and 5.46 provide for maximum proportional changes in reference tariffs at times of revision of the price list of:

- +/- (percentage change in the CPI + 13 percentage points) for the transmission network; and
- +/- (percentage change in the CPI + 18 percentage points) for the distribution network.

Required Amendment 33

The proposed access arrangement revisions should be amended to specify a gain sharing mechanism as follows.

- (a) Subject to paragraph (b) of this required amendment, an above-benchmark surplus is to be calculated for each of the years 2009/10 to 2011/12 as:

$$ABS_{2009/10} = EIB_{2009/10} - A_{2009/10}$$

$$ABS_{2010/11} = (EIB_{2010/11} - A_{2010/11}) - (EIB_{2009/10} - A_{2009/10})$$

$$ABS_{2011/12} = (EIB_{2011/12} - A_{2011/12}) - (EIB_{2010/11} - A_{2010/11}),$$

where

ABS_t is the above-benchmark surplus in year t ;

EIB_t is the efficiency and innovation benchmark for year t , being the forecast of non-capital cost for year t applied in the determination of target revenue for year t , adjusted for inflation as appropriate and adjusted to include any relevant adjustments for unforeseen events and changes to the Technical Rules as allowed for under sections 6.6 and 6.9 of the Access Code;

A_t is the actual non-capital costs incurred by Western Power in year t , adjusted for inflation as appropriate, adjusted to include any relevant adjustments for unforeseen events and changes to the Technical Rules as allowed for under sections 6.6 and 6.9 of the Access Code and adjustments under the D-factor scheme.

- (b) In any year in which an above-benchmark surplus is calculated to be a positive value but Western Power fails to meet service standard benchmarks for that year, the above-benchmark surplus for that year is deemed to be zero.
- (c) Subject to paragraph (d) of this required amendment, the following amounts may be added to target revenue for one or more access arrangement periods covering the years 2012/13 to 2016/17:

$$GSMA_{2012/13} = ABS_{2009/10} + ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2013/14} = ABS_{2009/10} + ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2014/15} = ABS_{2009/10} + ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2015/16} = ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2016/17} = ABS_{2011/12}$$

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

- (d) In any year where the amount of an adjustment to target revenue determined under paragraph (c) is a negative value, the amount of the adjustment to target revenue in that year is zero.

Required Amendment 34

The proposed access arrangement revisions should be amended to alter the specification of the service standard adjustment mechanism at clauses 5.24A and 5.24B to:

- (a) remove the dead-bands and limits around target values of service standards; and
- (b) calculate an amount of a difference between target and actual service standards as:

$$SSD_{2009/2010} = (SSB_{2009/10} - SSA_{2009/10})$$

$$SSD_{2010/2011} = (SSB_{2010/11} - SSA_{2010/11}) - (SSB_{2009/10} - SSA_{2009/10})$$

$$SSD_{2011/2012} = (SSB_{2011/12} - SSA_{2011/12}) - (SSB_{2010/11} - SSA_{2010/11})$$

Where:

SSD_t is the service standard difference in year t

SSB_t is the service standard benchmark in year t

SSA_t is the actual service standard in year t .

- (c) include incentive rates as specified in Attachment L of Western Power's submission of 10 September 2009.

Required Amendment 35

The proposed access arrangement revisions should be amended to provide for the recovery of deferred revenue over the third and subsequent access arrangement periods subject to approval by the Authority and avoidance of resultant price shocks to users of reference services.

Required Amendment 36

The proposed access arrangement revisions should be amended to provide for operation of the D-factor scheme to be subject to demonstration, to the Authority's satisfaction, that:

- any amount of operating expenditure satisfies the requirements of sections 6.40 and 6.41 of the Access Code, as relevant; and
- any amount of capital expenditure satisfies the requirements of section 6.51A of the Access Code.

Required Amendment 37

The proposed access arrangement revisions should be amended to resolve inconsistencies between clause 10 of the applications and queuing policy and clauses 3.4 and 3.5 of the electricity transfer access contract in relation to changes to covered services, including increases or decreases in contracted capacity at a connection point.

Required Amendment 38

The proposed access arrangement revisions should be amended such that clause 11.2 of the applications and queuing policy is amended to indicate that nothing in clause 11.2 provides Western Power with a derogation of obligations to energise connection points within the timeframes specified under clause 8.2 of the Code of Conduct for the Supply of Electricity to Small Use Customers or regulations 7 and 8 of the *Electricity Industry (Obligation to Connect) Regulations 2005*.

Required Amendment 39

The proposed access arrangement revisions should be amended such that clause 24.17(a) of the applications and queuing policy includes an obligation for Western Power to provide queue information in the initial response to an application to the extent that Western Power is reasonably able to do so, but in any case as part of a preliminary assessment under clause 19.3.

Required Amendment 40

The proposed access arrangement revisions should be amended such that the contributions policy includes an obligation on Western Power to provide an applicant or user with details of the calculation of any contribution to be required from the applicant or user including:

- where the contribution is in respect of new facilities investment, details of assessment of the new facilities investment against the requirements of the new facilities investment test and details of the calculation of the amount that does not meet the new facilities investment test;

- where the contribution is made in respect of non-capital costs related to alternative options, details of assessment of the non-capital costs against the alternative options test and details of the calculation of the amount that does not satisfy the alternative options test;
- details of assumptions and calculations applied in the apportionment of any forecast cost of works between the user or applicant and other users or applicants or Western Power under clause 5.4 of the contributions policy; and
- details of the calculation of a headworks contribution under clause 6 of the contributions policy.

Required Amendment 41

The proposed access arrangement revisions should be amended such that the contributions policy includes definitions of “rural zone” and “mixed zone” by cross reference to definitions of these terms in clause 5.3 of the price list information.

Required Amendment 42

The proposed access arrangement revisions should be amended such that clause 6 of the contributions policy sets out:

- the method or calculation and assumptions applied in determining the amount of costs to be recovered by headworks contributions;
- the method or calculation and assumptions applied in determining the allocation of costs across a forecast of connections to the network and determining the magnitude of headworks contributions;
- the procedures or methods applied by Western Power to ensure that headworks contributions will, in the long term, recover no more than Western Power’s costs of the headworks; and
- a mechanism, which may involve a system of accounting records, to ensure that any amount of the costs of headworks recovered by headworks contributions are not also recovered, or sought to be recovered, through other contributions or through tariffs for services.

Required Amendment 43

The proposed access arrangement revisions should be amended to delete the proposed clause 2(c)(iii) of the contributions policy that seeks to allow Western Power to require a contribution in respect of non-capital costs required in response to a connection application, where the non-capital costs associated with such works are costs which would not be incurred by a service provider efficiently minimising costs.

Required Amendment 44

The proposed access arrangement revisions should be amended such that the contributions policy only allows for contributions in respect of non-capital costs incurred in the implementation of an alternative option where:

- Western Power is able to clearly demonstrate that the costs were not included, and could not reasonably have been included, in forecasts of non-capital costs taken into account in setting the price control; and
- the conditions of section 6.41(b) of the Access Code are not satisfied.

Required Amendment 45

The proposed access arrangement revisions should be amended to delete provisions proposed under clause 4.3 of the contributions policy that allow for security to be required for a total period of greater than two years where forecast costs with respect to a connection application are less than \$15,000,000.

CONTENT OF AN ACCESS ARRANGEMENT

17. The required content of an access arrangement is specified in Chapter 5 of the Access Code. Section 5.1 specifies that an access arrangement must:
 - specify one or more reference services;
 - include a standard access contract for each reference service;
 - include service standard benchmarks for each reference service;
 - include a price control;
 - include pricing methods;
 - include a current price list and a description of the pricing years for the access arrangement;
 - include an applications and queuing policy;
 - include a contributions policy;
 - include a transfer and relocation policy;
 - if required, include efficiency and innovation benchmarks;
 - include provisions dealing with supplementary matters; and
 - include provisions dealing with:
 - the submission of proposed revisions to the access arrangement, including specification of a revisions submission date and target revisions commencement date; and
 - trigger events that require the service provider to submit proposed revisions to the access arrangement.
18. The reasons for the Authority's Final Decision address elements of the proposed revised access arrangement (i.e. Western Power's proposed access arrangement revisions) in the following order.
 - The "introduction" and "definitions" sections of the access arrangement, which are additional to the elements of an access arrangement required under section 5.1 of the Access Code.
 - Reference services.
 - Standard access contracts for reference services.
 - Service standard benchmarks.
 - Reference tariffs and the price control, including the determination of total costs and target revenue for the provision of covered services and reference services, the actual reference tariffs determined for the first year of the access arrangement period and the price control that governs changes to reference tariffs over the period, and the mechanisms that affect the determination of target revenue in the next access arrangement period.
 - Efficiency and innovation benchmarks applying to the provision of covered services.

- Various supplementary matters to the provision of covered services that are required to be addressed in the access arrangement.
- The applications and queuing policy.
- The contributions policy.
- The transfer and relocation policy.

INTRODUCTION TO THE ACCESS ARRANGEMENT AND DEFINITIONS

Access Code Requirements

19. Information presented in an access arrangement that is of a general or introductory nature does not fall within the scope of the elements of an access arrangement required under Chapter 5 of the Access Code.
20. The introduction to the current access arrangement includes dates for revision of the access arrangement, for which specific requirements exist under the Access Code. Under sections 5.29 and 5.31 of the Access Code, an access arrangement must specify:
 - a revisions submission date that is at least six months before the target revisions commencement date; and
 - a target revisions commencement date that must be five years after the start of the access arrangement period, unless a different date is proposed by the service provider and the different date is consistent with the Code objective.

Current Access Arrangement

21. Section 1 of the current access arrangement comprises an introduction that includes the proposed purpose, start date, revisions submission and commencement dates, and a list of the elements of the access arrangement. A section in this introduction describes the access arrangement's relationship to the Technical Rules and access arrangement information.
22. Section 2 of the current access arrangement relates to interpretation of certain terms used throughout the access arrangement.
23. The current access arrangement specifies a revisions submission date of 1 October 2008 and a target revisions commencement date of 1 July 2009.

Proposed Revisions

24. Proposed revisions to the introduction section of the access arrangement include:
 - an introduction to the proposed revisions in the context of revisions to the current access arrangement;

- a specified date of commencement of the proposed revisions of 1 July 2009 or a later date as specified by the Authority in accordance with section 4.26 of the Access Code;
- a proposed revisions submission date of 1 October 2011 and a target revisions commencement date of 1 July 2012, indicating an access arrangement period of three years from 1 July 2009; and
- a statement that the Authority must, under section 12.56 of the Access Code cause a review of the Technical Rules approximately six months before the target revisions commencement date for the proposed access arrangement revisions of 1 July 2009.

Considerations of the Authority

25. For matters of a general introductory nature, the Authority assessed the content of the introduction and definitions sections of the proposed revisions against considerations of consistency with, and ease of understanding of, the substantive elements of the current and revised access arrangements.
26. The Authority observed that the changes proposed for sections 1 and 2 of the access arrangement are either necessary updates to reflect revisions to the access arrangement for the second access arrangement period, such as stated time periods, or are of an editorial rather than substantive nature. Accordingly, the Authority indicated in the Draft Decision that it is satisfied that the general matters addressed in the introduction and definitions of the revised proposed access arrangement are consistent with the Access Code and the Code objective.
27. The Authority assessed the proposed revisions submission date and revisions commencement date against the specific requirements of section 5.31 of the Access Code.
28. The proposed target revisions commencement date of 1 July 2012 implies an access arrangement period of three years duration from 1 July 2009. Under section 5.31(b) of the Access Code, the Authority can only approve the target revisions commencement date if it is satisfied that this date, and an access arrangement period of three years rather than five years, is consistent with the Code objective.
29. Western Power has not provided reasons for proposing an access arrangement period of three years rather than five years duration.
30. In the Draft Decision, the Authority recognised that there are advantages of a longer (five year) access arrangement period:
 - the desirable incentives that a longer period creates for Western Power to out-perform its cost forecasts and achieve efficiencies that will ultimately be passed onto network users and electricity customers; and
 - the lower costs of regulation.
31. For a shorter access arrangement period to be consistent with the Code objective, the Authority indicated that there must be benefits from the shorter period that offset the loss of benefits from a longer period.
32. The Authority determined that the proposed access arrangement period of three years – during which the forecasts of costs are reflected in prices for network

services – is more likely than a longer access arrangement period to promote efficient operation and use of the SWIN and network services. Accordingly, the Authority indicated in the Draft Decision that it was satisfied that the proposed target revisions commencement date of 1 July 2012 is consistent with the Code objective. In making this determination, the Authority took into account:

- the particular feature of the proposed access arrangement revisions is the forecast increase in new facilities investment and non-capital costs over actual costs incurred in the first access arrangement period; and
 - with the global financial crisis, there is an unusual level of uncertainty in the level of economic activity and demand for network services for the second access arrangement period, and hence uncertainty as to whether the forecast increases in costs will be realised.
33. Finally, the Authority gave consideration to the statement in the proposed access arrangement revisions that the Authority must, under section 12.56 of the Access Code cause a review of the Technical Rules approximately six months before the target revisions commencement date for the proposed access arrangement revisions of 1 July 2009. The Authority considered that this statement is declaratory of section 12.56 of the Access Code. The Technical Rules are being addressed by the Authority as part of a separate assessment process.¹¹
34. No submissions made to the Authority addressed the Authority's Draft Decision on matters in either sections 1 or 2 of the proposed access arrangement revisions, including the proposed revisions submissions date or target revisions commencement date.
35. Taking into account the absence of submissions on the Draft Decision as it relates to the introduction to the access arrangement and definitions, the Authority maintains the positions taken in the Draft Decision and considers that the revisions submission date of 1 October 2011 and target revisions commencement date of 1 July 2012 are consistent with the Code objective.

REFERENCE SERVICES

Access Code Requirements

36. A reference service is a service described in the access arrangement and for which a reference tariff is specified in the access arrangement.
37. Section 5.1(a) of the Access Code requires that an access arrangement specify one or more reference services. The requirements for reference services are set out in section 5.2 of the Access Code:
- 5.2 An access arrangement must:
- (a) specify at least one reference service; and
 - (b) specify a reference service for each covered service that is likely to be sought by either or both of:

¹¹ Economic Regulation Authority web site: http://www.era.wa.gov.au/2/156/48/technical_rules.pm

- (i) a significant number of users and applicants; or
 - (ii) a substantial proportion of the market for services in the covered network;
- and
- (c) to the extent reasonably practicable, specify reference services in such a manner that a user or applicant is able to acquire by way of one or more reference services only those elements of a covered service that the user or applicant wishes to acquire; and
 - (d) for the covered network that is covered under section 3.1 – specify one or more reference services such that there is both:
 - (i) a reference service which enables a user or applicant to acquire an entry service at a connection point without a need to acquire a corresponding exit service at another connection point; and
 - (ii) a reference service which enables a user or applicant to acquire an exit service at a connection point without a need to acquire a corresponding entry service at another connection point.

38. The Access Code includes definitions of a number of terms that are relevant to understanding the reference services in the access arrangement.

“Covered service” means a service provided by means of a covered network, including:

- (a) a connection service; or
- (b) an entry service or exit service; or
- (c) a network use of system service; or
- (d) a common service; or
- (e) a service ancillary to a service listed in paragraphs (a) to (d) above,

but does not include an excluded service.

“Entry service” means a covered service provided by a service provider at an entry point under which the user may transfer electricity into the network at the entry point.

“Exit service” means a covered service provided by a service provider at an exit point under which the user may transfer electricity out of the network at the exit point.

“Excluded service” means a service provided by means of a covered network, including:

- (a) a connection service; or
- (b) an entry service or exit service; or
- (c) a network use of system service; or
- (d) a common service; or
- (e) a service ancillary to a service listed in paragraphs (a) to (d) above,

which meets the following criteria:

- (f) the supply of the service is subject to effective competition, and
- (g) the cost of the service is able to be excluded from consideration for price control purposes without departing from the Code objective.

“Reference service” means a covered service designated as a reference service in an access arrangement under section 5.1(a) for which there is a reference tariff, a standard access contract and service standard benchmarks.

“Non-reference service” means a covered service that is not a reference service.

“Reference tariff” means the tariff specified in a price list for a reference service.

39. The designation of any service as an excluded service is subject to determination by the Authority under section 6.33 of the Access Code. Other than as determined by the Authority under this section, all services provided by means of the covered network are covered services.

Current Access Arrangement

40. The current access arrangement at clauses 3.4 to 3.6 includes the following reference services:
- Anytime Energy (Residential) Exit Service, A1
 - Anytime Energy (Business) Exit Service, A2
 - Time of Use Energy (Small) Exit Service, A3
 - Time of Use Energy (Large) Exit Service, A4
 - High Voltage Metered Demand Exit Service, A5
 - Low Voltage Metered Demand Exit Service, A6
 - High Voltage Contract Maximum Demand Exit Service, A7
 - Low Voltage Contract Maximum Demand Exit Service, A8
 - Streetlighting Exit Service, A9
 - Un-Metered Supplies Exit Service, A10
 - Transmission Exit Service, A11
 - Distribution Entry Service, B1
 - Transmission Entry Service, B2.
41. Details of each reference service are provided in Appendix 7 of the current access arrangement, including:
- a description of the reference service;
 - criteria applied to determine eligibility of users for particular reference services;
 - the applicable reference tariff;
 - the applicable standard access contract; and
 - the applicable service standard benchmarks.
42. The current access arrangement at clause 3.12 also includes a description of a range of non-reference services that are in the nature of ancillary services.
43. The current access arrangement does not specify any services as excluded services.

Proposed Revisions

44. Western Power has not proposed any revisions to its list of reference services, but has made two material changes to the specification of reference services.
45. First, the eligibility criteria have been changed for the “Time of Use Energy (Small) Exit Service (A3)” and the name of the service has been changed to “Time of Use Energy (Residential) Exit Service (A3)”. The eligibility criteria have been changed from indicating that the service is available at an exit point with 12-month electricity consumption of less than 50,000 kWh to an exit point that is located at a residential premises or a premises occupied by a voluntary/charitable organisation.
46. Secondly, the eligibility criteria have been changed for the “Time of Use Energy (Large) Exit Service (A4)” and the name of the service has been changed to “Time of Use Energy (Business) Exit Service (A4)”. The eligibility criteria have been changed from indicating that the service is available at an exit point with 12-month electricity consumption of at least 50,000 kWh to an exit point that is located at a commercial (business) premises.
47. Western Power indicates that the purpose of these changes is to allow for different on-peak and off-peak charging periods for residential and commercial users of the network (to better align with existing metering capabilities), to create alignment with the energy only reference services and to simplify the administration of the two reference services.¹²
48. Western Power proposed that the specified list of non-reference services be revised to remove certain works, fees and charges from the list of non-reference services, including:
 - relocation of transmission assets at the request of a user;
 - relocation of distribution assets at the request of a user;
 - works for jointly owned assets;
 - sale of network schematics;
 - access billing services fees;
 - transition access fees; and
 - capital works application fees.
49. Western Power proposes adding to the list of non-reference services two additional services that comprise the provision of quotations for the:
 - relocation of transmission assets at the request of a user; and
 - relocation of distribution assets at the request of a user.

¹² Western Power submission of 17 December 2008.

Considerations of the Authority

50. The Authority has addressed the following matters relating either to proposed revisions to the access arrangement or matters raised in submissions.
- Changes to the eligibility criteria for the “time-of-use energy exit services”.
 - Inclusion in the access arrangement of a connection service as a reference service.
 - Inclusion in the access arrangement of a reference service for bi-directional connection points for the transfer of electricity both into and out of the network.
 - Changes to the list of non-reference services.
51. The Authority’s considerations on each of these matters are set out as follows.

Eligibility Criteria for the “Time-of-Use Energy Exit Services”

52. Proposed revisions to reference services specified in the current access arrangement comprise changes to eligibility criteria associated with the change in name of Time of Use Energy (Small) Exit Service (A3) to the Time of Use Energy (Residential) Exit Service (A3), and the Time of Use Energy (Large) Exit Service (A4) to the Time of Use Energy (Business) Exit Service (A4).
53. Western Power has indicated that the changes are proposed in response to an approach to Western Power by Synergy to align the network services with time-of-use parameters of retail electricity services that are programmed into interval meters. Western Power indicates that the programming of meters differs for residential and commercial services with:
- residential “Smartpower” meters programmed for an on-peak period of 7am to 9pm Monday to Friday and an off-peak period being all other times; and
 - commercial meters being programmed for an on-peak period of 8am to 10pm Monday to Friday and an off-peak period being all other times.¹³
54. Under the current access arrangement, both the Time of Use Energy (Small) Exit Service (A3) and Time of Use Energy (Large) Exit Service (A4) have an on-peak time defined as 8am to 10pm Monday to Friday. The reason for the change in the eligibility criteria for the reference services is to resolve the inconsistency between the on-peak and off-peak periods programmed into the meters and the on-peak and off-peak periods for the network services. Western Power indicates that the changes to eligibility criteria for the reference services are proposed after consideration of other options, such as changes to the definitions of on-peak and off-peak, and reprogramming of existing meters. These options are considered by Western Power as either too expensive to implement or causing conflicts with Synergy’s contractual obligations to electricity customers.

¹³ Email from Western Power to the Economic Regulation Authority of 21 January 2009. In the Authority’s Draft Decision the on-peak periods for residential “Smartpower” meters and commercial meters were stated incorrectly (i.e. the on-peak period for residential “Smartpower” meters was previously stated as 8am to 9pm, and the on-peak period for commercial meters was previously stated as 7am to 10pm).

55. The Authority took the view in the Draft Decision that the economic benefit of time-of-use tariffs is to enable network tariffs to reflect costs incurred in constructing the network to accommodate peak electricity demands. The availability of time-of-use tariffs provides price signals and incentives for electricity consumers to shift electricity consumption from periods of peak demand to periods of non-peak demand, which in turn engenders efficient use of, and investment in, the network infrastructure.
56. The Authority further took the view in the Draft Decision that, for the economic benefits of time-of-use tariffs to be achieved, the reference services that provide time-of-use tariffs should broadly correspond to customer classes with similar patterns of electricity use (and hence use of the network). This would allow the tariffs to be set to reflect the costs of providing network services to those customer classes. The Authority considered that this best occurs with the eligibility criteria for the time-of-use tariffs reflecting the characteristics (patterns of electricity use) of electricity customers, rather than the simple level of energy use.
57. Taking these matters into account the Authority indicated in the Draft Decision that it is satisfied that the changes to eligibility criteria of reference services to distinguish between residential and business premises are consistent with the requirements of section 5.2 of the Access Code. None of the submissions made to the Authority on the Draft Decision addressed the changes in eligibility criteria for reference services and the Authority maintains this view.
58. The Authority also considered in the Draft Decision whether the Time of Use Energy (Residential) Exit Service (A3) should be made unavailable to voluntary/charitable organisations, reflecting a draft recommendation to the government that concessionary electricity retail tariffs for such organisations be abolished.
59. In response to a request for information from the Authority, Western Power indicated that:

Western Power included voluntary/charitable organisations within the eligibility criteria of the A3 reference service to ensure alignment with the A1 reference service eligibility criteria. Western Power notes that in Synergy's submission to the [Authority] ... that Synergy requests the removal of voluntary/charitable organisations from the eligibility criteria of the A3 reference service due to the Office of Energy's recommendation. Western Power would like to see this issue treated consistently across the A1 and A3 reference tariff (either included in both or removed from both). The inclusion of voluntary/charitable organisations within the eligibility criteria is to provide support to the Synergy C1/C2 and D1/D2 [regulated retail electricity] tariffs, if these tariffs are ceasing then it is appropriate that the eligibility criteria for the A1 and A3 reference service remove the reference to voluntary/charitable organisations. Western Power notes that this recommendation is yet to be finalised by the Office of Energy.
60. The Authority observed that, at the time of the Draft Decision, eligibility criteria for time-of-use services that group voluntary/charitable organisations with business customers, rather than residential customers, would be inconsistent with regulated retail electricity tariffs that group voluntary/charitable organisations with residential electricity customers. While a recommendation has been made to government for

this grouping to change,¹⁴ no decision had been made to this effect. In the absence of such a change, additional costs may arise for Western Power and/or electricity retailers due to inconsistencies in eligibility criteria for regulated retail electricity tariffs and network tariffs.

61. There has been no change in these circumstances since the Draft Decision and the Authority considers that the proposed eligibility criteria should remain consistent with the regulated electricity retail tariffs. That is, the Time of Use Energy (Residential) Exit Service should continue to include voluntary/charitable organisations until such time as the corresponding eligibility criteria for the regulated electricity retail tariffs are changed to group voluntary/charitable organisations with businesses customers.

Additional Reference Services – Connection Service

62. In response to a submission from Verve Energy,¹⁵ the Authority considered in the Draft Decision whether the access arrangement should include a connection service, either as a reference service or otherwise as a non-reference service on specified terms and conditions.
63. The Authority took the view that it is neither necessary nor practical for the access arrangement to include a connection service as a reference service or non-reference service. The Authority took into account the following matters in coming to this view.
 - The Access Code does not require a service provider to include in an access arrangement a designation or description of non-reference services or a standard access contract for non-reference services. Under section 4.29(c), the Authority cannot require a service provider to include these matters in an access arrangement and, hence, the Authority cannot require Western Power to include a connection service in the access arrangement as a non-reference service.
 - As the cost of providing a connection service, and hence the relevant price for the service, would typically be specific to the party receiving the service, it would not be practical to establish a reference tariff for a connection service. The only manner in which a reference tariff could be ascribed to a connection service would be to determine a separate reference tariff for each party to whom the service is provided, which would be inconsistent with the concept of a reference service. In the absence of a reference tariff for an individual connection service, it is not possible to include a connection service in the access arrangement as a reference service, or to require that the access arrangement include a standard access contract for a connection service.
 - In the National Electricity Market (and under the National Electricity Rules) connection services are treated as negotiated services, meaning that the price and terms for the connection services are subject to determination by negotiation (in accordance with negotiation principles), with resolution of disputes by arbitration.

¹⁴ Office of Energy, January 2009, Electricity Retail Market Review: Final Recommendations Report, Review of Electricity Tariff Arrangements, Report to the Minister for Energy, pp. 29 – 31.

¹⁵ Verve Energy submission of 2 December 2008.

64. None of the submissions received by the Authority on the Draft Decision addressed this matter and the Authority maintains the position not to require the access arrangement to include a connection service as a reference service or non-reference service.

Additional Reference Services – Bi-directional Connection Points

65. The Authority considered in the Draft Decision whether the access arrangement should include a reference service that is both an entry and exit service at a single connection point. The relevant context was that such a reference service is necessary where small-scale renewable energy systems are connected to the network and where electricity consumers participate in the Renewable Energy Buyback Scheme. The current access arrangement does not provide a reference service for a connection point that may variously function as an entry or exit point.
66. The Authority took the view in the Draft Decision that the number of connection points for which a bi-directional service is required by Synergy (and potentially other users) means that the service is likely to be sought by a significant number of users. Accordingly, the Authority considered that the proposed access arrangement revisions should make provision for a reference service for a bi-directional connection point.
67. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 1

The proposed access arrangement revisions should be amended such that one or more reference services provide for single connection points to function both as entry points and exit points. This revision will cater for the requirements for network services that arise where small-scale renewable energy systems connect to the network and where electricity consumers participate in the Renewable Energy Buyback Scheme.

68. Subsequent to the Draft Decision, Alinta Sales and Synergy have made submissions to the Authority indicating support for this required amendment.¹⁶
69. Western Power has indicated to the Authority that it will amend the proposed access arrangement revisions to include reference services in accordance with Draft Decision Amendment 1.¹⁷
70. Western Power proposes to respond to this required amendment by inclusion in the access arrangement of “Reference Service C1” that will be available to new and existing users with bi-directional energy flows due to small-scale embedded generation in preference to the currently available Reference Service A1 (Anytime Energy (Residential) Exit Service) and Reference Service A3 (Time of Use Energy (Residential) Service). The proposed Reference Service C1 will be included in the access arrangement by a definition in Appendix 8 of the access arrangement as indicated in Table 1.

¹⁶ Alinta Sales Pty Ltd submission of 10 September 2009; Synergy submission of 1 October 2009.

¹⁷ Western Power submissions of 13 August 2009 and 5 October 2009.

Table 1 Western Power's proposed definition of a bi-directional reference service: Reference Service C1

Reference Service Name:	Reference Service C1 – Time of Use (Residential) – Bi-directional Service
Reference Service Description:	A bi-directional service combined with a connection service and a standard meter service at a bi-directional point on the low voltage (415 volts or less) distribution system.
Eligibility Criteria:	Users are eligible to use this service if: <ol style="list-style-type: none"> 1. The bi-directional point is located at a residential premise; 2. The consumer's facilities and equipment include a small scale embedded generation system connected via an inverter system that is rated up to 10 kVA for single phase connections and 30 kVA for three phase connections; 3. The consumer's inverter system must comply with the requirements of AS 4777 and the Technical Rules; 4. An interval meter having capability for import and export channels and five register information collection is installed at the bi-directional point; and 5. The consumer's facilities and equipment comply with the Technical Rules, the WA Electrical Requirements and AS 3000.
Applicable Reference Tariff:	"RT12" in the Price List published in Appendix 5 of the Access Arrangement
Applicable Standard Access Contract:	"Electricity Transfer Access Contract" published in Appendix 4 of the Access Arrangement
Applicable Service Standard Benchmarks:	Refer to Section 3.18 and 3.19 of the Access Arrangement

71. Western Power also proposes several consequential changes to the applications and queuing policy, electricity transfer access contract, transfer and relocation policy and contributions policy. These consequential changes comprise definitions for a bi-directional service and bi-directional connection point, and amendment of various provisions to include a bi-directional point as a type of connection point.¹⁸
72. The Authority observes that the definition of the bi-directional reference service is consistent with current practice of Western Power in providing bi-directional services other than as a reference service. The Authority also observes that the requirements for compliance with AS 4777 and AS 3000 are consistent with requirements under Technical Rules.¹⁹
73. Western Power's submission to the Authority addressing Draft Decision Amendment 1 includes copies of submissions made to Western Power during Western Power's own consultation on the nature and tariff structure for a bi-directional reference service.²⁰ The submissions made to Western Power indicate broad support for the bi-directional service as defined by Western Power and address mainly the proposed structure of the reference tariff for this service, which is considered by the Authority elsewhere in this Final Decision (paragraph 1067 and following).

¹⁸ Western Power submission of 5 October 2009.

¹⁹ Technical Rules, clauses 3.7.3 and 3.7.5.

²⁰ Western Power submission of 5 October 2009, Appendix Q2.

74. One submission made to Western Power questions why a bi-directional reference service should not also be made available for connection points other than at residential premises.²¹ Submissions made to the Authority on the Authority's assessment of the proposed access arrangement revisions indicate only a demand for a bi-directional service as a reference service for connection points at residential premises. Should demand for bi-directional reference services at other types of connection points become evident, this is a matter that can be addressed in future revisions of the access arrangement for the SWIN.
75. Taking into account Western Power's response to Draft Decision Amendment 1, the Authority maintains this requirement for amendment of the proposed access arrangement revisions. The Authority accepts that Western Power's proposed reference service will satisfy this requirement.

Required Amendment 1

The proposed access arrangement revisions should be amended such that one or more reference services provide for single connection points to function both as entry points and exit points. The reference service or services must cater for the requirements for network services that arise where small-scale renewable energy systems connect to the network and where electricity consumers participate in the Renewable Energy Buyback Scheme.

Non-Reference Services

76. Western Power has proposed changes to the non-reference services listed in clause 3.12 of the proposed access arrangement revisions. The proposed changes are to remove certain works, fees and charges from the list of non-reference services and to add to the list of non-reference services:
- quotation for relocation of transmission assets at the request of a user; and
 - quotation for relocation of distribution assets at the request of a user.
77. The Access Code does not include a requirement for an access arrangement to include a list of non-reference services, with these included in the access arrangement at Western Power's discretion. This list of non-reference services does not limit the range of non-reference services that Western Power may provide, nor that a prospective user may request.
78. Under section 4.29(b) of the Access Code, the Authority may use its discretion to approve a proposed access arrangement containing items not required to be included in the access arrangement.
79. In view of the absence of constraints on either Western Power or a user arising from the inclusion of non-reference services in the access arrangement, and the

²¹ Submission of Mr Noel Schubert to Western Power, 23 September 2009.

absence of submissions on the list of non-reference services, the Authority has no objection to the list forming part of the access arrangement or to the proposed revisions to this list.

STANDARD ACCESS CONTRACTS

Access Code Requirements

80. A standard access contract sets out the terms and conditions under which a user may obtain access to a reference service at the reference tariff. Section 5.1(b) of the Access Code requires that an access arrangement include a standard access contract for each reference service.
81. The requirements for standard access contracts are set out in sections 5.3 to 5.5 of the Access Code:
- 5.3 A standard access contract must be:
- (a) reasonable; and
 - (b) sufficiently detailed and complete to:
 - (i) form the basis for a commercially workable access contract; and
 - (ii) enable a user or applicant to determine the value represented by the reference service at the reference tariff.
- 5.4 A standard access contract may:
- (a) be based in whole or in part upon the model standard access contract, in which case, to the extent that it is based on the model standard access contract, any matter which in the model standard access contract is left to be completed in the Access Arrangement, must be completed in a manner consistent with:
 - (i) any instructions in relation to the matter contained in the model standard access contract; and
 - (ii) section 5.3; and
 - (iii) the Code objective;and
 - (b) be formulated without any reference to the model standard access contract and is not required to reproduce, in whole or in part, the model standard access contract.
- 5.5 The Authority:
- (a) must determine that a standard access contract is consistent with section 5.3 and the Code objective to the extent that it reproduces without material omission or variation the model standard access contract; and
 - (b) otherwise must have regard to the model standard access contract in determining whether the standard access contract is consistent with section 5.3 and the Code objective.

Current Access Arrangement

82. The current access arrangement includes a standard access contract (the “electricity transfer access contract”) that applies to all of the reference services under the access arrangement.

Proposed Revisions

83. In the proposed access arrangement revisions, Western Power has maintained the single electricity transfer access contract for all reference services (**proposed electricity transfer access contract**).²² The proposed electricity transfer access contract includes revisions made for the purposes of clarifying existing provisions as well as substantive changes to, or additions to, the contract.
84. The principal revisions proposed for the electricity transfer access contract include:
- provision for Western Power to provide a user with a “modified service” on a temporary basis (clause 3.1(d) of the proposed electricity transfer access contract);
 - a requirement that a user comply with “eligibility criteria” in order to obtain a reference service (clause 3.3);
 - provisions for updating of information and records for connection points (clauses 3.6(c) to 3.6(e) and 7.1(f));
 - provision for Western Power to unilaterally reduce a user’s contracted capacity at a connection point, where that contracted capacity is not being used by the user, Western Power is of the opinion that the contracted capacity is unlikely to be used, and the unused contracted capacity is the subject of an application from another person (clause 3.8);
 - provision for Western Power and a user to implement invoicing arrangements different to the standard invoicing arrangements set out in the electricity transfer access contract (clause 8.1(d));
 - an indication that provisions of the contract relating to charges for services are subject to sections 65 and 66 of the *Energy Operators (Powers) Act 1979 (WA)*, which deal with metering data, improperly functioning meters and meter tests (clause 8.5);
 - inclusion of sunset clauses on claims for adjusting payments in respect of payment errors (clauses 8.6(d) and 8.6(e)) and inclusion of procedural provisions dealing with goods and services tax implications of payment adjustments (clause 8.7(e));
 - clarification that requirements of the user and Western Power to comply with the Technical Rules are subject to any exemptions given to Western Power or the user under Chapter 1 of the Technical Rules (clause 11.1);
 - inclusion of processes for recording technical characteristics of equipment where exemptions to the Technical Rules are granted (clause 13);

²² Proposed access arrangement revisions, Appendix 4.

- inclusion of additional provisions dealing with dispute resolution (clause 29.3);
 - addition of “information about or relating to a controller” to a list of information required to be kept confidential by Western Power and a user (clause 33.1(f)); and
 - a change in the definition of a bare transfer (schedule 1) to indicate that a bare transfer involves no novation of the rights or obligations of the original user under the access contract with Western Power.
85. Subsequent to the Authority issuing its Draft Decision, Western Power has proposed further revisions to the electricity transfer access contract. These additional proposed revisions comprise:
- changes to clause 3.7 of the electricity transfer access contract to provide for flexibility in the storage and updating of connection and metering information according to the characteristics of the user;²³
 - changes to clause 9 of the electricity transfer access contract to remove provision for a user to provide a “parent company guarantee” and to increase the credit-rating thresholds that relieve a user or indemnifier from being required to provide security;²⁴ and
 - addition of a new clause relating to a change in control of a business that is a user.²⁵
86. On 28 August 2009, the Authority issued a notice to advise interested parties that these further proposed revisions to the electricity transfer access contract would be considered by the Authority in its Final Decision on the proposed access arrangement revisions, and invited interested parties to make submissions on the further proposed revisions.
87. Details of all proposed revisions to the electricity transfer access contract and the Authority’s determinations on each revision are set out below under “Considerations of the Authority”.

Considerations of the Authority

88. In considering the proposed access arrangement revisions, the Authority has given attention to the revisions proposed by Western Power, and in light of practical experience, whether the terms and conditions retained from the existing electricity transfer access contract are consistent with the requirements of the Access Code.
89. Particular elements of the proposed electricity transfer access contract are addressed below, in each case dealing with the Authority’s Draft Decision, submissions on the Draft Decision and the Authority’s Final Decision.

²³ Western Power submission of 13 August 2008, Attachment A.

²⁴ Western Power submission of 13 August 2008, Attachment G.

²⁵ Western Power submission of 13 August 2008, Attachment H.

Requirements for Exit and Entry Services (clause 3.1(b))

90. Clause 3.1(b) of the proposed electricity transfer access contract requires the user to have an exit service at a connection point (in order to transfer electricity out of the network at that connection point), and an entry service at a connection point (in order to transfer electricity into the network at that connection point). This clause is unchanged from the current access arrangement.
91. Synergy submitted that clause 3.1(b) prevents reference services accommodating embedded generation in the distribution network, which entails bi-directional transfer of electricity at a single connection point.²⁶ Synergy further submitted that the electricity transfer access contract should at least contemplate the existence of a connection point at which electricity is exported into and out of the network, as is currently happening within the South West Interconnected System (**SWIS**) (for example, small scale renewable energy systems that operate under the Government's Renewable Energy Buyback Scheme).
92. Synergy raised similar matters in its proposals for additional reference services, which the Authority has addressed in this Final Decision. Under this Final Decision, the Authority is requiring that the revised proposed access arrangement be amended to provide reference services to accommodate connection points with bi-directional transfer of electricity (refer paragraph 75). Western Power has indicated to the Authority that it will amend the proposed access arrangement revisions to comply with this requirement.

Maximum Rate of Electricity Transfer (clause 3.1(c))

93. Clause 3.1(c) of the proposed electricity transfer access contract requires the user to endeavour, as a reasonable and prudent person, to ensure that the rate at which electricity is transferred into or out of the network (by or on behalf of the user) does not exceed the contracted capacity for the service. This clause is unchanged from the current access arrangement.
94. Synergy submitted that this requirement on the user is unreasonable in circumstances where the user is not the controller of a connection point and, hence, has neither the necessary information nor the capability to meet the requirement of clause 3.1(c).²⁷ Synergy submitted that the clause contemplates that a user who is a retailer should take some action to control the rate of electricity consumption by its customers and contended that this outcome is unreasonable for reasons that:
 - it is not clear precisely what action a retail user must take in order to comply with clause 3.1(c);
 - it is not reasonable and is contrary to the Code objective for a regulated contract such as the electricity transfer access contract to require one contracting party (i.e. the user) to take action, at its cost, for the benefit of the other contracting party (i.e. Western Power) against third parties (i.e. the user's customers);

²⁶ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

²⁷ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

- a retail user does not have the ability to monitor in a timely manner whether its customer is in breach of the contractual requirement, let alone whether such breach is causing damage;
 - as any damage caused by a customer exceeding contracted capacity is most likely to be suffered by Western Power and not by the retail user, it will be legally difficult for a user to enforce such a contractual requirement, for example, by way of an injunction or damages;
 - clause 3.1(c) is uncertain in its operation as to precisely what the electricity transfer rate is that a user must not exceed;
 - clause 3.1(c) is unnecessary as, under the *Energy Operators (Powers) Act 1979* and under clause 6.1(e) of the electricity transfer access contract, Western Power has the ability to control the actions of a retail user's customer in minute detail and to impose sanctions for non-compliance; and
 - clause 3.1(c) restricts a retail user's ability to enter into contracts with its customers which entitle the customer to increase its contracted maximum demand.
95. Synergy submitted that if it is intended that clause 3.1(c) requires only that a user include a clause in its customer contract to the effect that the customer must not exceed contracted capacity, then clause 3.1(c) should be amended to make this clear. Further, clause 3.1(c) should also provide that the user does not have to enforce this requirement of the customer contract.
96. In the Draft Decision, the Authority indicated that it had considered the concerns of Synergy, but can not require amendment of clause 3.1(c) because this clause is the same as clause A3.14 of the model standard access contract under the Access Code. The Authority indicated in the Draft Decision that, under clause 5.5(a) of the Access Code, the Authority must determine that clause 3.1(c) is consistent with section 5.3 of the Access Code.
97. Subsequent to the Draft Decision, Synergy submits that the Authority has erred in this determination as the relevant consideration under section 5.5(a) of the Access Code is not whether a particular element of the electricity networks access contract is materially the same as a corresponding element in the model standard access contract. Rather, Synergy submits that the reproduction of an element of the model standard access contract would only automatically cause that element to be consistent with the requirements of the Access Code where the model standard access contract is adopted in its entirety. In circumstances where the model standard access contract is not adopted in its entirety, the model standard access contract should only serve as a benchmark when assessing whether the proposed electricity transfer access contract meets the requirements of the Access Code.²⁸
98. The Authority does not accept Synergy's contention of error in interpretation of clause 5.5(a) of the Access Code. The Authority considers that the effect of section 5.5(a) of the Access Code is that the Authority is required to determine that a standard access contract is consistent with section 5.3 of the Access Code and the Code objective to the extent that it reproduces the equivalent parts of the model standard access contract without material omission or variation. The Authority accepts that, in applying section 5.5(a) of the Access Code, it should also consider

²⁸ Synergy submission of 1 October 2009.

whether clauses of the model standard access contract are interdependent in which case the reproduction of one clause without another related provision or with alterations to a related provision may constitute a material omission or variation to the relevant part of the model standard access contract.

99. In regard to clause 3.1(c) of the proposed electricity transfer access contract, the Authority considers that there are no material omissions or variations from the corresponding clause A3.14 of the model standard access contract, either directly or by interaction with other provisions of the proposed electricity transfer access contract. Accordingly, the Authority maintains the determination under the Draft Decision that clause 3.1(c) is consistent with section 5.3 of the Access Code.

Modified Service (clause 3.1(d))

100. Under a new clause 3.1(d) of the proposed electricity transfer access contract, Western Power may provide the user with a “modified service” pending completion of events or works that are to be completed before the provision of the contracted service.
101. In submissions made to the Authority, Griffin Energy²⁹ and Alinta Sales³⁰ support the provision of a modified service and the flexibility that this provides for a user and Western Power to enter into an access agreement.
102. Alinta Sales, however, expressed concern that the provision for a modified service would reduce the incentive for Western Power to provide the full contracted service and provide too much discretion for Western Power in the timing for completion of relevant events or works necessary for the provision of the contracted service.
103. The Authority observes that there is nothing in clause 3.1(d) that alters any obligation arising under either the Access Code or access arrangement for Western Power to undertake necessary works or meet conditions for the provision of a contracted service. Further, the provision for a modified service can only occur on terms agreed to between a user and Western Power.
104. Taking into account the support expressed in submissions for the modified service and that the provision of modified services does not otherwise affect a user’s rights under the Access Code or access arrangement, the Authority considers that the new clause 3.1(d) is consistent with section 5.3 of the Access Code.

User may Select Services (clause 3.2)

105. Clause 3.2 of the proposed electricity transfer access contract allows the user to give notice to Western Power to change the service in respect of a connection point. Both the user, in giving notice, and Western Power, in processing the request, must comply with the applications and queuing policy. This clause is unchanged from the current access arrangement.

²⁹ Griffin Energy Development Pty Ltd submission of 17 December 2008.

³⁰ Alinta Sales Pty Ltd submission of 17 December 2009.

106. Synergy submitted that the timing requirements under the applications and queuing policy are inconsistent with relevant requirements under the *Electricity Industry Customer Transfer Code* (**Customer Transfer Code**).³¹

Clause 3.2 of the [electricity transfer access contract] refers to Western Power processing a notice by a User to change a Service in respect of a Connection Point in accordance with the Applications and Queuing Policy... . However the timing in clauses 13.1(a) and 13.1(b) of the [applications and queuing policy] within which Western Power must process the notice appear to be inconsistent with the requirement to nominate a transfer date set out in clause 4.7 of the Customer Transfer Code. Synergy submits that clause 3.2(b) should be amended to require Western Power to process a notice from User (i.e. a customer transfer request) in accordance with the requirements of the Customer Transfer Code.

107. Clauses 13.1(a) and 13.1(b) of the applications and queuing policy make provision for Western Power to undertake an assessment of whether an exit point is contestable – in circumstances where an applicant makes an electricity transfer application or connection application to establish a new exit point, or an incoming retailer makes a transfer request with regard to an exit point – and indicate the time period for Western Power to make this assessment (five business days). Neither of these clauses (or the associated timing requirement) are relevant to a change in reference service at a connection point.
108. Clause 4.7 of the Customer Transfer Code establishes requirements for a customer transfer date pursuant to a customer transfer request. The transfer date must be between either 3 and 50 business days (metropolitan area) or 5 and 50 business days (non-metropolitan area) after the customer transfer request. This clause, and the associated time requirements, are not relevant to a change in a reference service at a connection point.
109. The Authority therefore considers that neither of the timing requirements in clause 13.1 of the applications and queuing policy or clause 4.7 of the Customer Transfer Code are relevant to the provisions of clause 3.2 of the proposed electricity transfer access contract.

Eligibility Criteria (clause 3.3)

110. Western Power has proposed a new clause (clause 3.3) of the proposed electricity transfer access contract under which the user must comply with the eligibility criteria applicable to the reference service provided at a connection point.
111. The eligibility criteria for reference services relate to the nature of the premises (commercial or residential); historical or forecast maximum demand; the type of meter installed at the connection point; requirements for streetlights and un-metered supplies; and compliance with the Technical Rules, the WA Electrical Requirements and Australian Standard AS 3000.
112. Synergy submitted that it understands the intent of clause 3.3 is for a user to ensure that, when its customer's circumstances change such that the customer no longer meets the eligibility criteria, the user must change the reference service applicable to the customer in accordance with the applications and queuing policy.³² Synergy

³¹ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

³² Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

submitted that, if this is the case, then it is only possible for the user to meet this requirement if a change in the reference service applying to a customer is reasonably facilitated through the applications and queuing policy. Synergy submitted that clause 3.3 of the proposed electricity transfer access contract should be revised to reflect this policy:

The User, insofar as it is reasonably able to do so and subject to the Applications and Queuing Policy*, and subject to Western Power* meeting its legal and regulatory obligations in relation to providing Reference Services*, [must] in relation to each Reference Service Point*, comply with the Eligibility Criteria* applicable to the Reference Service* provided, or to be provided, at the Reference Service Point*.

113. The Authority considers that it is reasonable and consistent with section 5.3(a) of the Access Code for the user to be bound to comply with the relevant criteria for the reference service, as these criteria define the relevant reference service according to the situation and requirements of the connection point and electricity consumer.
114. The Authority considers that the revisions to clause 3.3 suggested by Synergy provide an unnecessary level of protection to the user and are subject to potential abuse by the user. These revisions would provide an ability for the user to not comply with the eligibility criteria, even if Western Power fulfilled its contractual obligations (in the provision of the contracted reference service), or in the event that Western Power has not met unrelated obligations.
115. The Authority accepted in the Draft Decision that the requirement to comply with eligibility criteria should be subject to Western Power meeting its obligations to, as necessary, change the reference service applicable to a connection point and electricity customer. Accordingly, the Authority determined that clause 3.3 should be subject to operation of the applications and queuing policy, which allows for the change of a reference service.
116. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 2

The proposed access arrangement revisions should be amended so that the requirement under clause 3.3 for a user to ensure compliance with eligibility criteria for a reference service is subject to operation of the applications and queuing policy regarding a change in the reference service applying to a connection point.

117. In response to Draft Decision Amendment 2, Western Power submits that it agrees that the requirement to comply with the eligibility criteria should be subject to Western Power meeting its obligations to change the reference service applicable to a connection point and electricity customer, and that clause 3.3 should be subject to operation of the applications and queuing policy which allows for the change of a reference service.³³
118. Western Power further submits that it intends to respond to the amendment required under the Draft Decision by addition of a new clause 3.3(b) to the electricity transfer access contract to indicate that any change in a reference service is subject to clause 3.2 of the electricity transfer access contract, which sets

³³ Western Power submission of 13 August 2009.

out Western Power's obligations in regard to a change in reference service at a connection point. The proposed clause 3.3(b) reads:

Where the User has sought to change the Reference Service in respect of a Connection Point under clause 3.2(a), its obligation under clause 3.3(a) in relation to that Connection Point is subject to compliance by Western Power with clause 3.2(b).

119. In a submission subsequent to the Draft Decision, Synergy indicates in-principle support for the new clause proposed by Western Power, but submits that clauses 3.2 and 3.3 of the electricity transfer access contract should be changed to reflect that an applicant under the applications and queuing policy who has lodged an application to change a reference service may be a user or a customer.
120. The Authority considers that it is unnecessary for the electricity transfer access contract to refer to a user or customer, as submitted by Synergy, as the electricity transfer access contract is a contract only between Western Power and a user.
121. The Authority therefore maintains the requirement for amendment of the electricity transfer access contract in accordance with Draft Decision Amendment 2 and accepts that Western Power's proposed clause 3.3(b) addresses this requirement.

Required Amendment 2

The proposed access arrangement revisions should be amended to include a new clause 3.3(b) of the electricity transfer access contract that reads "Where the user has sought to change the reference service in respect of a connection point under clause 3.2(a), its obligation under clause 3.3(a) in relation to that connection point is subject to compliance by Western Power with clause 3.2(b)".

Addition of a Connection Point (clause 3.4)

122. Western Power has included a new provision under clause 3.4 of the proposed electricity transfer access contract to establish a process for addition of a connection point to the contract.
123. Clause 3.4 of the proposed electricity transfer access contract corresponds to clause 3.3 of the current electricity transfer access contract. This clause makes provision for an increase of contracted capacity at a connection point and indicates that a request for an increase in contracted capacity is made by the user, and processed by Western Power, under the applications and queuing policy, the Customer Transfer Code or the electricity transfer access contract. The change to this clause applies the same process and requirements to the addition of a connection point.
124. The addition of a connection point to an electricity transfer access contract may occur in a range of circumstances, including where a new connection point is being established on the network and where a connection point is being transferred from the access contract of one retailer to another retailer – either with or without any change in the customer or energy transfer at that connection point. Depending upon the circumstances of the addition of a connection point, different

administrative processes may be applied to the application and approval of the new connection point, including the possibility that the addition may be subject to a queued connection application. Given this, the Authority considers that the addition of a connection point to an access contract is reasonably subject to relevant provisions of the applications and queuing policy, Customer Transfer Code or other relevant provisions of the contract, as applicable. As such, the Authority is satisfied that the proposed change to clause 3.4 is consistent with section 5.3 of the Access Code.

Deletion of a Connection Point (clause 3.6)

125. Clause 3.6 of the proposed electricity transfer access contract provides for the user to request deletion of a connection point from the contract. Clause 3.6 also sets out the circumstances in which Western Power is obliged to comply with the request. This clause is unchanged from the current access arrangement.³⁴
126. Synergy submitted that clause 3.6 of the proposed electricity transfer access contract should make it clear that Western Power cannot delete a connection point from an access contract, except in response to a request from the user:³⁵

Synergy submits that clause 3.6 of the [electricity transfer access contract] does not make it sufficiently clear that Western Power must not delete a Connection Point other than in accordance with a request by a User under clause 3.6(b). Further, that the sanctions for Western Power deleting a Connection Point from the [electricity transfer access contract] in breach of clause 3.6 are not sufficient.

Synergy is aware that Western Power has, on occasion, deleted Connection Points from an access contract other than at the request of a User in accordance with clause 3.6(b). The impact of this upon a User can be significant, including the lost opportunity cost to profit from the sale of electricity to the User's customers. Under the definition of Direct Damage in Schedule 9 of the [electricity transfer access contract], a User could not seek such lost opportunity costs from Western Power if it deleted a Connection Point in breach of the [electricity transfer access contract].

Synergy submits that in order for clause 3.6 to be reasonable within section 5.3(c) of the [Access Code], the following should be added to clause 3.6:

"(d) Subject to the Customer Transfer Code, Western Power must not delete a Connection Point other than in accordance with a notice given by a User in accordance with this clause 3.6.

(e) If Western Power deletes a Connection Point in breach of clause 3.6(d), Western Power is liable to pay the User any Indirect Damage suffered by the User as a result of Western Power's breach."

127. In the Draft Decision, the Authority determined that explicit protection for users against an unrequested deletion of a connection point is warranted and reasonably necessary for the electricity transfer access contract to be consistent with section 5.3 of the Access Code.
128. The Authority required the following amendment to the proposed access arrangement revisions.

³⁴ Clause 3.6 corresponds to clause 3.5 of the current electricity transfer access contract.

³⁵ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

Draft Decision Amendment 3

The proposed access arrangement revisions should be amended so that the revised electricity transfer access contract includes a clause 3.6(d) requiring that "subject to the Customer Transfer Code, Western Power must not delete a connection point other than in accordance with a notice given by a user in accordance with clause 3.6".

129. In response to Draft Decision Amendment 3, Western Power submits that it accepts that a connection point should not be deleted from an electricity transfer access contract, except when requested by the user or when the connection point has been transferred in accordance with the Customer Transfer Code.³⁶
130. Western Power further submits that it intends to respond to the amendment required under the Draft Decision by addition of a new clause 3.6(d) to the electricity transfer access contract. The proposed clause 3.6(d) reads:
- Subject to the Customer Transfer Code, Western Power must not delete a connection point other than in accordance with a notice given by a user under clause 3.6.
131. In submissions subsequent to the Draft Decision, Synergy and Alinta Sales indicate support for the new clause proposed by Western Power.³⁷
132. The Authority therefore maintains the requirement to amend the electricity transfer access contract in accordance with Draft Decision Amendment 3 and accepts that Western Power's proposed clause 3.6(d) addresses this requirement.

Required Amendment 3

The proposed access arrangement revisions should be amended to include a new clause 3.6(d) of the electricity transfer access contract that reads "Subject to the Customer Transfer Code, Western Power must not delete a connection point other than in accordance with a notice given by a user under clause 3.6".

133. In the Draft Decision, the Authority did not accept that the liability of Western Power for damages as proposed by Synergy is reasonable. The electricity transfer access contract explicitly limits damages recoverable by a person for direct damage other than where a party commits fraud. This is a deliberate scheme and such limitation of liability is quite common for access contracts relating to large infrastructure with multiple users where indirect losses could be substantial (e.g. if a breach causes power disruption for a period of time, the consequential or indirect damage could include potentially large financial losses, such as lost profits and damage to goodwill for each affected business). Synergy's proposal would make two exceptions to this limitation – fraud (an existing exception) and a deletion of a connection point. Under Synergy's proposal, Western Power would be liable for indirect damages arising from the deletion of a connection point other than in

³⁶ Western Power submission of 13 August 2009.

³⁷ Synergy submission of 1 October 2009; Alinta Sales submission of 10 September 2009.

accordance with clause 3.6 of the proposed electricity transfer access contract, whether this be negligent or deliberate.

134. The Authority further determined in the Draft Decision that making Western Power liable for indirect losses arising from the deletion of a connection point, where such deletion occurs as a result of negligence, is inconsistent with the other provisions of the electricity transfer access contract. The Authority did, however, consider that such liability is reasonable where the deletion of a connection point other than allowed for under clause 3.6 is wilful or deliberate.
135. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 4

The proposed access arrangement revisions should be amended so that the electricity transfer contract includes a new clause 3.6(e) requiring that, if Western Power wilfully or deliberately deletes a connection point in breach of clause 3.6(d), Western Power is liable to pay the user any indirect damage suffered by the user as a result of Western Power's action.

136. In response to Draft Decision Amendment 4, Western Power submits that it accepts that indirect loss can be claimed where it has wilfully or deliberately breached its obligation not to delete a connection point other than as allowed in clause 3.6, but submits that this should not be the case where the deletion was a result of an error of judgment, mistake, act or omission, whether negligent or not, which is made in good faith. Western Power contends that the absence of such exclusions would cause Western Power to be unreasonably exposed to potentially harsh and unreasonable consequences.³⁸ Western Power further contends that such exclusions are consistent with a concept of good faith in commercial contracts.
137. Western Power submits that it intends to respond to the amendment required under the Draft Decision by addition of a new clause 3.6(e) to the electricity transfer access contract. The proposed clause 3.6(e) reads:

If Western Power commits a breach of clause 3.6(d) in circumstances that constitute wilful default it is liable to the user for any damage caused by, consequent upon or arising out of the wilful default. In this case, the exclusion of indirect damage in clause 19.3 does not apply.

138. The new clause 3.6(e) would be accompanied by a definition of wilful default:

Wilful Default means a deliberate and purposeful act or omission carried out with a calculated regard for the consequences of the act or omission but does not include any error of judgment, mistake, act or omission, whether negligent or not, which is made in good faith.

139. In a submission subsequent to the Draft Decision, Synergy indicates in-principle support for the new clause proposed by Western Power, but submits that the proposed definition of wilful default is too broad and has the effect of "lifting the bar so high that this clause 3.6(e) and the Authority's required amendment will never come into effect". In particular, Synergy submits that the definition of wilful default should not include the relevant act or omission being purposeful or carried out

³⁸ Western Power submission of 13 August 2009.

without regard for the consequences of the act or omission, and should not exclude an error of judgement.³⁹

140. Alinta Sales submits that it is unclear whether the exclusions proposed by Western Power (i.e. deletions resulting from an error of judgement, mistake, act or omission, where negligent or not, which is made in good faith) are either necessary or appropriate.⁴⁰
141. The Authority has considered the submissions of Synergy and Alinta Sales. The Authority considers that it is appropriate that the exclusion of indirect damage should only arise where Western Power has done, or failed to do, an act and that this constitutes more than negligence. However, the Authority is persuaded by Synergy's submission that the definition of "wilful default" as proposed by Western Power is too broad. In particular, the Authority considers it is appropriate that where Western Power has been wilfully indifferent or reckless to the consequences of the act or omission then the exclusion of indirect damage should not apply.
142. The Authority therefore maintains the requirement for amendment of the electricity transfer access contract in accordance with Draft Decision Amendment 4, with an amendment to address the matter raised in Synergy's submission.

Required Amendment 4

The proposed access arrangement revisions should be amended to include a new clause 3.6(e) of the electricity transfer access contract that reads: "If Western Power commits a breach of clause 3.6(d) in circumstances that constitute wilful default it is liable to the user for any damage caused by, consequent upon or arising out of the wilful default. In this case, the exclusion of indirect damage in clause 19.3 does not apply".

The electricity transfer access contract should also be amended to include a definition of wilful default as:

- a) *a deliberate and purposeful act or omission carried out with a calculated regard for the consequences of the act or omission, or*
- b) *a reckless or wilful disregard for the consequences of the act or omission,*

but does not include any error of judgment, mistake, act or omission, whether negligent or not, which is made in good faith.

Connection Point Data (clause 3.7)

143. Schedule 3 of the proposed electricity transfer access contract comprises a database of connection points for which services are provided to the user.

³⁹ Synergy submission of 1 October 2009.

⁴⁰ Alinta Sales Pty Ltd submission of 10 September 2009.

Clause 3.7 of the proposed electricity transfer access contract provides for this database to be maintained and updated.

144. Under clause 3.7(b) of the proposed electricity transfer access contract, if the user is a “metering code participant” (within the meaning of the *Electricity Industry Metering Code (Metering Code)*), Western Power has responsibility for updating the “metering database” that forms schedule 3 of the electricity transfer access contract in accordance with relevant provisions of the Metering Code. Western Power also has an obligation to provide the user with secure access to this information.
145. The proposed access arrangement revisions include the following new clauses to be added to clause 3.7 of the electricity transfer access contract.
- (c) Western Power* will record and update the [contract maximum demand]* and [declared sent out capacity]* information in Part 1 of Schedule 3 within a database maintained by Western Power* and provide the User* with reasonable access to the information upon request by the User*.
 - (d) Subject to clause 3.7(e), where Western Power causes a Permanent Reconfiguration* of the Network* which results in the information contained in Schedule 3 having to be updated:
 - (i) Western Power* is not required to update the information contained in Schedule 3 before the next 1 July following the Permanent Reconfiguration* of the Network*; and
 - (ii) Western Power* must update the information contained in Schedule 3 before the next 21 July following the Permanent Reconfiguration* of the Network*.
 - (e) Where a Permanent Reconfiguration* of the Network* occurs as a result of, or arising from, a notice or application by the User* under clause 3.4, 3.5 or 3.6 which results in the information contained in Schedule 3 having to be updated:
 - (i) clause 3.7(d) does not apply; and
 - (ii) each Party* must update the information contained in Schedule 3 as soon as reasonably practicable after the Permanent Reconfiguration* of the Network*.
146. Synergy submitted that there are deficiencies in the proposed electricity transfer access contract for the management of, and changes to, schedule 3.
147. First, Synergy submitted that there is a lack of clarity with how Synergy will obtain access to Western Power’s systems for the connection point data in schedule 3.⁴¹ In particular Synergy submitted that:⁴²

... to comply with section 5.3 of the [Access Code], clause 3.7 of the [electricity transfer access contract] should be specific as to the manner, method and timing by which Western Power provides a User with such access, particularly given the dearth of any other regulatory requirements on Western Power in this respect. Therefore Synergy suggests that clause 3.7 be amended as marked up as follows:

- "(b) If the User* is a Metering Code Participant* then the User* and Western Power* agree that Western Power* will, in accordance with the provisions of the Metering Code*, record and update in the Metering Database* the

⁴¹ Synergy submission of 24 October 2008 and verbal communication of 31 October 2008.

⁴² Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

information in part 1 of schedule 3, and will do all things reasonably necessary to provide the User* with secure access to this information

...

- (f) Western Power*, acting in accordance with Good Electricity Industry Practice*, will provide the User* with such access as is reasonably acceptable to the User*, acting as a Reasonable and Prudent Person*, to the Metering Database* to enable the User* to update the information contained in the Metering Database* in accordance with the Metering Code* and clause 3.7(a), including access via "BuildPack", as that term is defined in the Communication Rules made under the Metering Code*."

148. Secondly, Synergy submitted that there are ambiguities and inconsistencies in the provisions for updating schedule 3 and the metering database, including the following matters.⁴³

- It is not clear how a user can comply with clause 3.7(e)(ii) and update schedule 3, as clause 3.7(b) appears to contemplate that only Western Power can actually update schedule 3.
- Clauses 3.7(b), (c), (d) and (e) and clause 7.1(f)⁴⁴ will create difficulties for users, particularly Synergy, in determining and reconciling the charges levied by Western Power. Synergy submits that these clauses do not adequately deal with the interaction between the metering database and schedule 3 or with what happens when there are discrepancies between the two, which could arise due to differing requirements to update schedule 3 and the metering database.
- If Western Power can unilaterally update information in schedule 3, there should be an obligation in the electricity transfer access contract for Western Power to provide advance notice to an affected user of any information to be updated by Western Power. Synergy submits that it is not reasonable to expect, or for the electricity transfer access contract to effectively require, retail users to attempt to identify changes to standing data after the event or have to reconcile charges with changes to schedule 3.

149. On more specific matters relating to the updating of schedule 3 and the metering database, Synergy submitted that:⁴⁵

The Information contained in Schedule 3 must always be correct and aligned to the Metering Database. If there is a discrepancy between the Metering Database and Schedule 3 (or any other registry) then, in the absence of manifest error, the Metering Database must be deemed to be correct in accordance with section 4.4(2) of the Metering Code and both the User and Western Power should be entitled to rely upon the information in the Metering Database in performing their respective obligations under the [electricity transfer access contract].

Where a Permanent Reconfiguration of the Network occurs as a result of a notice or application by the User, then the Metering Database must be updated in accordance with the requirements of the Metering Code, and this must be reflected in the

⁴³ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

⁴⁴ Clause 7.1(f) of the proposed electricity transfer access contract provides that, in calculating tariffs and charges for a service, Western Power must rely on the information in schedule 3 and updated information in schedule 3 cannot be applied retrospectively in calculating tariffs and charges.

⁴⁵ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

[electricity transfer access contract], including in an immediate updating of Schedule 3.

The note in Schedule 3 should be changed to reflect that Western Power will store the details in the Metering Database as described in accordance with clause 3.7 (as amended to address the issues identified in this submission).

There should be a clear mechanism in the [electricity transfer access contract] detailing how Western Power will update Schedule 3 from the Metering Database and how Western Power will advise affected Users of such updates. The requirement in clause 3.7(e) for each party to independently update their own Schedule 3 appears to be unworkable and will lead to manifest errors between a User and Western Power and also the Metering Database.

The Charges should be calculated using the Reference Service attributes listed in Schedule 3 (e.g. CMD and DSOC) while the Network determinates (e.g. substation zone, substations distance, TNI and pricing zone) should be those detailed in the Price List, as approved by the Authority annually. Synergy understands that this is perhaps what Western Power intended by clause 3.7. However Synergy is not convinced that clause 3.7 actually achieves this result.

150. In the Draft Decision the Authority accepted Synergy's submission that clause 3.7(e)(ii) is ambiguous as to whether the user may directly update schedule 3 and the metering database. The Authority required that this ambiguity be resolved before the approval of the proposed access arrangement revisions and indicated that this resolution may be achieved either by requiring that schedule 3 and the metering database be updated only by Western Power, or by making it more explicit that schedule 3 and the metering database can be updated directly by the user.
151. Depending upon which of these alternatives is adopted by Western Power, requirements for access by the user to information in schedule 3 and in the metering database will differ. In any case, the Authority was satisfied that it is necessary for clause 3.7 of the electricity transfer access contract to be consistent with section 5.3 of the Access Code and that the requirement for Western Power to provide access to schedule 3 and the metering database should be strengthened to ensure that access is provided in a form that reasonably meets the requirements of the user.
152. The Authority did not consider that it is necessary or desirable for the access contract terms and conditions to refer to specific mechanisms of communication under the Communication Rules, which are currently subject to independent review.
153. The Authority required the following amendments to the proposed access arrangement revisions.

Draft Decision Amendment 5

The proposed access arrangement revisions should be amended such that clause 3.7 of the electricity transfer access contract is clear on whether schedule 3 and, where relevant, the metering database, is to be updated only by Western Power, or by either Western Power or the user.

Draft Decision Amendment 6

The proposed access arrangement revisions should be amended such that clause 3.7 of the electricity transfer access contract requires Western Power to provide the user with such access to schedule 3 and the metering database as is reasonably required for the user to obtain information or to change relevant information.

154. In the Draft Decision, the Authority also accepted Synergy's submission that ambiguity exists in the data that will be used for the determination of tariffs and charges where there are inconsistencies between schedule 3, the metering database and the price list.
155. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 7

The proposed access arrangement revisions should be amended so that the electricity transfer access contract indicates which records of connection point data will have precedence, to the extent of any inconsistency between schedule 3 of the electricity transfer access contract, the metering database and any connection point data contained in the price list.

156. In response to Draft Decision Amendments 5, 6 and 7, Western Power has proposed substantial amendments to clause 3.7 of the electricity transfer access contract.⁴⁶ Western Power indicates that these amendments seek to retain a level of flexibility with respect to the databases in which information is recorded so as to meet the different expectations and demands of users, which Western Power explains as follows.

Western Power proposes additional amendments to clause 3.7 and related clauses to better facilitate current practice with users. There is flexibility in the current practice in that different users have different expectations and demands with respect to the database/s used for recording information under the [electricity transfer access contract].

In general terms, the typical practice is:

- Users that are only generators use Schedule 3 in addition to the metering database.
- Users that are retailers or 'gentailers' (retailers and generators) do not generally use Schedule 3 due to the number of connection points. Instead, these users typically, by agreement with Western Power, rely on the Metering Database or other databases maintained by Western Power.
- DSOC and CMD are not presently stored in the Metering Database. That information is stored in other databases maintained by Western Power. Also, Western Power outlines the current DSOC or CMD (as applicable) on each invoice sent to a user.

Given that generators typically have only a few connection points under an [electricity transfer access contract], it is reasonably manageable to keep Schedule 3 updated. However, retailers can have thousands of connection points and, because they can change frequently (for contestable customers), it is much more difficult to keep Schedule 3 up to date. For this reason, retailers and 'gentailers' typically rely on other database[s] and not schedule 3.

Western Power wishes to retain current levels of flexibility in the storage and updating of the required information. Western Power submits that it is consistent with section 5.3 of the Access Code and the Code Objective to not 'hard wire' the practice for all users (based largely on the submissions to the ERA by one user) but to allow the practice to be flexible to allow the interests and needs of all uses to be met.

⁴⁶ Western Power submission of 13 August 2009, including Attachment A.

The amendments proposed by Western Power are intended to accommodate that flexibility.

157. Western Power's proposed new clause 3.7 of the electricity transfer access contract is as follows.

3.7 Amendment to Connection Point* data

- (a) Unless the Parties* otherwise agree, Western Power must record the information referred to in Part 1 of Schedule 3, with respect to each Connection Point*, in the Connection Point Database*.
- (b) Subject to clauses 3.7(g) and 3.7(h), Western Power* must update the information contained in a Connection Point Database* following any variation made under this clause 3.
- (c) Upon request by the User* for information referred to in the Connection Point Database*, Western Power* will provide to the User* the most up-to-date version of that information.
- (d) The Parties* acknowledge that if the User* is a Metering Code Participant*, for each Connection Point* Western Power* must also record and update the relevant information required under Part 1 of Schedule 3 in the Metering Database* in accordance with the provisions of the Metering Code*.
- (e) Nothing in this Contract* restricts or prohibits Western Power* from maintaining and updating the Metering Database* in accordance with the Metering Code*.
- (f) Western Power* will provide the User* with access to the information in the Metering Database* in accordance with the Build Pack*.
- (g) Subject to clause 3.7(h), where Western Power causes a Permanent Reconfiguration* of the Network* which results in the information contained in the Contract Database* having to be updated:
 - (i) Western Power* is not required to update the information contained in the Connection Point Database* before the next 1 July following the Permanent Reconfiguration* of the Network*; and
 - (ii) Western Power* must update the information contained in the Connection Point Database* before the next 21 July following the Permanent Reconfiguration* of the Network*.
- (h) Where a Permanent Reconfiguration* of the Network* occurs as a result of, or arising from, a notice or application by the User* under clauses 3.4, 3.5 or 3.6 which results in the information contained in the Contract Database* having to be updated:
 - (i) clause 3.7(g) does not apply;
 - (ii) Western Power* must update the information contained in the Connection Point Database* as soon as reasonably practicable after the Permanent Reconfiguration* of the Network*; and
 - (iii) where the information to be updated is contained in Part 1 of Schedule 3, then the information must be updated in accordance with clause 37.2.
- (i) The Parties* must notify each other of any errors discovered in the Connection Point Database* as soon as reasonably practicable after becoming aware of the error.
- (j) Western Power* must amend any error in the Connection Point Database* as soon as reasonably practicable after becoming aware of the error, provided that if Western Power* becomes aware of an error otherwise than by notice

from the User* under clause 3.7(i), no amendment shall be made until Western Power* has given notice to the User* of the error.

- (k) Where under this Contract* Western Power* has recorded information in more than one of Part 1 of Schedule 3, the Metering Database* and any other database maintained by Western Power for the purposes of this Contract* and there is an inconsistency or conflict between the information in the databases in which the information is recorded, then the following order of precedence applies, from highest to lowest:
- (i) where the circumstances in clauses 3.7(g) or 3.7(h) apply:
 - (A) Part 1 of Schedule 3;
 - (B) any other database;
 - (C) the Metering Database*; and
 - (ii) in all other circumstances:
 - (A) the Metering Database*;
 - (B) Part 1 of Schedule 3;
 - (C) any other database.

158. Western Power proposes adding the following related definitions to the electricity transfer access contract:

Build Pack* means the 'Build Pack' developed under the Electricity Industry Customer Transfer Code 2004 Communication Rules (made under Part 5 of the Customer Transfer Code*) and/or the Electricity Industry Metering Code 2004 Communication Rules (made under Part 6 of the Metering Code*), as applicable in the circumstances.

Connection Point Database* means:

- (a) Part 1 of Schedule 3; or
- (b) another database or databases containing information relating to this Contract* and maintained by Western Power* as agreed between the Parties*, which for the avoidance of doubt can include the Metering Database* if the User* is not a Metering Code Participant* and this is agreed by the User* and Western Power*, as applicable.

Contract Database* means the Connection Point Database* or, if the Metering Database* is not included within the Connection Point Database* and clause 3.7(k)(ii) applies, then it means the Metering Database*.

159. In a submission subsequent to the Draft Decision and to Western Power's submission, Synergy sets out a number of concerns with Western Power's proposed response to Draft Decision Amendments 5, 6 and 7.⁴⁷ The particular concerns of Synergy are as follows.

- Western Power is not applying a uniform approach across all users in the maintenance of schedule 3 information.
- The proposed clause 3.7(a) only requires part of the information in schedule 3 to be recorded in the connection point database, and all information recorded in the connection point database should be for the connection point database, and be meaningful and commercially workable.

⁴⁷ Synergy submission of 1 October 2009.

- The proposed clause 3.7(c) does not include an obligation on Western Power to ensure accuracy of information provided to the user, and does not address the format in which information is provided to the user.
 - The proposed clause 3.7(d) confuses Western Power's obligations for metering points under the Metering Code and its licence with obligations under the electricity transfer access contract.
 - The proposed revisions do not clearly address a priority of obligations under the electricity transfer access contract and the Metering Code.
 - The proposed revisions do not establish a clear obligation for Western Power to provide a user with access to information in the connection point database and metering database.
 - The proposed clauses 3.7(g) and (h), relating to reconfigurations of the network, unreasonably allow for information in the connection point database and reference tariffs to change within a pricing year.
 - The metering database should include all information in schedule 3 if the metering database is to be used as the connection point database.
 - While clause 3.7(k) establishes rules of precedence of different databases when inconsistencies occur, the times at which these rules apply is not specified and there is no obligation on Western Power to resolve inconsistencies.
160. Contrary to Synergy's submission, the Authority accepts the approach taken by Western Power to indicate in the electricity transfer access contract that there is flexibility in the arrangements for recording of connection point data for metering and billing purposes. The Authority observes that, under Western Power's proposed changes to clause 3.7 of the electricity transfer access contract, arrangements other than recording of information in schedule 3 of the electricity transfer access contract can only be implemented by agreement between the user and Western Power. The Authority considers that this is consistent with the general scheme of regulation under the Access Code, whereby Western Power and a user may negotiate terms of a service different to the electricity transfer access contract.
161. Given the flexibility in arrangements for recording of connection point information, the Authority considered whether the terms of clause 3.7 of the electricity transfer access contract, and Western Power's proposed changes to clause 3.7, adequately establish a framework for agreement on arrangements. Draft Decision Amendments 5, 6 and 7 addressed this by requiring amendment of the electricity transfer access contract to ensure clarity in the general matters of:
- whether schedule 3 and, where relevant, an alternative or additional database, is to be updated only by Western Power, or by either Western Power or the user;
 - a requirement for Western Power to provide the user with such access to schedule 3 or an alternative or additional database, as is reasonably required, for the user to obtain information or to change relevant information; and
 - a requirement for the electricity transfer access contract to indicate which records of connection point data will have precedence, to the extent of any inconsistency between schedule 3 of the electricity transfer access contract, the metering database and any connection point data contained in the price list.

162. Western Power has addressed all of these matters in proposed changes to clause 3.7 of the electricity transfer access contract, including:
- an indication (at the proposed clauses 3.7(a) and (b)) that only Western Power may update schedule 3 or an alternative or additional database;
 - a clear obligation on Western Power to provide the user with access to schedule 3 or an alternative or additional database (at the proposed clause 3.7(c)); and
 - a clear indication of the order of precedence of schedule 3 and other databases of connection point data in the event of inconsistencies in records (at the proposed clause 3.7(k)).
163. The Authority considers that residual issues of Synergy with the proposed clause 3.7 of the electricity transfer access contract largely concern matters relevant to circumstances where Western Power and the user agree to arrangements other than a recording of connection point information in schedule 3 of the electricity transfer access contract. In these instances, the Authority considers that the matters of concern to Synergy should be resolved by negotiation.
164. The exception to this is the proposed revised clauses 3.7(g) and (h), which relate to reconfigurations of the network and which Synergy claims unreasonably allow for information in the connection point database and reference tariffs to change within a pricing year. However, these clauses relate only to an updating of information in the relevant database, which may cause a difference in an amount payable by a user under a reference tariff, but not a change in the reference tariff *per se*.
165. The Authority therefore maintains the general requirements for amendment of clause 3.7 of the electricity transfer access contract under Draft Decision Amendments 5, 6 and 7. The Authority is satisfied that the proposed changes to clause 3.7, as submitted by Western Power subsequent to the Draft Decision, adequately address these required amendments.

Required Amendment 5

The proposed access arrangement revisions should be amended such that clause 3.7 of the electricity transfer access contract is clear on whether schedule 3 and, where relevant, the metering database, is to be updated only by Western Power, or by either Western Power or the user.

Required Amendment 6

The proposed access arrangement revisions should be amended such that clause 3.7 of the electricity transfer access contract requires Western Power to provide the user with such access to schedule 3 and the metering database as is reasonably required for the user to obtain information or to change relevant information.

Required Amendment 7

The proposed access arrangement revisions should be amended so that the electricity transfer access contract indicates which records of connection point data will have precedence, to the extent of any inconsistency between schedule 3 of the electricity transfer access contract, the metering database and any connection point data contained in the price list.

166. Synergy also submitted that there is poor asset-data integrity for streetlight and unmetered reference services, which prevents Synergy from reconciling network charges under the electricity transfer access contract.⁴⁸
167. In the Draft Decision, the Authority indicated a view that clause 3.7 of the proposed electricity transfer access contract, together with relevant provisions of the Metering Code, establish a clear obligation for Western Power to maintain data that form the basis for determination of tariffs and charges for connection points. Given this obligation, the Authority considered that issues of data-integrity are a matter to be resolved between the contracting parties under an access contract, or under a service level agreement under the Metering Code. The Authority maintains this position in its Final Decision.

Contracted Capacity Not Utilised (clause 3.8)

168. Western Power has proposed a new clause 3.8 for the electricity transfer access contract that provides for Western Power to reduce a users contracted capacity in circumstances where part or all of the contracted capacity is not being used by the user, and the user has not demonstrated that the unused capacity will be utilised.

3.8 Contracted Capacity* not utilised

- (a) Subject to clause 3.8(c), where, in relation to Contracted Capacity* at a Connection Point*:
- (i) the Contracted Capacity is not being used by the User*;
 - (ii) it is unlikely, in the opinion of Western Power* as a Reasonable and Prudent Person* that the unused Contracted Capacity* will be used by the User* to satisfy the User*'s actual or forecast requirements; and
 - (iii) the unused Contracted Capacity* is the subject of an Application* from a person who is not the User*,

Western Power may give 30 days notice to the User* stating its intention to reduce the User*'s Contracted Capacity* and the amount and timing of the reduction.

- (b) If the User* fails within the period specified in the notice to:
- (i) use the Contracted Capacity*; or
 - (ii) demonstrate to the satisfaction of Western Power* as a Reasonable and Prudent Person* that the unused Contracted Capacity* will be used to satisfy the User*'s actual or forecast requirements,

⁴⁸ Synergy submission of 24 October 2008 and verbal communication of 31 October 2008.

Western Power may reduce the User's Contracted Capacity* in accordance with the notice.

- (c) Western Power* is not entitled to reduce Contracted Capacity* at a Connection Point* where the unused Contracted Capacity is attributable to Force Majeure*.

169. Western Power indicates the intent of the new clause 3.8 is as follows.⁴⁹

... the purpose of the provision is to not allow user's to 'sit' indefinitely on unused capacity to the detriment of other potential users of that capacity.

It is feasible that contracted capacity which remains un-utilised can, in the limit, lead to new investment in the network through the addition of network capacity which is physically not required, but is necessary to meet Western Power's contractual obligations. Western Power's objective in proposing the provision is to avoid this type of new investment in the network occurring. Western Power has "in principle" support from some stakeholders including Landfill Gas and Power (submission to ERA dated 12 December 2008) and Pacific Hydro (submission to ERA dated 2 December 2008).

Western Power's intention is to establish a process in response to the principle that withholding un-used capacity from the market, for whatever reason, can lead to investment in additional capacity that is unwarranted from an overall network perspective.

Western Power welcomes suggestions as to how the outcome can be otherwise achieved.

170. Western Power has indicated that Pacific Hydro and Landfill Gas and Power support the electricity transfer access contract, including provision for unused contracted capacity to be made available to other users. However, both parties oppose Western Power having the power to unilaterally make such a determination. Griffin Energy and Perth Energy also support a provision allowing unused capacity to be re-allocated, but similarly oppose such re-allocation being undertaken by a unilateral decision of Western Power. The relevant parts of the submissions from these parties are detailed below.⁵⁰

171. Pacific Hydro:

"Clause 3.8(a) of the Electricity Transfer Access Contract raises the dilemma faced by Network Service Providers (NSPs) where contracted capacity has been underutilised by the user. How can this capacity be redirected to other users in a fair and reasonable way? The generator, as the effective "owner" of this capacity, has built the connection assets to the size necessary to fit the contracted capacity. Generation development, particularly wind generation, requires the coordination of connection arrangements, licensing, planning and environmental approvals, turbine selection, noise abatement, construction and financial resources. During the development stage a number of these matters are progressed within the various timeframes and uncertainties as issues arise. With best practice and best intentions, the coordination of the multiple issues can result in connection arrangements being underutilised. Pacific Hydro has experienced these issues with a number of wind developments. Where there are no commercial opportunities to utilise the underutilised capacity, we agree that this capacity should be released back to the

⁴⁹ Access Arrangement Information, Appendix 12: section 3.4; Western Power submission of 17 December 2008.

⁵⁰ Pacific Hydro Pty Ltd submission of 2 December 2008; Landfill Gas and Power Pty Ltd submission of 12 December 2008; Griffin Energy Development Pty Ltd submission of 17 December 2008; Perth Energy submission of 17 December 2008.

transmission NSP. However as the owner of the connection capacity, Pacific Hydro considers any reduction to this capacity must be on the basis of agreement between the parties, including a clearly defined dispute mechanism and the engagement of an independent expert for arbitration if required.

172. Landfill Gas and Power:

... we are very concerned about any prospect of Western Power being given un-reviewable discretion. While we understand the concept behind Western Power seeking power to unilaterally revoke capacity reservations, and under carefully controlled provisions would support it as being in the public interest, we note that LGP itself has capacity reservations that it does not fully utilise, but which we funded and continue to pay for month by month in the expectation of using them in the future. Indeed, we find ourselves obliged to pay now to hold open capacity that is not IMO-certified until October 2010. On this basis, LGP supports Western Power being given a process for revoking a capacity reservation provided that process outlines suitable grounds for such an action (including the applicant unreasonably obstructing a more viable project) and provides a right of appeal to an independent party.

173. Griffin Energy:

Another significant inclusion in the proposed revisions to the Access Arrangement is the granting of the unilateral right to Western Power to reduce a user's contracted capacity at a connection point. A similar provision, supported by Griffin, was proposed for the current Access Arrangement but removed at the request of the Authority. Griffin contends that such a provision is absolutely consistent with the Code objectives and associated legislation. The Electricity Transmission Regulations 1996 states:

36. Effect of access to capacity

By executing or complying with its obligations under an access agreement or making any capital contribution under an access agreement, a user does not acquire any right, title or interest in or to the electricity transmission network.

This implies that while a user holds an agreement which allows its facility to send its output, at a connection point, into Western Power's transmission network, that user holds no rights over any other user, applicant or otherwise, over the transmission network itself. When the user is no longer able to send its output (at a connection point) into the network; and if there are other applicants seeking to utilise the network, then the contracted capacity of the user should be reduced and that capacity should be made available to another user. The alternative would be to allow the user to maintain its unused capacity and for Western Power to invest in additional capacity for the new applicant. In order to meet its obligations under the Code objectives, Western Power should favour the reduction of unused contracted capacity over the investment in new capacity – as the latter is clearly not promoting the economically efficient investment in and use of the network; nor is it promoting competition in markets upstream and downstream of the networks.

Griffin again supports the concept of reducing unused contracted network capacity. However, we also recognise the issues some users might raise with the vesting of this authority in Western Power itself. Griffin proposes that the right to reduce unused contracted network capacity be vested in the Authority, where Western Power, on application to the Authority, is required to meet a 'burden of evidence' test to activate this provision; and the relevant user is given the right to make submissions into the determination process.

174. Perth Energy:

Perth Energy agrees that a mechanism should be included to release or cancel capacity that is not being used by a customer. This would reduce over-investment in the transmission system and minimise the ability for capacity holders to exercise

market power. However, Perth Energy does not support the provision for Western Power to act unilaterally with respect to capacity under the [electricity transfer access contract]. If the proposed change in capacity cannot be agreed by the parties then it should be resolved under a binding dispute resolution process.

175. Other parties that made submissions to the Authority oppose the new clause 3.8.⁵¹ In particular, Synergy objected to the proposed clause 3.8 on a number of grounds.
176. First, Synergy submitted that the proposed clause 3.8 comprises terms and conditions that go beyond the terms and conditions necessary to govern the provision of a reference service and, therefore, beyond the terms and conditions contemplated for a standard access contract under the Access Code.⁵²

Synergy submits that this clause should be deleted as being contrary to sections 5.1(b) and 5.3 of the [Access Code] and the Code objective.

Under section 5.1(b) of the [Access Code] an access arrangement must include a standard access contract for each reference service. Synergy submits that it is implicit in this section that the standard access contract contain only those terms and conditions that relate to and are reasonably necessary to govern the reference service. However, clause 3.8 of the [electricity transfer access contract] does not relate to or govern a reference service. Rather, the clause specifically contemplates overriding entitlements to a reference service for matters unrelated to that service. The effect of the clause is to give Western Power the ability to unilaterally amend existing contractual entitlements for the apparent purpose of enabling Western Power to determine the best use of the Network.

Synergy submits that the Authority should not permit Western Power to expand the scope of the regulated standard access contract beyond that which was reasonably contemplated by the [Access Code]. Synergy submits that clause 3.8 deals with matters beyond those that are reasonably contemplated by the [Access Code]. Synergy submits the [Access Code] did not contemplate that the regulated standard access contract would include matters that were contrary to the reference service, being the service in respect of which the regulated contract is to provide terms and conditions.

Further, Synergy submits that clause 3.8 goes beyond what is reasonably required in order to provide terms and conditions upon which Western Power will provide reference services. Rather, the clause goes towards Western Power's management of the network, which Synergy submits is not appropriate in a regulated standard access contract.

177. Secondly, Synergy submitted that Western Power does not have a statutory power to exercise the provisions of the proposed clause 3.8.⁵³

Synergy also questions whether there is any statutory basis for Western Power to be given the ability to form a view as to whether a User's actual or forecast Contracted Capacity requirements are reasonable. To give Western Power such an ability would be, in effect, to permit Western Power to control the manner in which business is expanded and conducted in the SWIN. Synergy submits that the head of power under which the [Access Code] was made, namely section Part 8 of the Electricity

⁵¹ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract; Verve Energy submission of 2 December 2008; Western Australia Major Energy Users submission of 16 December 2008; Chamber of Commerce and Industry Western Australia submission of 17 December 2008; Alinta Sales Pty Ltd submission of 17 December 2008.

⁵² Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

⁵³ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

Industry Act 2004, does not extend to granting the power to give this ability to Western Power under the regulated standard access contract.

178. Thirdly, Synergy submitted that the proposed clause 3.8 is not reasonable within the meaning of section 5.3(a) of the Access Code as the clause provides Western Power with the ability to remove capacity from one of Synergy's customers even though the customer may have paid for the right, or provided contributions, for this capacity to be available.^{54,55}

179. Verve Energy indicated that it does not support the new clause 3.8 for reasons that:

- the provision is contrary to the imperative for generators to hold firm connection point contracted capacity under the bilateral-contract structure of the wholesale electricity market;
- proponents of new generation capacity may have difficulty obtaining project finance if there are not secure rights to contracted capacity;
- it is entirely reasonable that a network user may wish to retain unused contracted capacity in support of potential future development opportunities;
- a network user, in addition to ongoing annual network access charges, would invariably have also made a significant capital contribution to secure access; and
- it should not be the role of the network service provider to concern itself with policing anti-competitive behaviour.⁵⁶

180. Verve Energy submitted that reliance should be placed instead on the ability under the access arrangement to transfer capacity between users:

Notwithstanding Verve Energy's strong objection to unilateral removal of contracted capacity, it is mindful of facilitating and supporting economically efficient operation and use of the network. To that end, Verve Energy would be supportive of a proposal that suitably enables users to temporarily 'release' contracted capacity, to another user with immediate need, on the guarantee that the released contracted capacity can be recovered on, say, two years notice. Clearly, the new user would then be required to make any capital contribution necessary to facilitate the associated network augmentation. The effect of this arrangement would be to ensure economically efficient investment by appropriately delaying the required network augmentation, while not diminishing the user's future development options.

The 'bare transfer' arrangement contemplated in the Code, and established in the network operator's current Electricity Transfer Access Contract ..., is the ideal mechanism for facilitating that economically efficient investment.

181. The WAMEU submitted that they oppose the provision for Western Power to reduce contracted capacity and propose that contracted capacity should only be able to be reduced by agreement with the user, possibly with some consideration paid by Western Power.⁵⁷

⁵⁴ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

⁵⁵ Synergy submission of 24 October 2008 and verbal communication of 31 October 2008.

⁵⁶ Verve Energy submission of 2 December 2008.

⁵⁷ Western Australia Major Energy Users submission of 16 December 2008, pp. 87, 88.

182. The Chamber of Commerce and Industry (WA) submitted that it opposes the provisions of the new clause 3.8, submitting that Western Power is not appropriately equipped to assess whether a market participant will be likely to use unutilised capacity.⁵⁸
183. Alinta Sales submitted that there may be sound commercial reasons for network users to hold unutilised capacity as a real option for future projects that would require the capacity. There is a cost (in network charges) to the real option that exists in holding unutilised capacity and it is the network users, not Western Power, that are best placed to determine whether the cost of creating or maintaining the real option is commercially prudent.⁵⁹
184. Alinta Sales further submitted that:
- market mechanisms, including trading of contractual entitlements to capacity, are to be preferred as a means of achieving efficient use of network capacity; and
 - to the extent that the proposed clause 3.8 is intended to reduce anti-competitive behaviour, there are better mechanisms in competition law to achieve this.
185. Regarding the opinion of Synergy that Western Power does not have the statutory power or ability under the Access Code to establish the provisions of the proposed clause 3.8, the Authority does not accept that the matters addressed by clause 3.8 are necessarily outside the range of matters that may reasonably be addressed in the access arrangement terms and conditions. The right of a network service provider to reduce the contracted capacity of a user concerns the relationship between the user and the network operator with respect to access to contracted capacity and also sets out limits on the service.
186. In its substance, the proposed clause 3.8 is essentially the same as a clause that was proposed by Western Power in the original proposed access arrangement for the first access arrangement period. In its Final Decision on that proposed access arrangement, the Authority determined that the potential inability of a user to enter into a contract for an amount of capacity and to hold that contracted capacity for the term of the contract is unreasonable and inconsistent with the Access Code and the Code objective. This determination arose from considerations of the Authority that:
- contrary to a submission from Western Power, the clause would constitute a unilateral right of Western Power to reduce a user's contracted capacity and this right would only be less than unilateral if, for example, the reduction in capacity could occur only with the agreement of the user;
 - under the regulatory scheme established by the Access Code, where access contracts are based on rights to capacity at entry points and exit points, it would be unreasonable for a user to not be able to enter into a contract for capacity and, subject to continuing to pay the relevant tariffs for that capacity, to continue to hold the contracted capacity regardless of whether that capacity is used or not;

⁵⁸ Chamber of Commerce and Industry (WA) submission of 17 December 2008.

⁵⁹ Alinta Sales Pty Ltd submission of 17 December 2008.

- the ability of a user to hold contracted capacity at entry points or exit points that are unused is consistent with efficient investment in the network as the user will generally make any such decision to hold unused capacity taking into account the cost of that capacity and the value of the option to utilise the capacity at some time in the future;
 - under the regulatory scheme applying under the Access Code and where a user may be required to pay capital contributions for an augmentation of the network in order to contract for a certain amount of capacity at an entry or exit point, the ability of a user to hold contracted capacity that is unused is necessary for that user to make efficient decisions for the payment of capital contributions; and
 - other remedies exist to address the holding by a user of unused capacity for anticompetitive purposes – the holding by a user of unused capacity for this purpose may constitute hindering or preventing access and be unlawful under section 115 of the *Electricity Industry Act 2004* or otherwise in contravention of Part IV of the *Trade Practices Act*.⁶⁰
187. Western Power has not provided the Authority with any new information that would cause the Authority to take a different view. Moreover, the submissions made to the Authority as part of this current review process indicate that both new and established generators, electricity retailers and major electricity users oppose a right of Western Power to unilaterally reduce a user's contracted capacity.
188. In the Draft Decision, the Authority determined that a user should be able to maintain a level of contracted capacity regardless of whether this capacity is used or unused. The Authority expressed the view that market mechanisms should be preferred over administrative processes to resolve situations where one user holds contractual rights to unused capacity that may be used by another user, and that may in turn enable a network augmentation to be avoided. Further, given the existence of mechanisms to deal with the holding of unused capacity for anticompetitive reasons, the Authority considered that the right of a user to hold unused capacity is consistent with efficient investment in, and use of, the network in accordance with the Code objective.
189. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 8

The proposed access arrangement revisions should be amended to delete clause 3.8 of the electricity transfer access contract or to amend clause 3.8 to make any reduction in a user's contracted capacity subject to agreement with the user.

190. In response to Draft Decision Amendment 8, Western Power submits that it maintains its preference to include the proposed clause 3.8, but is prepared to comply with the required amendment by deleting the clause.⁶¹
191. The Authority therefore modifies the requirement for amendment of the electricity transfer access contract to require deletion of the proposed clause 3.8.

⁶⁰ Economic Regulation Authority, 2 March 2007, Final Decision on the Proposed Access Arrangement for the South West Interconnected Network, paragraphs 944 and 945.

⁶¹ Western Power submission of 13 August 2009.

Required Amendment 8

The proposed access arrangement revisions should be amended to delete clause 3.8 of the electricity transfer access contract.

Controllers (clause 6)

192. Clause 6 of the proposed electricity transfer access contract sets out rights of Western Power and obligations of the user where the user is not the controller at a connection point. No material changes to clause 6 have been proposed from the corresponding clause 6 of the current electricity transfer access contract.
193. Clause 6.1 of the proposed electricity transfer access contract requires that the user must nominate to Western Power the controller of a connection point where the equipment at the connection point or operation of the connection points exceed certain thresholds. Clause 6.1 also provides for Western Power to require the user to procure that the controller of a connection point enter into a connection contract directly with Western Power.
194. Clause 6.2 is relevant to the circumstance where the user is not also the controller of a connection point and Western Power does not have a connection contract directly with the controller. In this circumstance, clause 6.2(a) requires that the user ensure that the controller complies with obligations under the electricity transfer access contract including obligations arising from “good electricity industry practice” (under clause 11); the Technical Rules (under clause 12); technical characteristics of facilities and equipment (under clause 13); cooperation (under clause 14); access to premises (under clause 15); directions from the system operator (under clause 16); removal of equipment (under clause 17); and curtailment (under clause 25).
195. Synergy submitted that clause 6 imposes unreasonable or impractical requirements on the user, for reasons as follows.
196. First, Synergy submitted that it is not reasonable that, under clause 6.1(a) of the proposed electricity transfer access contract, the user may be required to nominate the controller of a connection point prior to the commencement of the service.⁶²

Synergy submits that, for the reasons set out below, It is not reasonable within section 5.3(a) of the [Access Code] for clause 6.1(a) of the [electricity transfer access contract] to require a User who is not the Controller of a Connection Point to nominate a person as the Controller of a Connection Point before the Start Date of the relevant Service.

Synergy is aware that Western Power has allocated to retail Users such as Synergy Connection Points without prior notice to the User. Further Western Power has retrospectively allocated Connection Points to retail Users such as Synergy. Therefore Synergy submits that clause 6.1(a) should be amended as underlined as follows:

⁶² Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

"If the User* is the not the Controller* of a Connection Point* then the User* must, by notice to Western Power* before the Start Date* of the relevant Services* or as soon as reasonably practical thereafter nominate a person as the Controller* for the Connection Point* where... "

197. Under the terms of the applications and queuing policy, a connection point cannot normally be added to the access contract with a user other than pursuant to an application from the user. There are circumstances, however, where a connection point may be added to an access contract other than by an application from the user and subsequent to the commencement of a service, most notably under the default supplier provisions of sections 35 to 38 of the *Electricity Industry (Customer Contracts) Regulations 2005*. As indicated by Synergy, it would be impractical in these circumstances for the user to nominate the controller of a connection point prior to the commencement of the service.
198. In the Draft Decision, the Authority determined that clause 6.1 of the electricity transfer access contract should accommodate these circumstances and the revised clause 6.1(a), as suggested by Synergy, is one way of achieving this.
199. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 9

The proposed access arrangement revisions should be amended such that clause 6.1(a) of the electricity transfer access contract be made to provide for the user to nominate a controller as soon as reasonably practical after the commencement of the service.

200. In response to Draft Decision Amendment 9, Western Power submits that it is prepared to comply with the required amendment and proposed a revised clause 6.1(a):

"If the User is not the Controller of a Connection Point then the User must, by notice to Western Power before the Start Date of the relevant Services, or as soon as reasonably practicable thereafter (but in all cases no later than 30 Business Days after the Start Date of the relevant Services) nominate a person as the Controller for a Connection Point.

201. In this proposed revision, Western Power has included a period of 30 business days as a reasonable period for the user to notify Western Power of the identity of the controller.
202. Synergy submits that it supports the revision proposed by Western Power.⁶³
203. Alinta Sales submits that it is unclear whether the proposed 30 business day limit on providing notice is consistent with the required amendment and that it is unclear whether a user could comply with this requirement in all instances where connection points may be added to an access contract other than by an application from the user and subsequent to the commencement of a service.⁶⁴

⁶³ Synergy submission of 1 October 2009.

⁶⁴ Alinta Sales Pty Ltd submission of 10 September 2009.

204. The Authority notes the matter raised by Alinta Sales, but considers that support for the proposed revisions by Synergy would suggest that the 30 business day limit is not likely to present difficulties for a user.
205. The Authority therefore maintains the requirement for amendment of the electricity transfer access contract in accordance with Draft Decision Amendment 9 and the revisions proposed by Western Power.

Required Amendment 9

The proposed access arrangement revisions should be amended such that clause 6.1(a) of the electricity transfer access contract provides for the user to nominate a controller as soon as reasonably practical, but in all cases within 30 business days, after the commencement of the service.

206. Secondly, Synergy submitted that, under clause 6.1(e) of the proposed electricity transfer access contract, the user should not have to procure that a controller of a connection point enter into a connection contract with Western Power:⁶⁵

Clause 6.1(e) of the [electricity transfer access contract] places an absolute obligation on a User to procure the nominated Controller to enter into a Connection Contract, Synergy submits that this is not reasonable within section 5.3(a) of the [Access Code].

Western Power is already adequately protected if the nominated person does not enter into a Connection Contract because, under clause 6.2(d), in these circumstances Western Power is not obliged to provide the Reference Service.

There may be many reasons why the person nominated as a Controller does not wish to enter into a Connection Contract. For example, that Western Power insists on unreasonable terms or on terms not acceptable to the nominated person.

It is not reasonable in these circumstances for there to be an obligation on the User to effectively force the person nominated as a Controller to enter into the Connection Contract. Synergy submits that such an absolute obligation is also not reasonably necessary to protect Western Power's interests, particularly given that there is sufficient incentive, both commercially and practically, for the User to encourage the person nominated as a Controller to enter into a Connection Contract so that the User (and presumably the person nominated as Controller) can use the Reference Service.

Therefore Synergy submits that clause 6.1(e) of the [electricity transfer access contract] should be amended as underlined as follows:

"If Western Power* requires, the User* must use reasonable endeavours to procure that the person nominated by the User* as a Controller* enters into a Connection Contract* with Western Power* in respect of the Connection Point*".

207. The obligation under clause 6.1(e) for a user to procure that a controller of a connection point enter into a connection contract with Western Power is subject to clause 6.1(a) that establishes the thresholds above which the requirement for a

⁶⁵ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

connection contract applies. These thresholds relate generally to the potential for operations at the connection point to disrupt the network.

208. The obligation on the user to procure that the controller of a connection point enter into a connection contract with Western Power is likely to mean that the user is required to compel the controller to enter into a connection contract with Western Power. This may entail the user not commencing the retail supply of electricity, or suspending supply, until the connection contract is entered into.
209. In the Draft Decision, the Authority agreed with Synergy that it is unreasonable for Western Power to require the user to procure that the controller of a connection point enter into a connection contract with Western Power. The Authority observes that the user is required in any case to provide Western Power with details of the controller at a connection point. After receiving such information, Western Power itself has the ability to require the controller to enter into a connection contract by the ability to cease supply of the reference service; that is, by disconnection of the connection point. The user does not have such a power to cease supply of an electricity service and hence, in the absence of action by Western Power, has a limited ability to enforce the requirement for the controller to enter into a connection contract.
210. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 10

The proposed access arrangement revisions should be amended such that clause 6.1(e) of the electricity transfer access contract requires only that the user uses reasonable endeavours to procure that a controller enter into a connection contract with Western Power.

211. In response to Draft Decision Amendment 10, Western Power submits that it is prepared to comply with the required amendment subject to the Authority accepting Western Power's proposed approach to Draft Decision Amendment 11. The Authority does not accept that Draft Decision Amendment 10 and 11 are sufficiently related that the responses to these required amendments should be contingent upon one another. Notwithstanding this, the Authority accepts that the substance of Western Power's response to Draft Decision Amendment 11 addresses the Authority's reasons for the required amendment and the requirements of the Access Code.
212. Taking these matters into account, the Authority maintains the requirement for amendment of the electricity transfer access contract in accordance with Draft Decision Amendment 10

Required Amendment 10

The proposed access arrangement revisions should be amended such that clause 6.1(e) of the electricity transfer access contract requires only that the user uses reasonable endeavours to procure that a controller enter into a connection contract with Western Power.

213. Thirdly, Synergy submitted that clause 6.2 causes an unreasonable requirement for Synergy to establish a network inspection service to ensure that equipment connected to the network continues to comply with the Technical Rules and gives rise to commercial risks and financial barriers for Synergy in the retail electricity market.⁶⁶ More particularly, Synergy submits that clause 6.2 should be amended to lessen the obligations of the user:⁶⁷

Synergy submits that clause 6.2(a) of the [electricity transfer access contract] should be amended as underlined as follows:

"Subject to clause 6.2(b) if the User* is not the Controller* of a Connection Point*, and the Controller* of that Connection Point* has not entered into a Connection Contract* with Western Power* in respect of the Connection Point* then the User* must use reasonable endeavours to ensure that the Controller* of that Connection Point* ..."

Synergy submits that the insertion of the words "must use reasonable endeavours" are necessary for the same reasons set out above in relation to clause 6.1(e) of the [electricity transfer access contract].

Synergy submits that a new clause 6.2(b) should be inserted as follows:

"Notwithstanding clause 6.2(a) the User* is not required to:

(i) do anything to determine whether or not the Controller* or its equipment is complying or compliant with the Technical Rules*: or

(ii) commence, maintain or continue legal proceedings:

(A) unless Western Power* provides an indemnity satisfactory to the User*, acting as a Reasonable and Prudent Person*, for all its costs of and relating to such proceedings: or

(B) to the extent that:

(I) the Controller* has obligations to Western Power* arising independently from this Contract, which, in the circumstances, Western Power acting as a Reasonable and Prudent Person*, should enforce: or

(II) Western Power* has rights or powers arising independently from this Contract*, which, in the circumstances, Western Power*, acting as a Reasonable and Prudent Person, should exercise."

Synergy submits that it is not reasonable to require a User, such as a retailer, to be effectively responsible for its customers' compliance with the Technical Rules or for the technical characteristics of its customers' Facilities and Equipment when, for the reasons set out under heading 3(b) above, Western Power is in a better position to do this. Further Synergy submits it is not reasonable to place an absolute obligation on a User, such as a retailer, to take action, on behalf of Western Power, and in order to protect Western Power's interests, against a retail User's customer, particularly in circumstances when Western Power has the ability to take such action independently of the retail User.

The effect is to allocate the risk of damage to the Network to a party that is not easily able to mitigate or bear such risk, in circumstances where such party is also expected to bear the cost of actions to mitigate the risk. Synergy reiterates its submissions set out under heading 3(b) above in this regard.

⁶⁶ Synergy submission of 24 October 2008 and verbal communication of 31 October 2008.

⁶⁷ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

Synergy submits that such a provision falls outside the ambit of power contemplated by a standard access contract required by section 5.1(b) of the [Access Code] Further that such provision is not reasonable within section 5.3(a) of the [Access Code] Finally Synergy submits that such a provision is contrary to the Code objective. It is not an economically efficient operation and use of the network or services of the network for the network operator to pass risks, which it is best able to mitigate and bear, to parties who have no interest in the risk and who are not best able to bear that risk, nor to mitigate it, let alone bear the cost of mitigation.

214. The Authority observed in the Draft Decision that clause 6.2(a) of the proposed electricity transfer access contract, which requires the user to procure the compliance of the controller of a connection point with terms of the electricity transfer access contract, is similar to clause A3.38 of the model standard access contract under the Access Code. However, the Authority observed that there are differences:

- clause 6.2(a) of the proposed electricity transfer access contract applies to all connection points and not just those over certain thresholds of capacity as applies under clause A3.38 of the model standard access contract; and
- clause 6.2(a) of the proposed electricity transfer access contract requires the user to procure compliance on a greater range of matters than clause A3.38 of the model standard access contract, including on the technical characteristics of facilities and equipment, directions from the system operator, removal of equipment and curtailment.

215. The Authority determined in the Draft Decision that it is unreasonable that the user is required to procure compliance of a controller, effectively on Western Power's behalf, noting that Western Power has the ability to require that the controller at a connection point enter into a connection contract with Western Power in circumstances where the facilities and level of energy transfer at the connection point are such as to have the potential to disrupt the network. As such, the Authority determined that it is reasonable that Western Power bear the costs potentially arising from such a requirement.

216. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 11

The proposed access arrangement revisions should be amended such that clause 6.2(a) of the electricity transfer access contract is made subject to a provision that the user is not required to commence, maintain or continue legal proceedings to procure compliance of a controller with obligations under the access contract unless Western Power provides an indemnity for all of the user's costs of and relating to such proceedings.

217. In a submission in response to Draft Decision Amendment 11,⁶⁸ Western Power refers to clause A3.36 of the model standard access contract under the Access Code, which defines "designated controllers". The following clauses A3.37 and A3.38 require, *inter alia*, that the user must procure a designated controller's compliance with provisions of the access contract, including such provisions as contemplated by Western Power under clause 6.2 of the proposed electricity

⁶⁸ Western Power submission of 13 August 2009.

transfer access contact. Western Power submits that it is prepared to provide an indemnity of the nature proposed by Synergy for legal proceedings outside of those contemplated under the model standard access contract for a “designated controller”. Western Power proposes new clauses 6.2(f) to (h) of the electricity transfer access contract to achieve this.

218. Having regard to Western Power’s submission, the Authority accepts that clause 6.2(a) of the electricity transfer access contract is consistent with the requirements of section 5.3 of the Access Code and the Code objective, to the extent that it reproduces without material omission or variation provisions of clauses A3.36 and A3.38 of the model standard access contract.
219. As such, the Authority accepts that clause 6.2(a) of the electricity transfer access contract may require the user to procure compliance of a controller with terms of the electricity transfer access contract where the user would be defined as a designated controller under clause A3.36 of the model standard access contract as implemented in the electricity transfer access contract. Synergy makes contentions to this effect in a submission made subsequent to the Draft Decision.⁶⁹
220. For the electricity transfer access contract, this would apply to controllers for connection points that fall within the scope of clause 6.1 of the electricity transfer access contract, being connection points where:
 - the generating plant with installed capacity exceeding 30 kVA is connected at the connection point; or
 - the connection assets for the connection point are operated at 66 kV or greater; or
 - the rating of the largest motor connected at the connection point is greater than 0.4 per cent of the three phase short circuit fault level at the attachment point.
221. For other controllers, the Authority maintains the position of Draft Decision Amendment 11 and will require that the proposed access arrangement revisions be amended to provide indemnity to users for actions to procure compliance with relevant terms of the access contract.

Required Amendment 11

The proposed access arrangement revisions should be amended such that clause 6.2(a) of the electricity transfer access contract is made subject to a provision that, for a connection point other than as contemplated by clause 6.1 of the electricity transfer access contract, the user is not required to commence, maintain or continue legal proceedings to procure compliance of a controller with obligations under the access contract, unless Western Power provides an indemnity for all of the user’s costs of and relating to such proceedings.

⁶⁹ Synergy submission of 1 October 2009.

Tariffs and Charges (clause 7)

222. Clause 7 of the proposed electricity transfer access contract specifies the tariffs and charges applicable to the services provided under the access contract (clause 7.1), the obligation of the user to pay the component charges of the relevant tariff (clause 7.2), and relief of the user from liability for payment of charges during any period of disconnection due to a force majeure event claimed by Western Power (clause 7.3). Clause 7 corresponds to clause 7 of the current electricity transfer access contract.
223. Western Power has proposed the inclusion of a new clause 7.1(f), relating to the information relied on by Western Power for the purposes of calculating the tariffs and charges for a service:
- (f) For the purposes of calculating Tariffs* and Charges* for a Service*:
 - (i) Western Power* is entitled to rely on the information contained in Schedule 3 (as updated from time to time in accordance with this Contract*); and
 - (ii) where information contained in Schedule 3 is updated, or to be updated, in accordance with this Contract*, the updated information:
 - (A) will not apply to any period before; and
 - (B) must not be used to calculate a Tariff* or Charge* until,

the date that the information is actually updated in accordance with this Contract*.
224. Synergy addressed several elements of clause 7 in its submission on the proposed electricity transfer access contract.⁷⁰
225. First, Synergy submits that clause 7.1 requires Western Power to apply a price change on and from the date energy was consumed so that changed charges apply to the period that the energy was transferred and consumed. Synergy submits that clause 7.1 should make it express that Western Power cannot engage in rounding or "pro-rating" as appears contemplated in the price list.
226. Under clause 7.1, the tariffs and charges applying for a service at a connection point are determined according to the price list and the details of the relevant connection points as specified in schedule 3 to the electricity transfer access contract. Clause 7.1 also deals with circumstances of a price list not being in effect at any given time, the determination of tariffs payable in a new access arrangement period, and a reliance on information in schedule 3 of the electricity transfer access contract to determine applicable tariffs.
227. Synergy provided the Authority with clarification of its concerns with clause 7.1, indicating that clause 7.1 does not adequately deal with the circumstance where a change in the charges applying under a reference tariff (as indicated in the price list) occurs during a billing period.⁷¹ Synergy refers to the price list of the proposed access arrangement revisions, which deals with the circumstance with the following note:⁷²

⁷⁰ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

⁷¹ Email from Synergy to the Economic Regulation Authority of 16 February 2009.

⁷² Revised proposed access arrangement, Appendix 5: p. 1.

For the avoidance of doubt, the prices within this Price List will apply to all consumption during the pricing year. Where consumption is metered with an accumulation meter and the meter reading interval causes some of the metered consumption to lie within the pricing year covered by this price list and the remainder within a previous or subsequent pricing year not covered by this price list, the consumption covered by this price list will be determined by prorating the metered consumption uniformly on a daily basis.

228. Synergy submits that this matter should be dealt with in the electricity transfer access contract. In any case, however, Synergy submits that, contrary to this note, Western Power's billing system is unable to undertake the prorating of consumption to days within a consumption period. Synergy submits that, until this practical matter is resolved, clause 7.1 of the electricity transfer access contract should make it clear that Western Power cannot engage in rounding or prorating of consumption for billing purposes.
229. The Authority concurs with Synergy that the circumstance of a billing period spanning a change in charges applying under a reference tariff should be dealt with in the electricity transfer access contract, rather than the price list, and that the relevant provision should be reasonable and contain sufficient detail, consistent with the requirements of section 5.3 of the Access Code. The Authority further considers that, in including such a provision in the electricity transfer access contract, Western Power will necessarily have to ensure consistency with the capabilities of its billing system.
230. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 12

The proposed access arrangement revisions should be amended such that clause 7.1 of the electricity transfer access contract includes a provision dealing with the determination of amounts payable by the user where there is a change in the charges payable under a reference tariff during a billing period. The provision must represent a reasonable balance between the interests of the user and Western Power.

231. In a submission in response to Draft Decision Amendment 12,⁷³ Western Power indicates that it accepts the required amendment and proposed amendment of the electricity transfer access contract to add a new sentence to clause 7.1(a) to read:

For the avoidance of doubt, the tariffs specified in the Price List apply to all consumption during the Pricing Year applicable to the Price List. Where consumption is metered with an accumulation meter and the meter reading interval causes some of the metered consumption to lie within the Pricing Year applicable to the Price List and the remainder within a Pricing Year applicable to another Price List, the consumption covered by the Price List will be determined by prorating the metered consumption uniformly on a daily basis.

232. Synergy submits that it agrees with the general concepts proposed by Western Power in response to Draft Decision Amendment 12, but submits that related amendments should also be made to clauses 3.7(g), 3.7(h) and 7.1(f) to indicate that:

⁷³ Western Power submission of 13 August 2009.

- at clause 7.1(f), indication that reliance on the contract database should be subject to an absence of manifest errors in the contract database;
 - at clause 3.7(g), indication that where Western Power causes a permanent reconfiguration of the network that would, in the normal course of events, cause a change in the charges payable but Western Power does not update the contract database until some later time, it is the current connection point database that applies for the calculation of tariffs and charges; and
 - at clause 3.7(h), indication that where the user initiates a permanent reconfiguration of the network that would, in the normal course of events, cause a change in the charges payable but Western Power does not update the contract database until some later time, it is the current connection point database that applies for the calculation of tariffs and charges.⁷⁴
233. The Authority considers that the further amendments sought by Synergy are unrelated to Draft Decision Amendment 12, which relates only to circumstances of a change in the price list during a billing period. Furthermore, the Authority considers that the further amendments sought by Synergy are unnecessary as the circumstances and matters contemplated in these further amendments are already addressed by the terms of the electricity transfer access contract that deal with errors in invoicing and arrangements for invoicing.
234. The Authority therefore maintains the requirement for amendment of the proposed access arrangement revisions in accordance with Draft Decision Amendment 12 and accepts that the revision to the proposed electricity transfer access contract proposed by Western Power meets this requirement.

Required Amendment 12

The proposed access arrangement revisions should be amended such that clause 7.1 of the electricity transfer access contract includes a provision dealing with the determination of amounts payable by the user where there is a change in the charges payable under a reference tariff during a billing period. The provision must represent a reasonable balance between the interests of the user and Western Power.

235. Secondly, and in relation to the proposed new clause 7.1(f), Synergy referred to its submission on the processes by which details of connection points in schedule 3 of the access contract may be altered. The Authority has addressed these matters in relation to clause 3.7 of the electricity transfer access contract (paragraphs 148 to 152, above).
236. Thirdly, Synergy objected to the provisions of clause 7.3 of the electricity transfer access contract that require a user to pay a portion of standing charges for services where the service is interrupted pursuant to a force majeure event claimed by Western Power. Under clause 7.3(a), if a service is unavailable for any consecutive period of two days or longer, a user is relieved of obligations to pay charges except

⁷⁴ Synergy submission of 1 October 2009.

for 10 per cent of standing charges. Synergy submitted that it is unreasonable for a user to have to pay any amount of charges in these circumstances.

237. The requirement under clause 7.3 for the payment of 10 per cent of standing charges reproduces clause A3.42(b) of the model standard access contract under the Access Code. As such, and under section 5.5 of the Access Code, the Authority must determine that this requirement is consistent with section 5.3 of the Access Code.

Invoicing and Payment (clause 8)

238. Clause 8 of the electricity transfer access contract⁷⁵ comprises terms of invoicing and payment, including:

- requirements for Western Power to issue invoices to the user (clause 8.1 of the electricity transfer access contract under the proposed access arrangement revisions);
- requirements for Western Power to provide information to the user to enable the user to calculate any amounts owed by Western Power to the user and requirements for the user to invoice Western Power for any such amounts (clause 8.2);
- requirements for payment of invoices (clause 8.3);
- requirements for dealing with disputed invoices and under or over payments (clause 8.4, 8.6 and 8.7); and
- the determination of liabilities for goods and services tax (clause 8.8).

239. Western Power has proposed several changes to clause 8, including:

- addition of a new clause 8.1(d) allowing parties to agree on alternative arrangements for invoicing to standard arrangements set out in clauses 8.1(a) to 8.1(c);
- addition of a new clause 8.5 to indicate that nothing in the electricity transfer access contract affects or limits the operation of sections 65 and 66 of the *Energy Operators (Powers) Act 1979 (WA)*;
- addition of new clauses 8.6(d) and 8.6(e) that establish a sunset provision for claims in relation to under and over-payments; and
- addition of a new clause 8.8(e) to adjust any payments as necessary where a change in the rules or rate of goods and services tax occurs.

240. In addition to these proposed changes, submissions have been made to the Authority on existing terms of clause 8 including:

- the format in which invoicing information is provided by Western Power to the user (clause 8.1(c)); and

⁷⁵ Clause 8 of the proposed electricity transfer access contract corresponds to clause 8 of the current electricity transfer access contract.

- a strengthening of requirements for Western Power to provide to the user information necessary for determination of any amount payable by Western Power to the user (clause 8.2(a)).

241. The proposed changes to clause 8 and other matters raised in submissions are addressed as follows in the order of the relevant provisions of clause 8.

Format of Electronic Information

242. Under clause 8.1(c) of the proposed electricity transfer access contract, Western Power is required, at the same time as issuing an invoice, to provide to the user the metering information used to calculate the charges. This information is required to be provided in electronic form. This clause is unchanged from the current electricity transfer access contract.
243. Synergy submitted that the clause should be amended to more specifically state that the information is to be provided in a particular data format referred to as the “CSV format” or other format acceptable to the user.⁷⁶ Synergy includes in its submission technical information on the CSV format to indicate that the format is an actual or emerging standard format for the transfer of electronic information.
244. The requirement under clause 8.1(c) of the electricity transfer access contract for Western Power to provide information in electronic form, without specification of the format of the information, is materially the same as the requirement under clause A3.44 of the model standard access contract under the Access Code. As such, and under section 5.5 of the Access Code, the Authority must determine that clause 8.1(c) is consistent with section 5.3 of the Access Code.
245. The format of information exchanged electronically between Western Power and a user is, at least in part, governed by the Communication Rules under clause 6.7 of the Metering Code. The Communication Rules require that information exchanged between parties to the Metering Code be in “XML format”.⁷⁷ The Authority considers that any debate and determination of an alternative format for information exchange would best occur through a process of amendment of the Communication Rules.

Alternative Arrangements for Invoicing

246. A proposed new clause 8.1(d) provides for Western Power and a user to implement, by mutual agreement, invoicing arrangements different to standard invoicing arrangements set out in clauses 8.1(a) to 8.1(c).
247. Perth Energy submits that it supports this proposed provision for reason that it increases commercial flexibility for both the user and Western Power.
248. The Authority considers that the proposed provision for alternative invoicing arrangements to be agreed between Western Power and the user is simply declaratory of rights under the Access Code for a user and Western Power to negotiate terms of access different to the terms of reference services. As such, the

⁷⁶ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

⁷⁷ Electricity Industry Metering Code 2005 Communication Rules, 10 February 2006, clause 3.1.

Authority considers the proposed clause 8.1(d) to be consistent with section 5.3 of the Access Code.

User Invoices

249. Clause 8.2(a) of the proposed electricity transfer access contract requires Western Power to provide the user with all information necessary for the user to determine any amounts payable by Western Power to the user. Section 8.2(c) deals with the situation where the user disputes the information provided by Western Power and provides for the user to issue an invoice to Western Power for the amount the user considers to be correct and to notify Western Power of a dispute over the information provided. These clauses are unchanged from the current electricity transfer access contract.
250. Synergy submitted that clause 8.2(c) should be broadened to deal with situations where Western Power fails to provide information (and thereby fails to comply with clause 8.2(a)), or Western Power does not provide information in an electronic format suitable for use by the user.⁷⁸
251. The provisions of clauses 8.2(a) and 8.2(c) of the electricity transfer access contract for Western Power to provide information and for the user to dispute the information provided are materially the same as the provisions of clauses A3.45(a) and A3.45(c) of the model standard access contract under the Access Code. As such, and under section 5.5 of the Access Code, the Authority must determine that clauses 8.2(a) and 8.2(c) are consistent with section 5.3 of the Access Code.
252. In any case, the Authority considers that the provisions of clause 8.2(c) for the dispute of information provided by Western Power are sufficiently broad to deal with Western Power failing to provide information or providing information in a format that the user is unable to utilise.

Payment of Invoices

253. Clause 8.3 of the proposed electricity transfer access contract establishes an obligation for each party to the access contract to pay invoices by the relevant due date and provides for interest to be paid on overdue invoices. This clause is unchanged from the current electricity transfer access contract.
254. Synergy submitted that clause 8.3 should be amended to make the user's obligation to pay invoices subject to Western Power having provided relevant metering information in a format acceptable to the user.⁷⁹
255. The provisions of clauses 8.3 of the electricity transfer access contract are materially the same as the provisions of clause A3.46 of the model standard access contract under the Access Code. As such, and under section 5.5 of the Access Code, the Authority must determine that clause 8.3 is consistent with section 5.3 of the Access Code.

⁷⁸ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

⁷⁹ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

Subordination to the *Energy Operators (Powers) Act 1979 (WA)*

256. Western Power has proposed a new clause 8.5 as follows:

8.5 Charge errors

Nothing in this clause or elsewhere in this Contract affects or limits the operation of sections 65 and 66 of the *Energy Operators (Powers) Act 1979 (WA)* in relation to Charges paid or payable by the User under this Contract.

257. Sections 65 and 66 of the *Energy Operators (Powers) Act 1979 (WA)* provide for the meter readings of energy operators to be *prima facie* evidence of the extent, characteristics and value of energy supplied, make provision for incorrect meter readings and make provisions for the testing of meters.

258. The Authority considers that the proposed clause 8.5 is declaratory in nature as the electricity transfer access contract will be subject to the *Energy Operators (Powers) Act 1979 (WA)* regardless of whether or not this is stated in the electricity transfer access contract. The Authority therefore considers that the proposed clause is reasonable and consistent with section 5.3 of the Access Code.

Sunset Clauses on Claims for Adjusting Payments

259. Western Power has proposed additional provisions to clause 8.6 of the proposed electricity transfer access contract⁸⁰ that establish a time limit for claims for adjusting payments in respect of payment errors. The additional provisions have effect to:

- require any party to give notice of a payment error as soon as reasonably practicable after the error is detected (clause 8.6(a)(i));
- cause a party not to be entitled to an adjusting payment if the other party is notified after the expiry of 18 months after the payment error (clause 8.6(d)); and
- limit adjusting payments to the correction of a payment error that occurred in the 12 month period preceding the date on which the payment error was notified by one party to the other (clause 8.6(e)).

260. Western Power states that the proposed new provisions are for the purpose of providing certainty as to the limit of the period for which a billing error will be corrected, and to ensure that the time limit on adjusting payments of 12 months aligns with a similar limit under section 65 of the *Energy Operators (Powers) Act 1979*.⁸¹

261. Support for these proposed changes has been indicated in submissions from Alinta Sales and Perth Energy, both of which note the consistency with provisions for settlements in the wholesale electricity market and consistency of provisions for claims by both parties to an access contract.

⁸⁰ Clause 8.6 corresponds to clause 8.5 of the current electricity transfer access contract.

⁸¹ Western Power submission of 17 December 2008; Revised access arrangement information, Appendix 12: section 3.5.

262. Synergy submitted that the limits on periods of adjusting payments and sunset clauses on claims for adjusting payments make it necessary to have stronger requirements for Western Power to provide information to users in support of invoices under clause 8.1 of the electricity transfer access contract.⁸² The Authority addressed this matter above (paragraphs 242 to 245 and 249 to 252).
263. Taking into account the submissions and consistency with relevant provisions of the *Energy Operators (Powers) Act 1979*, the Authority considers the proposed provisions of clause 8.6 to be consistent with section 5.3 of the Access Code and the Code objective.

Goods and Services Tax

264. Western Power has proposed a new clause 8.7(e) in the proposed electricity transfer access contract. Clause 8.7(e) provides for retrospective adjustments to be made to payments in respect of changes to either transactions to which the goods and services tax applies, or the rate at which the goods and services tax applies.
265. None of the parties that made submissions to the Authority addressed the proposed clause 8.7(e).
266. The Authority observes that the proposed clause 8.7(e) provides for adjustments to payments to be made in accordance with the goods and services tax liabilities under Commonwealth taxation law and that any such adjustments are not to the advantage of Western Power. As such, the Authority considers the proposed clause to be consistent with section 5.3 of the Access Code and the Code objective.

Security for Charges (clause 9)

267. Clause 9 of the electricity transfer access contract provides for Western Power to require a user to provide security against the users obligations under a contract for a network service. Security may take the form of a cash deposit, bank guarantee or similar financial instrument, or guarantee from the parent company of the user.
268. Under the current access arrangement, the provision for Western Power to require security is limited to circumstances where a reasonable and prudent person would consider there to be a material risk that the user will be unable to meet its obligations under the contract. Also, Western Power cannot determine such a material risk to exist (and hence require security) where the user or the indemnifier of the user has a credit rating of, or better than, “BBB” from Standard and Poors Australia Pty Ltd or “Baa” from Moody’s Investor Service Pty Ltd.
269. Western Power did not propose any changes to clause 9 of the electricity transfer access contract in the proposed access arrangement revisions. However, in a submission made to the Authority subsequent to the Draft Decision, Western Power has proposed changes to clause 9, comprising:
- removal of provision for security to comprise a guarantee from a parent company; and

⁸² Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

- increases in the required credit ratings of the user or indemnifier that prevent Western Power from requiring security from “BBB” to “A” from Standard and Poors Australia Pty Ltd or “Baa” to “A” from Moody’s Investor Service Pty Ltd.⁸³
270. Western Power indicates that the reasons for the proposed changes to clause 9 are that:
- a parent company guarantee does not constitute effective security due to circumstances or actions that may allow a parent company to avoid liability; and
 - the existing “BBB” and “Baa” credit rating thresholds are the lowest investment grade credit ratings and Western Power proposes to align the threshold credit ratings with its preferences for guarantees from banks with a credit rating of at least “A”.
271. The Authority issued a notice on 28 August 2009 to make interested parties aware of the proposed changes and advising that interested parties may make submissions on the matter by the closing date of 10 September 2009 for submissions on the Draft Decision.
272. Western Power’s proposed changes to clause 9 were addressed in a subsequent submission from Synergy.⁸⁴ Synergy contends that the revised threshold credit ratings would effectively require all users to pay or provide security and, as such, the proposed change is not reasonable and would be likely to discourage competition in markets upstream and downstream of the networks.
273. The Authority has determined that it will not allow Western Power to make the proposed change to clause 9 of the electricity transfer access contract. In coming to this determination, Western Power has not provided any evidence or analysis to satisfy the Authority that the proposed changes to clause 9 are reasonably necessary, to protect Western Power’s commercial interests.

Security for Contributions (clause 10)

274. Clause 10 of the proposed electricity transfer access contract requires a user to provide security to guarantee the present value of any contribution payable to Western Power under the contributions policy of the access arrangement.⁸⁵ No change is proposed to this clause other than to establish it as a separate clause from other security provisions (under clause 9) and to change the reference to a “capital contribution” to a “contribution” in accordance with Western Power’s proposed changes to its capital contributions policy.
275. Synergy submitted that clause 10 may impose an unreasonable requirement on Synergy to provide financial security for works required by customers and the associated contributions that need to be paid to Western Power by the customer.⁸⁶

⁸³ Western Power submission of 13 August 2009, Attachment G.

⁸⁴ Synergy submission of 1 October 2009.

⁸⁵ Clause 10 corresponds to clause 9(c) of the current electricity transfer access contract.

⁸⁶ Synergy submission of 24 October 2008 and verbal communication of 31 October 2008.

276. Provision exists under clause A3.51(b) of the model standard access contract of the Access Code for a service provider to require the user to provide security for unpaid contributions. However, this requirement may only apply where it is the user that must pay the contribution. It is not clear whether clause 10 of the proposed electricity transfer access contract is similarly limited.
277. In the Draft Decision, the Authority determined that it would be unreasonable and inconsistent with section 5.3 of the Access Code for a user to be required to provide security for contributions owed directly to Western Power by another party. The Authority required that clause 10 of the proposed electricity transfer access contract be amended to clarify that a user may only be required to provide security for contributions owed by the user.
278. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 13

The proposed access arrangement revisions should be amended such that clause 10 of the electricity transfer access contract clearly applies only in respect of a contribution payable by the user.

279. In a submission subsequent to the Draft Decision, Western Power indicated that it accepts the required amendment and proposed an amended clause 10 that refers to a contribution to be made by the user.
280. Synergy submits that the wording proposed by Western Power is imprecise and clause 10 should refer to contributions “*payable by the user*” rather than “*to be made by the user*”.⁸⁷
281. The Authority observes that the contributions policy under the proposed access arrangement revisions refers at different times to a user paying a contribution and making a contribution, with the different terms appearing to be synonymous. As such, the Authority considers that the terminology proposed by Western Power is clear in its meaning and meets the requirements of Draft Decision Amendment 13.
282. A submission of Alinta Sales makes no comment on Western Power’s response to Draft Decision Amendment 13, but raises additional concerns with the provisions of clause 10 of the proposed electricity transfer access contract, being that:
- there may be an inconsistency of the proposed electricity transfer access contract with the contributions policy in that the former states that the user *must* provide a bank guarantee in respect of an unpaid part of a contribution, while the latter states that Western Power *may* require a bank guarantee in the same circumstances; and
 - it is unclear why there are limits on the ability of Western Power to seek security in respect of access charges (clause 9(b) of the proposed electricity transfer access contract), but the same limits do not apply in respect of security for contributions.⁸⁸

⁸⁷ Synergy submission of 1 October 2009.

⁸⁸ Alinta Sales submission of 10 September 2009.

283. The Authority concurs with Alinta Sales that there is a discrepancy between clause 10 of the proposed electricity transfer access contract and the proposed contributions policy in indicating whether a requirement for security in respect of an unpaid portion of a contribution is an automatic requirement. The Authority also observes that a corresponding clause of the model standard access contract under the Access Code (clause A3.51) provides for a requirement for security in respect of contributions to be subject to an assessment of the risk that the user would be unable to meet the obligation for payment.
284. The Authority considers that these matters would best be resolved by providing for the terms of a contribution (including any requirement for security) to be determined under the contributions policy, and for the electricity transfer access contract to reflect these terms.
285. The Authority therefore maintains the requirement for the proposed access arrangement revisions to be amended in accordance with Draft Decision Amendment 13, but with changes to the required amendment to address the matters raised by Synergy and Alinta Sales.

Required Amendment 13

The proposed access arrangement revisions should be amended such that clause 10 of the electricity transfer access contract:

- clearly applies only in respect of a contribution to be made by the user; and
- applies where the requirement for security has been determined in accordance with the contributions policy.

Technical Rules (clause 12)

286. Clause 12 of the proposed electricity transfer access contract establishes requirements for Western Power and the user to comply with the Technical Rules.⁸⁹
287. Clause 12.1 of the proposed electricity transfer access contract requires that Western Power and the user both comply with the Technical Rules. Western Power has proposed changes to this clause to:
- make the requirement subject to any exemptions given to either Western Power or the user under Chapter 1 of the Technical Rules; and
 - indicate as an explanatory note that “[f]or the avoidance of doubt, this includes a requirement on the User to comply with the Technical Rules with respect to any other person or person’s equipment that will gain access, or Connect, to the Network through a Connection Point”.

⁸⁹ Clause 12 corresponds to clause 11 of the current electricity transfer access contract.

288. Synergy submits that the proposed clause 12 is unreasonable as it causes an unreasonable requirement for a user that is also a retailer to establish a network inspection service to ensure that equipment connected to the network continues to comply with the Technical Rules and gives rise to commercial risk and financial barriers for the user.⁹⁰ Synergy submits that clause 12 should be amended as follows:

"The User* must comply with the Technical Rules*, subject to any exemptions given to the User* or to any other person that will gain access, or Connect*, to the Network* through a Connection Point* under Chapter 1 of the Technical Rules*. (For the sake of clarity, this clause includes a requirement on the User* to, in so far as is reasonably practical, seek to ensure compliance with the Technical Rules* with respect to any other person or person's equipment that will gain access, or Connect*, to the Network* through a Connection Point*. However, nothing in this clause requires a User* to:

(i) do anything to determine whether or not such other person or their equipment is complying or compliant with the Technical Rules; or

(ii) commence, maintain or continue legal proceedings:

(C) unless Western Power* provides an indemnity satisfactory to the User*, acting as a Reasonable and Prudent Person*, for all its costs of and relating to such proceedings: or

(D) to the extent that:

(I) the other person has obligations to Western Power* arising independently from this Contract*, which, in the circumstances, Western Power*, acting as a Reasonable and Prudent Person*, should enforce: or

(II) Western Power* has rights and powers arising independently from this Contract*, which, in the circumstances, Western Power*, acting as a Reasonable and Prudent Person*, should exercise"

289. In the Draft Decision, the Authority took the view that the explanatory note proposed for clause 12.1 (indicating, for the avoidance of doubt, that a requirement on the user to comply with the Technical Rules includes a requirement with respect to any other person or person's equipment that will gain access, or connect, to the network through a connection point) creates a new obligation for the user, as the user would now be responsible for persons and equipment connected to the network through a connection point. The user's obligations to ensure compliance with the Technical Rules are addressed under clause 6.2 of the proposed electricity transfer access contract and the Authority considers that clause 12.1 should be consistent with clause 6.2, including the amendment to this clause required by the Authority under the Draft Decision.
290. The Authority required the following amendment to the revised proposed access arrangement.

Draft Decision Amendment 14

The proposed access arrangement revisions should be amended such that clause 12.1 of the electricity transfer access contract is consistent with clause 6.2 and limits the obligation of the user to ensure that any other person or person's equipment complies with the Technical Rules only to the extent:

⁹⁰ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

- that is reasonably practical for the user; and
 - that Western Power provides an indemnity for all of the user's costs of and relating to proceedings against any other person for the purposes of ensuring compliance.
291. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the required amendment and proposes to delete the proposed revision to clause 12.1 of the electricity transfer access contract.⁹¹
292. Synergy submits that Western Power's proposed response to Draft Decision Amendment 14 does not adequately address the required amendment, in particular including the required limitations to the obligation on the user to ensure compliance of another person's equipment with the Technical Rules.⁹²
293. With Western Power's proposed response to Draft Decision Amendment 14, the obligation on a user to ensure compliance of a party at a connection point (other than the user itself) is no longer required by clause 12. The Authority considers that the proposed revisions to clause 12.1 adequately limits the obligations on a user to procure third party compliance with the Technical Rules, as Western Power's proposed revision now requires only that Western Power and the user comply with the Technical Rules.
294. The Authority therefore maintains the requirement for amendment of clause 12.1 of the proposed electricity transfer access contract for consistency with clause 6.2, but modifies the requirement to conform with Western Power's proposed revisions to clause 12.1.

Required Amendment 14

The proposed access arrangement revisions should be amended such that clause 12.1 of the electricity transfer access contract states only that Western Power and the user must each comply with the Technical Rules.

295. Clause 12.2 of the proposed electricity transfer access contract deals with the costs of compliance with the Technical Rules and requires that:
- both Western Power and the user each bear their own costs of compliance with the Technical Rules (clause 12.2(a) and (b));
 - the user bear any costs incurred by Western Power in complying with the Technical Rules and resulting from an act or omission of the user (clause 12.2(c); and
 - the user bear any costs incurred by Western Power in upgrading the network in accordance with the Technical Rules and to resolve faults caused by the user's equipment (clause 12.2(d)).

⁹¹ Western Power submission of 13 August 2009.

⁹² Synergy submission of 1 October 2009.

296. Western Power has not proposed any material changes to clause 12.2.
297. Synergy submits that clause 12.2(c) is unreasonable as it does not limit the circumstance where the user must bear costs incurred by Western Power to acts or omissions in breach of the access contract, and potentially allows Western Power to recover costs from multiple parties.⁹³ Synergy submits that clause 12.2(c) should be amended as follows:
- "Notwithstanding clause [12.2](b), where an act or omission of the User* in breach of this Contract* causes Western Power* to incur extra costs in order to ensure Western Power complies with the Technical Rules*, the User* shall bear Western Power's reasonable extra costs so incurred to the extent that such costs are already not repaid by the User* or any other party under any other arrangement, including the Contributions Policy*".
298. In the Draft Decision, the Authority concurred with Synergy's submission that qualification of clause 12.2(c) is necessary to reasonably constrain the circumstances in which the user is liable for costs incurred by Western Power and that the qualifications should be that the act or omission of the user is in breach of the access contract and that Western Power has not recovered the relevant costs from any other party.
299. The Authority required the following amendment of the proposed access arrangement revisions.

Draft Decision Amendment 15

The proposed access arrangement revisions should be amended such that clause 12.2 of the electricity transfer access contract provides that an act or omission of the user that causes Western Power to incur extra costs for compliance with the Technical Rules only causes the user to be liable for those costs where:

- the act or omission of the user is in breach of the access contract; and
- Western Power has not already recovered the costs from another party.

300. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the required amendment and proposes a revised clause 12.2(c) of the proposed electricity transfer access contract that incorporates the amendment.⁹⁴
301. Synergy submits that it agrees with the general concept of Western Power's proposed revision to clause 12.2(c) of the proposed electricity transfer access contract, but submits that the revisions should also address the prospect that Western Power may also recover costs from another party in the future.⁹⁵
302. The intent of the Authority in requiring Draft Decision Amendment 15 was to prevent double recovery of costs by Western Power. The Authority accepts that Synergy's submission is consistent with this and the Authority has revised the required amendment to address this.

⁹³ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

⁹⁴ Western Power submission of 13 August 2009.

⁹⁵ Synergy submission of 1 October 2009.

Required Amendment 15

The proposed access arrangement revisions should be amended such that clause 12.2 of the electricity transfer access contract provides that an act or omission of the user that causes Western Power to incur extra costs for compliance with the Technical Rules only causes the user to be liable for those costs where:

- the act or omission of the user is in breach of the access contract; and
- Western Power has not already recovered, and will not recover, the costs from another party.

User's Representations and Warranties (clause 18)

303. Clause 18 of the proposed electricity transfer access contract sets out the representations and warranties of Western Power and the user.⁹⁶
304. Western Power has not proposed any material changes to clause 18.
305. Synergy submits that a provision of clause 18 that requires the user to give a warranty of compliance with the applications and queuing policy is unreasonable.⁹⁷

Synergy submits that it is not reasonable for clause [18](a)(i) of the [electricity transfer access contract] to require a User to give a warranty that it has complied with the Application Queuing Policy unless it is technically feasible for a User to comply with such policy. In this respect Synergy cannot give the warranty sought because, for the reasons to be set out in Synergy's submission on the Application Queuing Policy, it is not technically feasible for Synergy to comply with the existing Applications and Queuing Policy. Synergy does not know the position of other Users but would expect that other Users may also have these same difficulties.

In these circumstances Synergy submits that it is not reasonable to require a regulated contract to impose an obligation to give a warranty that is not reasonably capable of being given or that will be breached as soon as it is given.

306. Clause 18(a)(i) of the electricity transfer access contract is materially the same as clause A3.68(a)(i) of the model standard access contract under the Access Code. As such, the Authority is required to determine that clause 18(a)(i) is consistent with section 5.3 of the Access Code and the Code objective.

Liability and Indemnity (clause 19)

307. Clause 19 of the proposed electricity transfer access contract defines liabilities of Western Power and the user to each other, limitations to liability, and various requirements for each party to indemnify the other in respect of various events.

⁹⁶ Clause 18 corresponds to clause 17 of the current electricity transfer access contract.

⁹⁷ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

308. Western Power has not proposed material changes from the corresponding clause of the current electricity transfer access contract (clause 18) with the exception that maximum liabilities of the user to Western Power in respect of different types of connection points have been increased by either 10 or 20 per cent (clause 19.5).
309. In submissions made to the Authority, Alinta Sales and Synergy raised concerns with the maximum liability of retailers, the inflation indexation of limits to liability and asymmetry in maximum liabilities of Western Power and users. These matters are addressed in turn below.

Maximum Liability of Retailers

310. Clauses 19.5(a) to (c) of the proposed electricity transfer access contract set out the maximum liabilities of users:

- (a) Subject to clause 19.5(c), the maximum liability of Western Power* to the User* and the Indemnifier* collectively under and in connection with this Contract* is limited to an amount of \$5 million in the aggregate and refreshed annually each 1 July, except that the liability described in clause 20 is not counted for the purposes of Western Power*'s maximum liability under this Contract*.
- (b) Subject to clause 19.5(c), the maximum liability of both the User* and the Indemnifier* collectively to Western Power* under and in connection with this Contract* is limited to the sum of:
 - (A) for each Connection Point* at which Generation Plant* (other than wind or solar powered generation) is connected at a voltage of 66 kV and above - \$22 million in the aggregate, refreshed annually each 1 July; and
 - (B) for each Connection Point* at which wind or solar powered Generation Plant* is connected at a voltage of 66 kV or above - \$11 million in the aggregate, refreshed annually each 1 July; and
 - (C) for each Connection Point* at which Generation Plant* is connected at a voltage below 66 kV - \$1.2 million in the aggregate, refreshed annually each 1 July; and
 - (D) for each Connection Point* at which Consuming* plant is connected at a voltage of 66 kV and above - \$6 million in the aggregate, refreshed annually each 1 July; and
 - (E) for every 100 Connection Points* at which Consuming* plant is connected at a voltage below 66 kV - \$1.2 million in the aggregate, refreshed annually each 1 July,

except that the liabilities described in clause 20 are not counted for the purposes of both the User*'s and the Indemnifier*'s collective maximum liability under this Contract*.
- (c) The maximum liability amounts applicable under clauses 19.5(a) and 19.5(b) shall be CPI*-Adjusted* annually each 1 July.

311. Synergy submitted that the amounts of liability established under clause 19.5(b) are unreasonable for retailers with multiple connection points under access contracts:⁹⁸

Synergy submits that where the User has multiple Connection Points, clause 19.5(b) of the [electricity transfer access contract] should be deleted and replaced with the following:

⁹⁸ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

"The maximum liability of both the User' and the Indemnifier collectively to Western Power* under and in connection with this Contract* is limited to an amount of \$60 million in the aggregate, refreshed annually each 1 July, except that the liabilities described in clause 19 are not counted for the purpose of both the User's* and the Indemnifiers collective maximum liability under this Contract*."

Synergy submits that the amount of \$60 million is a reasonable amount for a maximum aggregate liability under a contract of this nature where the User has multiple Connection points. The existing clause would otherwise effectively require all Users to insure the Network, possibly for more than it is worth. For example if clause 19.5 were applied as written then it would require Synergy to take out approximately \$8.8 billion worth of insurance. Synergy cannot see how such a requirement is reasonable or meets the Code objective.

Further, if the clause is not so amended, and Synergy's submissions in relation to clauses 3.1(c), 6.2(a) and 12 ... are not made, then Users will be forced to take on an uninsurable liability that they cannot easily mitigate. Synergy understands that insurers will not give insurance to cover a User's liability to Western Power for damage caused by third parties other than the User, Synergy submits that such an outcome is not reasonable within section 5.3(a) of the [Access Code],

312. In the Draft Decision, the Authority accepted Synergy's submission that the maximum liabilities under clause 19.5(b) of the proposed electricity transfer access contract are unreasonable in that, for users that are retailers with many connection points, the maximum liability of the user may be an amount in excess of any reasonably conceivable level of damages to the network or Western Power and, as a result, this clause is not consistent with section 5.3 of the Access Code. The Authority indicated that it suspects that this may be an unintended consequence of clause 19.
313. The Authority sought information from Western Power on the appropriate value of a maximum liability for a user under clause 19. In response, Western Power indicated that it accepts that the formula of clause 19.5(b) produces unreasonable results for Synergy and that it endorses the concept of an aggregate liability cap for large electricity retailers.⁹⁹ Western Power further suggested that a cap of \$70 to \$80 million may be appropriate for large retailers.
314. The Authority required the following amendment to the proposed electricity transfer access contract.

Draft Decision Amendment 16

The proposed access arrangement revisions should be amended such that the calculation of liability under clause 19.5 of the electricity transfer access contract is limited to a cap on liabilities with the effect that the maximum liability of both the user and the indemnifier collectively to Western Power is limited to an amount of \$80 million in the aggregate, except that the liabilities described in clause 20 are not counted for the purpose of both the user's and the indemnifier's collective maximum liability.

⁹⁹ Email from Western Power to the Economic Regulation Authority of 12 February 2009.

315. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the required amendment and has proposed revisions to clause 19.5(b) to provide for a cap on liabilities of \$80 million in any one year period ending 1 July.¹⁰⁰
316. The Authority therefore maintains the requirement for amendment of the electricity transfer access contract under Draft Decision Amendment 16 and accepts that Western Power's proposed revision adequately addresses this required amendment.
317. Western Power has also proposed an additional revision to clause 19.5 of the proposed electricity transfer access contract that is related to Draft Decision Amendment 16 and which excludes from liability (and from the liability cap) under this clause any amounts of access charges.
318. Taking into account that no interested parties made submissions on this additional revision, The Authority accepts that this additional revision is reasonable in the context of a liability cap and in accordance with the requirements of section 5.3 of the Access Code. This revision has therefore been incorporated into the required amendment of clause 19.5 of the proposed electricity transfer access contract.

Required Amendment 16

The proposed access arrangement revisions should be amended such that the calculation of liability under clause 19.5 of the electricity transfer access contract is limited to a cap on liabilities with the effect that the maximum liability of both the user and the indemnifier collectively to Western Power is limited to an amount of \$80 million in the aggregate, except that the liabilities for access charges and liabilities described in clause 20 are not counted for the purpose of both the user's and the indemnifier's collective maximum liability.

Inflation Indexation of Limits to Liability

319. Clause 19.5(c) of the proposed electricity transfer access contract provides for the maximum liability amounts applicable under clauses 19.5(a) and 19.5(b) to be escalated for inflation each year.
320. Synergy submitted that there should be no provision for inflation indexation as:
 - any amounts specified should be sufficient to cover a maximum liability for the access arrangement period; and
 - the relatively small increases in levels of liability would be inconsistent with practices of insurance providers that typically issue insurance policies (for the relevant insurances) for amounts in multiples of \$1 million or \$5 million.
321. In the Draft Decision, the Authority indicated that it recognises that maximum limits on liability tend to be specified under commercial contracts in round numbers that

¹⁰⁰ Western Power submission of 13 August 2009.

may have some basis in an assessment of potential liability, but are specified in the round numbers for convenience. The Authority concurred with Synergy that annual inflation indexation of these values is pedantic and may potentially complicate the insurance transactions of users.

322. The Authority also observed that inflation indexation of limits to liability is not contemplated under the model standard access contract under the Access Code.
323. Taking these matters into account, the Authority determined that clause 19.5(c) is not reasonable and is inconsistent with section 5.3 of the Access Code. The Authority required this clause to be deleted from the proposed electricity transfer access contract before the proposed access arrangement revisions will be approved.

Draft Decision Amendment 17

The proposed access arrangement revisions should be amended to delete clause 19.5(c) of the electricity transfer access contract.

324. In a submission subsequent to the Draft Decision, Western Power contends that an absence of inflation indexation will cause liability amounts becoming inappropriate over time, particularly for long-term access contracts of up to 30 years or more. Western Power proposes that clause 19.5(c) be amended to allow for indexation every five years, with the indexed value rounded up to the nearest million dollars.¹⁰¹
325. Synergy submits that even inflation indexation every five years could result in the liability amounts being excessively high as the value of damage that a user may cause will not increase with inflation, but rather would tend to decline over time as the technology and design of the network improves over time.¹⁰²
326. Alinta Sales submits that any indexation is unnecessary as clause 19.5(d) of the proposed electricity transfer access contract imposes an obligation on the parties to negotiate in good faith to re-set maximum liability amounts every three years having regard to any relevant changed circumstances.¹⁰³
327. The Authority has no evidence upon which to judge whether the value of potential damage to a network may stay the same in real terms or decline over time, but accepts that is a valid question. Given this, the Authority considers that clause 19.5(d) provides adequate protection for Western Power to re-determine the value of maximum liability amounts if these are determined to be inadequate for any reason including underlying inflation in the economy. The Authority therefore maintains the requirement under Draft Decision Amendment 17 for amendment of the proposed electricity transfer access contract

¹⁰¹ Western Power submission of 13 August 2009.

¹⁰² Synergy submission of 1 October 2009. Synergy mistakenly makes this submission under a heading of Required Amendment 18 rather than Required Amendment 17.

¹⁰³ Alinta Sales Pty Ltd submission of 10 September 2009.

Required Amendment 17

The proposed access arrangement revisions should be amended to delete clause 19.5(c) of the electricity transfer access contract.

Asymmetry in Maximum Liabilities of Western Power and Users

328. Alinta Sales submitted that clause 19.5 of the proposed electricity transfer access contract imposes materially asymmetric caps on the liability of each party to the access contract.¹⁰⁴

Specifically, Western Power's maximum annual liability to any single network user is limited to \$5 million in aggregate (other than with respect to personal injury). In contrast, the maximum annual aggregate liability of network users is the sum of:

- \$20 million for each connection point at which generation plant (other than wind or solar powered generation) is connected at a voltage of 66 kV and above; and
- \$5 million for each connection point at which consuming plant is connected at a voltage of 66 kV and above; and
- \$1 million for every 100 connection points at which consuming plant is connected at a voltage below 66 kV.

Alinta requests the Authority consider whether clause 19.5 of the proposed standard [electricity transfer access contract] satisfies the Code objective and specifically whether the clause is reasonable as required by clause 5.3(a) of the [Access] Code.

329. The Authority considers that there is no necessary reason why maximum levels of liability should be the same for both parties to an access contract. Rather, maximum levels of liability may reasonably vary between the parties if, for example, there is a difference between the parties in the potential to cause damages to the other party. In the case of the SWIN, the Authority considers that it is reasonably likely that the actions of a user could give rise to greater damage to the network and (directly and indirectly) to the network service provider, than the damage that may be caused to a user by the actions of the network service provider. As such, the Authority does not consider the asymmetry between Western Power and the user in maximum levels of liability to be necessarily unreasonable.

Insurances (clause 21)

330. Clause 21 and schedule 5 of the proposed electricity transfer access contract specify requirements for Western Power and the user to hold insurances in respect of certain events and for certain amounts.¹⁰⁵
331. Western Power has not proposed any material changes to clause 21 or schedule 5, but has proposed some changes in wording.

¹⁰⁴ Alinta Sales Pty Ltd submission of 17 December 2008.

¹⁰⁵ Clause 21 corresponds to clause 20 in the current electricity transfer access contract.

332. Synergy submitted that some specific details of requirements for insurances as listed in schedule 5 are unreasonable and therefore inconsistent with section 5.3 of the Access Code.¹⁰⁶
333. The requirements for insurances as set out in schedule 5 of the proposed electricity transfer access contract (showing proposed changes from the electricity transfer access contract under the current access arrangement) are as follows.

Part 1 User* insurances

- (a) The User* must effect and maintain, commencing from the Commencement Date*, ~~insurance that will provide comprehensive cover in respect to all of the User's liabilities under this Contract*~~, including the following policies of insurance:
- (i) public and products liability of:
 - (A) public liability insurance for a limit of not less than the maximum liability of the User* under clause 19.5 per claim and unlimited in the aggregate of all claims made; and
 - (B) products liability insurance for a limit of not less than the maximum liability of the User* under clause 19.5 per claim and in the aggregate, refreshed annually;

covering the User*'s liability to Western Power* or any third party for death, bodily injury and loss or damage to property caused by any act, omission or negligence in relation to this Contract*;
 - (ii) workers' compensation insurance for all persons employed by the User* including employer's liability at common law, with a limit of cover in respect of any one occurrence at least equal to \$50 million;
 - (iii) motor vehicle third party property insurance for all loss or damage to property caused by or attributable to the use of a motor vehicle in the performance of the services or any work under the Contract*, for a limit of \$10 million per claim and unlimited in the aggregate of all claims made; and
 - (iv) contractors' plant ~~and~~ equipment insurance covering all loss or damage to ~~the User's contractor's~~ plant or equipment used in connection with this Contract* for its replacement value.
- (b) The policies of insurance under Schedule 56 Part 1(a) must be with an insurer authorised under the Insurance Act 1973 (Cth) or the equivalent in the United States of America or the United Kingdom.

Part 2 Western Power* insurances

- (a) Western Power* must effect and maintain, commencing from the Commencement Date*, the following policies of insurance:
- (i) public and products liability of:
 - (A) public liability insurance for a limit of not less than the maximum liability of Western Power* under clause 19.5 per claim and unlimited in the aggregate of all claims made; and
 - (B) products liability insurance for a limit of not less than the maximum liability of Western Power* under clause 19.5 per claim and in the aggregate, refreshed annually;

¹⁰⁶ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

covering Western Power*'s liability to the User* or any third party for death, bodily injury and loss or damage to property caused by any act, omission or negligence in relation to this Contract*;

- (ii) workers' compensation insurance for all persons employed by Western Power* including employer's liability at common law, with a limit of cover in respect of any one occurrence at least equal to \$50 million;
 - (iii) motor vehicle third party property insurance for all loss or damage to property caused by or attributable to the use of a motor vehicle in the performance of the services or any work under the Contract*, for a limit of \$10 million per claim and unlimited in the aggregate of all claims made; and
 - (iv) contractors' plant ~~and~~ or equipment insurance covering all loss or damage to ~~contractor's~~ Western Power*'s plant or equipment used in connection with this Contract* for its replacement value.
- (b) The policies of insurance under Schedule 5 Part 2(a) must be with an insurer authorised under the *Insurance Act 1973 (Cth)* or the equivalent in the United States of America or the United Kingdom.

334. The particular concerns of Synergy are that:

- for Part 1(a)(i)(A), the requirement for insurance to be unlimited in aggregate is unreasonable; and
- requirements for workers compensation, motor vehicle and third party property insurance under Part 1(a)(ii) and Part 1(a)(iii) will not be applicable to retailers and hence these parts should be qualified by "if applicable".

335. In the Draft Decision, the Authority indicated that it concurs with Synergy that it is not reasonable that insurance be unlimited in the aggregate as it is not reasonable to require insurance in circumstances where it is not required or to an extent that is not required. In the absence of any information to determine a particular value for a limit, the Authority considered that liability in the aggregate should be capped at \$50 million for each 12 months.

336. The Authority required the following amendment of the proposed access arrangement revisions.

Draft Decision Amendment 18

The proposed access arrangement revisions should be amended so that Part 1(a)(i)A of schedule 5 of the electricity transfer access contract provides for the insurance requirement to be limited in the aggregate to \$50 million in each 12 months.

337. In a submission subsequent to the Draft Decision, Western Power indicates that it is willing to address the requirement of Draft Decision Amendment 18 by revising Part 1(a)(i)A of schedule 5 to require public liability insurance of not less than \$50 million or the maximum liability of the user under clause 19.5 of the electricity transfer access contract, whichever is greater.¹⁰⁷ Western Power submits that it would be inappropriate to have the requirement for insurance for an amount less than the maximum liability under the electricity transfer access contract.

¹⁰⁷ Western Power submission of 13 August 2009.

338. Taking into account that no interested parties made submissions on Western Power's proposed revisions in response to Draft Decision Amendment 18, the Authority accepts that these proposed revisions adequately address the reasons for the required amendment. The Authority has therefore incorporated these proposed revisions in the required amendment.

Required Amendment 18

The proposed access arrangement revisions should be amended so that Part 1(a)(i)A of schedule 5 of the electricity transfer access contract provides for the insurance requirement to be limited in the aggregate to \$50 million in each 12 months or the maximum liability under clause 19.5 of the electricity transfer access contract, whichever is the greater.

339. In the Draft Decision, the Authority also concurred with Synergy that the requirements for workers compensation, motor vehicle and third-party property insurance under Part 1(a)(ii) and Part 1(a)(iii) of schedule 5 of the proposed electricity transfer access contract are not reasonable and should not apply where they are not required.
340. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 19

The proposed access arrangement revisions should be amended so that the requirements for workers compensation, motor vehicle and third-party property insurance under Part 1(a)(ii) and Part 1(a)(iii) of schedule 5 of the electricity transfer access contract apply only where these insurances are reasonably requested by Western Power.

341. In a submission subsequent to the Draft Decision, Western Power indicates that it does not accept the required amendment for reasons that:
- the requirements for insurance under Part 1(a)(ii) and Part 1(a)(iii) of schedule 5 of the proposed electricity transfer access contract are consistent with requirements under schedule 8 of the model standard access contract under the Access Code; and
 - requirements for motor vehicle insurance are reasonable given that users regularly drive vehicles on to premises of Western Power.¹⁰⁸
342. The Authority does not accept Western Power's contention that the requirements for insurance under Part 1(a)(ii) and Part 1(a)(iii) of schedule 5 of the proposed electricity transfer access contract are consistent with the model standard access contract. Schedule 8 of the model standard access contract (at clause 1) provides only for insurances required of the user to be specified, and indicating that the required insurances may be "as agreed between the parties to the access contract or determined in an arbitrated award in accordance with the service provider's access arrangement".

¹⁰⁸ Western Power submission of 13 August 2009.

343. While the Authority notes that, in Western Power's submission, requirements for motor vehicle insurance may reasonably be required for some users, this is not consistent with Draft Decision Amendment 19 that provides for such insurances to be required where reasonably requested by Western Power.
344. Taking these matters into account, the Authority maintains the requirement for amendment of the proposed electricity transfer access contract in accordance with Draft Decision Amendment 19.

Required Amendment 19

The proposed access arrangement revisions should be amended so that the requirements for workers compensation, motor vehicle and third-party property insurance under Part 1(a)(ii) and Part 1(a)(iii) of schedule 5 of the electricity transfer access contract apply only where these insurances are reasonably requested by Western Power.

Dispute Resolution (clause 29)

345. Clause 29 of the proposed electricity transfer access contract sets out provisions for dispute resolution. Western Power has proposed a new clause 29.3(b) to indicate that, if parties are unable to agree on a location for a meeting for resolution of a dispute, then the location will be determined by Western Power.
346. Synergy submitted that this proposed clause should be amended to indicate that Western Power will act as a reasonable and prudent person in determining a location.¹⁰⁹
347. There is no general requirement for Western Power to act as a reasonable and prudent person under an electricity transfer access contract. In the Draft Decision, the Authority determined that such a requirement is reasonably necessary for clause 29.3(b) of the proposed electricity transfer access contract to be consistent with section 5.3 of the Access Code.
348. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 20

The proposed access arrangement revisions should be amended so that clause 29.3(b) of the electricity transfer access contract requires that Western Power act reasonably in determining a location for a meeting for resolution of a dispute.

349. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the required amendment and proposes a corresponding revision to clause 29.3(b). Given this, the Authority maintains the requirement for amendment of the proposed electricity transfer access contract in accordance with Draft Decision Amendment 20.

¹⁰⁹ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

Required Amendment 20

The proposed access arrangement revisions should be amended so that clause 29.3(b) of the electricity transfer access contract requires that Western Power act reasonably in determining a location for a meeting for resolution of a dispute.

Assignment by the User (clause 31)

350. Clause 31 of the proposed electricity transfer access contract¹¹⁰ comprises provisions for the user to assign its interests under the access contract to another party and includes:

- a permission for the user to make a bare transfer;
- a requirement that the user notify Western Power of any details of a bare transfer; and
- for any transfer other than a bare transfer, a permission for the user to assign its rights in accordance with the transfer and relocation policy.

351. Western Power has proposed changes to the definitions of “assignment” and “bare transfer” in the electricity transfer access contract, introducing a provision for novation of an access contract:

Assignment* includes an assignment or Novation*.

Bare Transfer* means an assignment* under which the User* Assigns* the whole or a part of its access rights under this Contract* to an assignee, but under which there is no Novation*, with the result that the User*'s obligations under this Contract*, and all other terms of this Contract*, remain in full force and effect after the Assignment*, whether or not the assignee becomes bound to the User* or any other party to fulfil those obligations—means an Assignment of all or part of the User*'s Access Rights*, following which the User*'s obligations under the Contract*, and all other terms of this Contract*, remain in full force and effect despite the Assignment*.

Novate* and Novation* mean to substitute, with the consent of all Parties* to this Contract* and with effect on and from a date nominated as the effective date of the novation, an assignee for the User* as a party to this Contract*, with the result that:

- (a) all rights and obligations of the User* under this Contract* become rights and obligations of the assignee as if the assignee had been named in the Contract* in place of the User*; and
- (b) the User* is released from any obligations under this Contract* arising on or after the effective date of the novation, but remains liable for any default by it in the performance of those obligations prior to the effective date of the novation.

352. Synergy submitted that the new definition of “novate” and “novation” restricts rights of assignment:¹¹¹

¹¹⁰ Clause 31 corresponds to clause 30 in the current electricity transfer access contract.

¹¹¹ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

Western Power has inserted a new definition of "Novate" and "Novation". The effect of the definition appears to be to impose restrictions on what constitutes a Novation in a manner that fetters a User's ability to agree with an incoming party the terms and conditions of the Novation; in particular the User cannot contract with the incoming party to provide that the incoming party remains liable for any default by the User in the performance of obligations prior to the effective date of the novation. Synergy submits that such a condition is not reasonable within clause 5.3(a) of the [Access Code] and is not necessary to protect any business interests of Western Power. Therefore the restriction should be deleted,

353. The Authority considers that the introduction of the provision for novation of an access contract does not limit the mechanisms for transfer of rights under an access contract, but rather expands the mechanisms to include novation of a contract as well as assignment of rights under contract.
354. An assignment is the transfer of rights and obligations under an existing contract by a party to that contract to another party. A novation is the discharge of the existing contract and the entry into a new contract with the new party (usually on the same terms as the previous contract). By discharging and entering into a new contract the rights and obligations under the "old" contract will come to an end (and the existing party will be released from any new obligations) and new rights and obligations of the substituted party come into force under the new contract. The definition of "novation" proposed for the electricity transfer access contract attempts to introduce an effective provision for novation as, although the access contract remains on foot, the user who novates the contract is liable for those rights and liabilities up to the date of novation with the new user liable from that date. In this way, Western Power appears to be attempting to replicate the practical effect of a "true" novation.
355. Clause 31.3 of the proposed electricity transfer access contract states "for an assignment other than a bare transfer, the user may assign its access rights subject to compliance with the transfer and relocation policy." The definition of "assignment" indicates that an assignment "includes an assignment or novation". The Authority interprets this clause and associated definition of an assignment to mean that an assignment is not limited to a novation; that is, it includes other mechanisms such as an assignment. As such, a party retains the ability to assign the contract without the limitations attached to a novation.
356. The Authority also considers that the exclusion of novation from a bare transfer is consistent with the concept of a bare transfer where the original parties to an access contract retain all contractual obligations.
357. For the reasons set out above, the Authority accepts that the revisions proposed by Western Power are reasonable and therefore in accordance with the requirements of section 5.3 of the Access Code.

358. In a submission made to the Authority subsequent to the Draft Decision, Western Power has proposed further changes to clause 31, comprising a new sub-clause that prevents a “change in control” of the user without Western Power’s consent.¹¹² The proposed sub-clause is as follows.

31.4 Change in Control*

- (a) The User* agrees that a Change in Control* of the User* must not occur without Western Power’s prior written consent.
- (b) Western Power’s consent under paragraph (a) of this clause shall not be unreasonably withheld or delayed where the User* can satisfy Western Power* (acting as a Reasonable and Prudent Person*) that the person or corporation proposing to take Control* of the User* is financially and technically capable of performing the User’s obligations under this Contract*.
- (c) Paragraph (a) of this clause does not apply to a User* which is a Listed Corporation*.

359. Western Power also proposes the following related definitions.

Change in Control* means the acquisition by any person or corporation, either alone or together with any Associate* of a person or corporation, of Control* of the User*.

Control* of a company or trust by a person means the person holds or owns the majority of the issued shares of:

- (a) the company or the trustee company of the trust; or
- (b) the ultimate holding company of the company or trustee company of the trust.

Listed Corporation* has the meaning ascribed to it in the Corporations Act.

360. Western Power indicates that the proposed changes are for the purpose of protecting Western Power against circumstances in which a user effectively, without Western Power’s consent, transfers its interests in the electricity transfer access contract by way of a 100 per cent sale of shares in the user to another company, with the result that Western Power could effectively end up contracting with an entity about whom it knows little or nothing about, and whose financial and technical capabilities are unknown.
361. The Authority considers that Western Power has not demonstrated why clause 31.4 is reasonable given that Western Power is already adequately protected by its right to require security under clause 9 of the proposed electricity transfer access contract. If Western Power is concerned about the financial and technical ability of the proposed acquirer of a user, and such concerns are reasonable, then it is open to Western Power to require security under clause 9 of the proposed electricity transfer access contract. Western Power has also not provided any examples of where a change in control of a user during the current access arrangement period has caused Western Power detriment.
362. The proposed clause, as drafted, is very broad and includes “indirect” changes of control, being changes in control of the ultimate holding company of a user. Western Power has provided no satisfactory reason why such a broad change of control provision is reasonable, nor of any detriment caused to Western Power due

¹¹² Western Power submission of 13 August 2009, Attachment G.

to the lack of such a clause in the existing electricity transfer access contract. The clause also provides that Western Power shall not unreasonably delay or withhold consent where the user can satisfy Western Power (acting as a reasonable and prudent person) that the person or corporation proposing to take control of the user is financially and technically capable of performing the user's obligations under the contract. This appears to provide Western Power with a general right not to consent and a right not to consent (acting reasonably) where the person taking control has demonstrated that they are financially and technically capable of performing the user's obligations under the contract. In the Authority's view, the potential discretion provided to Western Power under this clause is not reasonable.

363. For these reasons the Authority considers that the proposed clause 31.4 is not reasonable and therefore contrary to the requirements of section 5.3 of the Access Code.

Confidentiality (clause 33)

364. Clause 33 of the proposed electricity transfer access contract establishes requirements for the parties to keep the access contract and related information confidential.¹¹³
365. Clause 33.1 contains a list of the circumstances or characteristics of relevant information that give rise to a requirement to keep the information confidential.
366. Western Power has proposed an additional item in clause 33.1 so that this clause includes "information about or relating to a controller".
367. Synergy submitted that the proposed new provision of clause 33.1 should also include information about or relating to a proposed controller.¹¹⁴
368. Clause 33.1 encompasses information exchanged between the parties to the access contract that is exchanged under the contract or in negotiations preceding the contract. This may include information on actual or proposed controllers of connection points. In the Draft Decision, the Authority accepted Synergy's submission that information about actual or proposed controllers may equally be regarded as confidential. As the term "controller" under the electricity transfer access contract does not include a proposed controller, the Authority considered that it is necessary for clause 33.1 to be amended to include a proposed controller for the clause to be consistent with section 5.3 of the Access Code.
369. The Authority required the following amendment to the proposed access arrangement revisions.

¹¹³ Clause 33 corresponds to clause 32 in the current electricity transfer access contract.

¹¹⁴ Synergy submission of 16 December 2008 on Electricity Transfer Access Contract.

Draft Decision Amendment 21

The proposed access arrangement revisions should be amended so that clause 33.1 of the electricity transfer access contract extends the requirement for confidentiality of information to encompass information exchanged in negotiations preceding the contract and information about, or relating to, a proposed controller.

370. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts Draft Decision Amendment 21 and proposes a corresponding revision to clause 33.1 of the proposed electricity transfer access contract.¹¹⁵ Given this, the Authority maintains the requirement for amendment of the proposed electricity transfer access contract in accordance with Draft Decision Amendment 21.

Required Amendment 21

The proposed access arrangement revisions should be amended so that clause 33.1 of the electricity transfer access contract extends the requirement for confidentiality of information to encompass information exchanged in negotiations preceding the contract and information about, or relating to, a proposed controller.

SERVICE STANDARD BENCHMARKS

Access Code Requirements

371. A service standard is defined in section 1.3 of the Access Code as either, or both of, the technical standard and reliability of delivered electricity. A service standard benchmark is a benchmark service standard for a reference service in an access arrangement.
372. Section 5.1(c) of the Access Code requires that an access arrangement include service standard benchmarks for each reference service.
373. The requirements for service standard benchmarks are set out in section 5.6 of the Access Code. A service standard benchmark must be reasonable and must be sufficiently detailed and complete to enable a user or applicant to determine the value represented by the reference service at the reference tariff.

Current Access Arrangement

374. The current access arrangement specifies service standard benchmarks for four measures of reliability of network services:
- transmission services –

¹¹⁵ Western Power submission of 13 August 2009.

- circuit availability;
 - system minutes interrupted (specified separately for the meshed and radial networks); and
 - distribution services –
 - system average interruption duration index (**SAIDI**);
 - system average interruption frequency index (**SAIFI**);
 specified separately for urban areas, rural-short and rural-long feeders and the Perth central business district.
375. Circuit availability refers to the availability of the transmission network to users that are directly connected to this network. Circuit availability is measured as a percentage of total possible hours available (i.e. the actual circuit hours available for transmission divided by the total possible circuit hours available), where a higher percentage indicates a higher standard of service.
376. System minutes interrupted refers to the period of network outages measured in minutes and is recorded separately for meshed and radial networks.¹¹⁶ System minutes interrupted is measured as the sum of megawatt minutes of unserved energy at substations that are connected to the meshed/radial transmission network divided by the system peak megawatts. A lower value of system minutes interrupted indicates a higher standard of service.
377. SAIDI is the average duration of outages (in minutes) per customer on the distribution network in a year, where a lower value indicates a higher standard of service.
378. SAIFI is the average number of interruptions per customer on the distribution network in a year, where a lower value indicates a higher standard of service.
379. A range of exclusions are specified for the measures of service standard benchmarks for both transmission and distribution services.

Proposed Revisions

380. Western Power has included service standard benchmarks in the proposed access arrangement revisions for the same service standards as in the current access arrangement, but has proposed changes to the values of the service standard benchmarks (at clauses 3.15 to 3.23 of the proposed access arrangement revisions).
381. Compared with the service standard benchmarks applied under the current access arrangement, the proposed service standard benchmarks for the transmission network represent a decline in service standards as measured by circuit availability and by system minutes interrupted for the meshed network, but an improved service standard as measured by system minutes interrupted for the radial network (Table 2).

¹¹⁶ A meshed network is an electricity network where there is more than one path between network nodes. A radial network is a network where there is only a single path between network nodes.

Table 2 Current and proposed service standard benchmarks for transmission services

	Circuit availability (% of total time)	System minutes interrupted (meshed network)	System minutes interrupted (radial network)
Current Access Arrangement			
Year ending June 2007	98.2	7.8	3.9
Year ending June 2008	98.2	7.8	3.9
Year ending June 2009	98.2	7.8	3.9
Proposed Revisions¹¹⁷			
Year ending June 2010	98.0	9.3	1.4
Year ending June 2011	98.0	9.3	1.4
Year ending June 2012	98.0	9.3	1.4

382. At clause 3.21 of the proposed access arrangement revisions, Western Power has proposed two changes to exclusions from measures of circuit availability for transmission lines.

- “T configuration circuits” have been removed from the exclusions for the measure of circuit availability for transmission lines, for the stated reason that Western Power has implemented changes to its reporting systems that facilitate reporting on the T configuration circuits.¹¹⁸
- An existing exclusion of the duration of planned outages from the measure of circuit availability has been revised to include periods when availability is temporarily restored. Western Power indicates that this change is a statement of existing practice under the current access arrangement and is included for the purposes of clarification.¹¹⁹

383. Compared with the service standard benchmarks applied under the current access arrangement, the proposed service standard benchmarks for the distribution network represent an improvement in service standards with the exception of interruption duration (SAIDI) for the CBD region (Table 3 and Table 4).

¹¹⁷ Proposed access arrangement revisions, p. 7.

¹¹⁸ Revised access arrangement information, p. 161.

¹¹⁹ Revised access arrangement information, p. 161.

Table 3 Current and proposed service standard benchmarks — system average interruption duration index (SAIDI) for distribution services

	SWIN total	CBD	Urban	Rural Short	Rural Long
Current Access Arrangement					
Year ending June 2007	277	21.4	222	425	741
Year ending June 2008	259	20.0	208	398	693
Year ending June 2009	224	17.3	179	343	598
Proposed Revisions¹²⁰					
Year ending June 2010	225	38	161	253	599
Year ending June 2011	210	38	150	233	567
Year ending June 2012	201	38	142	222	548

Table 4 Current and proposed service standard benchmarks — system average interruption frequency index (SAIFI) for distribution services

	SWIN total	CBD	Urban	Rural Short	Rural Long
Current Access Arrangement					
Year ending June 2007	3.44	0.32	3.12	4.89	5.58
Year ending June 2008	3.22	0.30	2.91	4.58	5.22
Year ending June 2009	2.78	0.26	2.51	3.95	4.50
Proposed Revisions¹²¹					
Year ending June 2010	2.44	0.24	1.88	3.05	4.89
Year ending June 2011	2.29	0.24	1.76	2.83	4.64
Year ending June 2012	2.18	0.24	1.67	2.70	4.47

384. At clauses 3.16 and 3.17 of the proposed access arrangement revisions, Western Power has proposed additional exclusions for the measures of SAIDI and SAIFI for distribution services.

¹²⁰ Proposed access arrangement revisions, p. 6.

¹²¹ Proposed access arrangement revisions, p. 6.

385. The current access arrangement includes exclusions in the calculation of SAIDI and SAIFI of:
- major event days in accordance with IEEE1366-2003 definitions as adopted by the Steering Committee in 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); and
 - *force majeure* events.
386. Western Power has proposed additional exclusions of:
- “planned outages”; and
 - “single customer interruptions”.
387. Western Power indicates that these additional exclusions:
- provided for SAIDI and SAIFI to be better measures of network performance; and
 - result in the application of definitions that are consistent with the “normalised unplanned” methodology of the SCNRRR.

Considerations of the Authority

388. The Authority has given separate consideration to the particular service standards for which service standard benchmarks are established and the proposed service standard benchmarks. These are addressed in turn, below.

Service Standards

389. The current access arrangement specifies service standard benchmarks for four measures of reliability of network services:
- circuit availability and system minutes interrupted (specified separately for the meshed and radial network) for transmission services; and
 - SAIDI and SAIFI (specified separately for urban areas, rural-short and rural-long feeders and the Perth central business district) for distribution services.
390. Western Power has proposed setting service standard benchmarks for the same service standards for the second access arrangement period.
391. The Authority has given consideration to whether service standard benchmarks for additional service standards should be included in the access arrangement. The Authority's considerations are set out in turn for the transmission and distribution network, as follows.

Transmission Service Standards

392. Western Power has not proposed any substantive changes to the service standards for which benchmarks are set for the transmission network.

393. The absence of changes to the service standards is despite contemplation during the process of approval of the current access arrangement that the service standard benchmarks for the transmission network in the second access arrangement period would include benchmarks for average outage duration and frequency of off-supply events. In approval of the current access arrangement, the Authority considered that the access arrangement should include service standards for average outage duration on the transmission network and the frequency of off-supply events:¹²²

The principal reason stated by Western Power for not including service standard benchmarks for average outage duration and frequency of off-supply events is that there is a lack of historical data to establish benchmarks. As discussed above, the Authority considers that the objective for the first access arrangement period should be to ensure that service standards are measured so as to enable a more rigorous determination of a potentially wider set of service standard benchmarks for the second access arrangement period. This is consistent with the introduction of service standards in other Australian jurisdictions at the time of electricity industry reform. The Authority notes in this regard that Western Power has stated an intention in its submission to the Authority to undertake the necessary work during the first access arrangement period to determine performance standard benchmarks for the required performance measures. Accordingly, the Authority expects that performance standard benchmarks for average outage duration and frequency of off-supply events will be able to be established for the second access arrangement period.

394. In the proposed access arrangement revisions, Western Power has not addressed the additional service standards for the transmission network as contemplated in the Authority's Final Decision for the current access arrangement.

395. In the absence of adequate explanation as to why benchmarks for the additional service standards should not be included in the access arrangement for the second access arrangement period, the Authority's Draft Decision required amendment of the proposed access arrangement revisions to include benchmarks for average outage duration and frequency of off-supply events. The Draft Decision indicated that these benchmarks should be consistent with those that apply to transmission businesses in the National Electricity Market:¹²³

- loss of supply event frequency, specified as a number of loss of supply events in a one year period, with benchmarks specified for events of low and high duration measured as system minutes interrupted; and
- average outage duration, measured in minutes.

396. The Authority required the following amendment to the proposed access arrangement revisions.

¹²² Economic Regulation Authority, 2 March 2007, Final Decision on the Proposed Access Arrangement for the South West Interconnected Network, paragraph 163.

¹²³ For example, refer to Australian Energy Regulator, 14 June 2007, Decision: Powerlink Queensland transmission network revenue cap 2007-08 to 2011-12, chapter 7.

Draft Decision Amendment 22

The proposed access arrangement revisions should be amended to include service standard benchmarks for:

- loss of supply event frequency, specified as a number of loss of supply events in a one year period with benchmarks specified for events of low and high duration measured as system minutes interrupted; and
- average outage duration, measured in minutes.

397. The amendment of the proposed access arrangement revisions to include service standard benchmarks for loss of supply event frequency and average outage duration is supported by Alinta Sales.¹²⁴

398. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the required amendment and has data to support the additional indicators.¹²⁵ Western Power proposes to include service standard benchmarks for loss of supply event frequency and average outage duration according to definitions as indicated in Table 5 and Table 6.

¹²⁴ Alinta Sales Pty Ltd submission of 10 September 2009.

¹²⁵ Western Power submission of 10 September 2009.

Table 5 Western Power's proposed definition of a service standard for loss of supply event frequency¹²⁶

Definition parameter	Definition
Sub-parameters	Frequency of events where loss of supply exceeds 0.1 system minutes Frequency of events where loss of supply exceeds 1.0 system minutes
Unit of measure	Number of events per annum
Source of data	SCADA Network Status Processor (NSP), PI Server database, System Disturbance database
Definition/formula	<p>Number of events greater than 0.1 system minutes</p> <p>Number of events greater than 1.0 system minutes</p> <p>System minutes are calculated for each supply interruption by the "load integration method" using the following formula:</p> $\Sigma (\text{MWh unsupplied} \times 60) / (\text{MW Peak Demand})$ <p>Where:</p> <p>MWh unsupplied is the energy not supplied as determined by using Western Power metering and PI server database. This data is used to estimate the profile of the load over the period of the interruption by reference to historical load.</p> <p>Period of the interruption starts when a loss of supply occurs and ends when Western Power offers supply restoration to the customer.</p> <p>MW Peak Demand is the maximum demand recorded on the South West Interconnected System for the previous financial year.</p>
Inclusions	All unplanned customer outages on all parts of the regulated transmission system.
Exclusions	<p>Unregulated transmission assets</p> <p>Any outages shown to be caused by a 'third party system', e.g. intertrip signal, generator outage, customer installation, customer request or Western Power direction</p> <p>Momentary interruptions (less than one minute)</p> <p>Planned outages</p> <p>Force majeure events</p>

¹²⁶ Western Power submission of 10 September 2009, Attachment A: p. 3.

Table 6 Western Power's proposed definition of a service standard for average outage duration¹²⁷

Definition parameter	Definition
Sub-parameters	Total average outage duration
Unit of measure	Minutes
Source of data	SCADA Network Status Processor (NSP), PI Server database, System Disturbance database and ASI Availability reporting database
Definition/formula	(Aggregate minutes duration of all unplanned outages) / (No. of events)
Inclusions	<p>Faults on all parts of the regulated transmission system</p> <p>All forced and fault outages whether or not loss of supply occurs</p> <p>Circuits include regulated overhead lines, underground cables and "bulk" power transformers (each with a designated Western Power SCADA ASI tag). Regional transformers, reactive plant and other primary plant are excluded from the performance parameter.</p>
Exclusions	<p>Planned outages</p> <p>Momentary interruptions (less than one minute)</p> <p>Force majeure events</p> <p>Unregulated transmission assets</p> <p>Any outages shown to be caused by a 'third party system', e.g. intertrip signal, generator outage, customer installation, customer request or System Management direction.</p> <p>The impact of each event is capped at 14 days</p>

399. The Authority is satisfied that the definitions of loss of supply event frequency and average outage duration are consistent with definitions applied to transmission businesses in the National Electricity Market.¹²⁸

¹²⁷ Western Power submission of 10 September 2009, Attachment A: p. 4.

¹²⁸ The definitions of these services standards proposed by Western Power are derived from definitions of service standards published by the Australian Energy Regulator (Electricity Transmission Network Service Providers: Service Target Performance Incentive Scheme, March 2008). In particular, the definition of loss of supply event frequency is consistent with that applied to Transend and the definition of average outage duration is consistent with that applied to TransGrid.

400. Taking the above matters into account, the Authority maintains the requirement for amendment of the proposed access arrangement revisions to include service standard benchmarks for loss of supply event frequency and average outage duration. The Authority accepts that the definitions of service standards and proposed service standard benchmarks as set out in Western Power's submission of 10 September 2009 will satisfy Required Amendment 22.

Required Amendment 22

The proposed access arrangement revisions should be amended to include service standard benchmarks for:

- loss of supply event frequency, specified as a number of loss of supply events in a one year period with benchmarks specified for events of low and high duration measured as system minutes interrupted; and
- average outage duration, measured in minutes.

Distribution Service Standards

401. For distribution services, Western Power has proposed to include service standard benchmarks in the access arrangement for the same service standards as under the current access arrangement; that is, SAIDI and SAIFI. Western Power has, however, proposed changes to the calculation methods for these service standards and to "exclusions" from measurement of the service standards.
402. The Authority has addressed the following matters relating to the proposed service standards applied to distribution services under the proposed access arrangement revisions:
- the proposed changes in calculation methods for SAIDI and SAIFI exclusions from measures of these service standards;
 - the inclusion of additional service standards for momentary interruptions to supply and for particular locations on the distribution network; and
 - the inclusion of additional service standards for metering activities.
403. On the methods of calculation of SAIDI and SAIFI, Western Power has proposed that the calculation methods be changed to be consistent with the "normalised unplanned" methodology of the SCNRRR, involving the exclusion of planned outages and single-customer outages from the calculations of SAIDI and SAIFI.
404. The Authority concurs with Western Power that the measures of service standards applied under the access arrangement should comply with nationally consistent methods. This allows comparability of service standards across different networks and assists a user to determine the value of a reference service at the reference tariff, consistent with the requirements of section 5.6 of the Access Code.
405. In the Draft Decision, the Authority observed that the proposed exclusion of planned interruptions from calculations of SAIDI and SAIFI is in accordance with the SCNRRR methods that are intended to function as nationally consistent

methods.¹²⁹ However, the SCNRRR methods explicitly include outages affecting a single customer in the measures of SAIDI and SAIFI.¹³⁰ Accordingly, the Authority considered that this exclusion should not apply to measures of SAIDI and SAIFI under the access arrangement.

406. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 23

The proposed access arrangement revisions should be amended such that definitions of SAIDI and SAIFI do not make provision for the exclusion of single customer interruptions.

407. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts Draft Decision Amendment 23 and proposes corresponding revisions to definitions of SAIDI and SAIFI.¹³¹
408. In addition to addressing Draft Decision Amendment 23, Western Power has proposed additional revisions to definitions of SAIDI and SAIFI in relation to the exclusion of “major event days”. Specifically, Western Power has proposed to amend the major event day exclusion as follows.

Major event days in accordance with IEEE1366-2003 ~~definitions as adopted by Steering Committee on National Regulatory Reporting Requirements (SCNRRR).~~

409. As mentioned, the Authority concurs with Western Power that the measures of service standards applied under the access arrangement should comply with nationally consistent methods. The Authority notes that in relation to major event days, the SCNRRR normalised unplanned methodology does not adopt the Institute of Electrical and Electronics Engineers’ (IEEE) 1366-2003 definition for “major event days”.¹³²

¹²⁹ Utility Regulators Forum (Steering Committee on National Regulatory Reporting Requirements), March 2002, National Regulatory Reporting for Electricity Distribution and Retailing Businesses, p. 7.

¹³⁰ Utility Regulators Forum (Steering Committee on National Regulatory Reporting Requirements), March 2002, National Regulatory Reporting for Electricity Distribution and Retailing Businesses, p. 6.

¹³¹ Western Power submission of 10 September 2009.

¹³² Institute of Electrical and Electronics Engineers, *1366-2003: IEEE Guide for Electric Power Distribution Reliability Indices*. The IEEE 1366-2003 standard uses the “Beta Method” to identify major event days which are excluded from the reliability standards and individual feeder standards. A major event day under the Beta Method is one in which the daily total system SAIDI value exceeds a threshold value, T_{MED} , where $T_{MED} = e^{(\alpha = 2.5\beta)}$. The SCNRRR methodology adopts a standard three minute threshold approach to identify major outages that are excluded from measures of SAIDI and SAIFI; that is, outages that exceed a threshold SAIDI impact of three minutes are excluded (Utility Regulators Forum (Steering Committee on National Regulatory Reporting Requirements), March 2002, National Regulatory Reporting for Electricity Distribution and Retailing Businesses, p. 7).

410. The Authority therefore requires amendment of definitions of SAIDI and SAIFI to remove the exclusion of single customer interruptions and alter the definition of major event days.

Required Amendment 23

The proposed access arrangement revisions should be amended such that definitions of SAIDI and SAIFI:

- do not make provision for the exclusion of single customer interruptions;
- exclude reference to definitions as definitions adopted by the Institute of Electrical and Electronics Engineers' (IEEE) in specification of "major event days".

411. The Authority has given consideration to whether service standard benchmarks should be established for service standards other than SAIDI and SAIFI.
412. Alinta Sales submitted that the access arrangement should include service standard benchmarks for service standards that capture momentary interruptions in supply.¹³³ According to Alinta Sales, momentary interruptions of supply can be of particular significance for some electricity customers and the SAIDI and SAIFI measures of service reliability do not adequately capture the incidence of momentary interruptions.
413. The Authority gave attention to a service standard that captures momentary interruptions in its approval of the current access arrangement, in particular the inclusion of a service standard benchmark for the average number of momentary interruptions per customer per year, measured as the "momentary average interruption frequency index, or **MAIFI**".¹³⁴ While initially giving consideration to a requirement for the current access arrangement to include service standard benchmarks for MAIFI, the Authority did not persist in this requirement due to a submission from Western Power that it was not practically possible to accurately produce MAIFI data without a multi-million dollar investment.¹³⁵
414. The inability of many electricity distributors to report MAIFI data has previously been recognised by the SCNRRR where it was indicated for MAIFI to be an "optional" service standard in reporting requirements for electricity distributors,

¹³³ Alinta Sales Pty Ltd submission of 17 December 2008.

¹³⁴ Defined as the total number of customer interruptions of one minute or less, divided by the total number of distribution customers.

¹³⁵ Economic Regulation Authority, 2 March 2007, Final Decision on the Proposed Access Arrangement for the South West Interconnected Network, paragraph 184. Western Power, 19 May 2006, 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, Part A: section 3.9.

notwithstanding the potential value of MAIFI data as an indicator of service reliability.¹³⁶

415. Alinta Sales contends that there is potential value in requiring the measurement of MAIFI as a service standard, but does not provide any demonstration of the benefits. Given the lack of evidence, the Authority remains of the view that there has not been sufficient demonstration of need for this performance standard to be established to warrant the investment that would be necessary to produce MAIFI data.
416. Alinta Sales also submitted that the service standards under the current access arrangement do not adequately provide indications of the reliability of distribution services at particular locations on the network.¹³⁷
417. Measures of service reliability at particular locations are addressed in service standards established for distribution services in other jurisdictions.
418. In Victoria, for example, the reliability of distribution services at particular locations is addressed by:
 - service standard benchmarks and reporting requirements for the duration of interruptions (SAIDI for planned and unplanned interruptions) for the 15 per cent of customers experiencing the longest time of off-supply in the reporting period; and
 - reporting requirements for the frequency of short-duration interruptions (MAIFI) and duration of interruptions (SAIDI for planned and unplanned interruptions) for low-reliability feeders for which the service standards are above (worse than) a specified threshold.¹³⁸
419. The Authority considers that service standard benchmarks that provide an indication of the worst levels of service reliability that may be expected from the distribution network are important in enabling a network user or applicant to assess the value represented by a reference service at a reference tariff, and hence consistent with the requirements of section 5.6(b) of the Access Code. This particularly applies for connection points on rural feeders for which low levels of reliability may be masked by system-wide average measures of SAIDI and SAIFI.
420. In the Draft Decision, the Authority determined that service standard benchmarks should be established for the worst performing feeders in the distribution network to establish an element of accountability for forecast expenditure in the proposed access arrangement revisions, which includes substantial increases in capital expenditure and non-capital costs undertaken to maintain or improve reliability.
421. The Authority required the following amendment to the proposed access arrangement revisions.

¹³⁶ Utility Regulators Forum (Steering Committee on National Regulatory Reporting Requirements), March 2002, National Regulatory Reporting for Electricity Distribution and Retailing Businesses, pp. 4, 5.

¹³⁷ Alinta Sales Pty Ltd submission of 17 December 2008.

¹³⁸ Essential Services Commission, October 2005, Electricity Distribution Price Review 2006-10 Final Decision Volume 1 Statement of Purpose and Reasons, pp. 28 – 30.

Draft Decision Amendment 24

The proposed access arrangement revisions should be amended to include service standard benchmarks for SAIDI and SAIFI for customers served by the 15 per cent of worst performing feeders.

422. The amendment of the proposed access arrangement revisions to include service standard benchmarks for SAIDI and SAIFI for customers served by the 15 per cent of worst performing feeders is supported by Alinta Sales.¹³⁹
423. Subsequent to the Draft Decision, the Authority provided further information to Western Power to clarify that Draft Decision Amendment 24 should relate to SAIDI and SAIFI measures for the 15 per cent customers served by the worst performing feeders, rather than the customers served by the 15 per cent of worst performing feeders.
424. In a submission subsequent to the Draft Decision, Western Power requests that the Authority reconsider the need for Draft Decision Amendment 24 for reason that the SAIDI and SAIFI measures for the 15 per cent of customers served by the worst performing feeders would fulfil the same role in indications of service quality as the existing SAIDI and SAIFI measures for rural-long feeders.¹⁴⁰ Western Power indicates that the measures for the 15 per cent of customers served by the worst performing feeders would be predominantly served by rural-long feeders, and the difference in recorded SAIDI and SAIFI measures, although different, is not of sufficient magnitude to materially affect a user's assessment of the value of a reference tariff (Table 7).

Table 7 Comparison of SAIDI and SAIFI for the worst 15 per cent of customers served and for rural-long feeders¹⁴¹

Year	SAIDI		SAIFI	
	Worst 15% of customers served	Rural-long feeders	Worst 15% of customers served	Rural-long feeders
2005/06	631	472	5.47	3.69
2006/07	728	624	6.30	4.72
2007/08	711	611	6.03	4.99
2008/09	711	573	5.91	4.27

425. Western Power further contends that accountability for service standards should be through the service standard adjustment mechanism for the existing service standards and feeder categories, which correspond to the feeder categories by which Western Power plans capital and maintenance works.
426. The Authority accepts Western Power's contention that there would be substantial overlap between measures of SAIDI and SAIFI for the 15 per cent of customers served by the worst performing feeders and for the existing category of rural-long

¹³⁹ Alinta Sales submission of 10 September 2009.

¹⁴⁰ Western Power submission of 10 September 2009.

¹⁴¹ Western Power submission of 10 September 2009, Attachment C: p. 2.

feeders. The Authority also observes that there is a strong correlation between the measures for the two categories of customer groups. On this basis, the Authority considers that the service standard benchmarks for the rural-long feeders adequately capture service reliability for the worst affected customers and the Authority does not maintain the requirement for amendment of the proposed access arrangement revisions in accordance with Draft Decision Amendment 24.

427. On the matter of service standard benchmarks for metering activities, the Authority has considered a submission from Synergy that the access arrangement should include service standard benchmarks for metering activities.¹⁴²
428. The Authority took the view in the Draft Decision that it is not necessary for the access arrangement to include service standard benchmarks for these activities. While metering activities are appropriately subject to agreed service obligations and standards, these are established under Part 5 of the Metering Code, including under any service level agreement that exists between Western Power and the user.
429. In a submission subsequent to the Draft Decision, Synergy submits that the Authority has misunderstood the issue in respect of service standards for metering services.¹⁴³ Synergy submits that the issue is not whether the access arrangement should contain service standard benchmarks for metering activities that are governed under the Metering Code, but rather that “all network reference services that include covered services necessary for the operation of the reference service contain a service standard benchmark in the [access arrangement] as required by the [Access Code]”.
430. Section 5.1(c) of the Access Code requires that the access arrangement include service standard benchmarks for each reference service. The Authority considers that this requirement is met by establishing service standard benchmarks for broad quality parameters of the service, in particular parameters of reliability, and that it is not necessary to establish service standard benchmarks for every activity that is undertaken as part of the delivery of a service.
431. Metering activities are a component of network services that are under the control of Western Power and for which the parameters of the activities can be specified in advance of the service being provided. This is unlike the reliability of network services which is unavoidably stochastic in nature and for which a performance target is more appropriate than a specified service level.
432. The Authority therefore considers that it is neither necessary nor desirable for the access arrangement to include service standard benchmarks for metering services. The obligations of Western Power in the provision of metering services are best specified by codification in the Metering Code, the applicable Service Level Agreement and/or by terms and conditions of access contracts.

¹⁴² Synergy submission of 17 December 2008 on Reference Services.

¹⁴³ Synergy submission of 1 October 2009.

Service Standard Benchmarks

General Approach to the Authority's Consideration of Service Standard Benchmarks

433. Section 5.6 of the Access Code requires that a service standard benchmark must be reasonable and must be sufficiently detailed and complete to enable a user or applicant to determine the value represented by the reference service at the reference tariff.
434. In order to satisfy the requirements of the Access Code, the Authority considers that service standard benchmarks must be established at values that are reasonable forecasts of the values of the relevant service standards to be achieved during the access arrangement period, and are the values that users of the network can expect to be achieved.
435. As a general principle, the Authority considers that recent historical measures of service standards provide an appropriate starting point for determining service standard benchmarks for the access arrangement period. However, as the benchmarks need to be a forecast for the access arrangement period, historical measures need to be adjusted for factors considered likely to cause service standards to vary from historical measures during the access arrangement period. These factors may include, for example, new investment or changes to maintenance activities that directly or indirectly affect service quality.
436. Western Power provides supporting information for the proposed revisions to service standard benchmarks in the revised access arrangement information.¹⁴⁴ Additional information relevant to the consideration of Western Power's proposed service standard benchmarks is Western Power's service standard performance report for 2007/08¹⁴⁵ and the Authority's February 2008 report titled "*2006/07 Annual Performance Report: Electricity Distributors*", which is available from the Authority's web site.¹⁴⁶
437. Of particular relevance to the consideration of service standard benchmarks is the forecasts of new facilities investment and non-capital costs that support the maintenance and improvement of service standards. Subsequent to submission of the proposed access arrangement revisions, Western Power provided the Authority with anticipated revisions to cost forecasts, which incorporate substantial reductions in forecast costs, particularly for the first and second years of the second access arrangement period. Western Power has indicated that it envisages being able to maintain current levels of reliability despite the anticipated decrease in forecast costs.¹⁴⁷

¹⁴⁴ Revised access arrangement information, Part A: section 6; Part D: section 3.

¹⁴⁵ Western Power, 28 October 2008, Access Arrangement Service Standard Benchmark Report Financial Year Ending June 2008 (available from the Economic Regulation Authority web site: http://www.era.wa.gov.au/2/721/48/service_standar.pm)

¹⁴⁶ Economic Regulatory Authority web site: http://www.era.wa.gov.au/2/246/51/reports__decisi.pm

¹⁴⁷ Western Power, 25 May 2009, Letter from Mr Phil Southwell, General Manager Strategy and Corporate Affairs.

Transmission

438. Actual performance data for transmission services and the service standard benchmarks in the first and second access arrangement periods are shown in Table 8. The proposed service standard benchmarks for the transmission network represent a decline in service standards as measured by circuit availability and by system minutes interrupted for the meshed network, but an improved service standard as measured by system minutes interrupted for the radial network.

Table 8 Service standard benchmarks and actual performance for transmission services¹⁴⁸

	Circuit availability (% of total time)		System minutes interrupted (meshed network)		System minutes interrupted (radial network)	
	B'mark	Actual	B'mark	Actual	B'mark	Actual
Year ending June 2005	-	-	-	5.8	-	1.5
Year ending June 2006	-	98.0	-	5.1	-	0.9
Current Access Arrangement						
Year ending June 2007	98.2	98.0¹⁴⁹	7.8	14.2	3.9	1.4
Year ending June 2008	98.2	98.2	7.8	8.7¹⁵⁰	3.9	1.8
Year ending June 2009	98.2	98.3	7.8	7.6	3.9	2.0
Proposed Revisions						
Year ending June 2010	98.0	-	9.3	-	1.4	-
Year ending June 2011	98.0	-	9.3	-	1.4	-
Year ending June 2012	98.0	-	9.3	-	1.4	-

439. The actual performance data indicate service standards close to or better than the benchmarks in 2006/07 and 2007/08 for the measures of circuit availability and system minutes interrupted on the radial network, but worse than benchmark performance for measures of system minutes interrupted on the meshed network (indicated by Western Power to be a result of significant outages caused by large-scale bush fires).

¹⁴⁸ Actual values for 2004/05 and 2005/06 are reproduced from the access arrangement information (Part A: section 6). Actual values for 2006/07 and 2007/08 are reproduced from Western Power, 28 October 2008, Access Arrangement Service Standard Report Financial Year Ending June 2008. Actual values for 2008/09 are reproduced from Western Power, service standard benchmarks for 2008/09 (provided via email of 23 October 2009, DMS#6435127v3).

¹⁴⁹ A value of 97.9 is indicated in the access arrangement information (Part A: section 6).

¹⁵⁰ A value of 8.6 is indicated in the access arrangement information (Part A: section 6).

440. Western Power indicates that there are no significant drivers to either improve or relax the service standard benchmarks for the transmission services and benchmarks for the second access arrangement period, and benchmarks are established at the average of the actual performance for 2005/06 to 2007/08.
441. Notwithstanding the claim by Western Power that there are no drivers for improving or worsening service standards, the proposed access arrangement revisions as submitted by Western Power to the Authority in October 2008 incorporates substantial forecast increases in non-capital costs in monitoring and maintenance activities and in new facilities investment for the transmission network.
442. Prior to the Authority issuing its Draft Decision, Western Power provided the Authority with anticipated revisions to cost forecasts indicating substantial reductions in new facilities investment and non-capital costs in the first two years of the second access arrangement period, although still with significant real increases in costs over the level of costs in the first access arrangement period. Western Power indicated that the revised forecasts of costs are sufficient to allow for current levels of reliability to be maintained, but that the projected improvements in service standard benchmarks may need to be reviewed.¹⁵¹
443. In the Draft Decision, the Authority required further reductions in forecast non-capital costs for reasons including that there was a lack of substantiation for large increases in maintenance costs across the access arrangement period while still indicating that service standard benchmarks could be met in the first and second years of the period. Consistent with this determination, the Authority did not see any need to revise the service standard benchmarks.
444. There have been no further submissions to the Authority on the service standard benchmarks for the transmission network and the Authority maintains the position set out in the Draft Decision in respect of the service standard benchmarks for circuit availability and system minutes interrupted.
445. In a submission subsequent to the Draft Decision, Western Power has proposed service standard benchmarks for the additional transmission service standards of loss of supply event frequency and average outage duration. Western Power presents actual performance against these service standard benchmarks over the four year period of 2005/06 to 2008/09 and proposes service standard benchmarks approximately equal to the average of actual performance over the three year period 2005/06 to 2007/08 (Table 9).

¹⁵¹ Western Power, 25 May 2009, Letter from Mr Phil Southwell, General Manager Strategy and Corporate Affairs.

Table 9 Actual performance and proposed service standard benchmarks for loss of supply event frequency and average outage duration¹⁵²

Period	Loss of supply event frequency		Average outage duration
	Minor (>0.1 system minutes)	Major (>1 system minutes)	
Actual performance			
2005/06	20	0	744
2006/07	30	3	834
2007/08	27	2	715
2008/09	18	3	507
Proposed benchmarks			
2009/10	25	2	764
2010/11	25	2	764
2011/12	25	2	764

446. The Authority accepts that the determination of service standard benchmarks on the basis of average actual performance for the period 2005/06 to 2007/08 is consistent with the both the incentive framework that operates for service standards under the access arrangement and the timing that should normally apply for approval of proposed access arrangement revisions and the setting of service standard benchmarks (where the service standard benchmarks are set without knowledge of the achieved service standard for the last year of the preceding access arrangement period).
447. Accordingly, the Authority considers that the proposed service standard benchmarks for loss of supply event frequency and average outage duration are consistent with the requirements of section 5.6 of the Access Code.

Distribution

448. Actual performance data and the SAIDI and SAIFI service standard benchmarks for distribution services in the first and second access arrangement periods are shown in Table 10 and Table 11.¹⁵³

¹⁵² Western Power submission of 10 September 2009, Attachment A: p. 5.

¹⁵³ As Western Power proposed changes to the calculation of SAIDI and SAIFI for the second access arrangement period actual performance data are presented as two values for each year, the first value being consistent with the definitions of service standards under the current access arrangement and the second value, indicated in brackets, being consistent with the definitions of service standards proposed for the second access arrangement period.

Table 10 Service standard benchmarks and actual performance — system average interruption duration index (SAIDI) for distribution services

	SWIN total		CBD		Urban		Rural Short		Rural Long	
	B'mark	Act.	B'mark	Act.	B'mark	Act.	B'mark	Act.	B'mark	Act.
Current Access Arrangement¹⁵⁴										
Year ending June 2007	277	275 (229)	21.4	33 (33)	222	173 (142)	425	406 (329)	741	711 (624)
Year ending June 2008	259	284 (230)	20.0	55 (51)	208	207 (165)	398	323 (260)	693	717 (611)
Year ending June 2009	224	282 (221)	17.3	37 (28)	179	202 (158)	343	320 (238)	598	684 (573)
Proposed Revisions¹⁵⁵										
Year ending June 2010	225	-	38	-	161	-	253	-	599	-
Year ending June 2011	210	-	38	-	150	-	233	-	567	-
Year ending June 2012	201	-	38	-	142	-	222	-	548	-

¹⁵⁴ Actual values for 2006/07 and 2007/08 are reproduced from the revised access arrangement information (Part A: section 6) with values in round brackets calculated consistently with the service standard benchmarks proposed for the second access arrangement period. Actual values for 2008/09 are reproduced from Western Power, service standard benchmarks for 2008/09 (provided via email of 23 October 2009, DMS#6435127v3).

¹⁵⁵ Revised access arrangement information, Part A: p. 56.

Table 11 Service standard benchmarks and actual performance — system average interruption frequency index (SAIFI) for distribution services

	SWIN total		CBD		Urban		Rural Short		Rural Long	
	B'mark	Act.	B'mark	Act.	B'mark	Act.	B'mark	Act.	B'mark	Act.
Current Access Arrangement¹⁵⁶										
Year ending June 2007	3.44	2.87 (2.52)	0.32	0.26 (0.25)	3.12	2.03 (1.80)	4.89	4.35 (3.79)	5.58	5.43 (4.72)
Year ending June 2008	3.22	2.77 (2.50)	0.30	0.23 (0.22)	2.91	2.10 (1.91)	4.58	3.50 (3.13)	5.22	5.56 (4.99)
Year ending June 2009	2.78	2.46 (2.20)	0.26	0.17 (0.15)	2.51	1.82 (1.65)	3.95	3.04 (2.70)	4.50	4.83 (4.27)
Proposed Revisions¹⁵⁷										
Year ending June 2010	2.44	-	0.24	-	1.88	-	3.05	-	4.89	-
Year ending June 2011	2.29	-	0.24	-	1.76	-	2.83	-	4.64	-
Year ending June 2012	2.18	-	0.24	-	1.67	-	2.70	-	4.47	-

449. With the exception of service standard benchmarks for SAIDI in the CBD area, Western Power has proposed service standard benchmarks for SAIDI and SAIFI that represent improvements in service reliability over reliability levels achieved in 2006/07 and 2007/08.
450. Western Power indicates in the revised access arrangement information that the forecast capital and operating expenditures forecast for the second access arrangement period (as provided in the proposed access arrangement revisions as submitted in October 2008) include provision for “modest but achievable improvements in distribution service performance” and that reliability improvements have been estimated by simulation modelling of the distribution system.¹⁵⁸ Western Power also provides details of planned improvements in reliability (specified as a reduction in SAIDI of 29 minutes for the entire SWIN) to be achieved by 2011/12 as a result of specific capital projects.¹⁵⁹

¹⁵⁶ Actual values for 2006/07 and 2007/08 are reproduced from the revised access arrangement information (Part A: section 6) with values in round brackets calculated consistently with the service standard benchmarks proposed for the second access arrangement period. Actual values for 2008/09 are reproduced from Western Power, service standard benchmarks for 2008/09 (provided via email of 23 October 2009, DMS#6435127v3).

¹⁵⁷ Revised access arrangement information, Part A: p. 56.

¹⁵⁸ Revised access arrangement information, section 6.3.2.

¹⁵⁹ Revised access arrangement information, Appendix 1: p. 51.

451. Prior to the Authority issuing its Draft Decision, Western Power provided the Authority with anticipated revisions to cost forecasts indicating substantial reductions in forecasts of costs in the first two years of the second access arrangement period, although still with large real increases in costs over the level of costs in the first access arrangement period. Western Power indicated that the revised forecasts of costs are sufficient to allow for current levels of reliability to be maintained, but that the projected improvements in service standard benchmarks may need to be reviewed.¹⁶⁰
452. In the Draft Decision, the Authority took the view that the service standard benchmarks for the transmission and distribution networks are reasonably established to reflect actual performance in the first access arrangement period. The Authority considered that improvements in service standard benchmarks could not necessarily be expected given revisions to forecast costs for the second access arrangement period as determined by Western Power, and as further required by the Authority under the Draft Decision. Accordingly, the Authority took the view that the service standard benchmarks as proposed by Western Power for the second access arrangement period meet the requirements of the Access Code.
453. In a submission subsequent to the Draft Decision, Western Power has indicated that the Authority's required amendments to the methods of calculation for SAIDI and SAIFI (with the inclusion of single customer outages) results in a small decrease in apparent historical performance that needs to be reflected in revised service standard benchmarks for the second access arrangement period.¹⁶¹ The revised historical performance and proposed service standard benchmarks for the second access arrangement period are shown in Table 12 and Table 13.

¹⁶⁰ Western Power, 25 May 2009, Letter from Mr Phil Southwell, General Manager Strategy and Corporate Affairs.

¹⁶¹ Western Power Submission 10 September 2009.

Table 12 Revised service standard benchmarks and actual performance — system average interruption duration index (SAIDI) for distribution services

	SWIN total	CBD	Urban	Rural Short	Rural Long
First access arrangement period (actual values) ¹⁶²					
Year ending June 2007	236	41	147	334	652
Year ending June 2008	235	52	167	264	633
Year ending June 2009	225	29	161	241	589
Second access arrangement period (benchmarks) ¹⁶³					
Year ending June 2010	230	38	165	259	642
Year ending June 2011	224	38	162	253	588
Year ending June 2012	213	38	153	244	556

Table 13 Revised service standard benchmarks and actual performance — system average interruption frequency index (SAIFI) for distribution services

	SWIN total	CBD	Urban	Rural Short	Rural Long
First access arrangement period (actual values) ¹⁶⁴					
Year ending June 2007	2.54	0.26	1.80	3.81	4.81
Year ending June 2008	2.52	0.22	1.92	3.14	5.06
Year ending June 2009	2.21	0.16	1.65	2.71	4.32
Second access arrangement period (benchmarks) ¹⁶⁵					
Year ending June 2010	2.50	0.24	1.92	3.12	5.00
Year ending June 2011	2.46	0.24	1.89	3.06	4.85
Year ending June 2012	2.41	0.24	1.83	2.98	4.80

¹⁶² Email from Western Power to the Economic Regulation Authority of 30 October 2009.

¹⁶³ Western Power submission of 10 September 2009, Attachment B.

¹⁶⁴ Email from Western Power to the Economic Regulation Authority of 30 October 2009.

¹⁶⁵ Western Power submission of 10 September 2009: Attachment B.

454. The Authority accepts that the revised service standard benchmarks proposed by Western Power are consistent with historical performance and the required amendment to the methods for calculation of SAIDI and SAIFI, and that the revisions are consequential to this required amendment.

PRICE CONTROL

Introduction

455. For each reference service specified in the access arrangement, there must be a reference tariff established under the access arrangement.
456. Section 5.1(d) of the Access Code requires that the access arrangement must include a “price control”. A price control is a constraint on the level of reference tariffs that specifies the level of tariffs either directly, such as with price caps, or indirectly through constraints on the level of overall revenue able to be earned by the service provider.
457. The specific requirements and objectives for a price control are set out in sections 6.1 to 6.5 of the Access Code:
- 6.1 Subject to section 6.3, an access arrangement may contain any form of price control provided it meets the objectives set out in section 6.4 and otherwise complies with this Chapter 6.
 - 6.2 Without limiting the forms of price control that may be adopted, price control may set target revenue:
 - (a) by reference to the service provider’s approved total costs; or
 - (b) by setting tariffs with reference to:
 - (i) tariffs in previous access arrangement periods; and
 - (ii) changes to costs and productivity growth in the electricity industry;
 or
 - (c) using a combination of the methods described in sections 6.2(a) and 6.2(b).
 - 6.3 The first access arrangement must contain the form of price control described in section 6.2(a).
 - 6.4 The price control in an access arrangement must have the objectives of:
 - (a) giving the service provider an opportunity to earn revenue (“target revenue”) for the access arrangement period from the provision of covered services as follows:
 - (i) an amount that meets the forward-looking and efficient costs of providing covered services, including a return on investment commensurate with the commercial risks involved;
 plus:
 - (ii) for access arrangements other than the first access arrangement, an amount in excess of the revenue referred to in section 6.4(a)(i), to the extent necessary to reward the service provider for efficiency gains and innovation beyond the efficiency and innovation benchmarks in a previous access arrangement;
 plus:

- (iii) an amount (if any) determined under section 6.6 [adjustments for unforeseen events];
plus:
 - (iv) an amount (if any) determined under section 6.9 [adjustments for technical rule changes];
plus:
 - (v) an amount (if any) determined under an investment adjustment mechanism (see sections 6.13 to 6.18);
plus:
 - (vi) an amount (if any) determined under a service standards adjustment mechanism (see sections 6.29 to 6.32);
plus –
 - (vii) an amount (if any) determined under section 6.37A [tariff equalisation contributions];
 - and
 - (b) enabling a user to predict the likely annual changes in target revenue during the access arrangement period; and
 - (c) avoiding price shocks (that is, sudden material tariff adjustments between succeeding years).
- 6.5 The amount determined in seeking to achieve the objective specified in section 6.4(a)(i) is a target, not a ceiling or a floor.
458. Western Power has determined a value of target revenue by reference to forecast costs for the second access arrangement period – the “building block” method. This is consistent with requirements of section 6.2(a) of the Access Code and with the method for determination of target revenue for the first access arrangement period.
459. In considering Western Power’s proposed target revenue, the Authority has had to make assessments of the actual and forecast costs of Western Power over the first and second access arrangement periods, including:
- an assessment of whether the forecast of non-capital costs for the second access arrangement period meets the requirement of section 6.40 of the Access Code, including only those costs that would be incurred by a service provider efficiently minimising costs;
 - an assessment of whether new facilities investment in the first access arrangement period may be added to the capital base of the network under the provisions of section 6.51A of the Access Code, including an assessment of whether, and to what extent, the new facilities investment satisfies the new facilities investment test under section 6.52 of the Access Code; and
 - an assessment of whether forecast new facilities investment for the second access arrangement period may be taken into account in determining target revenue (by notional addition to the capital base), including an assessment of whether, and to what extent, the new facilities investment satisfies the new facilities investment test under section 6.52 of the Access Code.
460. For the purposes of the approval of proposed access arrangement revisions, and pursuant to sections 6.41, 6.51 and 6.51A of the Access Code, the Authority has a discretion whether to recognise costs in the total costs and target revenue that

underlie the price control. This includes forecast non-capital costs, actual new facilities investment during the first access arrangement period and forecast new facilities investment. Before recognising these costs in total costs and target revenue, the Authority must be satisfied that the costs meet the tests of sections 6.41, 6.51 and 6.51A of the Access Code (as relevant). The responsibility rests with Western Power to demonstrate to the Authority that the costs satisfy these tests.

461. In making an assessment of costs, the Authority had regard to substantial increases in costs for the Western Power networks that occurred over the course of the first access arrangement period and that are forecast to occur over the second access arrangement period.
462. During the Authority's assessment of the proposed access arrangement (between August 2005 and April 2007) for the first access arrangement period, the Authority considered both an original forecast of costs and a revised forecast submitted by Western Power during the course of the assessment. During 2005/06, Western Power's non-capital costs for the distribution network substantially exceeded original cost forecasts for that year. In view of this, Western Power submitted revised forecasts of costs to the Authority. The revised forecast incorporated substantial increases in forecast non-capital costs (\$87 million or 12 per cent higher than original forecasts). Western Power also submitted a revised forecast of new facilities investment that incorporated a substantial increase in forecast capital costs (\$284 million or 23 per cent). In its decision on the proposed access arrangement revisions, the Authority accepted Western Power's explanations for the revised costs, which contributed to annual increases of five per cent in real terms in reference tariffs over the course of the first access arrangement period.¹⁶⁶
463. Although the Authority approved the higher revised forecast costs, actual costs for the first access arrangement period have exceeded the cost forecasts for that period (on which reference tariffs were based) by approximately 19 per cent for non-capital costs and 53 per cent for new facilities investment.
464. In the proposed access arrangement revisions for the second access arrangement period, Western Power has projected further very substantial increases in costs over the actual level of costs in the first access arrangement period.
- Forecasts of non-capital costs included in the proposed access arrangement submission of October 2008 are, for transmission and distribution respectively, 44 per cent and 58 per cent higher in real terms than actual costs for the first access arrangement period. Western Power has subsequently revised the forecasts downwards, but even the revised forecasts include increases in non-capital costs over actual costs in the first access arrangement period of 25 per cent for transmission and 34 per cent for distribution.
 - Forecasts of new facilities investment included in the proposed access arrangement submission of October 2008 are, for transmission and distribution respectively, 135 per cent and 48 per cent higher in real terms than actual costs for the first access arrangement period. Western Power has subsequently revised the forecasts downwards, but even the revised

¹⁶⁶ Economic Regulation Authority, 2 March 2007, Final Decision on the Proposed Access Arrangement for the South West Interconnected Network, pp. 57 – 67.

forecasts include increases in capital costs over actual costs in the first access arrangement period of 58 per cent for transmission and 34 per cent for distribution.

465. The trend of steeply increasing costs has prompted the Authority to give careful scrutiny to the efficiency of costs in the first access arrangement period and the cost forecasts for the second access arrangement period.
466. In making an assessment of costs, the Authority has obtained advice from consultants on a range of relevant matters including:
- a review by Wilson Cook & Co Limited of Western Power's forecast expenditures for the second access arrangement period;¹⁶⁷
 - a review by Geoff Brown & Associates Ltd of Western Power's governance arrangements as they relate to the control of work programs and costs;¹⁶⁸ and
 - a review by Geoff Brown & Associates Ltd of a sample of capital projects and programs and the amounts of new facilities investment for these projects and programs claimed by Western Power to meet the new facilities investment test under section 6.52 of the Access Code.¹⁶⁹
467. These reviews and the Authority's assessment of costs have been hampered by a lack of necessary information, both as submitted by Western Power in the revised access arrangement information and as subsequently provided to the Authority and its consultants in response to specific requests. The inadequacy of information has been of particular concern in respect of actual new facilities investment in the first access arrangement period, which is required to demonstrate the amounts of new facilities investment that satisfy the relevant tests under the Access Code for addition to the capital base of the SWIN.
468. Prior to the Authority's Draft Decision, the following requests for information and/or documents were made by the Authority to Western Power.
- The Authority wrote to Western Power on 5 February 2009 advising that the Authority would be unable to determine the amount of new facilities investment to roll into the capital base in the absence of information concerning the efficiency of capital expenditure during the first access arrangement period.
 - On 5 February 2009, the Authority issued Western Power with a notice pursuant to section 51 of the *Economic Regulation Authority Act 2003* to provide information and/or documents to demonstrate that actual new facilities investment during the first access arrangement period satisfies the test under section 6.51A of the Access Code, and forecast new facilities investment for the second access arrangement period is reasonably expected to satisfy the test. The information was requested to be provided by 9 March 2009.

¹⁶⁷ Wilson Cook & Co Ltd, May 2009, Review of Western Power's Expenditures for Second Access Arrangement Final Report.

¹⁶⁸ Geoff Brown & Associates Ltd, 14 July 2009, Review of Expenditure Governance: Western Power.

¹⁶⁹ Geoff Brown & Associates Ltd, 14 July 2009, Review of New Facilities Investment Test Compliance: Western Power AA1 Projects.

- On 4 March 2009, Western Power wrote to the Authority and indicated that it does not have “rigorous commentary on the [new facilities investment test] for the vast majority of expenditure dating back to the commencement of the current access arrangement period” and while it had documentation containing “information and elements relevant to the [new facilities investment test]”, it needed to prepare “new supporting documentation for almost all projects and programs of work to specifically demonstrate that [the new facilities investment test] is satisfied”.
 - Subsequent to Western Power’s letter of 4 March, the Authority explored the merits of a sampling approach to assess Western Power’s new facilities investment as a practical way to progress the draft decision.
 - On 19 March 2009, the Authority advised Western Power that the section 51 notice would remain in place (and therefore Western Power was required to comply with it). However, in order to advance the Authority’s assessment of the proposed revisions to Western Power’s access arrangement:
 - Western Power should provide information and documents to demonstrate satisfaction of the requirements for the new facilities investment test for 30 selected projects; and
 - the Authority may request further information and/or documents relating to the selected projects or for additional projects (i.e. the sample of projects did not replace the original section 51 notice information requirements).
 - Western Power provided information and documents relating to the sample of 30 projects.
 - On 23 April 2009, the Authority advised Western Power that it was considering the information provided by it and was not in a position to comment on the adequacy of the information until the relevant assessments were undertaken. The Authority also advised that the information submitted by Western Power for the 30 sample projects was likely to be insufficient to arrive at a conclusive view in relation to the new facilities investment test. The Authority encouraged Western Power to submit any additional information which it believed addressed the requirements of the section 51 notice that would assist the Authority in undertaking its assessment in relation to the new facilities investment test.
469. Despite the requests for information, Western Power had failed, by the time of the Authority’s Draft Decision, to provide the Authority with information sufficient to demonstrate to the Authority’s satisfaction that the actual and forecast costs meet the relevant tests of the Access Code. This was confirmed by Western Power’s consultants.¹⁷⁰
470. Subsequent to the Draft Decision, Western Power made a submission to the Authority that includes further information to justify actual and forecast costs, including reports from consultants on the extent to which new facilities investment in the first access arrangement period meets the requirements of the Access Code to be added to the capital base for the SWIN.¹⁷¹ It is evident from Western Power’s

¹⁷⁰ Western Power submission of 10 September 2009, Attachment F2: pp. 13, 62.

¹⁷¹ Western Power submission of 10 September 2009, Attachment F2.

submission that Western Power made information available to its own consultant(s) that was not made available to the Authority prior to the Authority's Draft Decision, despite the requests made to Western Power for the provision of all relevant information.

471. Adding to the context of a trend of increasing costs for Western Power and a lack of information to determine whether these costs meet the relevant tests under the Access Code, information from a range of sources indicate substantial deficiencies in Western Power's management and governance processes as they relate to the undertaking and costs of operating and capital activities. Of particular concern to the Authority has been information to indicate the following.

- A failure of Western Power to maintain processes and documentation to sustain rigorous and accurate assessments of capital projects and programs against the requirements of the new facilities investment test.¹⁷²
- Deficiencies of planning and design processes that create potential for inefficient engineering of capital projects.¹⁷³
- Systematic shortcomings in governance processes for major works, particularly during the course of much of the first access arrangement period, including:
 - poor internal cost estimating processes;¹⁷⁴
 - a possibility that Western Power sometimes specifies requirements for equipment over and above industry standards and norms, potentially limiting competition amongst potential suppliers;¹⁷⁵
 - evidence of overcharging of Western Power by contractors, enabled by poor contractual arrangements and limited reconciliation of purchase orders, quotations and invoices;¹⁷⁶ and
 - excessive contingency provisions in project budgets.¹⁷⁷
- A lack of quality control for works undertaken by contractors, and instances of contractors failing to undertake works in accordance with specifications, notably in the case of inspection of wood poles.¹⁷⁸

¹⁷² Geoff Brown & Associates Ltd, 14 July 2009, Review of Expenditure Governance: Western Power. Geoff Brown & Associates Ltd, 14 July 2009, Review of New Facilities Investment Test Compliance: Western Power AA1 Projects. Western Power submission of 10 September 2009, Attachment F2: p. 62.

¹⁷³ Geoff Brown & Associates Ltd, 14 July 2009, Review of Expenditure Governance: Western Power. Geoff Brown & Associates Ltd, 14 July 2009, Review of New Facilities Investment Test Compliance: Western Power AA1 Projects. Economic Regulation Authority, 19 February 2009, Final Determination on the New Facilities Investment Test for a 66/11 kV Medical Centre Zone Substation Expansion and Voltage Conversion of the Distribution Network. Western Power submission of 10 September 2009, Attachment F2: pp. 42, 43.

¹⁷⁴ Geoff Brown & Associates Ltd, 14 July 2009, Review of Expenditure Governance: Western Power. Western Power submission of 10 September 2009, Attachment F2.

¹⁷⁵ Geoff Brown & Associates Ltd, 14 July 2009, Review of Expenditure Governance: Western Power. Western Power submission of 10 September 2009, Attachment F2: p. 48.

¹⁷⁶ Geoff Brown & Associates Ltd, 14 July 2009, Review of Expenditure Governance: Western Power. Western Power submission of 10 September 2009, Attachment F2.

¹⁷⁷ Geoff Brown & Associates Ltd, 14 July 2009, Review of Expenditure Governance: Western Power.

¹⁷⁸ Department of Commerce Energy Safety, May 2009, 2008 Distribution Wood Pole Audit Review, pp. 9, 10, 28.

472. There is also evidence of deficiencies in the management of network assets and operations that may give rise to inefficiencies in capital works and operating and maintenance activities. This evidence includes the following.
- Western Power's contraventions of its transmission (ETL2) and distribution (EDL1) licences.¹⁷⁹ Contraventions relate, in part, to deficiencies of Western Power's asset management system, including:
 - a lack of understanding of key processes for operational and capital work programs; and
 - poor documentation of the condition of the distribution system leading to reactive and imprecise systems for maintenance activities.
 - Confidential information obtained by the Authority relating to Western Power's budgeting of capital and operating activities.¹⁸⁰
473. The context of the Authority's assessment of costs for the second access arrangement period is, therefore, a trend of substantially increasing costs over the course of the first and second access arrangement periods, a lack of information to justify these increases and evidence of deficiencies in management and governance processes.
474. The Department of Treasury and Finance has submitted that a means of dealing with uncertainty in whether forecast increases in costs satisfy the requirements of the Access Code may be to allow the carryover of non-capital costs over and above forecasts from one access arrangement period to the next.¹⁸¹ The Authority considers that such a carryover is not consistent with the scheme of regulation established by the Access Code and the Code objective. With the exception of certain carryover mechanisms that create incentives for efficient expenditure, the scheme of regulation under the Access Code is to establish the price control on the basis of a forecast of costs. The risk faced by the service provider of having to bear cost overruns relative to forecasts (but as well the ability to retain the benefit of any out-performance of forecasts) provides incentives for the service provider to seek to achieve improvements in the efficiency of its operations.
475. The Authority has therefore assessed the actual and forecast costs against the relevant requirements of the Access Code, and where it is determined that the requirements of the Access Code are not met, exercising discretion to amend the amounts of costs to be taken into account in determination of target revenue.
476. The Authority assessment of costs and the level of target revenue is set out in the following sections of this Final Decision, addressing the following matters:
- forecasts of demand for services;
 - an amount of tariff equalisation contributions;

¹⁷⁹ Economic Regulation Authority, 8 January 2009, Section 32 - Electricity Industry Act 2004 Notice of Failure to Comply with Licence.

¹⁸⁰ This information is subject to a claim of confidentiality by Western Power and the Authority has therefore set out its detailed findings in relation to these submissions in a 'Confidential Annexure' to this Final Decision (Appendix D).

¹⁸¹ Department of Treasury and Finance submission of 10 September 2009, p. 4.

- a forecast of non-capital costs;
- amounts of actual and forecast new facilities investment and values of the capital base at the commencement of the second access arrangement period and a notional capital base over the term of the second access arrangement period;
- a rate of return (weighted average cost of capital);
- an allowance for the cost of working capital; and
- adjustments to target revenue for the second access arrangement period to reflect certain cost and revenue outcomes for the first access arrangement period.

Forecast Demand for Services

Western Power's Forecast

477. In the revised access arrangement information, Western Power has provided forecasts of transmission demand and energy at three levels:
- a demand forecast for the bulk transmission system, based on the demand forecasts reported in the July 2007 Statement of Opportunities by the Independent Market Operator (**IMO**);
 - demand forecasts for each substation, developed by statistical extrapolation from previous peak demands for each substation and adjustment for expected new bulk loads; and
 - demand forecasts for load areas developed using the bulk transmission forecasts and individual substation forecasts.
478. The demand forecasts prepared by the IMO and reported in the 2007 Statement of Opportunities are based on an assumed rate of economic growth in Western Australia of three to four per cent annual growth in Gross State Product.
479. The area-based demand forecasts used by Western Power to develop the forecasts of new facilities investment for the transmission network are shown in Table 14.

Table 14 Western Power's Area-Based Forecasts (MW) used to develop the forecasts of new facilities investment for the transmission network¹⁸²

Area	2009/10	2010/11	2011/12
Bunbury	318	332	351
Cannington	333	364	374
East Country	129	134	163
Eastern Goldfields	116	120	124
East Perth	350	363	371
Guildford	170	179	173
GT	30	34	39
Kwinana	319	348	363
Muja	303	310	319
North Country	181	180	187
Northern Terminal	968	1,011	1,055
South Fremantle	243	257	265
South Terminal	407	423	417
West Terminal	184	175	183
Total	4,229	4,382	4,531
Growth	4.4%	3.6%	3.4%
IMO 2007 "10% probability of exceedance" forecast	4,233	4,361	4,505

480. Western Power has also forecast requirements for connection of generation that includes:

- generation projects that have been assigned capacity credits as part of the Reserve Capacity Mechanism operating in the wholesale electricity market;
- committed generation projects, being those that have a signed access agreement; and
- the most probable generation projects required to maintain the minimum reserve margin.¹⁸³

481. Western Power has forecast total distribution energy sales by extrapolation of actual energy sales for 2006/07 by a forecast rate of growth in energy demand of 2.2 per cent per annum, as published by the IMO in 2007. Forecast energy sales for the distribution network are shown in Table 15.

¹⁸² Revised access arrangement information, p. 62. Forecasts are for coincident system peak demand.

¹⁸³ Revised access arrangement information, pp. 64, 65.

Table 15 Western Power's forecast energy sales for the distribution network¹⁸⁴

Year	Forecast energy sales (GWh)
2007/08 (actual)	13,087
2008/09	13,375
2009/10	13,670
2010/11	13,970
2011/12	14,278

Considerations of the Authority

482. The forecasts of peak energy demand for the transmission network and total energy demand for the distribution network are derived from projections of the IMO as published in the July 2007 Statement of Opportunities and, in turn, forecasts of economic growth for Western Australia, including forecasts of rates of growth of Gross State Product in Western Australia of:

- 3.2 per cent in 2009/10;
- 3.1 per cent in 2010/11; and
- 5.0 per cent in 2011/12.

483. The rates of economic growth on which the forecasts of energy demand have subsequently been based are substantially greater than more recent forecasts of growth in Gross State Product of:

- -1.25 per cent in 2009/10;
- -0.50 per cent in 2010/11; and
- 3.75 per cent in 2011/12.¹⁸⁵

484. The IMO has published revised forecasts of energy demand that takes into account the expectation of lower rates of economic growth in Western Australia and correspondingly lower rates of growth in energy demand. The lower forecasts of sent-out energy and maximum demand and lower forecasts of total sent-out energy are shown in Table 16 and Table 17.

¹⁸⁴ Revised access arrangement information, p. 114.

¹⁸⁵ Government of Western Australia, May 2009, 2009-10 Budget Economic and Fiscal Outlook, Budget Paper No. 3, p. 152.

Table 16 Revised forecasts of sent-out energy produced by the Independent Market Operator¹⁸⁶

Year	2008 forecast sent-out energy (GWh)	2009 forecast sent-out energy (GWh)	Change
2009/10	18,504	17,145	-1,359
2010/11	21,066	17,726	-3,340
2011/12	21,492	18,177	-3,315
2012/13	21,851	20,206	-1,645
2013/14	22,500	21,600	-900
2014/15	22,940	21,648	-1,292
2015/16	23,373	22,055	-1,318
2016/17	23,752	22,607	-1,145
2017/18	24,087	22,955	-1,132

Table 17 Revised forecasts of expected maximum demand produced by the Independent Market Operator¹⁸⁷

Year	2008 Forecast 10% probability of exceedence (MW)	2009 Forecast 10% probability of exceedence (MW)	Change
2009/10	4,260	4,200	-61
2010/11	4,704	4,397	-307
2011/12	4,860	4,725	-134
2012/13	5,010	5,132	123
2013/14	5,192	5,452	260
2014/15	5,354	5,518	164
2015/16	5,497	5,721	224
2016/17	5,631	5,903	273
2017/18	5,759	6,065	306

485. Given the IMO's forecast, the Authority took the view in the Draft Decision that rates of growth in energy demand and demand for network services are likely to be lower than the forecasts provided by Western Power in the revised access arrangement information. The Authority took this into account in its assessment of Western Power's forecasts of costs. The Authority also took into account a likelihood of lower rates of growth of energy demand in considering the deliverability of maintenance activities and capital works underlying cost forecasts and in requiring

¹⁸⁶ Independent Market Operator, July 2008, Statement of Opportunities, p. 46. Independent Market Operator, July 2009, Statement of Opportunities p. 50.

¹⁸⁷ Independent Market Operator, July 2009, Statement of Opportunities, p. 33.

Western Power to submit a revised forecast of new facilities investment for the second access arrangement period.

486. In a submission subsequent to the Draft Decision, Western Power indicates that it has revised its forecasts of costs to take into account the forecast of energy demand published by the IMO in July 2009, supplemented by additional information available to Western Power, such as connection applications for major loads and demand in specific load areas within the SWIS.¹⁸⁸ Western Power indicates that it expects average annual peak load to be 100MW lower than under the forecast of energy demand applied in 2008 for the proposed access arrangement revisions. Western Power further indicates that the revised forecasts of energy demand, amongst other factors, have caused a review of forecast costs from \$6.1 billion as set out in the proposed access arrangement revisions to \$4.9 billion.
487. Western Power's revised forecasts of costs (capital and operating) are further addressed by the Authority in later sections of this Final Decision.

Tariff Equalisation Contributions

Access Code Requirements

488. Section 6.37A of the Access Code provides that target revenue may include an amount of tariff equalisation contributions, which comprise an amount levied on users of the SWIN to finance amounts paid by the Western Australian Government to Horizon Power for the provision of electricity services in areas not serviced by the SWIN:

6.37A If the service provider for the Western Power Network is or will be required, by a notice made under section 129D(2) of the Act, to pay a tariff equalisation contribution into the Tariff Equalisation Fund during an access arrangement period, then an amount may be added to the target revenue for the covered network for the access arrangement period, which amount—

- (a) must not exceed the total of the tariff equalisation contributions which are or will be required to be paid under the notice, including any amount that was payable or paid before the commencement of the access arrangement period; and
- (b) must be separately identified as being under this section 6.37A.

Proposed Revisions

489. Under the current access arrangement, an amount of tariff equalisation contributions of \$177 million (in dollar values of 30 June 2006) was added to the target revenue for the first access arrangement period (2006/07 to 2008/09).¹⁸⁹
490. In the proposed access arrangement revisions submitted in October 2008, Western Power did not make an allowance in target revenue for tariff equalisation contributions in its determination of target revenue for the second access arrangement period (2009/10 to 2011/12). Western Power indicated that the

¹⁸⁸ Western Power submission of 10 September 2009.

¹⁸⁹ Economic Regulation Authority, 2 March 2007, Final Decision on the Proposed Access Arrangement for the South West Interconnected Network, Appendix B.

absence of an allowance for tariff equalisation contributions is due to advice from the Office of Energy that the contributions will not be required in the second access arrangement period.

Considerations of the Authority

491. Under section 6.37A of the Access Code, an amount in respect of a tariff equalisation contribution may be added to target revenue only if the service provider is required by a notice under section 129D(2) of the *Electricity Industry Act 2004* to pay the same amount into the tariff equalisation fund. In the proposed access arrangement revisions submitted in October 2008, Western Power indicated that this would not occur for the second access arrangement period and, accordingly, no amount has been added to target revenue. This is in accordance with provisions of the Access Code and, accordingly, the Authority determined in the Draft Decision an amount of target revenue that excluded any allowance for a tariff equalisation contribution.
492. Notwithstanding this determination, the Authority also recognised in the Draft Decision that State Government was considering the possible amounts of a tariff equalisation contribution for the term of the second access arrangement period. The Department of Treasury and Finance indicated to the Authority that these amounts may be in the order of \$115.4 million in 2009/10, \$140.9 million in 2010/11 and \$146.4 million in 2011/12 (in nominal dollar values).¹⁹⁰
493. Subsequent to the Draft Decision, the Treasurer has given notice that tariff equalisation contributions will be required for each of the years of the second access arrangement period, as follows (in nominal dollar values):
- 2009/10 – \$122.1 million;
 - 2010/11 – \$175.7 million; and
 - 2011/12 – \$181.2 million.¹⁹¹
494. The Authority observes that the amount of the tariff equalisation contribution for the second access arrangement period (a total of \$479.0 million) is substantially greater than the amount of \$213.3 million (in nominal dollar values) that applied (in total) for the first access arrangement period. This is despite increases in retail electricity tariffs during 2009 that would have increased the revenues of Horizon Power.
495. The Authority is not party to information on either the manner in which the values of the tariff equalisation contributions have been derived, or the mechanisms by which Horizon Power is held accountable for activities and expenditures financed by the tariff equalisation contributions (The Treasurer did not utilise the provisions of section 129E of the *Electricity Industry Act 2004* to seek the assessment and advice of the Authority before making his determination).
496. Under section 6.37A of the Access Code, the Authority has a discretion in whether or not to allow the amount of the tariff equalisation contribution to be added to target revenue. In exercising this discretion for the purposes of this Final Decision, the

¹⁹⁰ Email advice from the Department of Treasury and Finance of 13 May 2009.

¹⁹¹ Government Gazette No. 153, 25 August 2009, p. 3325. Government Gazette No. 208, 17 November 2009, p. 4639.

Authority has had no basis to consider the reasonableness of the amount of the tariff equalisation contribution. This is of concern to the Authority given the substantial value of the required tariff equalisation contribution and the consequent effect on target revenue and the value of reference tariffs – the tariff equalisation contribution constitutes 23 per cent of reference tariff charges for distribution services and causes average distribution tariffs to increase at an annual average rate of CPI + 17.7 per cent over the second access arrangement period, rather than CPI + 2.0 per cent, which would result from this Final Decision if the tariff equalisation contribution was excluded.

497. Notwithstanding this, the Authority recognises that Western Power is required to pay the tariff equalisation contributions and, on this basis, the Authority allows the gazetted tariff equalisation contribution amounts to be added to the target revenue for the second access arrangement period.

Non-Capital Costs

Access Code Requirements

498. Section 6.40 of the Access Code makes provision for the total costs and target revenue to include an amount in respect of forecast non-capital costs for the access arrangement period.

6.40 Subject to section 6.41, the non-capital costs component of approved total costs for a covered network must include only those non-capital costs which would be incurred by a service provider efficiently minimising costs.

499. Sections 6.41 and 6.42 of the Access Code provide for the non-capital costs component of target revenue to include the non-capital costs of an “alternative option” of providing covered services, subject to certain conditions being met. An alternative option refers to an activity undertaken by Western Power for the purposes of providing a covered service as an alternative to investing in a major augmentation of the network.¹⁹² An alternative option may include such activities as demand-side management or generation either instead of, or in addition to, network augmentation.

6.41 Where, in order to maximise the net benefit after considering alternative options, a service provider pursues an alternative option in order to provide covered services, the non-capital costs component of approved total costs for a covered network may include non-capital costs incurred in relation to the alternative option (“alternative option non-capital costs”) if:

- (a) the alternative option costs do not exceed the amount of alternative option costs that would be incurred by a service provider efficiently minimising costs; and
- (b) at least one of the following conditions is satisfied:
 - (i) the additional revenue for the alternative option is expected to at least recover the alternative option costs; or

¹⁹² A major augmentation of the network is defined in section 1.3 of the Access Code as an augmentation with a cost exceeding \$10 million (CPI adjusted) for the distribution network or \$30 million (CPI adjusted) for the transmission network.

- (ii) the alternative option provides a net benefit in the covered network over a reasonable period of time that justifies higher reference tariffs; or
- (iii) the alternative option is necessary to maintain the safety or reliability of the covered network or its ability to provide contracted covered services.

6.42 For the purposes of section 6.41(b)(i) “additional revenue” for an alternative option means:

- (a) the present value (calculated at the rate of return over a reasonable period) of the increased tariff income reasonably anticipated to arise from the increased sale of covered services on the network to one or more users (where “increased sale of covered services” means sale of covered services which would not have occurred had the alternative option not been undertaken); minus
- (b) the present value (calculated at the rate of return over the same period) of the best reasonable forecast of the increase in non-capital costs (other than alternative option costs) directly attributable to the increased sale of the covered services (being the covered services referred to in the expression “increased sale of covered services” in section 6.42(a)),

where the “rate of return” is a rate of return determined by the Authority in accordance with the Code objective and in a manner consistent with this Chapter 6, which may be the rate of return most recently approved by the Authority for use in the price control for the covered network under this Chapter 6.

Proposed Revisions

- 500. Under the proposed price control for the second access arrangement period, Western Power has made an allowance in target revenue for forecast non-capital costs for the transmission and distribution networks.
- 501. Subsequent to submission of the proposed access arrangement revisions, Western Power advised the Authority that the forecasts of non-capital costs (along with forecasts of new facilities investment) will be revised to take into account the effect of the global financial crisis on local economic conditions and budget constraints imposed by the State Government.¹⁹³ Western Power provided the Authority with “indicative anticipated revisions” to forecasts of costs, indicating reductions in forecast non-capital costs from the original forecasts of 12 per cent for the transmission network and 13 per cent for the distribution network (in real terms).
- 502. The Authority addressed both the originally proposed forecasts and revised forecasts in the Draft Decision.
- 503. Subsequent to the Draft Decision, Western Power has submitted to the Authority details of actual non-capital costs for 2008/09, and further revised forecasts for the second access arrangement period.¹⁹⁴
- 504. Table 18 and Table 19 show Western Power’s actual non-capital costs for the first access arrangement period, forecasts of non-capital costs as originally submitted in

¹⁹³ Western Power, 25 May 2009, Letter from Mr Phil Southwell, General Manager Strategy and Corporate Affairs.

¹⁹⁴ Western Power submission of 10 September 2009.

October 2008, the anticipated revised forecasts for the second access arrangement period submitted to the Authority in May 2009, and the further revised forecasts submitted to the Authority subsequent to the Draft Decision (September 2009).

**Table 18 Non-capital costs for the transmission network
(real \$ million at 30 June 2009)¹⁹⁵**

	Year	Year	Year
First access arrangement period	2006/07	2007/08	2008/09
Forecast ¹⁹⁶	72.77	75.10	75.64
Actual ¹⁹⁷	74.12	74.46	73.07
Second access arrangement period	2009/10	2010/11	2011/12
Original forecast (October 2008) ¹⁹⁸	100.90	105.97	112.78
Anticipated revised forecast (May 2009) ¹⁹⁹	77.19	96.17	108.55
Revised forecast (September 2009) ²⁰⁰	75.89	96.75	103.83

¹⁹⁵ Numerical amounts throughout this Final Decision are generally shown to 2 decimal places and, hence, where total amounts are shown these amounts may not total exactly due to rounding.

¹⁹⁶ Revised access arrangement information, Appendix 9. Values differ from those shown in the Draft Decision due to the application of actual inflation for 2008/09.

¹⁹⁷ Western Power, submission of 10 September 2009. Values differ from those shown in the Draft Decision due to the application of actual inflation for 2008/09.

¹⁹⁸ Revised access arrangement information, Appendix 7 (Revenue Model).

¹⁹⁹ Western Power, 25 May 2009, Letter from Mr Phil Southwell, General Manager Strategy and Corporate Affairs. Real dollar values calculated using inflation factors applied by Western Power (revised access arrangement information, Appendix 7: Revenue Model).

²⁰⁰ Western Power submission of 10 September 2009.

**Table 19 Non-capital costs for the distribution network
(real \$ million at 30 June 2009)**

	Year	Year	Year
First access arrangement period	2006/07	2007/08	2008/09
Forecast ²⁰¹	205.93	207.49	211.49
Actual ²⁰²	251.10	255.69	284.05
Second access arrangement period	2009/10	2010/11	2011/12
Original forecast (October 2008) ²⁰³	393.99	416.48	436.37
Anticipated revised forecast (May 2009) ²⁰⁴	287.39	366.40	426.43
Revised forecast (September 2009) ²⁰⁵	283.65	360.13	417.97

505. Western Power has provided supporting information for the forecasts of non-capital costs in Appendix 1 of the revised access arrangement information and for the revised forecast in its submission of 10 September 2009.

Considerations of the Authority

Approach to the Assessment of Forecasts of Non-Capital Costs

506. The starting point for the Authority in considering the forecast of non-capital costs is the levels of expenditure in the first access arrangement period. The focus of the Authority's consideration of forecasts of non-capital costs is, firstly, to consider whether actual non-capital costs of the first access arrangement period are consistent with the costs that would be incurred by a service provider efficiently minimising costs and, secondly, whether Western Power has adequately substantiated and justified differences in forecast non-capital costs from the actual non-capital costs incurred in the first access arrangement period.

507. The process adopted by the Authority in considering the forecasts of non-capital costs has been, therefore, to:

- verify records of actual non-capital costs for the first two years of the first access arrangement period for which audited cost data are available (2006/07 and 2007/08), taking into account also information provided by Western Power on actual costs in 2008/09;

²⁰¹ Revised access arrangement information, Appendix 9. Values differ from those shown in the Draft Decision due to the application of actual inflation for 2008/09.

²⁰² Western Power submission of 10 September 2009. Values differ from those shown in the Draft Decision due to the application of actual inflation for 2008/09.

²⁰³ Revised access arrangement information, Appendix 7 (Revenue Model).

²⁰⁴ Western Power, 25 May 2009, Letter from Mr Phil Southwell, General Manager Strategy and Corporate Affairs. Real dollar values calculated using inflation factors applied by Western Power (revised access arrangement information, Appendix 7: Revenue Model).

²⁰⁵ Western Power submission of 10 September 2009.

- assess whether the actual non-capital costs for the first access arrangement period are efficient and consistent with the requirements of section 6.40 of the Access Code; and
- assess whether Western Power has provided adequate justification for forecast trends and step changes in levels of non-capital costs over the term of the second access arrangement period.

Verification of Non-Capital Costs in the First Access Arrangement Period

508. For the verification of non-capital costs in the first access arrangement period, Western Power provided regulatory accounts that reconcile costs of regulated activities with a set of base accounts for the business.²⁰⁶ Taking into account that the regulatory accounts presented by Western Power were audited for Western Power by the Office of the Auditor General and the results of an independent review of the accounts commissioned by the Authority,²⁰⁷ the Authority is satisfied that the regulatory accounts provide a true and correct indication of non-capital costs in 2006/07 and 2007/08. Details of this verification were provided in the Draft Decision.²⁰⁸
509. While Western Power has, subsequent to the Draft Decision, provided the Authority with information on actual non-capital costs in 2008/09, the Authority has not received regulatory accounts for 2008/09 and has not sought to verify this information.

Efficiency of Non-Capital Costs in the First Access Arrangement Period

510. The Authority has given consideration to whether the actual non-capital costs for the first access arrangement period are consistent with a service provider efficiently minimising costs and therefore constitute a relevant cost base against which forecasts of non-capital costs for the second access arrangement period can be assessed.
511. The revised access arrangement information does not include information relevant to establishing the efficiency of non-capital costs in the first access arrangement period.
512. Western Power has some incentives to efficiently minimise non-capital costs by virtue of the incentive properties of the revenue cap price control applying under the current access arrangement. That is, Western Power would have an incentive to seek efficiencies in non-capital costs due to an ability to retain the benefits of cost savings relative to the forecasts on which the price control was set, and also due to Western Power being exposed to the risk of cost overruns relative to the forecasts.
513. Notwithstanding the incentives for efficiency in non-capital costs, the Authority observes that there has been a substantial overrun of non-capital costs for the distribution network in the first access arrangement period, by an amount of approximately 27 per cent (Table 18 and Table 19 at paragraph 504, above). This overrun occurred against a background of the Authority having allowed Western

²⁰⁶ Revised access arrangement information, Appendices 8 and 9.

²⁰⁷ BDO Kendalls, 2 July 2009, Regulatory Financial Audit Western Power.

²⁰⁸ Draft Decision, paragraphs 384 to 386.

Power to submit revisions to forecasts of non-capital costs during the course of the assessment of the proposed access arrangement for the first access arrangement period, which included a 12 per cent increase in forecast costs, and approval of these revised and higher forecasts in the determination of target revenue for that period.

514. Western Power attributes the overrun of non-capital costs to:

- a carryover of work and/or invoiced costs from 2005/06 to the first year of the access arrangement period (2006/07);
- greater than expected inflation of costs of labour, materials and contractors;
- greater than anticipated work volumes as asset management plans and maintenance regimes were implemented, and due to an increase in faults as a result of the poor condition of some distribution assets;
- less than expected savings from initiatives undertaken to improve the efficiency of operation and maintenance activities; and
- unanticipated requirements for network-support generation.²⁰⁹

515. In view of this overrun, the Authority considers that there is reason to assess the efficiency of the actual non-capital costs in the first access arrangement period before the level of actual non-capital costs can be accepted as being consistent with a service provider efficiently minimising costs, and therefore constitute a relevant cost base against which forecasts of non-capital costs for the second access arrangement period can be assessed. The Authority has undertaken this assessment by considering:

- the governance arrangements and business processes for operation and maintenance activities; and
- comparisons of cost indices between Western Power and other transmission and distribution businesses.

516. In reviewing governance arrangements and business processes, the Authority has obtained advice from Geoff Brown & Associates. The advice identifies deficiencies in governance and business processes for operating and maintenance activities, consistent with other evidence for deficiencies in cost control by Western Power. These deficiencies included fragmentation and lack of coordination of maintenance activities for the distribution network, planning of maintenance activities in an *ad hoc* manner that is likely to have varied across operating divisions, and inefficiencies in contractual arrangements for major work programs such as vegetation management and asset inspections. The advice indicates that these deficiencies were being addressed by changes in management practices during the course of the first access arrangement period.²¹⁰

517. A comparison of cost indices for operating expenditures for transmission and distribution businesses has been compiled by Wilson Cook & Co.²¹¹ The

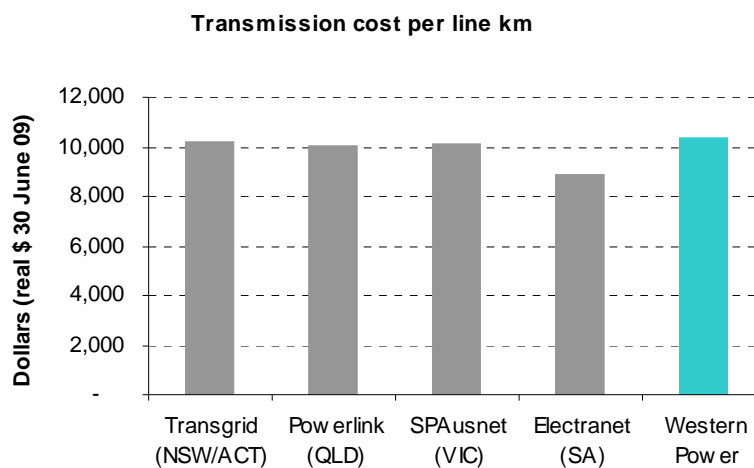
²⁰⁹ Revised access arrangement information, Appendix 1: pp. 153, 154.

²¹⁰ Geoff Brown & Associates Ltd, 14 July 2009, Review of Expenditure Governance: Western Power.

²¹¹ Wilson Cook & Co Ltd, May 2009, Review of Western Power's Expenditures for Second Access Arrangement Final Report, pp. 74, 85.

comparison of costs indices for 2007/08 of cost per line kilometre for transmission and cost per customer, cost per line kilometre and cost per kWh for distribution indicate a cost performance of Western Power within the range of measures for other network businesses, albeit at the top end of the range (Figures 1 to 4 below).

Figure 1 Transmission cost per line km for 2007/08 of non-capital costs for Western Power and other Australian electricity network businesses²¹²



²¹² Wilson Cook & Co Ltd, May 2009, Review of Western Power's Expenditures for Second Access Arrangement Final Report. Further analysis undertaken by the Authority using additional sources: Eastern States network statistics (km and MW) sourced from Australian Energy Regulator, State of the Energy Market 2008 and operating costs sourced from final regulatory determinations of the Australian Energy Regulator.

Figure 2 Distribution cost per line km for 2007/08 of non-capital costs for Western Power and other Australian electricity network businesses²¹³

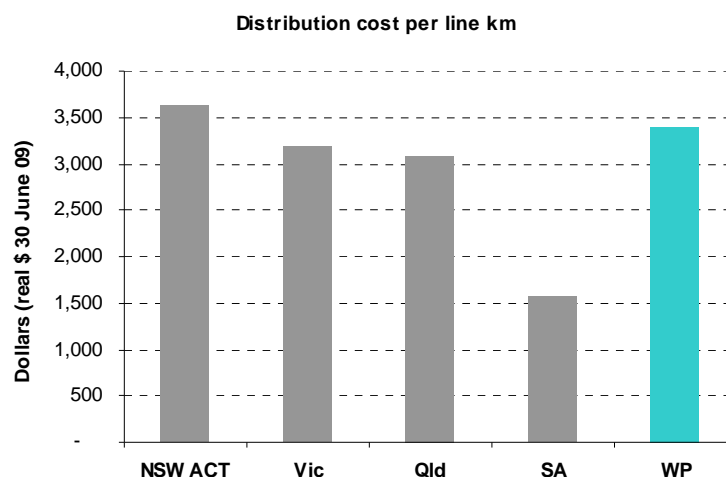
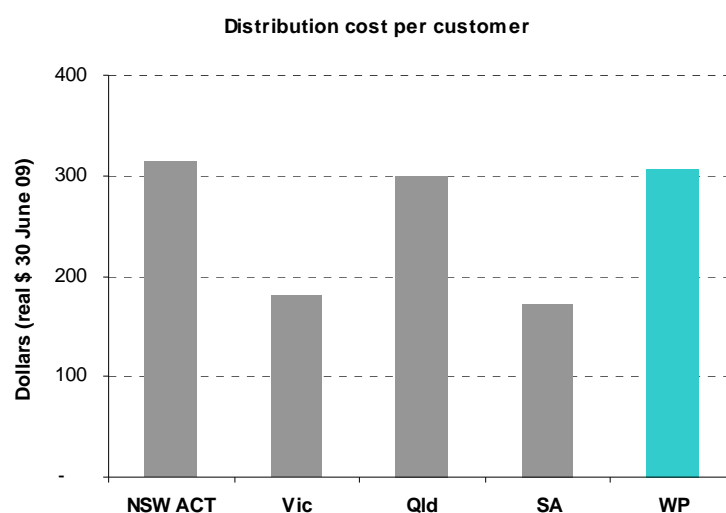


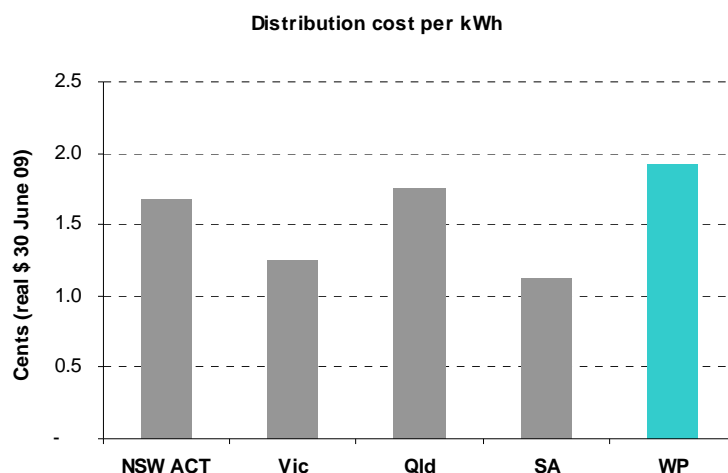
Figure 3 Distribution cost per customer for 2007/08 of non-capital costs for Western Power and other Australian electricity network businesses²¹⁴



²¹³ Wilson Cook & Co Ltd, May 2009, Review of Western Power's Expenditures for Second Access Arrangement Final Report. Further analysis undertaken by the Authority using additional sources: Eastern States network statistics (customers, km and GMh) sourced from distribution network service provider performance reports for 2007/08 and operating costs sourced from final regulatory determinations of the Australian Energy Regulator.

²¹⁴ Wilson Cook & Co Ltd, May 2009, Review of Western Power's Expenditures for Second Access Arrangement Final Report. Further analysis undertaken by the Authority using additional sources: Eastern States network statistics (customers, km and GMh) sourced from distribution network service provider performance reports for 2007/08 and operating costs sourced from final regulatory determinations of the Australian Energy Regulator.

Figure 4 Distribution cost per kWh for 2007/08 of non-capital costs for Western Power and other Australian electricity network businesses²¹⁵



518. This comparison of cost indices is not a conclusive indication that the non-capital costs of Western Power are comparable with those of other network business and accord with industry benchmarks. The comparison does not take into account a range of business-specific factors that may cause cost indices to differ between network businesses for reasons other than cost efficiency. For example, the comparison does not take into account that Western Power may not have been undertaking maintenance activities in accordance with best practice within the industry,²¹⁶ which may cause Western Power's costs to appear artificially low in comparison with other network businesses. Conversely, there may also be characteristics of the SWIN, such as low densities of connections in regional areas that cause unit costs to be greater than for other network businesses. There may also be differences between Western Power and other network businesses in the demarcation between transmission and distribution activities.
519. The advice received by the Authority on governance, business processes and comparisons of cost indices indicates that there may be some doubt as to whether the actual non-capital costs recorded by Western Power for 2007/08 include only those non-capital costs that would be incurred by a service provider efficiently minimising costs. However, the Authority's conclusion is that evidence for a level of inefficiency of costs is limited and, given incentives for efficiencies in non-capital costs, the Authority considers that there are not sufficient grounds to conclude that the actual costs for 2007/08 are inefficient and justify deriving a lower base level of costs as a starting point for the assessment of forecast non-capital costs for the second access arrangement period. Accordingly, the Authority has assessed the forecasts of non-capital costs for the second access arrangement period by

²¹⁵ Wilson Cook & Co Ltd, May 2009, Review of Western Power's Expenditures for Second Access Arrangement Final Report. Further analysis undertaken by the Authority using additional sources: Eastern States network statistics (customers, km and GMh) sourced from distribution network service provider performance reports for 2007/08 and operating costs sourced from final regulatory determinations of the Australian Energy Regulator.

²¹⁶ In the revised access arrangement information (Appendix 1: p. 47), Western Power indicates that some maintenance works have been less than necessary for compliance with policies for asset management resulting in a backlog of maintenance work.

considering the information that may justify changes in costs from the actual costs of 2007/08.

Forecast Increases in Non-Capital Costs

Changes from Actual Costs incurred in the First Access Arrangement Period

520. The method adopted by the Authority to assess Western Power's forecast of non-capital costs has been to consider differences from the level of non-capital costs actually incurred by Western Power in 2007/08 and, for the purposes of this assessment, considered to be efficient within the meaning of section 6.40 of the Access Code. In considering differences between the forecast costs for the second access arrangement period and the actual costs of 2007/08, the Authority has had regard to changes over time in unit costs and to information provided by Western Power to justify step changes in levels of operating activities and the associated non-capital costs. Subsequent to the Draft Decision, this assessment has also been informed by values of actual costs incurred in 2008/09.
521. Western Power has proposed forecasts of non-capital costs that embody significant real increases over actual costs in the first access arrangement period in almost all categories of expenditure.
- Forecasts of non-capital costs included in the proposed access arrangement submissions of October 2008 are, for transmission and distribution respectively, 44 per cent and 58 per cent higher in real terms than actual costs for the first access arrangement period.
 - Forecasts of non-capital costs included in the revised cost forecasts of May 2009 are, for transmission and distribution respectively, 27 per cent and 37 per cent higher in real terms than actual costs for the first access arrangement period.
 - Forecasts of non-capital costs included in the revised cost forecasts subsequent to the Draft Decision are, for transmission and distribution respectively, 25 per cent and 34 per cent higher in real terms than actual costs for the first access arrangement period.
522. This forecast increase in costs is on top of substantial increases in non-capital costs over the course of the first access arrangement period, with actual costs being 19 per cent greater than forecast costs for this period.

High-Level Justifications for Increases in Costs

523. In the revised access arrangement information Western Power describes three high-level drivers of operating expenditure for the transmission and distribution networks:
- expansions in the transmission and distribution networks, with increases in energy demand and new connections for load and generation capacity;
 - an ongoing effect of previously constrained expenditure; and

- a continuing increase in unit costs, particularly in light of the resources boom in Western Australia.²¹⁷
524. For the distribution network, Western Power also indicates that increases in non-capital costs are driven by more onerous safety, health and environmental regulations.²¹⁸

Expansions in the transmission and distribution networks

525. Western Power contends that rises in energy demand and consequent growth of the transmission and distribution network drives increases in non-capital costs through increases in inspection and operation activities, primarily involving:
- an increase in the number of technicians employed to manage and maintain the additional assets; and
 - an increase in the costs of SCADA and communications.²¹⁹
526. These increases in costs are indicated by Western Power to be partially offset by improvements in asset-condition monitoring and the replacement of existing assets with new assets.²²⁰
527. The Authority accepts that the expansions in the transmission and distribution networks will result in higher non-capital costs, particularly in the cost line items of “network operations” and “SCADA & communications”. The Authority has taken this into account in its assessment of forecast costs for these particular cost line items later in this section of the Final Decision.

Previously constrained expenditure

528. Western Power contends that there exists a backlog in preventative maintenance for the transmission and distribution networks arising from budget constraints existing prior to the commencement of the access arrangement for the SWIN on 1 July 2007. This results in increased costs for several work programs for the second access arrangement period to expand inspection and maintenance activities to levels consistent with requirements under asset management policies.²²¹ This includes increased inspection activity and increased vegetation management activity.²²²
529. The Authority has received advice that Western Power’s asset management plans reflect typical practice in the electricity transmission industry in Australasia and that increases in expenditure to conduct preventative maintenance in accordance with the asset management plans are justified.²²³

²¹⁷ Revised access arrangement information, pp. 79 - 81, 127.

²¹⁸ Revised access arrangement information, p. 127.

²¹⁹ Revised access arrangement information, pp. 80, 127.

²²⁰ Revised access arrangement information, pp. 80, 131.

²²¹ Revised access arrangement information, pp. 81, 82, 128.

²²² Revised access arrangement information, p. 128.

²²³ Wilson Cook & Co Ltd, May 2009, Review of Western Power’s Expenditures for Second Access Arrangement Final Report, p. 71.

530. Given the substantial increases in forecast activities and costs for preventative maintenance, the Authority has given consideration to whether Western Power has the capacity to undertake the increased activity. Western Power claims that the increase in the level of maintenance activities is deliverable by a combination of the use of internal resources (80 per cent of expenditure for transmission and 85 per cent for distribution) and contractors (20 per cent of expenditure for transmission and 15 per cent for distribution).²²⁴ Western Power has further indicated that, for the transmission network, corrective maintenance activities and related costs have been reduced by an amount of \$10 million in accordance with constraints on capacity to undertake the activities.²²⁵
531. Western Power provided to the Authority on a confidential basis a report by PB Associates that reviewed the delivery strategy. PB Associates concluded that Western Power's delivery plan for capital and operating works was insufficiently advanced or robust to provide certainty of full implementation of the works program and that reducing the works program by three to five per cent would be prudent.²²⁶
532. The Authority considers that there is a significant potential that the original forecast of non-capital costs put forward by Western Power in the proposed access arrangement revisions may not be a reasonable forecast due to the volume of works and activities not being delivered by Western Power. However, the Authority observes that the revisions to cost forecasts provided to the Authority by Western Power in May 2009 and in Western Power's submission subsequent to the Draft Decision indicate substantially reduced forecasts of maintenance costs in the first two years of the second access arrangement period (2009/10 and 2010/11). The revised forecasts are addressed further below, but at this point the Authority notes that the reduction in costs is greater than the reduction in the work program contemplated by PB Associates to take into account constraints on deliverability. As such, the Authority considers that Western Power has the capacity to deliver the volume of works and activities underlying the anticipated revised forecast of non-capital costs.
533. In a submission subsequent to the Authority's Draft Decision, Western Power indicates that the forecast costs (including both non-capital costs and new facilities investment) for 2009/10 have been revised in accordance with Western Power's 2009/10 budget that has been agreed with the Western Australian Government.²²⁷ Western Power indicates that this has substantially constrained the forecast of costs for 2009/10. The revised forecast of costs includes increasing levels of costs over the second access arrangement period and similar levels of costs for the final year of the second access arrangement period, as indicated in the forecast originally submitted. This suggests that Western Power does not expect the Western Australian Government to impose similar budget constraints in the second and third years of the second access arrangement period, although the likelihood of budget constraints is not explicitly addressed by Western Power.

²²⁴ Revised access arrangement information, pp. 85 – 131.

²²⁵ Wilson Cook & Co Ltd, May 2009, Review of Western Power's Expenditures for Second Access Arrangement Final Report, p. 72.

²²⁶ PB Associates, August 2008, Western Power's Ability to Deliver AA2 Program of Works Business Assurance Report, Prepared for Western Power, p. 10.

²²⁷ Western Power submission of 10 September 2009, Attachment D: p. 6.

Increases in unit costs

534. In deriving forecasts of costs, Western Power has applied escalation factors for real increases in wages, contract services and materials, with composite cost escalators applied for each category of operating expenditure based on the proportions of each of these three categories of inputs to the relevant activities.²²⁸ The escalation factors were produced by Western Power's human resources staff (for internal labour costs) or were provided to Western Power by Access Economics, with the consultant's report provided as Appendix 2 of the revised access arrangement information and cost escalators for various input categories summarised in Appendix 1 of the revised access arrangement information.²²⁹ In summary, the cost escalators applied by Western Power are derived from escalators for particular inputs as follows.
- Real increases in labour costs for all years of the second access arrangement period, with real increases of approximately 2 per cent per annum for external labour and 3.5 per cent per annum for internal labour.
 - Real increases in land costs for all years of the second access arrangement period, with real increases of 2.5 to 3 per cent per annum for Perth land in 2009/10 and 2010/11 and then a substantially greater rate of increase of about 5 per cent in 2011/12, and for non-Perth land real increases of about 2 per cent in 2009/10 and 2010/11 and then a substantially greater rate of increase of about 4 per cent in 2011/12.
 - For most materials, no real increases or slight real decreases in unit costs in 2009/10 and 2010/11 and then substantial real increases in unit costs at a rate of generally 3 to 4 per cent in 2011/12. Exceptions are raw copper and raw aluminium for which real decreases in unit costs are expected for the entire period.
535. These cost escalators were used by Access Economics and Western Power to derive combined materials escalators and average escalators for operating and capital activities (activity escalators) as shown in Table 20.

²²⁸ Revised access arrangement information, p. 81.

²²⁹ Revised access arrangement information, Appendix 1: pp. 54, 55.

Table 20 Combined material escalators and weighted average escalators applied by Western Power in forecasts of capital and operating costs for the second access arrangement period (real annual rate of change, per cent)²³⁰

Escalator category	2009/10	2010/11	2011/12
Labour			
Utilities workers	2.02	1.49	2.03
Western Power internal workers	3.44	3.32	2.73
Combined materials escalators			
Transmission operating	1.10	-1.13	3.44
Transmission capital	1.00	-1.20	3.41
Distribution operating	0.50	-1.51	3.05
Distribution capital	1.24	-1.08	3.52
Activity escalators			
Transmission operating	2.40	1.71	2.57
Transmission capital	1.58	0.08	2.98
Distribution operating	2.30	1.60	2.61
Distribution capital	2.08	0.94	2.80

536. For non-capital costs, the real increases in unit costs and resultant activity escalators contribute to only a small part of the forecast real increases in non-capital costs from 2007/08 levels (as submitted with the proposed access arrangement revisions). The cost escalation factors applied by Western Power indicate that real increases in unit costs account for increases in non-capital costs over the cost levels of 2007/08 of:

- \$23.57 million of the total real increase in non-capital costs of \$96.27 million for the transmission network; and
- \$94.37 million of the total real increase in non-capital costs of \$479.75 million for the distribution network.

537. The report by Access Economics at Appendix 2 of the revised access arrangement information is dated 4 April 2008 and was prepared prior to the global economic downturn in the third quarter of 2008. The cost escalators are likely to have been premised on continuing “economic boom” conditions in Western Australia and the concomitant ongoing strength in labour markets in Western Australia, price pressures on labour costs and land prices, continuing high energy costs and continuing high commodity prices.

538. Following a request from the Authority to re-consider cost escalation rates in light of the economic downturn, Western Power provided the Authority with a further report by Access Economics that presents forecasts of unit cost escalations in labour and

²³⁰ Revised access arrangement information, Appendix 1: p. 55. Real values were calculated using inflation rates as shown in this reference.

materials, updated to May 2009 (Table 21). These revised forecasts include forecasts of real decreases in labour costs for 2010/11 and 2011/12, and real decreases in unit costs of materials over the period.

Table 21 Labour and combined material escalators for capital and operating costs determined at May 2009 (real annual rate of change, per cent)²³¹

Escalator category	2009/10	2010/11	2011/12
Labour			
Utilities workers	3.57	-1.08	-0.58
Combined materials escalators			
Transmission operating	-0.20	-2.54	1.17
Transmission capital	0.99	-4.40	-0.10
Distribution operating	0.30	-3.32	0.00
Distribution capital	-0.60	-2.54	1.27

539. When submitting this further report from Access Economics, Western Power did not advise the Authority of revised escalators for capital and operating activities (activity escalators). In the absence of these calculations, the Authority considered the labour and materials escalators provided in the Access Economics report of May 2009 and took a view in the Draft Decision that it would be reasonable to assume no real increase in unit costs during the course of the second access arrangement period. In the Draft Decision, the Authority took this into account in examining particular categories of forecast costs, with a general view that cost forecasts for the second access arrangement period should not include any allowance for real increases in unit costs.
540. In a submission subsequent to the Draft Decision, Western Power has provided the revised activity escalators determined from the Access Economics report of May 2009 (Table 22).

²³¹ Access Economics, 29 May 2009, Material and labour cost escalation factors. Real values were calculated using forecast inflation rates as shown in this reference.

Table 22 Activity escalators for capital and operating activities determined at May 2009 (real annual rate of change, per cent)²³²

Escalator category	2009/10	2010/11	2011/12
Labour			
Utilities workers	3.53	-1.08	-0.60
Western Power internal workers	4.87	2.38	2.22
Combined materials escalators			
Transmission operating	-0.21	-2.59	1.18
Transmission capital	0.23	-3.35	-0.03
Distribution operating	0.92	-4.37	-0.10
Distribution capital	-0.68	-2.54	1.24
Activity escalators			
Transmission operating	3.34	-0.02	0.84
Transmission capital	2.45	-2.30	-0.23
Distribution operating	3.33	-0.02	0.87
Distribution capital	2.19	-0.76	0.87

541. Western Power indicates that it has applied these cost escalators in determining the revised forecasts of non-capital costs and new facilities investment provided in its submission subsequent to the Draft Decision. The cost escalators indicate real increases in unit costs for capital and operating activities over the course of the second access arrangement period (although with decreases in 2010/11 and, for transmission capital costs, in 2011/12), rather than the zero real increase in unit costs taken into account by the Authority in the Draft Decision.

542. The Authority accepts that the revised cost escalators provided by Western Power are determined on an appropriate basis and has taken these escalators into account in determination of the forecasts of costs for the purposes of this Final Decision.

More onerous safety, health and environmental regulations

543. In the revised access arrangement information, Western Power indicates that increases in non-capital costs for the distribution network are driven by more onerous safety, health and environmental regulations. Western Power indicates that part of the increase in non-capital costs is due to expansion in activities of vegetation management and activities to provide benefits of public safety (bulk globe replacement on streetlights on a three year rather than four year cycle),²³³ but does not relate these activities to changes in regulatory requirements.

²³² Western Power submission of 10 September 2009. Values shown incorporate actual inflation for 2008/09.

²³³ Revised access arrangement information, pp. 128, 129, Appendix 1: section 3.8.

544. In the Draft Decision, the Authority determined that it is unable to take this driver of costs into account in the absence of information on the new regulatory requirements to be faced by Western Power in the second access arrangement period.
545. In its submission subsequent to the Draft Decision, Western Power indicates that increases in expenditures are not driven by new regulatory requirements, but rather compliance with existing regulatory requirements.²³⁴ This is taken into account by the Authority later sections of this decision in relation to particular categories of non-capital costs.

Risks if proposed works are not undertaken

546. Western Power identifies three areas of risks if forecast non-capital costs are not allowed for:
- unacceptable increases in the risk of deterioration in the reliability performance of the transmission network over the medium term (after the second access arrangement period);
 - increases in unacceptable delays in new customer connections during the second access arrangement period; and
 - increases in risks to public safety during and beyond the second access arrangement period.²³⁵
547. In advising the Authority in May 2009 of anticipated revisions to forecasts of non-capital costs, with reductions of 12 to 13 per cent below the original forecasts, Western Power indicated that, in reviewing the forecast expenditures, Western Power “will continue its risk-based approach and develop revised proposals based on the following strategies:
- direct expenditure to progressively address the highest public safety risks and compliance obligation; ... and
 - maintain current levels of reliability”.²³⁶
548. The Authority notes that, regardless of the forecast of non-capital costs taken into account in the approval of the proposed access arrangement revisions, the allocation of available funds across activities and priorities in operation and maintenance of the SWIN is a matter for determination by Western Power. Regardless of the Authority’s decision on the forecast of non-capital costs, Western Power remains accountable for operation of the network, including meeting licence conditions service standard benchmarks and requirements for health and safety.
549. In a submission subsequent to the Draft Decision, Western Power indicates that reductions in forecast non-capital costs from the original forecast submitted with the proposed access arrangement revisions come at the expense of lesser improvements in expected reliability of distribution services as measured by SAIDI

²³⁴ Western Power submission of 10 September 2009, Attachment D: p. 10, 49.

²³⁵ Revised access arrangement information, pp. 85, 132.

²³⁶ Western Power, 25 May 2009, Letter from Mr Phil Southwell, General Manager Strategy and Corporate Affairs.

and SAIFI.²³⁷ The Authority has addressed the revised values of SAIDI and SAIFI in the section of this Final Decision dealing with service standard benchmarks.

Assessment of cost line items

550. The Authority has given consideration to cost line items within the forecast of non-capital costs to determine whether forecast increases in levels of costs, over the actual level of costs recorded for 2007/08, were adequately justified by Western Power in terms of the general drivers of increases in costs or other factors.
551. In the Draft Decision, the Authority determined required amendments to the particular cost line items of the forecast of non-capital costs where it was considered that insufficient justification was provided for increases in costs over the level of actual costs incurred in 2007/08. Subsequent to the Draft Decision, Western Power has provided additional supporting information and made some revisions to the cost forecasts. The Authority's consideration of the additional information and revisions to the cost forecasts is set out as follows.

Business Support Costs

552. The cost forecasts for "business support costs" as presented to the Authority as part of the proposed access arrangement revisions are presented in Table 23, together with actual costs for the first access arrangement period.

Table 23 Actual and forecast business support costs (forecast of October 2008, real \$ million at 30 June 2009)²³⁸

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission	18.54	20.63	24.30	27.39	28.04	28.70
Distribution	46.95	55.35	65.82	76.58	78.70	80.80
Total	65.49	75.98	90.13	103.97	106.74	109.50

553. In the Draft Decision, the Authority compared forecast levels of business support costs with actual costs recorded for 2007/08.
554. Business support costs for the transmission and distribution networks were forecast to be \$92.27 million greater in real terms in total over the second access arrangement period than cost levels of 2007/08, attributed by Western Power to an increase in business support activities and escalation of unit costs. In the anticipated revised forecast of costs (submitted in May 2009) Western Power included a higher forecast of business support costs for 2009/10 (\$31.13 million rather than \$27.39 million for the transmission network, and \$85.39 million rather than \$76.58 million for the distribution network), and approximately the same forecasts for 2010/11 and 2011/12. No explanation was provided for the increase in forecasts costs for 2009/10.

²³⁷ Western Power submission of 10 September 2009, Attachment D: pp. 16 – 18.

²³⁸ Revised access arrangement information, Appendix 9.

555. The Authority determined in the Draft Decision that Western Power had not adequately demonstrated that all of the forecast increase in business support costs of approximately \$92 million over actual costs incurred in 2007/08 is consistent with the requirements of section 6.40 of the Access Code. On the basis of the information provided by Western Power, the Authority determined that a forecast of business support costs for the second access arrangement period that would comply with the requirements of section 6.40 of the Access Code would provide only for a total increase in real costs of \$40 million over 2007/08 costs (equivalent to \$13.3 million in each year), which allows for adequately substantiated increases in costs (\$32 million) plus some increase in business support costs with the size of Western Power's business (\$8 million). The Authority derived a reduced forecast of business support costs allowing for an increase in costs over the second access arrangement period of \$40 million in total, with allocation between the transmission and distribution networks in the same proportions as in the forecasts provided by Western Power.
556. Subsequent to the Draft Decision, Western Power has submitted a revised forecast of business support costs, shown in Table 24, together with the previous forecasts and the values of business support costs determined by the Authority in the Draft Decision.

Table 24 Proposed, Draft Decision and revised forecasts of business support costs (real \$ million at 30 June 2009)²³⁹

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission						
Proposed October 2008				27.39	28.04	28.70
Revised May 2009				31.13	28.06	28.71
Draft Decision				23.52	23.46	23.41
Revised Sept 2009	18.27	20.32	24.56	26.80	28.26	29.56
Distribution						
Proposed October 2008				76.58	78.70	80.80
Revised May 2009				85.39	78.66	80.77
Draft Decision				65.79	65.85	65.90
Revised Sept 2009	46.25	54.53	69.83	72.85	77.17	81.17
Total						
Proposed October 2008				103.97	106.74	109.50
Revised May 2009				116.52	106.73	109.48
Draft Decision				89.31	89.31	89.31
Revised Sept 2009	64.52	74.85	94.39	99.65	105.42	110.73

²³⁹ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

557. The revised forecast of business support costs submitted subsequent to the Draft Decision incorporates a reduction in the forecast for 2009/10 relative to the original forecast (approximately \$4.3 million less) and the revised forecast of May 2009 (approximately \$16.9 million less) but similar amounts for 2011 and 2012. The revised forecast submitted subsequent to the Draft Decision has a total value of business support costs of \$47.9 million greater than the amount of business support costs determined by the Authority in the Draft Decision.
558. In its submission of 10 September 2009, Western Power provides explanation for the increase in forecast business support costs over cost levels of 2007/08 in terms of:
- a step increase in costs from 2007/08 to 2008/09 of \$23.9 million (in real terms), driven principally by increases in “non-discretionary” insurance costs and taxes (\$7.6 million), “semi-discretionary” costs including costs of strategic initiatives and costs of other business improvement initiatives (\$10.4 million), and one-off costs for redundancies and design costs for projects that do not proceed to construction and are written off as an operating expense (\$5.9 million);²⁴⁰ and
 - projections of increases in costs from 2008/09 by 10.4 per cent per annum for non-discretionary costs (amounting to \$18.0 million over the second access arrangement period) and 3.4 per cent per annum for semi-discretionary costs (amounting to 13.8 million over the second access arrangement period).
559. The principal components of increases in costs over the 2008/09 levels of costs appear from the information provided by Western Power to be as follows.
- An increase in costs of “strategy and corporate affairs” of \$8.1 million for an “energy and education” program, increased activities in regulatory support and strategy, a “carbon neutral program”, and escalation of unit costs for existing activities.²⁴¹
 - An increase in costs of finance division activities of \$9.6 million, driven mainly by increased labour costs, increased support for the works program, additional activities to provide for regulatory compliance, and scrutiny of major projects and operations.²⁴²
 - An increase in costs of legal and governance activities of \$4.7 million, driven by increased legal activities and cost of external legal advice, and escalation of costs for existing activities.²⁴³
 - An increase in insurance costs of \$16.7 million, driven by projected increases in insurance premiums and self-insurance losses, based on previous loss

²⁴⁰ Western Power submission of 10 September 2009 Attachment D: pp. 84, 85. The Authority observes that there is a discrepancy between Western Power’s stated values of the increase in costs from 2007/08 to 2008/09 of \$23.9 million in one instance (as indicated in Figure 5-11, p. 84) and \$19.46 million in another instance (as indicated in Table 5-45, p.81).

²⁴¹ Wester Power submission of 10 September 2009, Attachment D: p.90.

²⁴² Wester Power submission of 10 September 2009, Attachment D: p.91.

²⁴³ Wester Power submission of 10 September 2009, Attachment D: pp. 91, 93.

history adjusted to recognise growth in the network and the condition of assets.²⁴⁴

- An increase in rates and taxes of \$3.4 million.²⁴⁵
560. Increases in costs are indicated by Western Power to be partly offset by reduced costs in the CEO division (\$7.4 million over the second access arrangement period), a reduction in costs of administrative services (\$5.1 million), and non-recurrence of one-off costs of redundancies in 2008/09 (\$3.1 million).²⁴⁶
561. The Authority accepts that substantial reforms to the manner in which Western Power conducts its business and initiatives to implement these reforms are necessary. However, Western Power has not provided the Authority with sufficient information to demonstrate that all the increases in semi-discretionary costs relate to these reforms, particularly for activities such as an energy and education program and a carbon neutral program that appear totally discretionary and that account for \$6.3 million over the access arrangement period. The Authority is not prepared to accept that these costs are consistent with the requirements of section 6.40 and requires that the forecast of non-capital costs be reduced by an amount of \$6.3 million in total over the second access arrangement period in respect of business support costs.

Preventative Maintenance

562. The cost forecasts for “preventative routine maintenance” and “preventative condition maintenance” as presented as part of the proposed access arrangement revisions are indicated in Table 25 and Table 26, together with actual costs for the first access arrangement period.

Table 25 Actual and forecast preventative routine maintenance costs (forecast of October 2008, real \$ million at 30 June 2009)²⁴⁷

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission	11.84	11.74	12.09	21.42	22.65	23.91
Distribution	28.95	30.89	31.73	54.11	56.33	59.36
Total	40.79	42.64	43.82	75.53	78.98	83.27

²⁴⁴ Wester Power submission of 10 September 2009, Attachment D: p 94.

²⁴⁵ Wester Power submission of 10 September 2009, Attachment D: p 94.

²⁴⁶ Wester Power submission of 10 September 2009, Attachment D: p 93.

²⁴⁷ Revised access arrangement information, Appendix 9.

Table 26 Actual and forecast preventative condition maintenance costs (forecast of October 2008, real \$ million at 30 June 2009)²⁴⁸

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission	9.36	6.80	10.43	14.17	14.94	17.26
Distribution	35.62	31.82	49.52	91.22	93.07	95.91
Total	44.99	38.62	59.95	105.39	108.01	113.17

563. In the Draft Decision, the Authority compared forecast levels of preventative maintenance costs with actual costs recorded for 2007/08, observing that the forecasts of preventative maintenance costs presented in October 2008 represent substantial increases in costs over the actual costs recorded in 2007/08. For both transmission and distribution, Western Power attributed the forecast increase in preventative maintenance costs to an expansion in inspection and maintenance activities to a level in full compliance with asset maintenance plans and policies as well as an escalation in unit costs.²⁴⁹
564. The anticipated revisions to cost forecasts submitted by Western Power to the Authority in May 2009 incorporated substantial reductions in the forecast costs for preventative maintenance for 2009/10 and 2010/11, but approximately the same forecast costs for 2011/12.
565. The Authority observed in the Draft Decision that the anticipated revisions to forecast preventative maintenance costs include substantial real increases in costs from year to year over the second access arrangement period: a 45 per cent increase in preventative routine maintenance costs from 2009/10 to 2010/11 and 23 per cent increase from 2010/11 to 2011/12; and a 73 per cent increase in preventative condition maintenance costs from 2009/10 to 2010/11 and 34 per cent increase from 2010/11 to 2011/12. Western Power did not provide any information to indicate why, if the anticipated revised forecasts incorporate large reductions to costs in the first year of the second access arrangement period, there remains a need for the very substantial increases over the period such that levels of costs in the final year (2011/12) are the same as the original forecast.
566. In view of the lack of justifying information for the substantial increases in forecast costs over the second access arrangement period, the Authority determined in the Draft Decision that the anticipated revised forecasts were not consistent with the requirements of section 6.40 of the Access Code. The Authority indicated an expectation that Western Power would provide further information to support the anticipated revised forecasts, following the issuing of the Draft Decision. Pending any such information being received, and for the purposes of the Draft Decision, the Authority determined that the year-to-year increases in forecast preventative maintenance costs should be limited to 15 per cent.
567. Subsequent to the Draft Decision, Western Power has submitted further revised forecasts of preventative maintenance costs, shown in Table 27 and Table 28

²⁴⁸ Revised access arrangement information, Appendix 9.

²⁴⁹ Revised access arrangement information, Appendix 1: p. 97, 98, 161.

together with the previous forecasts and the values of preventative maintenance costs determined by the Authority in the Draft Decision.

Table 27 Proposed, Draft Decision and revised forecasts of preventative routine maintenance costs (real \$ million at 30 June 2009)²⁵⁰

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission						
Proposed Oct 2008				21.42	22.65	23.91
Revised May 2009				13.66	19.98	23.90
Draft Decision				13.66	15.71	18.07
Revised Sept 2009	11.66	11.57	14.68	12.99	20.42	25.19
Distribution						
Proposed Oct 2008				54.11	56.33	59.36
Revised May 2009				32.89	47.56	59.37
Draft Decision				32.89	37.82	43.49
Revised Sept 2009	28.52	30.44	36.38	29.54	45.98	52.43
Total						
Proposed Oct 2008				75.53	78.98	83.27
Revised May 2009				46.55	67.54	83.27
Draft Decision				46.55	53.53	61.56
Revised Sept 2009	40.19	42.00	51.05	42.53	66.40	77.62

²⁵⁰ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

Table 28 Proposed, Draft Decision and revised forecasts of preventative condition maintenance costs (real \$ million at 30 June 2009)²⁵¹

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission						
Proposed Oct 2008				14.17	14.94	17.26
Revised May 2009				8.39	13.32	17.23
Draft Decision				8.39	9.65	11.10
Revised Sept 2009	9.22	6.70	8.60	8.93	13.37	12.46
Distribution						
Proposed Oct 2008				91.22	93.07	95.91
Revised May 2009				40.60	71.34	95.96
Draft Decision				40.60	46.68	53.69
Revised Sept 2009	35.10	31.35	48.06	40.13	68.81	107.57
Total						
Proposed Oct 2008				105.39	108.01	113.17
Revised May 2009				48.99	84.66	113.18
Draft Decision				48.99	56.34	64.79
Revised Sept 2009	44.32	38.05	56.65	49.06	82.18	120.02

568. The revised forecast of preventative maintenance costs submitted subsequent to the Draft Decision is similar to the revised forecast submitted to the Authority in May 2009. The revised forecast subsequent to the Draft Decision includes substantially reduced costs in the first year of the second access arrangement period (with forecast costs in that year of \$16 million less than actual costs in 2008/09), and steep year-to-year increases in subsequent periods. Western Power indicates that the reduced forecast of costs in 2009/10 results from constraints imposed by the 2009/10 budget for Western Power agreed with the Western Australian Government and constraints on the deliverability of an increased work program. The steep year-to-year increases in costs in 2010/11 and 2011/12 are indicated to be necessary to address a range of maintenance expenditure priorities and a backlog of maintenance works that results from constrained expenditures in the first access arrangement period and in 2009/10 under budget constraints imposed by the Western Australian Government.

569. Overall, preventative maintenance costs are indicated to be:

- \$197.7 million (82 per cent) greater in real terms over the course of the second access arrangement period than if costs were maintained at the level of actual costs in 2007/08; and

²⁵¹ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

- \$114.7 million (35 per cent) greater in real terms over the course of the second access arrangement period than if costs were maintained at the level of actual costs in 2008/09.
570. In its submission subsequent to the Draft Decision, Western Power has provided explanation for the increases in costs over the course of the second access arrangement period only with reference to actual costs of 2008/09. Western Power has not separately explained the substantial increase in costs from 2007/08 to 2008/09. The Authority would ideally have preferred to examine the cost forecasts against the baseline of costs in the 2007/08 year (as undertaken in the Draft Decision), but has examined the information from Western Power on its merits, despite this applying to a baseline of actual expenditure in 2008/09.
571. For transmission, increases in preventative routine maintenance costs of \$14.5 million over 2008/09 cost levels are explained to be a result of:
- increased rates of inspection of poles, overhead switchgear and substations, accounting for \$6.1 million over the second access arrangement period;
 - growth in the network, accounting for \$3.6 million;
 - addressing a backlog of maintenance works, accounting for \$5.9 million; and
 - escalation of unit costs of \$2.1 million,
- with these increases in costs offset by a decrease in other costs of \$3.2 million.²⁵²
572. For distribution, increases in preventative routine maintenance costs of \$18.8 million over 2008/09 cost levels are explained to be a result of:
- inspection of poles and overhead switchgear and substations, accounting for \$15.1 million over the second access arrangement period;
 - addressing a backlog of maintenance work, accounting for \$8.2 million;
 - bulk globe replacement, accounting for \$1.5 million;
 - growth in the network, accounting for \$2.6 million; and
 - escalation of unit costs of \$4.6 million,
- with these increases in costs offset by a decrease in other costs of \$13.3 million.²⁵³
573. For transmission, increases in preventative condition maintenance costs of \$9.0 million over 2008/09 cost levels are explained to be a result of:
- substation transformer re-clamping, accounting for \$1.5 million over the second access arrangement period;
 - plant and building modifications and refurbishments, accounting for \$1.2 million;
 - growth in the network, accounting for \$1.7 million;
 - addressing a backlog of maintenance works, accounting for \$0.5 million;

²⁵² Western Power submission of 10 September 2009, Attachment D: p. 53.

²⁵³ Western Power submission of 10 September 2009, Attachment D: p. 50.

- other miscellaneous costs, accounting for \$2.8 million; and
- escalation of unit costs of \$1.2 million,

with these increases in costs offset by a decrease in other costs of \$3.2 million.²⁵⁴

574. For distribution, increases in preventative condition maintenance costs of \$72.2 million over 2008/09 cost levels are explained to be a result of:

- pole maintenance, accounting for \$32.2 million over the second access arrangement period;
- additional emergency generation, accounting for \$11.7 million;
- growth in the network, accounting for \$2.8 million;
- addressing a backlog of works, accounting for \$28.3 million; and
- escalation of unit costs of \$8.0 million,

with these increases in costs offset by a decrease in other costs of \$10.8 million.²⁵⁵

575. Western Power provides a detailed summary of the reasons for the additional works and costs. The two largest single components of the increase in costs over cost levels of 2008/09 are to allow a reduction in a backlog of maintenance works and an increase in inspection and maintenance of poles in the distribution network, which together account for approximately \$75 million of the increase in costs of \$114.5 million over the level of costs in 2008/09. Escalation in unit costs accounts for a further \$16 million and growth in the network a further \$9.2 million.

576. Addressing a backlog of preventative maintenance works accounts for approximately \$43 million of the increase in costs over the level of costs in 2008/09. Western Power has provided a detailed breakdown of backlog volumes of defects and breakdowns of the cost estimates of clearing these defects. Western Power also indicates that clearing the backlog of works is necessary to:

- ensure that assets are maintained in accordance with policies and that service levels are maintained;
- reduce the level of equipment failures and emergency maintenance and consequent public safety risks such as bushfires and electric shocks, and
- comply with a notice from the Authority in 2008 requiring action to address outstanding backlog volumes.²⁵⁶

577. The Authority accepts that there is a backlog of maintenance works for the transmission and distribution networks and, on the basis of the information provided by Western Power, that this is reasonably reflected in the forecast costs of preventative maintenance.

²⁵⁴ Western Power submission of 10 September 2009, Attachment D: p. 63.

²⁵⁵ Western Power submission of 10 September 2009, Attachment D: p. 59.

²⁵⁶ Western Power submission of 10 September 2009, Attachment D: pp. 57, 65. The notice referred to is presumably that dated 8 January 2009 in which the Authority observed that the asset management systems for the transmission and distribution networks do not put in place proper measures for maintenance of the networks.

578. The largest single element of the increase in preventative maintenance costs over the level of actual costs in 2008/09 is additional costs of pole inspections and maintenance in the distribution network, at \$32.2 million. The need for this increase in this activity has been independently substantiated by the Western Australian Government's Office of Energy Safety.²⁵⁷ Over the three years from 2009/10, Western Power anticipates that around 170,000 inspections will be undertaken each year, with around 36,000 poles requiring maintenance at an average cost of \$1,013.24 per pole.²⁵⁸ These maintenance figures exclude replacement and reinforcement of poles, which are contained in capital expenditure.
579. On the basis of the information provided by Western Power, the Authority accepts that the forecast of preventative maintenance costs satisfies the requirements of section 6.40 of the Access Code.

Corrective Maintenance

580. The cost forecasts for "corrective deferred maintenance" and "corrective emergency maintenance" as presented to the Authority as part of the proposed access arrangement revisions are indicated in Table 29 and Table 30, together with actual costs for the first access arrangement period.

Table 29 Actual and forecast corrective deferred maintenance costs (forecast of October 2008, real \$ million at 30 June 2009)²⁵⁹

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission	3.44	4.84	4.45	5.73	6.53	7.21
Distribution	27.66	28.11	22.82	23.33	25.71	28.45
Total	31.10	32.95	27.27	29.05	32.24	35.66

Table 30 Actual and forecast corrective emergency maintenance costs (forecast of October 2008, real \$ million at 30 June 2009)²⁶⁰

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission	1.72	1.85	1.86	2.98	3.27	3.42
Distribution	56.50	60.45	48.83	71.03	74.31	78.45
Total	58.23	62.30	50.69	74.01	77.58	81.87

²⁵⁷ Energy Safety 2009, 2008 Distribution Wood Pole Audit Review: A Review of Western Power's Response to the 2006 Regulatory Compliance Assessment of Western Power's Distribution Wood Pole Management Systems.

²⁵⁸ An inspection rate of 170,000 poles is based on a fault rate of 0.21 per pole top inspection together with 36,000 faults detected each year. Western Power submission of 10 September 2009, Attachment D: p. 60.

²⁵⁹ Revised access arrangement information, Appendix 9.

²⁶⁰ Revised access arrangement information, Appendix 9.

581. In the Draft Decision, the Authority compared forecast levels of corrective maintenance costs with actual costs recorded for 2007/08.
582. The Authority observed that the forecast corrective deferred maintenance costs for transmission were substantially greater in real terms than the actual costs recorded in 2007/08. Western Power attributed the forecast increase in corrective maintenance costs to an increase in corrective maintenance activities and real increases in unit costs.
583. The forecast corrective deferred maintenance costs for the distribution network were observed to be below or similar to the level of actual costs for 2007/08 in real terms.
584. Corrective emergency maintenance costs for the transmission and distribution networks were forecast to be substantially greater in real terms in total over the second access arrangement period than cost levels of 2007/08.
585. In supporting documents to the proposed access arrangement revisions, Western Power provided very limited justification or reasons for the changes in corrective emergency maintenance costs, other than indicating that the cost forecasts are based on historical trends and cost escalation factors.²⁶¹ The increase in corrective emergency maintenance costs for the distribution network in 2009/10 was indicated to be in part due to a forecast increase in hire costs for emergency response generators for the purposes of decreasing the number of customers affected by planned outages, with an expected effect of improving performance as measured by SAIDI.²⁶²
586. The Authority received advice that the overall increasing trend in corrective maintenance costs is unreasonable given the increased preventative maintenance costs being proposed by Western Power.²⁶³ While the increase in preventative maintenance activities and costs may not give rise to an immediate reduction in corrective maintenance costs, there is an apparent inconsistency with the increase in preventative maintenance activities being associated with a rising trend in corrective maintenance costs, rather than these costs remaining approximately constant in real terms. Notwithstanding this advice, the Authority recognised that the forecast corrective maintenance costs reflect not only a rate of faults, which may be expected to be stabilised or reduced by an increase in preventative maintenance activities, but also by additional corrective maintenance activities to improve service standards while addressing the same number of faults. The additional use and costs of emergency response generators are a case in point.
587. The anticipated revisions to forecast corrective maintenance costs submitted to the Authority in May 2009 incorporated reductions in forecast costs for 2009/10, but then substantial real increases in costs from year to year over the second access arrangement period: a 61 per cent increase in corrective deferred maintenance costs from 2009/10 to 2010/11 and an 11 per cent increase from 2010/11 to 2011/12; and a 20 per cent increase in corrective emergency maintenance costs from 2009/10 to 2010/11 and 14 per cent increase from 2010/11 to 2011/12.

²⁶¹ Revised access arrangement information, Appendix 1: pp. 100, 101, 162, 163.

²⁶² Revised access arrangement information, Appendix 1: pp. 157, 158.

²⁶³ Wilson Cook & Co Ltd, May 2009, Review of Western Power's Expenditures for Second Access Arrangement Final Report, pp. 72, 82.

Western Power did not provide any information to indicate why, if the anticipated revised forecasts incorporate large reductions to costs in the first year of the second access arrangement period, there remains a need for the substantial increases over the period such that levels of cost in the final year (2011/12) are the same as the original forecast.

588. In view of the lack of justifying information for the increases in forecast costs over the second access arrangement period, the Authority determined in the Draft Decision that the anticipated revised forecasts are not consistent with the requirements of section 6.40 of the Access Code. The Authority indicated an expectation that Western Power would provide further information to support the anticipated revised forecasts following the issuing of this Draft Decision. Pending any such information being received, and for the purposes of the Draft Decision, the Authority determined that the year-to-year increases in forecasts costs should be limited to 15 per cent.
589. Subsequent to the Draft Decision, Western Power has submitted further revised forecasts of corrective maintenance costs, shown in Table 31 and Table 32 together with the previous forecasts and the values of corrective maintenance costs determined by the Authority in the Draft Decision.

Table 31 Proposed, Draft Decision and revised forecasts of corrective deferred maintenance costs (real \$ million at 30 June 2009)²⁶⁴

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission						
Proposed October 2008				5.73	6.53	7.21
Revised May 2009				4.49	6.56	7.22
Draft Decision				4.49	5.16	5.94
Revised Sept 2009	3.39	4.77	5.74	4.33	7.95	8.33
Distribution						
Proposed October 2008				23.33	25.71	28.45
Revised May 2009				15.52	25.68	28.43
Draft Decision				15.52	17.84	20.52
Revised Sept 2009	27.25	27.70	16.74	11.25	16.65	17.95
Total						
Proposed October 2008				29.05	32.24	35.66
Revised May 2009				20.01	32.25	35.66
Draft Decision				20.01	23.01	26.46
Revised Sept 2009	30.64	32.47	22.48	15.59	24.60	26.28

²⁶⁴ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

Table 32 Proposed, Draft Decision and revised forecasts of corrective emergency maintenance costs (real \$ million at 30 June 2009)²⁶⁵

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission						
Proposed October 2008				2.98	3.27	3.42
Revised May 2009				1.85	3.23	3.43
Draft Decision				1.85	2.13	2.45
Revised Sept 2009	1.70	1.83	1.21	1.89	2.23	2.65
Distribution						
Proposed October 2008				71.03	74.31	78.45
Revised May 2009				58.06	68.49	78.45
Draft Decision				58.06	66.77	76.79
Revised Sept 2009	55.67	59.56	64.45	70.62	73.96	76.62
Total						
Proposed October 2008				74.01	77.58	81.87
Revised May 2009				59.92	71.72	81.88
Draft Decision				59.92	68.91	79.24
Revised Sept 2009	57.36	61.38	65.66	72.51	76.19	79.27

590. The revised forecast of corrective maintenance costs submitted subsequent to the Draft Decision constitutes a reduction in corrective deferred maintenance costs for the distribution network relative to the revised forecasts of May 2009, largely offset by an increase in forecast corrective emergency maintenance costs. In total, the latest revised forecast of corrective maintenance costs for the second access arrangement period is approximately \$7 million less than the revised forecast of May 2009 and \$17 million greater than the amount of costs determined by the Authority in the Draft Decision.

591. Overall, corrective maintenance costs are indicated to be:

- \$12.9 million (4.6 per cent) greater in real terms over the course of the second access arrangement period than if costs were maintained at the level of actual costs in 2007/08; and
- \$30.0 million (11 per cent) greater in real terms over the course of the second access arrangement period than if costs were maintained at the level of actual costs in 2008/09 (noting that corrective maintenance costs in 2008/09 were actually less than in 2007/08).

²⁶⁵ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

592. In its submission subsequent to the Draft Decision, Western Power has provided explanation for the increases in costs over the course of the second access arrangement period only with reference to actual costs of 2008/09. Western Power has not separately explained the decrease in costs from 2007/08 to 2008/09. The Authority would ideally have preferred to examine the cost forecasts against the baseline of costs in the 2007/08 year (as undertaken in the Draft Decision), but has examined the information from Western Power on its merits, despite this applying to a baseline of actual expenditure in 2008/09.
593. For transmission, increases in corrective deferred maintenance costs of \$3.5 million over 2008/09 cost levels are explained to be a result of:
- clearing of a backlog of maintenance works, accounting for \$1.6 million over the second access arrangement period;
 - growth in the network, accounting for \$1.1 million;
 - environmental clean-up, accounting for \$1.7 million;
 - emergency follow-up corrective maintenance, accounting for \$2.2 million; and
 - escalation of unit costs of \$0.7 million,
- with these costs offset by a decrease in other costs of \$3.8 million.²⁶⁶
594. For distribution, decreases in corrective deferred maintenance costs of \$4.4 million over 2008/09 cost levels are explained to be a result of:
- a shift of costs (3.3 million in 2008/09) in respect of asset damage, car versus pole and graffiti repair to non-reference services;
 - emergency follow-up corrective maintenance of underground assets, accounting for \$3.5 million over the second access arrangement period;
 - growth in the network, accounting for \$1.8 million; and
 - escalation of unit costs of \$1.6 million,
- with these costs offset by a decrease in other costs of \$1.3 million.²⁶⁷
595. For transmission, increases in corrective emergency maintenance costs of \$3.2 million over 2008/09 cost levels are explained to be a result of:
- emergency maintenance costs, accounting for \$2.3 million over the second access arrangement period;
 - growth in the network, accounting for \$0.5 million;
 - other miscellaneous costs, accounting for \$0.1 million; and
 - escalation of unit costs of \$0.2 million.²⁶⁸
596. For distribution, increases in corrective emergency maintenance costs of \$27.7 million over 2008/09 cost levels are explained to be a result of:

²⁶⁶ Western Power submission of 10 September 2009, Attachment D: p. 68.

²⁶⁷ Western Power submission of 10 September 2009, Attachment D: p. 66. Email from Western Power to the Economic Regulation Authority of 20 November 2009.

²⁶⁸ Western Power submission of 10 September 2009, Attachment D: p. 72.

- primary response group costs, accounting for \$9.4 million over the second access arrangement period;
- additional emergency generation, accounting for \$4.5 million;
- growth in the network, accounting for \$5.0 million;
- other miscellaneous works, accounting for \$1.0 million; and
- escalation of unit costs of \$7.9 million;

with these costs offset by a decrease in other costs of \$0.1 million.²⁶⁹

597. In its submission subsequent to the Draft Decision, Western Power has provided detailed explanation of increases in corrective maintenance costs. The two largest single components of the \$30.0 million increase in costs over cost levels of 2008/09 are an increase in costs of primary response groups for the distribution network (\$9.4 million) and additional emergency generation (\$4.5 million). Escalation in unit costs accounts for a further \$10.4 million and growth in the network a further \$8.4 million, and the total increases are offset by other cost reductions.
598. The increase in costs of primary response groups is indicated by Western Power to be a result of increases in the incidences of network faults with the increased costs reflecting a trend of increased costs.²⁷⁰ The Authority considers that the projected increase in costs on the basis of a longer term trend is inconsistent with increasing levels of preventative maintenance over the second access arrangement period. As such, the Authority is not satisfied that the forecast increase in costs of primary response groups of \$9.4 million is consistent with the requirements of section 6.40 of the Access Code. The Authority considers that this amount should be significantly reduced by increases in preventative maintenance and the clearing of maintenance backlogs. In the absence of specific information to assess this increase in more detail, considers that the amount should be half of that forecast by Western Power, a reduction of \$4.7 million.
599. Other than this amount, the Authority accepts that the information provided by Western Power on the forecast of corrective maintenance costs provides sufficient basis to conclude that the forecast costs are consistent with the requirements of section 6.40 of the Access Code.

Network Operations and SCADA & Communications

600. The cost forecasts for “network operations” and “SCADA & communications” as presented to the Authority as part of the proposed access arrangement revisions are indicated in Table 33 and Table 34, together with actual costs for the first access arrangement period.

²⁶⁹ Western Power submission of 10 September 2009, Attachment D: p. 70.

²⁷⁰ Western Power submission of 10 September 2009, Attachment D: p. 70.

Table 33 Actual and forecast network operations costs (forecast of October 2008, real \$ million at 30 June 2009)²⁷¹

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission	6.52	12.77	9.64	12.92	14.00	14.70
Distribution	13.33	10.81	13.58	20.03	21.83	23.20
Total	19.85	23.58	23.22	32.96	35.83	37.90

Table 34 Actual and forecast SCADA & communications costs (forecast of October 2008, real \$ million at 30 June 2009)²⁷²

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission	7.00	7.17	6.00	8.12	8.93	9.92
Distribution	1.40	1.24	1.08	1.39	1.43	1.62
Total	8.39	8.40	7.08	9.51	10.37	11.54

601. In the Draft Decision, the Authority compared forecast levels of network operations costs and SCADA & communications costs with actual costs recorded for 2007/08.
602. The Authority observed that network operations costs and SCADA and communications costs for the transmission and distribution networks were forecast to be substantially greater in real terms in total over the second access arrangement period than cost levels of 2007/08. Western Power attributed the increases to increases in the underlying activities associated with the expansion of the transmission and distribution networks, increased operations to support capital and maintenance programs, and escalation of unit costs.
603. In the Draft Decision, the Authority took the view that the increases in costs were adequately justified by the expected increase in network operations and communications activities requirements with expansion of the network. The Authority determined that the forecast network operations and SCADA & communications costs, less a correction to remove allowances for escalation in unit costs during the second access arrangement period, would be consistent with the requirements of section 6.40 of the Access Code.
604. The anticipated revisions to cost forecasts submitted by Western Power to the Authority in May 2009 incorporated substantial reductions in the forecast costs for network operations and SCADA & communications.
605. Given that Western Power submitted the anticipated revisions to forecast network operations and SCADA & communications costs with a reduction in these costs by an amount greater than the amount attributable to escalation in unit costs, the

²⁷¹ Revised access arrangement information, Appendix 9.

²⁷² Revised access arrangement information, Appendix 9.

Authority determined in the Draft Decision that the forecast costs should be amended in accordance with Western Power's anticipated revisions to the forecast costs.

606. Subsequent to the Draft Decision, Western Power has submitted further revised forecasts of network operations costs and SCADA & communications costs, shown in Table 35 and Table 36 together with the previous forecasts and the values of these costs determined by the Authority in the Draft Decision.

Table 35 Proposed, Draft Decision and revised forecasts of network operations costs (real \$ million at 30 June 2009)²⁷³

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission						
Proposed October 2008				12.92	14.00	14.70
Revised May 2009				9.17	9.80	10.56
Draft Decision				9.17	9.80	10.56
Revised Sept 2009	6.43	12.58	10.52	13.57	14.31	14.60
Distribution						
Proposed October 2008				20.03	21.83	23.20
Revised May 2009				17.08	18.36	19.64
Draft Decision				17.08	18.36	19.64
Revised Sept 2009	13.13	10.65	15.78	20.12	21.15	21.89
Total						
Proposed October 2008				32.96	35.83	37.90
Revised May 2009				26.25	28.16	30.19
Draft Decision				26.25	28.16	30.19
Revised Sept 2009	19.56	23.23	26.31	33.69	35.47	36.49

²⁷³ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

Table 36 Proposed, Draft Decision and revised forecasts of SCADA & communications costs (real \$ million at 30 June 2009)²⁷⁴

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission						
Proposed October 2008				8.12	8.93	9.92
Revised May 2009				7.51	7.61	9.91
Draft Decision				7.51	7.61	9.91
Revised Sept 2009	6.89	7.06	5.96	6.51	8.72	9.53
Distribution						
Proposed October 2008				1.39	1.43	1.62
Revised May 2009				1.76	1.43	1.57
Draft Decision				1.76	1.43	1.57
Revised Sept 2009	1.38	1.22	0.93	0.86	1.41	1.57
Total						
Proposed October 2008				9.51	10.37	11.54
Revised May 2009				9.27	9.04	11.49
Draft Decision				9.27	9.04	11.49
Revised Sept 2009	8.27	8.28	6.90	7.37	10.14	11.10

607. The revised forecasts of network operations costs submitted subsequent to the Draft Decision are similar to the original forecasts submitted with the proposed access arrangement revisions in October 2008. Western Power attributes these forecast costs, and the increases in costs over the actual costs of the first access arrangement period, to the same factors as described in the revised access arrangement information and accepted by the Authority in the Draft Decision, being an expansion in operations with an increase in capital and maintenance works and costs of network-support generation.²⁷⁵ On this basis the Authority considers that the forecast of network operations costs is consistent with the requirements of section 6.40 of the Access Code.
608. For SCADA and communications costs, the revised forecast of costs is less than the forecast accepted by the Authority under the Draft Decision. Taking this into account, the Authority considers that the revised forecast meets the requirements of section 6.40 of the Access Code.

²⁷⁴ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

²⁷⁵ Western Power submission of 10 September 2009, Attachment D: pp. 74, 75.

Call Centre

609. The cost forecasts for “call centre” costs as presented to the Authority as part of the proposed access arrangement revisions are indicated in Table 37, together with actual costs for the first access arrangement period.

Table 37 Actual and forecast call centre costs (forecast of October 2008, real \$ million at 30 June 2009)²⁷⁶

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Distribution	5.26	5.12	6.40	5.37	5.47	5.55

610. In the Draft Decision, the Authority compared forecast levels of call centre costs with actual costs recorded for 2007/08.
611. Call centre costs for the distribution network were forecast to be \$1.01 million greater than cost levels of 2007/08 in real terms, attributable to escalation of historical costs for forecast changes in labour and materials costs.²⁷⁷
612. The anticipated revisions to cost forecasts submitted by Western Power to the Authority in May 2009 included approximately the same forecast call centre costs as the original forecast.
613. In the Draft Decision, the Authority required that the forecast of call centre costs be reduced to remove allowances for cost escalation during the second access arrangement period.
614. Subsequent to the Draft Decision, Western Power has submitted further revised forecasts of call centre costs, shown in Table 38 together with the previous forecasts and the values of these costs determined by the Authority in the Draft Decision.

²⁷⁶ Revised access arrangement information, Appendix 9.

²⁷⁷ Revised access arrangement information, Appendix 1: p. 61.

Table 38 Proposed, Draft Decision and revised forecasts of call centre costs (real \$ million at 30 June 2009)²⁷⁸

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Distribution						
Proposed October 2008				5.37	5.47	5.55
Revised May 2009				5.37	5.52	5.56
Draft Decision				5.25	5.26	5.20
Revised Sept 2009	5.18	5.05	6.12	4.60	4.65	4.70

615. The revised forecast of call centre costs submitted subsequent to the Draft Decision includes lower costs than previous forecasts submitted by Western Power and than required by the Authority under the Draft Decision. Western Power attributes the lower forecast of costs to efficiencies realised after a transition from a shared call-centre facility to an in-house facility.²⁷⁹
616. Taking into account the reduction in the forecast of costs from that accepted by the Authority in the Draft Decision, the Authority considers that the revised forecast of call centre costs meets the requirements of section 6.40 of the Access Code.

Metering

617. The cost forecasts for “metering” as presented to the Authority as part of the proposed access arrangement revisions are indicated in Table 39, together with actual costs for the first access arrangement period.

Table 39 Actual and forecast metering costs (forecast of October 2008, real \$ million at 30 June 2009)²⁸⁰

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Distribution	21.01	19.23	15.90	20.21	24.46	29.07

618. In the Draft Decision, the Authority compared forecast levels of metering costs with actual costs recorded for 2007/08.
619. Metering costs for the distribution network were forecast to be \$16.05 million greater in real terms in total over the second access arrangement period than cost levels of 2007/08, attributed by Western Power to growth of the network and

²⁷⁸ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

²⁷⁹ Western Power submission of 10 September 2009, Attachment D: p. 77.

²⁸⁰ Revised access arrangement information, Appendix 9.

metering activities, requirements for auditing under the Metering Code, and escalation of unit costs.²⁸¹

620. Western Power has also included in the forecast metering costs an allowance for the operation and maintenance of “smart meters”. Western Power indicates that this accounts for \$22 million of forecast metering costs.²⁸² Subsequent to submission of the proposed access arrangement revisions, Western Power indicated to the Authority that the inclusion in the forecast non-capital costs of costs relating to smart meters is an error.²⁸³
621. The anticipated revisions to cost forecasts submitted by Western Power to the Authority in May 2009 did not incorporate any material change to forecast metering costs.
622. In the Draft Decision, the Authority observed that, after correction for the costs associated with smart meters, forecast metering costs for the second access arrangement period are slightly below the actual metering costs of 2007/08. On this basis, the Authority accepted that the forecast of metering costs, less the allowance for smart meters and less a correction to remove allowances for cost escalation during the second access arrangement period (amounting to a total of approximately \$3.19 million), is consistent with the requirements of section 6.40 of the Access Code.
623. Subsequent to the Draft Decision, Western Power has submitted further revised forecasts of metering costs, shown in Table 40 together with the previous forecasts and the values of these costs determined by the Authority in the Draft Decision.

Table 40 Proposed, Draft Decision and revised forecasts of metering costs (real \$ million at 30 June 2009)²⁸⁴

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Distribution						
Proposed October 2008				20.21	24.46	29.07
Revised May 2009				20.20	24.45	29.08
Draft Decision				16.27	16.44	16.34
Revised Sept 2009	20.70	18.95	18.71	19.76	21.72	21.72

624. The revised forecast of metering costs is greater than the amount of costs determined by the Authority in the Draft Decision. In its submission subsequent to the Draft Decision, Western Power has confirmed that the allowance in the forecast

²⁸¹ Revised access arrangement information, Appendix 1: pp. 168.

²⁸² Western Power, (undated), Presentation provided to Wilson Cook & Co Ltd titled “Metering Opex Access Arrangement Submission Presented by Mr A. Stephenson”. Values are \$3.49 million in 2009/10, \$7.09 million in 2010/11, \$10.92 million in 2011/12.

²⁸³ Revised access arrangement information, Appendix 1: p. 53.

²⁸⁴ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

of metering costs for the operation of smart meters was an error and that it has removed the smart meter related costs from forecast of metering costs. However, Western Power has included in the revised forecast an allowance for cost escalation and an amount of IT related costs that Western Power claims were erroneously omitted from the original proposed forecast.²⁸⁵

625. The Authority considers that Western Power has appropriately corrected the forecast of metering costs to remove the allowance for smart-meter related costs. The Authority also accepts the revision that Western Power has made to include previously omitted costs. Taking these matters into account, the Authority accepts that the revised forecast of metering costs meets the requirements of section 6.40 of the Access Code.

Non-Recurring Costs

626. The cost forecasts for “non-recurring costs” as presented to the Authority as part of the proposed access arrangement revisions are indicated in Table 41, together with actual costs for the first access arrangement period.

Table 41 Actual and forecast non-recurrent costs (forecast of October 2008, real \$ million at 30 June 2009)²⁸⁶

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission	0	0	1.30	2.18	1.94	1.70
Distribution	0	0	0.03	22.24	25.47	23.05
Total	0	0	1.33	24.42	27.41	24.76

627. For the transmission network, the non-recurrent costs were indicated to arise in the removal of redundant assets and remediation of line easements, and management of asbestos risks in transmission assets.²⁸⁷
628. For the distribution network, the non-recurrent costs are indicated to arise in:
- research and development projects for demand-side management, with a total forecast cost of \$9.6 million;
 - research and development projects for positioning Western Power as an “energy solutions” business, with a forecast cost of \$16.7 million;
 - field surveys for capturing and improving asset information, with a forecast cost of \$14.3 million;
 - training of staff and contractors, with a forecast cost of \$29.7 million; and
 - maintenance of automated switches, with a forecast cost of \$0.43 million.²⁸⁸

²⁸⁵ Western Power submission of 10 September 2009, Attachment D: p. 78.

²⁸⁶ Revised access arrangement information, Appendix 9.

²⁸⁷ Revised access arrangement information, Appendix 1: pp. 105, 106.

²⁸⁸ Revised access arrangement information, Appendix 1: pp. 169–174.

629. On the forecast costs for research and development associated with demand management, the Authority observed in the Draft Decision that regulators of electricity distribution businesses in other jurisdictions have allowed for costs of research and development for demand-side management in regulated revenues, although the allowed levels of costs are substantially lower (at between \$0.6 and \$1 million per year rather than approximately \$3 million per year as proposed by Western Power), and the distribution businesses are held to some account for the use of these funds.²⁸⁹
630. On Western Power's forecast costs for research and development associated with development of Western Power as an "energy solutions" business, no further justification for these costs was provided. The Authority indicated in the Draft Decision that it is not satisfied that these research and development activities and associated costs are sufficiently closely related to the provision of covered services to warrant inclusion in the total costs and target revenue under the price control.
631. On Western Power's forecast costs for training, the Authority indicated in the Draft Decision that it is satisfied that an amount of training activities may appropriately be included in the total costs and target revenue under the price control. However, the Authority considered that the level of costs forecast by Western Power should be reduced to reflect a reduction in forecast new loads for the second access arrangement period and a reduced capital investment program.
632. On Western Power's forecasts costs for field surveys for capturing and improving asset information, the Authority recognised that there is evidence of Western Power's asset management being hampered by poor asset information. The Authority considered that there is at least a *prima facie* case for expenditure to improve this information.
633. Taking the above into account, the Authority determined in the Draft Decision that the forecast of non-recurring costs is inconsistent with the requirements of section 6.40 of the Access Code. The Authority considered that consistency with section 6.40 would require a reduction in the forecast costs for research and development on demand management to a total of \$3 million over the second access arrangement period, exclusion of costs for research and development for Western Power's "energy solutions" business initiative, and a halving of the forecast cost for training. This results in a reduction in the forecast non-recurrent costs by \$38.2 million.
634. In the advice provided to the Authority on anticipated revisions to cost forecasts, Western Power indicated substantially lower forecasts of non-recurring costs of \$35.66 million rather than \$76.59 million. The Authority observed in the Draft Decision that the anticipated revised forecast of non-recurrent costs is of a similar value to the reduced value considered by the Authority to be consistent with section 6.40 of the Access Code and determined that the forecast of non-recurrent costs should be reduced to the amount of the anticipated revised forecast.
635. Subsequent to the Draft Decision, Western Power has submitted further revised forecasts of non-recurrent costs, shown in Table 42 together with the previous

²⁸⁹ Australian Energy Regulator, 28 April 2009, Final decision New South Wales Distribution Determination 2009-10 to 2013-14, pp. xxxii – xxxv. Essential Services Commission, October 2005, Electricity Distribution Price Review 2006-10 Final Decision Volume 1 Statement of purpose and Reasons, pp. 213, 240.

forecasts and the values of these costs determined by the Authority in the Draft Decision.

Table 42 Proposed, Draft Decision and revised forecasts of non-recurrent costs (real \$ million at 30 June 2009)²⁹⁰

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission						
Proposed October 2008				2.18	1.94	1.70
Revised May 2009				0	1.90	1.67
Draft Decision				0	1.90	1.67
Revised Sept 2009	0	0	0	0	0.57	0.59
Distribution						
Proposed October 2008				22.24	25.47	23.05
Revised May 2009				0.20	15.22	16.67
Draft Decision				0.20	15.22	16.67
Revised Sept 2009	0	0	0	0.89	14.71	17.82
Total						
Proposed October 2008				24.42	27.41	24.76
Revised May 2009				0.20	17.12	18.34
Draft Decision				0.20	17.12	18.34
Revised Sept 2009	0	0	0	0.89	15.28	18.41

636. The revised forecast of non-recurring costs submitted subsequent to the Draft Decision is marginally less, in total, than the forecast of costs determined by the Authority in the Draft Decision. Taking this into account, the Authority accepts that the forecast of non-recurring costs meets the requirements of section 6.40 of the Access Code.

Reliability

637. The cost forecasts for “reliability” costs as presented to the Authority as part of the proposed access arrangement revisions are indicated in Table 43, together with actual costs for the first access arrangement period.

²⁹⁰ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

Table 43 Actual and forecast reliability-improvement costs (forecast of October 2008, real \$ million at 30 June 2009)²⁹¹

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Distribution	3.77	1.54	1.95	1.06	1.08	1.11

638. In the Draft Decision, the Authority compared forecast levels of reliability improvement costs with actual costs recorded for 2007/08.
639. Western Power has forecast reliability improvement costs at a level less than actual costs recorded for 2007/08.
640. Reliability improvement costs are indicated by Western Power to comprise inspection and maintenance activities designed to increase the reliability of the distribution network, such as pole top inspections, line patrols and maintenance works resulting from the inspections.²⁹²
641. The anticipated revisions to cost forecasts submitted by Western Power to the Authority in May 2009 included an increase in forecast costs for 2009/10 over the original forecast (\$2.83 million rather than \$1.06 million), but approximately the same costs for 2010/11 and 2011/12.
642. In the Draft Decision, the Authority took the view that it is reasonable that Western Power may increase some activities related directly to maintaining and improving the reliability of distribution services. On this basis, the Authority considered that an amendment of the forecast non-capital costs for reliability improvement to the levels of revisions by Western Power in May 2009 is consistent with the requirements of section 6.40 of the Access Code.
643. Subsequent to the Draft Decision, Western Power has submitted further revised forecasts of costs for reliability improvement, shown in Table 44 together with the previous forecasts and the values of these costs determined by the Authority in the Draft Decision.

²⁹¹ Revised access arrangement information, Appendix 9.

²⁹² Revised access arrangement information, Appendix 1: p. 173.

Table 44 Proposed, Draft Decision and revised forecasts of reliability-improvement costs (real \$ million at 30 June 2009)²⁹³

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Distribution						
Proposed October 2008				1.06	1.08	1.11
Revised May 2009				2.83	1.05	1.11
Draft Decision				2.83	1.05	1.11
Revised Sept 2009	3.71	1.52	0.74	2.90	3.07	3.16

644. Western Power indicates that the reduction in reliability improvement costs in 2010/11 and 2011/12 relative to 2009/10 was an oversight in developing these forecasts. In the revised forecast subsequent to the Draft Decision, Western Power has maintained approximately the same level of costs in all years of the second access arrangement period (with an allowance for escalation in unit costs), reflecting a continuation of the same program across all three years.²⁹⁴
645. The Authority maintains the view that it is reasonable that Western Power may increase some activities related directly to maintaining and improving the reliability of distribution services. The Authority has considered the increases proposed by Western Power, particularly in years 2010/11 and 2011/12 and considers that those increases are still reasonable and consistent with the Authority's view as set out in the Draft Decision. On this basis, the Authority considers that the revised forecast submitted subsequent to the Draft Decision, including the increase in forecasts costs to reflect the continuation of activities across all three years of the access arrangement period, meets the requirements of section 6.40 of the Access Code.

Non-Reference Services

646. The cost forecasts for "non-reference services" as presented to the Authority as part of the proposed access arrangement revisions are indicated in Table 45, together with actual costs for the first access arrangement period.

²⁹³ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

²⁹⁴ Western Power submission of 10 September 2009, Attachment D: p. 80.

Table 45 Actual and forecast non-reference (miscellaneous) services costs (forecast of October 2008, real \$ million at 30 June 2009)²⁹⁵

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission	10.78	5.46	4.45	5.99	5.67	5.94
Distribution	4.84	6.10	5.30	7.42	8.61	9.81
Total	15.62	11.55	9.75	13.42	14.27	15.76

647. In the Draft Decision, the Authority compared forecast levels of non-reference services with actual costs recorded for 2007/08.
648. Forecast costs for the provision of non-reference services for the transmission and distribution networks were forecast to be \$9.30 million greater in real terms in total over the second access arrangement period than if cost levels of 2007/08 had been maintained, with the increase attributed by Western Power to an increase in provision of services and escalation of costs.
- \$2.74 million can be attributed to real escalation of the 2007/08 level of costs at escalation rates applied by Western Power; and
 - \$6.55 million can be attributed to an increase in non-reference service activities and costs, and escalation of this incremental cost at escalation rates applied by Western Power.
649. The anticipated revisions to cost forecasts submitted by Western Power to the Authority in May 2009 indicates a lower forecast of non-reference service costs for the transmission network in 2009/10 (\$0.98 million rather than \$5.99 million), but approximately the same costs for 2010/11 and 2011/12 and for the distribution network.
650. In the Draft Decision, the Authority accepted that the forecasts of non-capital costs for the provision of non-reference services are consistent with section 6.40 of the Access Code, given the justification for these costs provided by Western Power and taking into account that the amount of these costs are deducted from the amount of total costs to derive a target revenue to be recovered by reference tariffs.
651. Subsequent to the Draft Decision, Western Power has submitted further revised forecasts of non-reference services costs, shown in Table 46 together with the previous forecasts and the values of these costs determined by the Authority in the Draft Decision.

²⁹⁵ Revised access arrangement information, Appendix 9.

Table 46 Proposed, Draft Decision and revised forecasts of non-reference service costs (real \$ million at 30 June 2009)²⁹⁶

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission						
Proposed October 2008				5.99	5.67	5.94
Revised May 2009				0.98	5.71	5.93
Draft Decision				0.98	5.71	5.93
Revised Sept 2009	10.62	5.38	1.81	0.86	0.92	0.93
Distribution						
Proposed October 2008				7.42	8.61	9.81
Revised May 2009				7.51	8.66	9.82
Draft Decision				7.51	8.66	9.82
Revised Sept 2009	4.77	6.01	6.29	10.13	10.85	11.39
Total						
Proposed October 2008				13.42	14.27	15.76
Revised May 2009				8.49	14.36	15.75
Draft Decision				8.49	14.36	15.75
Revised Sept 2009	15.39	11.38	8.10	11.00	11.76	12.32

652. The forecasts of costs for provision of non-reference services submitted subsequent to the Draft Decision comprises a lower level of costs than previous forecasts or allowed for by the Authority in the Draft Decision. Western Power indicates that the lower costs reflect a declining trend in costs evident in the 2008/09 year and lower demand for non-reference services thought to reflect the global financial crisis.²⁹⁷
653. The Authority considers that the reasons for the revised forecast of non-reference service costs are reasonable and that the revised forecast meets the requirements of section 6.40 of the Access Code.

Total Non-Capital Costs

654. Taking into account the consideration of the individual cost line-items as set out above and the revised forecast of costs submitted by Western Power, the Authority considers that Western Power's forecast of non-capital costs as set out in the revised access arrangement information is not consistent with the requirements of section 6.40 of the Access Code. The Authority considers that an amount of \$11 million does not meet the requirements of section 6.40, comprising \$6.3 million

²⁹⁶ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

²⁹⁷ Western Power submission of 10 September 2009, Attachment D: p. 76.

of forecast business support costs and \$4.7 million of corrective maintenance costs (paragraphs 561 and 598 of this Final Decision).

655. The Authority will require amendment of the revised proposed access arrangement so that the target revenue and price control reflect a forecast of non-capital costs that excludes this amount. The Authority has amended the forecast by deducting this amount from the forecast costs for the second access arrangement period. The amount in respect of business support costs has been deducted from the non-capital cost forecasts of transmission and distribution, in proportion to the division of total business support costs across the two networks. The amount in respect of corrective maintenance costs has been deducted from the forecast of non-capital costs for the distribution network.
656. The Authority requires the following amendment to the proposed access arrangement revisions.

Required Amendment 24

The proposed access arrangement revisions should be amended to reflect a forecast of non-capital costs as follows (real \$ million at 30 June 2009):

	2009/10	2010/11	2011/12
Transmission:	75.46	96.32	103.40
Distribution:	280.84	357.11	414.11
Total:	356.29	453.43	517.51

657. In approving this forecast of non-capital costs for the second access arrangement period, the Authority recognises that this forecast continues a trend of steeply increasing non-capital costs for the SWIN.
658. A large part of the increases in costs relates to a clearance of a backlog of preventative maintenance works (\$43 million, refer paragraph 576) and could be regarded as in the nature of abnormal or non-recurring costs that will not be continued in the third access arrangement period. The Authority expects to have regard to this factor when proposed revisions to the access arrangement are submitted to the Authority for the third access arrangement period. In particular, the Authority expects to be mindful of the need to remove costs of this nature from actual non-capital costs for the second access arrangement period when deriving a benchmark of actual costs to apply in assessment of forecast costs for the third access arrangement period.
659. The year-on-year increases in non-capital costs over the second access arrangement period are indicated by Western Power to be a result of the “budget constraints” imposed on Western Power in 2009/10 by the Western Australian Government, which has the effect of “pushing” works to the latter two years of the second access arrangement period. The Authority does not know whether similar budget constraints will be applied to Western Power in 2010/11 and 2011/12 and, hence, whether Western Power will actually undertake the maintenance activities

provided for in the revised forecast of preventative maintenance costs. This matter is not directly relevant to the Authority's consideration of whether the forecast of costs meets the requirements of section 6.40 of the Access Code – although the matter may be relevant when assessing non-capital costs as part of the Authority's assessment of revisions for the third access arrangement period as it is actual costs that will form the baseline against which cost forecasts for the third access arrangement period will be assessed.

660. The Authority notes that budget constraints that result in maintenance expenditure being lower than the forecasts underlying target revenue and reference tariffs would result in users paying for a level of maintenance that may not occur. However, Western Power would still be subject to the service standard benchmarks and service standard adjustment mechanism of the access arrangement, including penalties for underperformance against the service standard benchmarks. Moreover, in future reviews of the access arrangement the Authority expects that planned maintenance works that have been paid for by users will be taken into account in setting cost forecasts and service standard benchmarks, even if Western Power has not actually undertaken these works.

Capital Base and New Facilities Investment

Access Code Requirements

661. The capital base is the value ascribed to network assets that are used to provide covered services. Where the target revenue for a price control is set by reference to the service provider's total costs, section 6.43 of the Access Code provides for the value of the capital base to be used to calculate a return on the capital base and an amount of depreciation.
662. Under the current access arrangement, an initial capital base was established under sections 6.46 and 6.48 of the Access Code at an "optimised deprival value" of the network assets.
663. Section 6.48 of the Access Code requires that the capital base at the start of any access arrangement period other than the first access arrangement period be determined in a manner that is consistent with the Code objective. A note to section 6.48 indicates that:

A number of options are available in relation to the determination of the capital base at the start of an access arrangement period, including:

- rolling forward the capital base from the previous access arrangement period applying benchmark indexation such as the consumer price index or an asset specific index, plus new facilities investment incurred during the previous access arrangement period, less depreciation and redundant capital etc; and
- valuation or revaluation of the capital base using an appropriate methodology such as the Depreciated Optimised Replacement Cost or Optimised Deprival Value methodology.²⁹⁸

²⁹⁸ The Authority notes section 1.5(e) of the Access Code which provides that "notes" in the Access Code are to be disregarded in interpreting the Code. However, the Authority considers that the note to section 6.48 would be consistent with the Code objective.

664. Notwithstanding that section 6.48 of the Access Code does not mandate a method of valuation of the capital base, sections 6.50 to 6.63 of the Access Code contemplate new facilities investment being added to the capital base and the value of any redundant assets being subtracted from the capital base, consistent with use of the “roll forward” method for determination of the capital base as described in the note to section 6.48.

665. Section 6.51A of the Access Code provides that new facilities investment may be added to the capital base if it passes certain tests:

6.51A New facilities investment may be added to the capital base if:

- (a) it satisfies the new facilities investment test; or
- (b) the Authority otherwise approves it being adding to the capital base if:
 - (i) it has been, or is expected to be, the subject of a contribution; and
 - (ii) it meets the requirements of section 6.52(a); and
 - (iii) the access arrangement contains a mechanism designed to ensure that there is no double recovery of costs as a result of the addition.

666. The new facilities investment test is set out in section 6.52 of the Access Code:

6.52 New facilities investment satisfies the new facilities investment test if:

- (a) the new facilities investment does not exceed the amount that would be invested by a service provider efficiently minimising costs, having regard, without limitation, to:
 - (i) whether the new facility exhibits economies of scale or scope and the increments in which capacity can be added; and
 - (ii) whether the lowest sustainable cost of providing the covered services forecast to be sold over a reasonable period may require the installation of a new facility with capacity sufficient to meet the forecast sales;

and

- (b) one or more of the following conditions is satisfied:
 - (i) either:
 - A. the anticipated incremental revenue for the new facility is expected to at least recover the new facilities investment; or
 - B. if a modified test has been approved under section 6.53 and the new facilities investment is below the test application threshold – the modified test is satisfied;
 - or
 - (ii) the new facility provides a net benefit in the covered network over a reasonable period of time that justifies the approval of higher reference tariffs; or
 - (iii) the new facility is necessary to maintain the safety or reliability of the covered network or its ability to provide contracted covered services.

667. The “modified test” referred to in section 6.52(b)(i)B of the Access Code and set out in section 6.53 provides for an access arrangement to specify that new facilities investment below a threshold value will not be subject to the tests of sections 6.52(b)(i)A, (ii) and (iii) of the Access Code.

668. Section 6.54 of the Access Code requires that the Authority, in making a determination under the new facilities investment test, must have regard to whether the new facilities investment was required by a written law or a statutory instrument.
669. Sections 6.61 to 6.63 of the Access Code provide for an amount to be subtracted from the capital base in respect of redundant network assets.
670. With proposed revisions to an access arrangement typically being considered by the Authority prior to commencement of the access arrangement period in which the revisions to the access arrangement will apply, the capital base at the start of the access arrangement period will need to be determined (if being determined by the roll forward method) without knowledge of all the new facilities investment that will occur in the current access arrangement period. In this circumstance, section 6.50 of the Access Code provides for a forecast of the new facilities investment to occur prior to the revisions commencement date to be added to the capital base if, at the time of inclusion, it is reasonably expected to satisfy the test in section 6.51A.
671. In determination of total costs for an access arrangement period, section 6.51 of the Access Code provides for the forward-looking and efficient costs of providing covered services to include capital costs in relation to forecast new facilities investment for the access arrangement period that, at the time of inclusion, is reasonably expected to satisfy the test of section 6.51A. This forecast new facilities investment is not, however, added to the capital base and would again be subject to the test of section 6.51A prior to being added to the capital base at the commencement of the next access arrangement period.

Proposed Revisions

672. Consistent with the current access arrangement, Western Power has specified capital base values separately for the transmission and distribution networks.
673. The capital base for each of the transmission and distribution networks has been calculated by Western Power for the beginning of the second access arrangement period using a roll forward method that involves commencing with the opening value at the beginning of the first access arrangement period and:
- adding the values of new facilities investment during the first access arrangement period that Western Power considers to meet the requirements of the new facilities investment test under section 6.52 of the Access Code, and/or that were financed by capital contributions (including values forecast for 2008/09 as provided for under section 6.50 of the Access Code);
 - deducting values of redundant assets;
 - deducting values of depreciation as allowed for in target revenue for the first access arrangement period; and
 - adjustment for actual and forecast inflation to dollar values at 30 June 2009.

674. Western Power's calculated values of the capital base for the transmission and distribution networks at the commencement of the second access arrangement period (1 July 2009) are shown in Table 47 and Table 48.²⁹⁹

Table 47 Proposed capital base at 30 June 2009 for the transmission network (real \$ million at 30 June 2009)³⁰⁰

	2006/07	2007/08	2008/09	2009/10
Opening asset value	1,500.69	1,750.16	2,005.03	2,386.27
New facilities investment	302.32	312.31	443.64	
Redundant assets	0	0	0	
Depreciation	-52.84	-57.44	-62.40	
Closing asset base	1,750.16	2,005.03	2,386.27	

Table 48 Proposed capital base at 30 June 2009 for the distribution network (real \$ million at 30 June 2009)³⁰¹

	2006/07	2007/08	2008/09	2009/10
Opening asset value	1,725.75	2,057.77	2,417.72	2,877.11
New facilities investment	441.40	474.16	582.91	
Redundant assets	-4.15	-3.97	-3.92	
Depreciation	-105.23	-110.24	-119.60	
Closing asset base	2,057.77	2,417.72	2,877.11	

675. For the purposes of determining target revenue for the second access arrangement period, Western Power proposed notional values of the capital base for the transmission and distribution networks at the commencement of each year of the second access arrangement period, incorporating forecasts of new facilities investment.

²⁹⁹ Proposed access arrangement revisions, clause 6.1.

³⁰⁰ Revised access arrangement information, Appendix 7 (Revenue Model). Values differ from those shown in the Draft Decision due to the application of actual inflation for 2008/09.

³⁰¹ Revised access arrangement information, Appendix 7 (Revenue Model). Values differ from those shown in the Draft Decision due to the application of actual inflation for 2008/09.

676. Western Power's notional capital base values for the second access arrangement period are indicated in Table 49 and Table 50.

Table 49 Proposed notional capital base values for the second access arrangement period for the transmission network (real \$ million at 30 June 2009)³⁰²

	2009/10	2010/11	2011/12
Opening asset value	2,386.27	2,992.99	3,693.28
New facilities investment (net of contributions)	680.00	785.47	530.33
Redundant assets	0	0	0
Depreciation	-73.28	-85.18	-99.40
Closing asset base	2,992.99	3,693.28	4,124.21

Table 50 Proposed notional capital base values for the second access arrangement period for the distribution network (real \$ million at 30 June 2009)³⁰³

	2009/10	2010/11	2011/12
Opening asset value	2,877.11	3,249.33	3,649.09
New facilities investment (net of contributions)	520.87	566.27	636.21
Redundant assets	-3.78	-3.68	-3.59
Depreciation	-144.87	-162.83	-181.32
Closing asset base	3,249.33	3,649.09	4,100.40

677. Subsequent to submission of the proposed access arrangement revisions, Western Power advised the Authority in May 2009 that the forecasts of new facilities investment will be revised to take into account the effect of the global financial crisis on local economic conditions and budget constraints imposed by the State Government.³⁰⁴ Western Power provided the Authority with "indicative anticipated revisions" to forecasts of costs indicating reductions in forecast new facilities investment (in real terms) of 25 per cent for the transmission network and 18 per cent for the distribution network. Subsequent to the Authority's Draft Decision, Western Power has provided a further revised forecast of new facilities investment for the second access arrangement period, indicating further reductions in forecast

³⁰² Revised access arrangement information, Appendix 7 (Revenue Model). Values differ from those shown in the Draft Decision due to the application of actual inflation for 2008/09.

³⁰³ Revised access arrangement information, Appendix 7 (Revenue Model). Values differ from those shown in the Draft Decision due to the application of actual inflation for 2008/09.

³⁰⁴ Western Power, 25 May 2009, Letter from Mr Phil Southwell, General Manager Strategy and Corporate Affairs.

investment.³⁰⁵ The proposed and subsequently revised forecasts of new facilities investment are shown in Table 51.

Table 51 Actual, forecast and anticipated-revised forecast new facilities investment to be added to the capital base (real \$ million at 30 June 2009)³⁰⁶

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Actual	Actual	Forecast	Forecast	Forecast
Transmission						
Forecast (Oct 2008)				680.00	785.47	530.33
Anticipated revised forecast (May 2009)				293.46	629.41	650.63
Revised forecast (September 2009)	302.32	312.31	318.71	283.48	519.03	590.33
Distribution						
Forecast (Oct 2008)				520.87	566.27	636.21
Anticipated revised forecast (May 2009)				394.09	500.91	538.60
Revised forecast (September 2009)	441.40	474.16	636.55	404.93	515.73	546.60

Considerations of the Authority

678. The Authority has considered Western Power's calculation of the capital base for each of the transmission and distribution networks and consistency of these calculations with the requirements of the Access Code, including:

- the general method applied in calculating the capital base;
- verification that the stated new facilities investment in the first access arrangement period occurred;
- determination of the capital base at the commencement of the second access arrangement period, taking into account an assessment of actual new facilities investment in the first access arrangement period against the test of section 6.51A of the Access Code, and values of depreciation and redundant assets; and
- determination of notional values of the capital base in each year of the second access arrangement period taking into account the assessment of forecast new facilities investment against the test of section 6.51A of the Access Code, and forecast values of depreciation and redundant assets.

³⁰⁵ Western Power submission of 10 September 2009, confidential supporting documents (Revenue Model, DMS#6439363v1).

³⁰⁶ Revised September 2009 values incorporate actual inflation for 2008/09 and revised annual inflation forecasts for the second access arrangement period.

679. The Authority's consideration of these matters is set out as follows.

General Method of Calculation

680. Western Power has calculated the capital base for each of the transmission and distribution networks using a roll forward method, applied in a manner consistent with the method contemplated in the note to section 6.48 of the Access Code.
681. The roll forward method has been favoured by utility regulators throughout Australia and is the method mandated for electricity transmission and distribution networks of the National Electricity Market under Chapters 6A and 6 of the National Electricity Rules.
682. The Authority is satisfied that the method used by Western Power is consistent with the Code objective.

Capital Base at the Commencement of the Second Access Arrangement Period

683. In considering the capital base at the commencement of the second access arrangement period, the Authority has considered the value of new facilities investment to be added to the capital base, and the values of redundant assets and depreciation to be deducted from the capital base.

New Facilities Investment

684. Under section 6.51A of the Access Code, the new facilities investment may be added to the capital base if:
- it satisfies the new facilities investment test (as set out under section 6.52 of the Access Code); or
 - the Authority otherwise approves it being added to the capital base if:
 - it has been, or is expected to be, the subject of a capital contribution; and
 - it meets the requirements of section 6.52(a) of the Access Code; and
 - the access arrangement contains a mechanism designed to ensure that there is no double recovery of costs as a result of the addition.
685. After having regard to information provided by Western Power and other advice, the Authority determined in the Draft Decision that the entire amount of new facilities investment for the first access arrangement period does not satisfy the requirements of section 6.51A of the Access Code for addition to the capital base. There were two elements to this determination.
686. First, the Authority considered that the proposed value of new facilities investment includes some amounts that can not be appropriately added to the capital base due to being amounts that either are not appropriately considered as new facilities investment or that comprise an overstatement of costs for 2008/09. The Authority determined that the proposed value of new facilities investment to be added to the capital base should be reduced by \$63.5 million for the transmission network in 2008/09 (in nominal dollar values of 2008/09) and \$65 million for the distribution

network divided across years 2006/07 to 2008/09 (in nominal dollar values of 2007/08).

687. Secondly, the Authority determined that new facilities investment undertaken by Western Power exceeds the amount that would be invested by a service provider efficiently minimising costs as a result of cost inefficiencies arising in both the design and governance of capital projects.
688. The Authority did not have sufficient information to make a definitive assessment on a project-by-project basis of the extent to which the actual value of new facilities investment exceeds the amount that would be invested by a service provider efficiently minimising costs. However, on the basis of available information, the Authority considered that there was evidence to support the view that there were systematic inefficiencies in the design and governance of capital projects in the first access arrangement period and that the entire amount of new facilities investment does not satisfy the efficiency test of section 6.52(a) of the Access Code.
689. In the Draft Decision, the Authority determined a value of new facilities investment in the first access arrangement period that it was satisfied meets the efficiency test of section 6.52(a) of the Access Code. In doing so, the Authority considered a possible range in the extent of inefficiency of more than a nominal amount, but less than 25 per cent of the total value of new facilities investment. The Authority determined that the extent of inefficiency amounts to 15 per cent of the total amount of new facilities investment, other than that amount of new facilities investment comprising assets constructed by other parties and gifted to Western Power.
690. The Authority therefore required that the amount of new facilities investment for the first access arrangement period that is to be added to the capital base should be reduced to exclude investment to the value of \$63.5 million for the transmission network and \$65 million for the distribution network that is not appropriately considered as new facilities investment or that comprises an overstatement of costs for 2008/09, and further reduced by an amount of 15 per cent of the new facilities investment (other than that comprising gifted assets) to reflect likely inefficiencies in the undertaking of investment.
691. The Authority accordingly required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 26

The proposed access arrangement revisions should be amended to reflect actual new facilities investment in the first access arrangement period reduced to:

- exclude investment to the value of \$63.5 million (nominal) for the transmission network in 2008/09 that comprises an overstatement of costs for 2008/09;
 - exclude investment to the value of \$65 million (nominal in 2007/08 dollar values) for the distribution network that comprises an amount of costs that is not appropriately considered as new facilities investment; and
 - exclude a further amount of 15 per cent of the new facilities investment (other than that comprising gifted assets) to reflect likely inefficiencies in the undertaking of investment.
692. Submissions made to the Authority on Draft Decision Amendment 26 variously support or oppose the position taken by the Authority.

693. The Financial Investor Group submits that the Authority failed to take into account the market circumstances in which Western Power was operating in the first access arrangement period, being the economic boom conditions, associated demand for network augmentations and cost escalation in construction. The Financial Investor Group also contends that retrospective assessment of new facilities investment and the risk created for Western Power is not consistent with providing incentives for efficient investment in the network, will reduce incentives for investment in other regulated infrastructure services, increase the cost of capital for infrastructure projects and increase the time for investments to be approved and occur.³⁰⁷
694. The Department of Treasury and Finance concurs that Western Power had not provided sufficient information to assess new facilities investment against the requirements of the Access Code, but indicates that the Authority had not provided sufficient guidance to Western Power on the requirements for information. In this context, the Department contends that an arbitrary figure of 15 per cent is an unsatisfactory means of penalising Western Power for a failure to provide information. The Department submits that there are three alternative options for the Authority to deal with the evaluation of new facilities investment in the first access arrangement period: (1) provide greater opportunity for Western Power to provide information; (2) revalue the capital base by method other than the roll-forward method; or (3) seek to apply more rigorous quantitative methods in any reduction in the amount of new facilities investment to be added to the capital base.³⁰⁸
695. The WAMEU support the Authority's determination under Draft Decision Amendment 26, submitting that this required amendment appropriately applies a strong discipline to the addition of new facilities investment to the capital base and appropriately reflect the real needs of the SWIN.³⁰⁹
696. The matters raised in submissions are dealt with below in relation to the Authority's further consideration of the value of new facilities investment in the first access arrangement period that is to be added to the capital base. On the particular assertion of the Department of Treasury and Finance that the Authority had not provided sufficient guidance to Western Power on the requirements for information, the Authority notes that the provisions of the Access Code clearly set out the tests required to be satisfied for new facilities investment to be added to the capital base and place an onus on Western Power, as the service provider, to demonstrate satisfaction of these tests. The Authority has also made several requests to Western Power for information and provided substantial time periods for Western Power to meet these requests (as described at paragraph 468 of this Final Decision).
697. Western Power has made a submission to the Authority addressing each of the separate requirements of Draft Decision Amendment 26. Western Power has also provided revised values of new facilities investment for the first access arrangement period, incorporating actual values for 2008/09, and revised values of new facilities investment proposed to be added to the capital base. These revised values are shown in Table 52 and Table 53.

³⁰⁷ Financial Investor Group submission of September 2009.

³⁰⁸ Department of Treasury and Finance submission of 10 September 2009.

³⁰⁹ Western Australia Major Energy Users submission of 6 August 2009.

Table 52 Originally proposed, Draft Decision and revised proposed values of new facilities investment in the first access arrangement period to be added to the capital base for the transmission network (real \$ million at 30 June 2009)³¹⁰

	2006/07	2007/08	2008/09
Western Power original proposal (October 2008)	302.32	312.31	443.64
Draft Decision	256.97	265.46	323.12
Western Power submission (September 2009)³¹¹			
Actual new facilities investment	302.32	312.31	318.71
Adjustments	4.92	8.15	10.66
Addition to the capital base	297.40	304.16	308.05

Table 53 Originally proposed, Draft Decision and revised proposed values of new facilities investment in the first access arrangement period to be added to the capital base for the distribution network (real \$ million at 30 June 2009)³¹²

	2006/07	2007/08	2008/09
Western Power original proposal (October 2008)	441.40	474.16	582.91
Draft Decision	359.72	389.93	490.65
Western Power submission (September 2009)³¹³			
Actual new facilities investment	441.40	474.16	636.55
Adjustments	8.00	5.50	0.47
Addition to the capital base	433.39	468.66	636.08

698. On the matter of the exclusion of investment to the value of \$63.5 million (nominal) for the transmission network that comprises an overstatement of costs for 2008/09 (the subject of the first bullet point in Draft Decision Amendment 26), the Authority determined this amount as a value of forecast new facilities investment on two

³¹⁰ Revised access arrangement information, Appendix 7 (Revenue Model). Values differ from those shown in the Draft Decision due to the application of actual inflation for 2008/09.

³¹¹ Western Power submission of 10 September 2009, confidential supporting documents (Revenue Model, DMS#6439363v1).

³¹² Revised access arrangement information, Appendix 7 (Revenue Model). Values differ from those shown in the Draft Decision due to the application of actual inflation for 2008/09.

³¹³ Western Power submission of 10 September 2009, confidential supporting documents (Revenue Model, DMS#6439363v1).

projects that either did not proceed or have been delayed, and hence the forecast expenditure did not occur. Western Power has submitted that this value can be properly determined now that information on actual capital costs for 2008/09 is available.³¹⁴ More particularly, Western Power submits that when actual values of new facilities investment are applied to updating the capital base, unspent amounts are automatically taken into account. Western Power also submits that the following adjustments may be made to actual new facilities investment:

- an amount of \$6.969 million (in real dollar values at 30 June 2009) for the Busselton-Margaret River line project (100% of the total project expenditure) is appropriately excluded from new facilities investment as the project did not proceed; and
- an amount of \$3.151 million (in real dollar values at 30 June 2009) related to the portion of cost of the 490MVA transformers at Wells Terminal is appropriately excluded from new facilities investment as this amount was not recovered from the customer (Western Power indicates in its submission that it will request re-inclusion of this amount in the capital base at a later date).

699. Western Power also indicates that an amount of \$9.9 million in actual expenditure incurred for the North Country Region 330kV transmission project should be retained in the new facilities investment to be added to the capital base on the grounds that this expenditure satisfies clauses 6.52(a) and 6.52(b)(iii) of the Access Code, indicating also that the project has “passed” the regulatory test and has been given the conditional “go-ahead” by the State Government, albeit with a modified scope.
700. Contrary to the submission from Western Power, other information available to the Authority indicates that it is uncertain whether the North Country Region 330kV transmission project will proceed as currently proposed and, if so, the timing of the project. In particular, advice from Western Power indicates that it is reviewing the project taking into account, *inter alia*, options for undertaking the project as a single stage or two stage project, revised forecasts of demand for network services, and interaction between the project and the proposed Eneabba to Karara transmission line project.³¹⁵ For reason of the uncertainty with the project, the Authority considers that costs to date on this project should not be added to the capital base at this time.
701. Finally, the Authority notes advice from Geoff Brown and Associates that Western power has failed to properly account for an amount of contributions of \$3.25 million for one particular project (connection of the Newgen Neerabup Power Station) and that this amount should be excluded from the amount of new facilities investment added to the capital base.³¹⁶
702. Taking account of the above, the Authority considers that an amount of \$23.24 million of capital costs (in real dollar values at 30 June 2009) should be excluded from new facilities investment to be added to the capital base for reason of the related capital works either not being appropriately considered as investment in the first access arrangement period, or for reasons that the costs should have

³¹⁴ Western Power submission of 10 September 2009, p. 18.

³¹⁵ Western Power, 2 November 2009, Letter from Mr Doug Aberle, Managing Director.

³¹⁶ Geoff Brown and Associates Ltd, 17 June 2009, Review of New Facilities Investment Test Compliance Western Power AA1 Projects, p. 9.

been recovered from capital contributions. This comprises an amount of \$6.97 million in respect of the Busselton-Margaret River transmission line project, an amount of \$3.15 million in respect of costs of transformers at Wells Terminal, \$9.87 million in respect of the North Country Region 330kV transmission project, and \$3.25 million in respect of connection of the Newgen Neerabup Power Station.

703. On the matter of the overrun of costs of Western Power in undertaking works for subdivisions (the subject of the second bullet point in Draft Decision Amendment 26), the Authority determined this amount on the basis of an understanding that the amount of \$65 million represented a cost overrun in Western Power undertaking works for developers of subdivisions in a capacity as a contractor. The Authority took the view that any amount of a cost overrun to Western Power in its activities as a contractor should not form part of new facilities investment.
704. Western Power has submitted that this understanding of the Authority is incorrect and the amount \$65 million is the value of an expected difference between the costs of works undertaken by Western Power in respect of subdivisions, but not works being undertaken by the developer, and capital contributions paid in respect of these works. Western Power submits that the works in question were for upstream augmentations of the network and not the construction of assets within subdivisions. Western Power further submits that the actual difference in costs and contributions (calculated with actual rather than forecast values for 2008/09) is \$33.424 million and not \$65 million.³¹⁷
705. The Authority has verified the submission of Western Power and accepts that the difference between contributions and the cost of works is appropriately included in new facilities investment to be assessed against the test of section 6.51A of the Access Code for addition to the capital base.
706. On the matter of the reduction in the value of new facilities investment to be added to the capital base in view of inefficiencies in investment projects (the subject of the third bullet point in Draft Decision Amendment 26), Western Power submits that the Authority should not require the reduction for reasons that the Authority's application of the new facilities investment test and reduction in the value of new facilities investment to be added to the capital base are:
- not consistent with the Code objective;
 - not consistent with good regulatory principles and practice in other comparable jurisdictions; and
 - not consistent with an objective, engineering-based assessment of the prudence of Western Power's capital expenditure in the first access arrangement period.³¹⁸
707. In support of the first two of these contentions, Western Power has submitted a report by Professor George Yarrow and Dr. Christopher Decker.³¹⁹

³¹⁷ Western Power submission of 10 September 2009, Attachment E.

³¹⁸ Western Power submission of 10 September 2009, Attachment F.

³¹⁹ Western Power submission of 10 September 2009, Attachment F1.

708. Western Power cites the report of Yarrow and Decker in making the following contentions.
709. First, Western Power contends that the Authority has applied too strict an interpretation of the “efficiency test” of the new facilities investment test. Western Power submits that the efficiency test should be applied to a standard of requiring only that the planning and governance of capital projects meet normal standards of reasonableness, competence and non-negligence, rather than best-possible performance or best practice. A standard of reasonableness should allow for the fact that there are differences of view amongst well informed experts on the need, timing and design of network investments and that decisions are made under uncertainty and necessarily require an exercise of subjective judgement.
710. Secondly, Western Power contends that by applying a too strict interpretation of the efficiency test, the Authority will adversely affect incentives for future investment by creating an excessively high risk that new facilities investment will not be added to the capital base.
711. Thirdly, Western Power contends that the Authority’s conclusions of systematic over-engineering of capital projects and inefficiencies in planning and governance are unsupported by substantive analysis or other evidence.
712. Fourthly, Western Power contends that the disallowance of new facilities investment by the Authority is inconsistent with regulatory precedent in Australia and internationally. Inconsistency with precedent arises in the application of an *ex post* prudence test within an incentive-based regulatory regime; the high efficiency standard required to be met by Western Power; the magnitude of the disallowance; and a disallowance being determined for investment generally and without evidence of substantial failures for individual capital projects.
713. In addressing the Authority’s determination of a level of inefficiency in new facilities investment, Western Power has submitted a report from Sinclair Knight Merz (**SKM**).³²⁰ This report documents an assessment of the capital-works processes of Western Power (design standards, planning policies, plant specifications and procurement processes), benchmarking of project-cost performance of Western Power against major capital projects in other industries, and an assessment of ten of the 30 capital projects examined by the Authority’s consultants prior to the Draft Decision.
714. The Authority observes that SKM appears to have had access to more information on particular capital projects that was made available by Western Power to the Authority, despite the Authority having previously advised Western Power of deficiencies in information provided with the proposed access arrangement revisions and issuing Western Power with a statutory notice requiring further relevant information to be provided.
715. SKM identifies some of the same deficiencies in planning and governance of capital works as identified by the Authority’s consultant (Geoff Brown and Associates), including the following.

³²⁰ Western Power submission of 10 September 2009, Attachment F2.

- SKM acknowledges that, prior to June 1998, there was a lack of temperature correction of historic loads in extrapolation of time series of peak demand records for the purposes of demand forecasting, which Geoff Brown and Associates indicated may lead to inefficient timing of investment. SKM indicates, however, that it does not share the concerns of Geoff Brown and Associates over Western Power's methods of forecasting affecting the efficiency of new facilities investment, indicating a view that Western Power's demand forecasting systems are consistent with good industry practice in Australia.
- SKM agrees that, prior to 2008/09, Western Power's cost estimation process was below good industry practice.
- SKM agrees that overcharging by contractors was occurring at the commencement of the first access arrangement period, but was resolved by the end of the period.
- SKM agrees that there are deficiencies in reconciliation of *ex ante* NFIT analyses ("compliance summaries") and the actual costs of projects and values of contributions ("analysis spreadsheets").
- SKM agrees that Western Power has not met the reporting requirements for the new facilities investment test as would be expected of a utility that has been operating under a regulatory regime for some time.

716. SKM offers differing views and opinions than Geoff Brown and Associates and/or the Authority on several matters.

- Western Power's planning processes are consistent with good electricity industry practice with adequate consideration of options for network augmentations.
- There are no deficiencies in the zone substation planning criteria applied by Western Power in the "NCR wind-back program" (a program to reduce loads on certain substation transformers), although the concerns of Geoff Brown and Associates were more that this capital program may not be adequately integrated with network operation rather than concerns with the capital program itself.
- Western Power has not been slow to adopt aluminium cable in place of copper cable for underground distribution, but rather has made the change broadly in line with other distribution businesses.
- Western Power's design standards for substations, transmission and distribution are consistent with practices in other jurisdictions and with efficiency of investment. While SKM identified some elements of Western Power's substation design standards that may marginally increase the initial capital cost of establishing new facilities, SKM considered the additional investment to be part of an efficient process to establish new facilities, taking into account the circumstances of the Western Power network. SKM identified that modern analytical software packages for design of transmission assets are available that have not been adopted by Western Power and that may provide for efficiencies of about 10 per cent in transmission line costs, but the adoption of such packages is considered to be "more an area for improvement than a deviation from good electricity industry practice at the current time".

- The general program for the conversion of distribution assets from 66kV to 132kV is sound and reasonable from a business case perspective, and consistent with good industry practice, which is contrary to the concerns of Geoff Brown and Associates that the benefits that may accrue from the additional investment in 132kV equipment have not been demonstrated.
 - Specifications of plant and equipment are robust and in line with good electricity industry practice, which is contrary to the view of Geoff Brown and Associates that Western Power sometimes specifies requirements for equipment over and above industry standards and norms, thus limiting competition amongst potential suppliers.
717. SKM undertook three benchmarking studies to assess the efficiency of costs incurred by Western Power in capital projects.
718. The first of the cost-benchmarking analysis undertaken by SKM involved examining the extent of cost overruns of major resource projects in the period 2006 to 2008 and comparison with cost overruns of Western Power in the period 2004 to 2006.³²¹ SKM indicates that the level of cost overruns of Western Power is better than for the resources industry. However, the data presented for major resource projects and for Western Power cover different periods of time, which would coincide with different economic conditions and pressures for cost overruns. As such, the Authority considers that this benchmarking analysis does not inform consideration of Western Power's cost efficiency for capital projects.
719. The second of the cost-benchmarking studies undertaken by SKM comprises a comparison between Western Power and other Australian distribution businesses of unit costs for a range of types of equipment and types of capital works, using data compiled by SKM as part of a current, larger, benchmarking study.³²² It is implied, but not stated, that this comparison is for a recent period of time. SKM found costs of Western Power were neither systematically higher nor lower than comparable entities. The Authority accepts that this comparison is evidence of the effectiveness of Western Power's procurement processes.
720. The third cost-benchmarking study undertaken by SKM comprised a comparison of actual costs for a sample of ten capital projects of the first access arrangement period with a cost estimate for the works undertaken independently by SKM.³²³ Differences ranged from actual costs being approximately 19 per cent less than cost estimates to 19 per cent greater than cost estimates, and in aggregate the actual costs for the ten projects being 5 per cent greater than the cost estimates. SKM indicate that this is within an acceptable range of accuracy for this comparison, and the comparison does not indicate any systematic inefficiency in costs. The Authority accepts that this comparison is evidence that costs of capital projects of Western Power are at, or may slightly exceed, the level of costs that would be expected for the electricity industry more generally.

³²¹ Western Power submission of 10 September 2009, Attachment F2: pp. 54, 55.

³²² Western Power submission of 10 September 2009, Attachment F2: pp. 55 – 57.

³²³ Western Power submission of 10 September 2009, Attachment F2: pp. 58, 59 and Appendix C.

721. SKM has undertaken a review of seven of the 30 capital projects examined by the Authority's consultants prior to the Draft Decision, with the following findings and opinions.³²⁴

- *Cost estimation.* SKM makes explicit findings of cost estimation processes being satisfactory for only two of the seven projects reviewed, on the basis that the final cost was close to the estimated cost for each project. For other projects, SKM variously identified deficiencies in cost estimation, determined that available information was inadequate to draw a conclusion on cost estimation processes, or made an explicit conclusion.
- *Options analysis.* SKM indicates that, for all the projects reviewed, multiple options were considered and of the options considered for each project the most appropriate "appears" to have been selected. SKM determined that there is "room for improvement" in the presentation and discussion of options in the approvals documentation. With the exception of the North Country 330 kV transmission reinforcement project, the consideration of a demand-side management option has not been included in most projects. However, many of these projects were designed before the current thinking in the electricity industry to consider the viability of demand-side management.
- *Governance / approvals processes.* SKM indicates that appropriate approvals processes were followed for all of the projects reviewed with the exception of:
 - the establishment of Waikiki substation for which there was a lack of appropriate information to reach a position on whether governance and approvals processes are appropriate; and
 - the Bibra Lake substation for which a \$1 million change order did not get reflected in the approved expenditure for the project and the original project approval documentation poorly reflected the options considered, and for which the resulting reduction in the "capital project approval" value would have resulted in this project being delivered with a 10 per cent over-run.
- *Efficiency of engineering solutions.* SKM indicates that there was limited information to make detailed conclusions on the effectiveness of the engineering solutions employed. However, the major and visible engineering decisions appear consistent with good electricity industry practice.
- *Procurement.* SKM indicates that no material issues were identified in the projects reviewed that indicated the procurement processes undertaken by Western Power would result in sub economic project outcomes.
- *Project or works management.* SKM indicates that no significant concerns were identified with the application of project and works management processes for the projects reviewed that have proceeded to a stage where project or works management processes are relevant. The major exception to this is the transformer replacement project, for which SKM could not identify any details on the project management processes employed.

³²⁴ Western Power submission of 10 September 2009, Attachment F2: pp. 60 – 62 and Appendix D.

722. The principal conclusions drawn by SKM from the range of analyses undertaken and cited by Western Power are that:
- Western Power has solid planning and governance policies and processes in place;
 - specific process issues identified by the Authority's consultant could not be quantified to support the 15 per cent inefficiency factor proposed in the Draft Decision; and
 - cost overruns on Western Power's major projects during the period from 1 July 2006 to 30 June 2009 are consistent with, or lower than, the increases in project costs that were experienced in other industries in Western Australia over the same period.
723. SKM identified and quantified deficiencies in cost estimation and evidence of contractor over-charging (as sources of inefficiency) at \$28 million, as follows.
724. In relation to inadequate cost estimating, SKM identified 65 capital projects of value greater than \$2 million that SKM considered were potentially adversely affected by deficiencies in cost estimation processes:
- 32 projects with a total expenditure of \$198 million that had original approved cost estimates in excess of 10 per cent less than the final delivered cost;
 - 20 projects with a total expenditure of \$77 million that had original approved cost estimates in excess of 20 per cent above the final delivered cost; and
 - 13 projects with a total value of \$76 million for which SKM was not able to identify a record of the original cost estimate.
725. SKM took a view that poor cost estimation processes may give rise to an "inefficiency factor" of a maximum of five per cent of the project value, reckoning that any greater extent of inefficiency would have been detected in SKM's own review of individual projects. SKM applied this factor to the total value of all projects identified by it as being affected by estimation problems to derive a value of inefficiency of \$18 million (five per cent of a total of value of projects of \$351 million).
726. In relation to contractor overcharging, SKM indicate that the extent of overcharging has been determined by audit studies to be 3.5 per cent of project values in 2006/07. Taking into account that there has been no evidence presented of overcharging in the latter part of the first access arrangement period, SKM applied an inefficiency factor of 3.5 per cent in 2006/07 trending down to zero by the end of the first access arrangement period (3.5 per cent in 2006/07, 1.75 per cent in 2007/08 and zero per cent in 2008/09) to the amount of internally funded expenditure on distribution reinforcements of \$639 million, deriving a value of inefficiency of \$10 million.
727. Western Power submits that the SKM report provides a sound basis for rejecting the Authority's finding of systematic inefficiency and deficiencies in planning and governance of Western Power's capital works program. Citing the opinions of Yarrow and Decker and SKM, Western Power submits that the Authority should reconsider its application of the new facilities investment test in the Final Decision. Western Power contends that a reasonable application of the new facilities investment test would result in an exclusion of no more than \$28 million of new facilities investment from addition to the capital base. This corresponds to

approximately 1.1 per cent of Western Power's actual stated new facilities investment for the first access arrangement period of \$2,484 million.³²⁵

728. In further assessing the extent to which actual new facilities investment in the first access arrangement period satisfies the efficiency test of section 6.52(a) of the Access Code, the Authority has given separate consideration to two elements of efficiency in augmentation of the transmission and distribution networks:
 - the cost efficiency of individual augmentation projects, that is, whether particular assets, capital projects and capital programs are undertaken at minimum cost; and
 - the efficiency of the portfolio of augmentation projects, that is, whether augmentations of the network are efficient in the choice and timing of projects.
729. This first element of inefficiency may arise from factors such as poor cost control and the Authority considers that there is evidence, as accepted by Western Power, of inefficiencies arising from poor cost control.
730. From the analysis undertaken by SKM, Western Power has provided an estimate of such inefficiencies of \$28 million, comprising \$18 million in respect of inefficiency arising from deficiencies in cost estimation processes and approximately \$10 million in respect of overcharging by contractors.
731. The Authority considers that SKM's estimate of the extent of inefficiency arising from deficiencies in cost estimation processes may not fully capture the extent of this inefficiency.
732. SKM determined the value of \$18 million as five per cent of a value of significant capital projects (greater than \$2 million in value) for which the final cost exceeded the cost estimate by greater than 10 per cent, or original cost estimates could not be located.
733. The Authority considers that there is no reason why estimates of the extent of inefficiency arising from deficiencies in cost estimation should be so constrained. Rather, the Authority considers such inefficiencies may arise regardless of the difference between an original cost estimate and the final cost of a project (for example, a poor original cost estimate may drive an inefficiently high cost outcome), and may arise regardless of the size of the capital project.
734. The Authority accepts that the value of five per cent applied by SKM as the level of inefficiency arising from deficiencies in cost estimation processes is appropriate, given the benchmarking study undertaken by SKM that indicates actual costs for a range of projects exceeding benchmarks by, on average, about five per cent.
735. Taking these matters into account, and otherwise applying the reasoning of SKM, the Authority considers that the extent of inefficiency arising from poor cost estimation processes may extend to five per cent of investment for the transmission network and that part of investment in the distribution network internally funded by Western Power (that is, excluding gifted assets). This would amount to a value of \$117 million (five per cent of \$910 million (net of previous adjustment) of investment

³²⁵ Western Power submission of 10 September 2009, p. 8.

in the transmission network and \$1,436 million of Western Power funded investment in the distribution network). Together with the extent of inefficiency arising from overcharging by contractors (\$9.56 million), the extent of inefficiency from deficiencies in cost control is estimated to amount to \$126.87 million.

736. The second element of inefficiency – inefficiency in the portfolio of augmentation projects – may arise from factors such as deficiencies in forecasting of demand for network services and planning of network augmentations. These factors have a bearing on whether the broader portfolio of network augmentations that is represented by new facilities investment in the first access arrangement period represents an efficient (cost minimising) choice and timing of projects.
737. The Authority is of the view that there have been inefficiencies in the planning and design of augmentations of the network as a result of deficiencies in forecasting of demand for services, deficiencies in consideration of all relevant options for augmentations, and over-engineering of augmentation designs. Further information provided by Western Power subsequent to the Draft Decision confirms the Authority's view that such inefficiencies have occurred in network augmentations of the first access arrangement period. In particular, the information provided by Western Power confirms the Authority's view of deficiencies of planning, design and governance processes that include the following.
- Western Power not using best-practice design software for the design of transmission lines that would facilitate more effective economic optimisation of transmission line design.³²⁶
 - An absence of standard designs and guidelines for distribution assets.³²⁷
 - Unusually restrictive design specifications for equipment, limiting the number of potential suppliers.³²⁸
 - A lack of rigour in assessing options for network augmentations and documenting these assessments.³²⁹
738. The Authority does not have sufficient information to be able to assess the extent of inefficiency on a project-by-project basis. However, for the reasons set out above, the Authority remains of the view that the extent of inefficiency is greater than a nominal amount. The Authority considers that the extent of inefficiency is in the order of five per cent.
739. In conclusion, the Authority considers that there is evidence that the value of capital expenditure for the first access arrangement period includes amounts that are either not appropriately considered as new facilities investment for the purposes of addition to the capital base, or that fail to satisfy the efficiency test under section 6.52(a) of the Access Code.
740. The Authority recognises the potential adverse incentive effects for investment that may arise as a result of *ex post* adjustments to values of investment to be added to the capital base and reflected in reference tariffs. It is these adverse incentive

³²⁶ Western Power submission of 10 September 2009, Attachment F2: pp. 42, 43.

³²⁷ Western Power submission of 10 September 2009, Attachment F2: p. 44.

³²⁸ Western Power submission of 10 September 2009, Attachment F2: p. 48.

³²⁹ Western Power submission of 10 September 2009, Attachment F2: p. 61.

effects that are the subject of the paper by Yarrow and Decker, submitted to the Authority by Western Power, and the submission of the Financial Investor Group.³³⁰

741. Notwithstanding the potential adverse incentive effects of an *ex post* review of the efficiency of investment, the Authority is required to undertake such a review under the requirements the new facilities investment test under section 6.52 of the Access Code. The Authority has had to undertake this review in circumstances of Western Power not being able to provide project or program specific information to support the claim of compliance of new facilities investment with the new facilities investment test. As a result, the Authority's view on whether, and to what extent, the new facilities investment of the first access arrangement period meets the efficiency test of section 6.52(a) of the Access Code is based on a consideration of processes and practices within Western Power, rather than consideration of particular capital projects and program. The Authority's view is that the planning, design and governance processes of Western Power were, during the first access arrangement period, sufficiently deficient that the value of new facilities investment is in excess of the amount that satisfies the efficiency test of section 6.52(a). On the basis of available information, it has not been possible for the Authority to rigorously derive a value of this inefficiency, but this does not absolve the Authority of the obligation to determine a value.
742. An alternative course of action in determining the capital base for the start of the second access arrangement period is a revaluation by an alternative method, such as a depreciated optimised replacement cost or optimised deprival value, as has been suggested by the Department of Treasury and Finance. The Authority does not favour a re-valuation of the capital base by a method other than the roll forward calculation for reasons of time and cost of doing so. In any case, Western Power has proposed determination of the capital base by the roll-forward method and the Authority is required to assess this proposal.
743. In assessing new facilities investment of the first access arrangement period against the requirements of the Access Code, the Authority has been hampered by a lack of necessary information both as submitted by Western Power in the revised access arrangement information and as subsequently provided to the Authority and its consultants in response to specific requests. Information provided by Western Power subsequent to the Draft Decision has allowed better analysis of new facilities investment and, having regard to this information, the Authority considers that the following amounts should be excluded from Western Power's capital costs of the first access arrangement period in determining the amount of new facilities investment to be added to the capital base:
- an amount of \$23.24 million (in dollar values of 30 June 2009) in respect of transmission projects that have been delayed or not proceeded, or amounts that should have been recovered through capital contributions (paragraphs 698 to 702) above), of which an amount of \$10.12 million has already been excluded from revised amounts of new facilities investment submitted to the Authority by Western Power subsequent to the Draft Decision;
 - an amount of \$126.87 million in respect of inefficiencies arising from deficiencies in processes of cost estimation and from overcharging by

³³⁰ Western Power submission of 10 September 2009, Attachment F1; Financial Investor Group submission of September 2009.

contractors (paragraph 735, above), of which an amount of \$18 million has already been excluded from revised amounts of new facilities investment submitted to the Authority by Western Power subsequent to the Draft Decision; and

- a further amount \$110.97 million, being five per cent of new facilities investment net of the above adjustments and of gifted assets, reflecting the view of the Authority that inefficiencies have occurred in the selection and timing of augmentation projects as a result of deficiencies in methods for forecasting demand for network services and deficiencies in analysis of options for augmentation projects.

744. The application of these adjustments to new facilities investment of the first access arrangement period is shown in Table 54. The effect of the adjustments is to reduce the value of new facilities investment to be added to the capital base by \$261.08 million, equivalent to 10.5 per cent.

Table 54 Calculation of adjusted amounts of new facilities investment in the first access arrangement period to be added to the capital base (real \$ million at 30 June 2009)

	2006/07	2007/08	2008/09	Total
Transmission				
New facilities investment (excluding gifted assets)	302.32	312.31	318.71	933.34
Adjustments in respect of projects delayed or cancelled, or amounts that should have been recovered by contributions	-7.75	-7.75	-7.75	-23.24
Adjustments in respect of inefficiencies in cost estimation and overcharging by contractors	-14.73	-15.23	-15.55	-45.50
Adjustment of 5 per cent of net amount in respect of deficiencies of demand forecast and analysis of options	-13.99	-14.47	-14.77	-43.23
Gifted assets	0	0	0	0
Value to be added to the capital base	265.85	274.87	280.64	821.36
Distribution				
New facilities investment (excluding gifted assets)	418.08	453.57	564.59	1,436.23
Adjustments in respect of projects delayed or cancelled, or amounts that should have been recovered by contributions	0	0	0	0
Adjustments in respect of inefficiencies in cost estimation and overcharging by contractors	-27.04	-26.10	-28.23	-81.37
Adjustment of 5 per cent of net amount after other adjustments and gifted assets in respect of deficiencies of demand forecast and analysis of options	-19.55	-21.37	-26.82	-67.74
Gifted assets	23.32	20.60	71.96	115.88
Value to be added to the capital base	394.80	426.70	581.50	1,403.00

745. The Authority requires the following amendment of the proposed access arrangement revisions to reflect these adjustments to the values of new facilities investment to be added to the capital base.

Required Amendment 25

The proposed access arrangement revisions should be amended so that the total amounts of new facilities investment added to the capital base are as follows (real \$ million at 30 June 2009):

	2006/07	2007/08	2008/09
Transmission:	265.85	274.87	280.64
Distribution:	394.80	426.70	581.50
Total:	660.65	701.56	862.15

Redundant Assets

746. In determination of total costs for the first access arrangement period, Western Power included in a notional roll forward of the capital base a forecast of the value of redundant assets for the access arrangement period. The forecast value was deducted from the capital base (in relevant asset categories) and an equivalent amount was included in the total costs through an amount of accelerated depreciation.
747. In deriving the capital base for the commencement of the second access arrangement period, Western Power has applied the same values of redundant assets and accelerated depreciation as forecast for the first access arrangement period, with these values escalated for inflation to dollar values of 30 June 2009.
748. The treatment of redundant assets applied in the first access arrangement period is intended to compensate Western Power for asset redundancy. The compensation occurs by the reduction in the value of the capital base being offset by an allowance for accelerated depreciation.
749. This mechanism appropriately compensates Western Power for asset redundancy only where no revenue is gained from the disposal of the redundant assets. Where revenue is gained from disposal of the redundant assets, Western Power would be over-compensated for asset redundancy by the amount of the revenue. This would be inconsistent with applying the roll forward calculation of the capital base in a manner consistent with the Code objective.
750. In the regulatory accounts for the first access arrangement period, Western Power identifies revenue from the disposal of redundant assets of \$4.23 million in 2006/07 and \$5.72 million in 2007/08 (nominal dollar values), which corresponds to \$4.48 million and \$5.80 million, respectively in real dollar values of 30 June 2009.³³¹
751. In the Draft Decision, the Authority required that revenue from the disposal of redundant assets, and any additional values of revenues from redundant assets in

³³¹ Revised access arrangement information, Appendix 8. Real dollar values calculated using actual inflation for 2008/09.

2008/09, be taken into account (as deductions) in determination of the capital base at the commencement of the second access arrangement period.

752. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 27

The proposed access arrangement revisions should be amended to add the value of any revenues from disposal of assets in the first access arrangement period to the value of redundant assets applied in calculation of the capital base at the commencement of the second access arrangement period.

753. In a submission subsequent to the Draft Decision, Western Power accepts the requirement for Draft Decision Amendment 27.³³² Accordingly, the Authority maintains the requirement for this amendment.

Required Amendment 26

The proposed access arrangement revisions should be amended to add the value of any revenues from disposal of assets in the first access arrangement period to the value of redundant assets applied in calculation of the capital base at the commencement of the second access arrangement period.

754. The amended values of redundant assets to be deducted from the capital base, with values updated to reflect actual inflation in 2008/09, are indicated in Table 55.

³³² Western Power, submission of 13 August 2009. In this submission, Western Power points out that there was an error in the Draft Decision that indicate values of revenues from sale of assets as 1.80 million in 2006/07 and \$0.31 million in 2007/08, rather than the other way around. The Authority acknowledges that this was a drafting error and correct values have been applied in determining target revenue in the Draft Decision and in this Final Decision.

Table 55 Amended value of redundant assets in the first access arrangement period (real \$ million at 30 June 2009)³³³

	2006/07	2007/08	2008/09	Total
Transmission				
Value of redundant assets under the first access arrangement	0	0	0	0
Proceeds from sale of assets	0.13	1.83	0	1.95
Total value to be deducted in calculation of the capital base	0.13	1.83	0	1.95
Distribution				
Value of redundant assets under the first access arrangement	4.15	3.97	3.92	12.05
Proceeds from sale of assets	0.20	0	0	0.20
Total value to be deducted in calculation of the capital base	4.35	3.97	3.92	12.24

Depreciation

755. In calculating its proposed value of the capital base at the commencement of the second access arrangement period, Western Power has applied values of depreciation taken into account in determining notional capital base values and the target revenue for the first access arrangement period, escalated for inflation to dollar values at 30 June 2009. The Authority is satisfied that this approach is consistent with applying the roll forward calculation in a manner consistent with the Code objective.

Capital Base at the Commencement of the Second Access Arrangement Period

756. The Authority has calculated revised values of the capital base for the transmission and distribution networks at 30 June 2009 in accordance with the Authority's determination under this Final Decision on the value of new facilities investment in the first access arrangement period that may be added to the capital base under section 6.51A of the Access Code, and on the value of redundant assets to be subtracted from the capital base.

757. The Authority's revised capital base at 30 June 2009 for the transmission network of \$2,147.41 million compares with a value of \$2,386.27 million originally proposed by Western Power (in dollar values of 30 June 2009, using actual inflation for 2008/09).

758. The Authority's revised capital base at 30 June 2009 for the distribution network of \$2,781.44 million compared with a value of \$2,877.11 million originally proposed by

³³³ Western Power submission of 10 September 2009, confidential supporting documents (Revenue Model, DMS#6439363v1).

Western Power (in dollar values of 30 June 2009, using actual inflation for 2008/09).

759. The calculations of the revised capital base values for each of the transmission and distribution networks are shown in Table 56 and Table 57.

Table 56 Authority's revised capital base at 30 June 2009 for the transmission network (real \$ million at 30 June 2009)

	2006/07	2007/08	2008/09	2009/10
Opening asset value	1,500.69	1,713.57	1,929.17	2,147.41
New facilities investment	265.85	274.87	280.64	
Redundant assets	-0.13	-1.83	0	
Depreciation	-52.84	-57.44	-62.40	
Closing asset base	1,713.57	1,929.17	2,147.41	

Table 57 Authority's revised capital base at 30 June 2009 for the distribution network (real \$ million at 30 June 2009)

	2006/07	2007/08	2008/09	2009/10
Opening asset value	1,725.75	2010.97	2,323.45	2,781.44
New facilities investment	394.80	426.70	581.50	
Redundant assets	-4.35	-3.97	-3.92	
Depreciation	-105.23	-110.24	-119.60	
Closing asset base	2010.97	2,323.45	2,781.44	

Notional Capital Base over the Second Access Arrangement Period

Application of the Section 6.51A Test to Forecast New Facilities Investment

760. Section 6.51 of the Access Code provides for the target revenue for an access arrangement period to include capital costs calculated in respect of an amount of forecast of new facilities investment that is reasonably expected to satisfy the test in section 6.51A of the Access Code.
761. The practical effect of section 6.51A is that Western Power may notionally add forecast new facilities investment to the capital base in each year of the second access arrangement period to the extent that the forecast amounts either:
- are reasonably expected to satisfy the new facilities investment test; or
 - are (or are to be) financed by a contribution, are reasonably expected to meet the requirements of the first part of the new facilities investment test (the efficiency test of section 6.52(a) of the Access Code), and the access

arrangement contains a mechanism designed to ensure that there is no double recovery of costs as a result of adding the amount to the capital base.

762. In determination of target revenue, Western Power proposes to only take into account forecast new facilities investment that is reasonably expected to satisfy the new facilities investment test. Western Power proposes to not add to the capital base any new facilities investment that is financed by contributions.
763. Western Power has determined amounts of forecast new facilities investment to be notionally added to the capital base by deriving a total amount of forecast new facilities investment and subtracting a forecast of capital contributions. These amounts, as per Western Power's proposed access arrangement revisions of October 2008, are shown in Table 58 and Table 59.

Table 58 Proposed forecast of new facilities investment for the second access arrangement period for the transmission network (proposal of October 2008, real \$ million at 30 June 2009)³³⁴

	2009/10	2010/11	2011/12
Growth			
Capacity expansion	460.26	449.16	292.98
Generation driven	36.43	112.49	49.52
Customer driven	92.56	165.18	121.42
Estimating risk (3.5 per cent)	20.62	25.44	16.24
Asset replacement and renewal			
Asset Replacement	30.58	30.95	38.61
Estimating risk (3.5 per cent)	1.07	1.08	1.35
Improvement in service			
Reliability driven	6.14	9.64	9.25
SCADA and communications	13.04	13.39	15.83
Estimating risk (3.5 per cent)	0.67	0.81	0.88
Compliance			
Regulatory compliance	45.86	41.45	37.11
Estimating risk	1.60	1.45	1.30
Corporate			
IT	9.10	7.30	4.45
Business support	12.05	11.53	4.86
Total new facilities investment	729.98	869.86	593.79
Forecast Contributions	49.98	84.39	63.47
Net addition to the capital base	680.00	785.47	530.33

³³⁴ Revised access arrangement information, p. 76, Appendix 7 and Appendix 9. Some inconsistencies exist between values shown in Appendices and in the body of the revised access arrangement information. Values indicated in the Appendices have been assumed to be the correct values.

Table 59 Proposed forecast of new facilities investment for the second access arrangement period for the distribution network (proposal of October 2008, real \$ million at 30 June 2009)³³⁵

	2009/10	2010/11	2011/12
Growth			
Capacity expansion	77.78	90.59	97.30
Customer access	149.16	151.93	157.61
Gifted assets	97.91	99.74	103.47
Estimating risk (3.5 per cent)	11.37	11.98	12.54
Asset replacement and renewal			
Asset Replacement	71.48	84.26	128.83
State underground power program	35.32	38.41	22.69
Metering	45.63	46.06	47.69
Estimating risk (3.5 per cent)	5.33	5.91	6.97
Improvement in service			
Reliability driven	44.41	54.41	67.40
Rural power improvement program	8.41	5.40	3.13
SCADA and communications	5.91	5.93	5.93
Estimating risk (3.5 per cent)	2.06	2.30	2.68
Compliance			
Regulatory compliance	87.92	103.31	135.08
Estimating risk	3.08	3.62	4.73
Corporate			
IT	27.30	21.90	13.34
Business support	34.91	33.00	13.59
Total new facilities investment	707.99	758.71	822.98
Forecast Contributions	187.13	192.45	186.77
Net addition to the capital base	520.87	566.27	636.21

New Facilities Investment Test

764. Western Power's approach to determining an amount of forecast new facilities investment that is reasonably expected to satisfy the new facilities investment test is:

- in respect of the efficiency test of section 6.52(a) of the Access Code, to contend that the planning and procurement processes of Western Power are

³³⁵ Revised access arrangement information, p. 122, Appendix 7 and Appendix 9. Some inconsistencies exist between values shown in Appendices and in the body of the revised access arrangement information. Values indicated in the Appendices have been assumed to be the correct values.

such as to ensure that the forecast of new facilities investment is a reasonable forecast of costs that would satisfy the efficiency test; and

- in respect of the tests of section 6.52(b) of the Access Code, to indicate a forecast of contributions determined in accordance with the contributions policy (as an amount that does not satisfy the new facilities investment test or is otherwise chargeable as a contribution) and deducting this amount from the forecast total new facilities investment.³³⁶

765. Western Power indicates that the forecast of contributions is derived as an amount consistent with historical levels of capital contributions as a percentage of total capital expenditure.³³⁷

766. The approach taken by the Authority in considering the forecast of new facilities investment and the amount of this forecast investment claimed by Western Power to satisfy the new facilities investment test has been to:

- assess whether the forecast of new facilities investment is reasonably expected to satisfy the efficiency test under section 6.52(a) of the Access Code; and
- assess whether Western Power has made a reasonable forecast of the amount of new facilities investment that will satisfy the new facilities investment in its entirety and that is not otherwise financed by capital contributions.

767. The Authority accepts that the planning and procurement processes applied by Western Power in development of the forecast of new facilities investment for the second access arrangement period support a view that this forecast is consistent with the requirements of the efficiency test of section 6.52(a) of the Access Code. Advice obtained by the Authority indicates that Western Power has implemented substantial improvements to its processes of cost estimation and applied these improved processes to the determination of cost forecasts for the second access arrangement period.³³⁸ The improvements include establishing an estimating centre within Western Power, with an initial focus on expenditure forecasts for the second access arrangement period.

768. Notwithstanding that planning and procurement processes within Western Power may be appropriate for producing a forecast of new facilities investment that is consistent with the efficiency test of section 6.52(a) of the Access Code, the Authority has also given consideration to three matters affecting the forecast of new facilities investment:

- the economic downturn that has emerged subsequent to Western Power submitting its proposed access arrangement revisions and that may reduce requirements for new facilities investment related to growth in demand for network services;
- assumptions of escalation of unit costs for network augmentations; and

³³⁶ Western Power submission of 17 December 2008.

³³⁷ Email correspondence from Western Power of 13 July 2009.

³³⁸ Geoff Brown & Associates Ltd, 14 July 2009, Review of Expenditure Governance: Western Power.

- the inclusion by Western Power of a 3.5 per cent margin in forecasts of new facilities investment as an “estimating risk margin”.
769. In the Draft Decision, the Authority determined that Western Power should provide an updated forecast of new facilities investment for the second access arrangement period to address the lower demand for forecast new facilities investment that may arise in the second access arrangement period as a result of the economic downturn, and to exclude the 3.5 per cent margin in forecasts of new facilities investment as an “estimating risk margin”.
770. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 28

The proposed access arrangement revisions should be amended to incorporate a forecast of new facilities investment that:

- reflects a revised program of capital works that takes into account revised forecasts of demand for network services;
 - reflects a zero rate of escalation in unit costs over the second access arrangement period; and
 - excludes any “estimating risk margin”.
771. Western Power has addressed each of these matters in a submission subsequent to the Draft Decision.³³⁹ In this same submission, Western Power has provided the Authority with revised forecasts of new facilities investment for the transmission and distribution networks (Table 60 and Table 61). The revised forecasts reflect a revised program of capital works and revised escalation rates for unit costs. Western Power has also excluded any “estimating risk margin” from the revised forecast.

³³⁹ Western Power submission of 10 September 2009, Attachment D.

Table 60 **Original and revised forecast of new facilities investment for the second access arrangement period for the transmission network (real \$ million at 30 June 2009)³⁴⁰**

	2009/10		2010/11		2011/12	
	Original	Revised	Original	Revised	Original	Revised
Growth						
Capacity expansion	476.37	136.55	464.88	159.25	303.24	167.29
Generation driven	37.70	26.36	116.43	134.91	51.26	89.21
Customer driven	95.80	84.82	170.96	172.05	125.67	247.76
Asset replacement and renewal						
Asset Replacement	31.65	19.57	32.03	30.18	39.96	31.55
Improvement in service						
Reliability driven	6.36	1.79	9.97	1.85	9.57	1.07
SCADA and communications	13.50	10.96	13.86	13.01	16.39	15.35
Compliance						
Regulatory compliance	47.46	15.97	42.90	32.80	38.41	42.30
Corporate						
IT	9.10	5.95	7.30	7.52	4.45	5.19
Business support	12.05	4.97	11.53	8.91	4.86	7.66
Total new facilities investment	729.98	306.95	869.86	560.48	593.79	607.39
Forecast Contributions	49.98	23.46	84.39	41.46	63.47	17.05
Net addition to the capital base	680.00	293.54	785.47	519.03	530.33	590.33

Note: for comparison purposes, values of the original forecast include the 3.5% estimating risk factor.

³⁴⁰ Revised access arrangement information Appendix 9. Western Power submission of 10 September 2009, confidential supporting documents (Expenditure Project List, DMS#6405708v1).

Table 61 Original and revised forecast new facilities investment for the second access arrangement period for the distribution network (real \$ million at 30 June 2009)³⁴¹

	2009/10		2010/11		2011/12	
	Original	Revised	Original	Revised	Original	Revised
Growth						
Capacity expansion	80.50	81.54	93.76	104.01	100.70	98.30
Customer access	154.38	202.38	157.25	202.78	163.13	202.38
Gifted assets	101.34	86.61	103.23	86.78	107.09	86.61
Asset replacement and renewal						
Asset Replacement	73.98	71.35	87.21	110.51	133.34	131.01
State underground power program	36.55	19.84	39.75	19.40	23.49	18.89
Metering	47.23	12.22	47.67	12.33	49.36	12.75
Improvement in service						
Reliability driven	45.97	10.96	56.31	29.06	69.76	47.03
Rural power improvement program	8.70	7.94	5.59	0	3.23	0
SCADA and communications	6.12	5.58	6.13	6.05	6.14	5.59
Compliance						
Regulatory compliance	91.00	79.99	106.92	101.84	139.81	111.01
Corporate						
IT	27.30	17.86	21.90	22.55	13.34	15.58
Business support	34.91	14.90	33.00	26.72	13.59	22.99
Total new facilities investment	707.99	611.16	758.71	722.01	822.98	752.14
Forecast Contributions	187.13	206.23	192.45	206.28	186.77	205.54
Net addition to the capital base	520.87	404.93	566.27	515.73	636.21	546.60

Note: for comparison purposes, values of the original forecast include the 3.5% estimating risk factor.

772. For transmission, the revised forecast of new facilities investment is, in total, \$719 million (33 per cent) less than originally proposed, and the amount to be notionally added to the capital base is \$603 million (30 per cent) less. Western Power indicates that this reduction in forecast new facilities investment is a result of a revision of growth-driven projects in accordance with updated forecasts of demand for network services and advice from customers on the required timing of

³⁴¹ Revised access arrangement information Appendix 9. Western Power submission of 10 September 2009, confidential supporting documents (Expenditure Project List, DMS#6405708v1).

projects, and deferral of non-growth-driven projects. In particular, Western Power indicates that three projects accounting for approximately \$500 million of forecast new facilities investment have been deferred within the second access arrangement period:

- Pinjar-Eneabba 330 kV line (North Country Region south line section, \$253.3 million) – deferred by 2 years;
- South West bulk transmission reinforcement (\$191.2 million) – deferred by two years; and
- Binningup Desalination Plant (\$54.0 million) – deferred by one year.

773. Western Power indicates that four major transmission line projects have deferred until some time after the second access arrangement period:

- Grange Resources mine 220 kV supply (indicated in the original forecast at \$179.3 million) – deferred by five to ten years;
- new Wanneroo-Hocking-Wangara 132 kV line (indicated in the original forecast at \$46 million) – deferred by three years;
- new Kojonup-Albany 132 kV line (indicated in the original forecast at \$138.8 million) – deferred by five to ten years; and
- Eneabba-Geraldton 330 kV line (North Country Region north line section) – deferred by three to five years.

774. Western Power also indicates that a “Perth CBD substation” project (indicated in the original forecast at \$45.3 million) has been deferred and that a major transmission line (from Eneabba to the Gindalbie Metals Karara mine, indicated in the original forecast at \$74 million) has been removed from the forecast on the basis that it is expected to be built and owned by the customer.

775. For distribution, the revised forecast of new facilities investment is, in total, \$204 million (9 per cent) less than originally proposed, and the amount to be notionally added to the capital base \$256 million (15 per cent) less. These reductions arise principally from reduced capital programs in non-growth areas, including:

- a reduction in investment under the State Underground Power Program (\$41.7 million, 42 per cent) and Rural Power Improvement Program (\$9.6 million, 55 per cent), reflecting lower State Government commitments to these programs;
- a reduction in investment in meters (\$107.0 million, 74 per cent), driven by a reduced forecast of new connections;
- a reduction in investment for regulatory compliance of (\$44.9 million, 13 per cent); and
- a reduction in IT and business support costs (\$23.4 million, 16 per cent) by deferral of projects beyond 2012.

776. These reductions are, in part, offset by increases in forecast new facilities investment in growth driven projects in categories of capacity expansion and customer access of \$142 million.

777. The Authority observes that Western Power has made substantial changes to the forecasts of new facilities investment in accordance with the determination under the Draft Decision that the forecasts should be revised to reflect changes in economic conditions. In particular, Western Power has revised the forecast of new facilities investment downwards in accordance with a reduced forecast of energy demand. The Authority notes that the general outlook for economic conditions is changing, and may be more optimistic at the current time than earlier in 2009 when the forecasts of energy demand were made. On this basis, the Authority considers that Western Power's revised forecast of new facilities investment for the second access arrangement period may be conservative.
778. Western Power's revised forecasts of new facilities investment incorporate an escalation of unit costs in accordance with Western Power's determination of cost escalators and including real escalation rates of between -2.30 and 2.45 per cent per annum for transmission works and between -0.76 and 2.19 per cent for distribution works.³⁴² While the escalation of unit costs is greater than the zero rate of escalation contemplated by the Authority in the Draft Decision, the Authority considers that these escalation rates have been rigorously derived and are appropriately reflected in the forecast of new facilities investment.
779. Western Power's revised forecasts of new facilities investment exclude allowances for the "estimating risk margin", included in the original forecasts at 3.5 per cent of forecast costs.
780. Taking into account the revisions made by Western Power to the forecasts of new facilities investment, the Authority is satisfied that the revised forecast is reasonably expected to satisfy the "efficiency test" under section 6.52(a) of the Access Code.
781. The second part of the new facilities investment tests comprises the "incremental revenue test", "net benefits test" and "safety and reliability test" of section 6.52(b) of the Access Code. Western Power has determined an amount of new facilities investment that it contends meets the tests of section 6.52(b) by indicating a forecast of contributions determined in accordance with the contributions policy (as an amount that does not satisfy the new facilities investment test or is otherwise chargeable as a contribution) and deducting this amount from the forecast total new facilities investment.
782. The Authority has compared the forecast of contributions with actual values in the first access arrangement period (Table 62). The Authority observes that the level of capital contributions forecast by Western Power is generally within the range of the first access arrangement as a proportion of the values of new facilities investment in categories that attract contributions. The exception is for the transmission network in 2011/12, for which a relatively low ratio of contributions to customer driven investment is forecast, which the Authority accepts is adequately explained by the large value of customer driven expenditure in this year that is accounted for by investment in the Pinjar – Eneabba 330 kV transmission line project. On the basis of the ratios of contributions to levels of customer driven investment, the Authority accepts that the forecast of contributions is reasonable and the residual values of investment may reasonably be expected to satisfy the second part of the new facilities investment test under section 6.52(b) of the Access Code.

³⁴² Western Power submission 10 September 2009 Attachment D, Table 2-2. Real values were calculated using inflation rates as shown in this reference.

Table 62 Actual and forecast capital contributions (real \$ million at 30 June 2009)³⁴³

	2006/07 Actual	2007/08 Actual	2008/09 Actual	2009/10 Forecast	2010/11 Forecast	2011/12 Forecast
Transmission						
Customer driven investment	18.98	74.47	36.39	84.54	164.31	235.59
Generation driven investment	119.50	89.38	95.63	26.36	134.91	89.21
Total	138.48	163.85	132.03	110.90	299.22	324.79
Contributions	35.90	53.11	10.83	23.46	41.46	17.05
Ratio of contributions to investment	0.26	0.32	0.08	0.21	0.14	0.05
Distribution						
Customer driven investment	191.92	192.26	249.25	202.38	202.78	202.38
Gifted assets	23.32	20.60	71.96	86.61	86.78	86.61
Total	215.24	212.86	321.22	288.99	289.55	288.99
Contributions	179.72	143.99	153.51	206.23	206.28	205.54
Ratio of contributions to investment	0.84	0.68	0.48	0.71	0.71	0.71

New facilities investment that is the subject of a contribution

783. For the second access arrangement period, Western Power proposes a different treatment of contributions than that applied under the access arrangement for the first access arrangement period in taking the value of contributions into account in setting and applying the price control.
784. Under the current access arrangement, the value of any new facilities investment financed by contributions is added to the capital base and the value of contributions is deducted from target revenue. This treatment leaves Western Power financially neutral in respect of the financing of new facilities investment by contributions. Western Power earns future revenue from depreciation allowances and a rate of return on the value of investment added to the capital base, but bears an equivalent cost (in present value terms) by having the value of the contributions deducted from the value of revenue able to be recovered under the price control. This treatment is consistent with the requirement of section 6.51A(b) of the Access Code for the value of investment financed by capital contributions to be added to the capital base.
785. For the second access arrangement period, Western Power has proposed to not add to the capital base any new facilities investment financed by contributions. This treatment of contributions is also financially neutral on Western Power. Western

³⁴³ Western Power submission of 10 September 2009. Western Power submission of 10 September 2009, confidential supporting documents (Revenue Model, DMS#6439363v1).

Power does not meet the cost of the new facilities investment that is the subject of the contribution and does not gain any revenue from that investment. As such, the requirements of section 6.51A(b) of the Access Code are redundant in considering the value of new facilities investment to be notionally added to the capital base for the second access arrangement period.

Conclusion on Application of the Section 6.51A Test

786. In determining the forecast total costs for providing covered services for the second access arrangement period, Western Power proposes to take into account only that part of forecast new facilities investment that is reasonably expected to satisfy the new facilities investment test. Western Power proposes that the amount of forecast new facilities investment that is the subject of capital contributions is not to be taken into account in determining the forecast total costs.
787. Taking into account the matters set out above, the Authority is satisfied that the revised forecast of new facilities investment provided by Western Power in a submission to the Authority subsequent to the Draft Decision is reasonably expected to satisfy the test in section 6.51A of the Access Code. Accordingly, the Authority considers that the capital costs associated with this forecast new facilities investment may, under section 6.51 of the Access Code, be included in the target revenue for the second access arrangement period.
788. The Authority notes that new facilities investment for the second access arrangement period is subject to further assessment against the tests of section 6.51A of the Access Code either on request by Western Power before the investment occurs (under section 6.71 of the Access Code), or after the investment occurs and at the time of assessment of proposed revisions to the access arrangement.
789. The Authority therefore requires the proposed access arrangement revisions to be amended so that target revenue reflects the revised forecasts of new facilities investment as submitted by Western Power.

Required Amendment 27

The proposed access arrangement revisions should be amended to reflect a forecast of new facilities investment for the second access arrangement period as set out by Western Power in its submission to the Authority dated 10 September 2009.

790. The corresponding allocations of the revised forecast of new facilities investment across asset classes, also provided by Western Power,³⁴⁴ are shown in Table 63 and Table 64.

³⁴⁴ Western Power submission of 10 September 2009. Western Power submission of 10 September 2009, confidential supporting documents (Revenue Model, DMS#6439363v1).

Table 63 Amended forecast new facilities investment for the transmission network (real \$ million at 30 June 2009)

	2009/10	2010/11	2011/12
Transmission cables	5.98	7.29	7.84
Transmission steel towers			
Total investment	119.66	233.21	286.40
Forecast contributions	7.32	12.94	5.32
Net investment	112.33	220.27	281.08
Transmission wood poles	17.14	25.01	28.35
Transmission metering	0	0	0
Transmission transformers			
Total investment	45.57	92.93	92.37
Forecast contributions	6.18	10.92	4.49
Net investment	39.40	82.01	87.88
Transmission reactors			
Total investment	1.16	5.12	3.52
Forecast contributions	0.83	1.46	0.60
Net investment	0.33	3.65	2.92
Transmission capacitors			
Total investment	9.53	33.00	23.99
Forecast contributions	4.85	8.57	3.52
Net investment	4.68	24.44	20.47
Transmission circuit breakers			
Total investment	55.33	93.36	92.23
Forecast contributions	3.79	6.70	2.76
Net investment	51.54	86.66	89.48
SCADA & communications			
Total investment	11.94	14.93	17.02
Forecast contributions	0.16	0.29	0.12
Net investment	11.78	14.64	16.90
IT	5.95	7.52	5.19
Other non-network assets	4.97	8.91	7.66
Land and easements			
Total investment	29.72	39.21	42.8
Forecast contributions	0.33	0.58	0.24
Net investment	29.39	38.63	42.56
Total investment	306.95	560.48	607.39
Total contributions	23.46	41.46	17.05
Total new facilities investment less contributions	283.48	519.03	590.33

Table 64 Amended forecast new facilities investment for the distribution network (real \$ million at 30 June 2009)

	2009/10	2010/11	2011/12
Wooden poles			
Total investment	162.35	215.00	243.99
Forecast contributions	15.69	15.72	15.69
Net investment	146.67	199.29	228.30
Underground cables			
Total investment	225.45	244.15	245.44
Forecast contributions	113.46	113.41	112.93
Net investment	111.99	130.74	132.51
Transformers			
Total investment	79.38	86.28	87.31
Forecast contributions	39.21	39.26	39.16
Net investment	40.18	47.02	48.15
Switchgear			
Total investment	68.51	82.55	91.42
Forecast contributions	24.33	24.35	24.28
Net investment	44.18	58.20	67.14
Street lighting			
Total investment	24.75	25.98	26.41
Forecast contributions	13.55	13.54	13.48
Net investment	11.20	12.44	12.93
Meters and services	12.22	12.33	12.75
SCADA & communications	17.86	22.55	15.58
IT	5.73	6.45	6.24
Other non-network assets	14.90	26.72	22.99
Land and easements	0	0	0
Total investment	611.16	722.01	752.14
Total contributions	206.23	206.28	205.54
Total new facilities investment less contributions	404.93	515.73	546.60

Redundant Assets

791. Consistent with the treatment of redundant assets in the first access arrangement period, Western Power includes a forecast of the value of redundant assets in the notional roll forward of the capital base for the second access arrangement period. The forecast value is deducted from the capital base (in relevant asset categories) and an equivalent amount included in the total costs through an amount of accelerated depreciation.

792. The treatment of redundant assets applied in the first access arrangement period and proposed for the second access arrangement period compensates Western Power for asset redundancy – the reduction in the value of the capital base is offset by an allowance for accelerated depreciation.
793. Values of redundant assets proposed for the second access arrangement period are shown in Table 65 and are indicated by Western Power to relate to assets expected to be made redundant as a result of the under-grounding of distribution lines under the State Underground Power Program.³⁴⁵ Given the low value of the redundancy allowances and the fact that these relate to a specific program, the Authority determined in the Draft Decision that these allowances are appropriately taken into account in determination of target revenue for the second access arrangement period. The Authority maintains this position.

Table 65 Value of redundant assets proposed for the second access arrangement period (real \$ million at 30 June 2009)³⁴⁶

	2009/10	2010/11	2011/12
Transmission	0	0	0
Distribution			
Wooden pole lines	2.88	2.82	2.74
Transformers	0.77	0.75	0.73
Switchgear	0.19	0.19	0.18
Total distribution	3.84	3.75	3.66
Total	3.84	3.75	3.66

Depreciation

794. Under section 6.70 of the Access Code, an access arrangement must include a specification of the method by which depreciation allowances for assets of the capital base are calculated, assumptions as to asset lives and the circumstances in which the depreciation of a network asset may be accelerated.
795. Western Power's proposed method and assumptions for calculation of depreciation allowances are set out in clauses 6.4 to 6.6 of the proposed access arrangement revisions.
796. In determination of total costs for the second access arrangement period, Western Power calculates depreciation allowances using the straight-line method with assumptions of average residual lives of existing assets included in the initial capital base values of the transmission and distribution networks, and total asset lives for new assets introduced to the capital base as new facilities investment. Western Power has maintained the same method of straight-line depreciation and

³⁴⁵ Proposed access arrangement revisions, clause 6.6.

³⁴⁶ Western Power submission of 10 September 2009, confidential supporting documents (Revenue Model, DMS#6439363v1).

assumptions of asset lives in calculation of depreciation allowances as applied for the first access arrangement period.

797. At clause 6.6 of the proposed access arrangement revisions, Western Power indicates that accelerated depreciation will be applied to distribution assets that will be decommissioned as a result of the State Underground Power Program undertaken by Western Power on behalf of the Western Australian Government. This principle of accelerated depreciation is unchanged from the current access arrangement.
798. Assumptions of asset lives for the asset categories of the capital base of the transmission and distribution networks are indicated in Table 66.

Table 66 Assumptions of asset lives applied for calculation of depreciation allowances³⁴⁷

Asset category	Assumed asset life (years)	
	Existing assets at 30 June 2006	New assets
Transmission		
Cables	38.10	55.00
Steel towers	41.30	60.00
Wood poles	20.90	45.00
Metering	26.10	40.00
Transformers	25.50	50.00
Reactors	27.00	50.00
Capacitors	23.10	40.00
Circuit breakers	28.20	50.00
SCADA & communications	11.40	34.15
IT & T	4.20	16.85
Other non-network assets	12.00	16.85
Land and easements	Not applicable	Not applicable
Distribution		
Wooden pole lines	14.50	41.00
Underground cables	36.90	60.00
Transformers	16.90	35.00
Switchgear	13.50	35.00
Street lighting	1.20	20.00
Meters and services	9.20	25.00
IT & T	9.80	10.16
SCADA & communications	10.20	10.16
Other non-network assets	11.30	10.16
Land and easements	Not applicable	Not applicable

799. Western Power has proposed continuing the same method of calculation of depreciation allowances and assumptions of asset lives as applied for the first access arrangement period. The Authority is satisfied that the calculation of depreciation allowances is consistent with the requirements of section 6.70 of the Access Code.

³⁴⁷ Revised Access Arrangement Information, Appendix 7 (Revenue Model).

Notional Capital Base Values for the Second Access Arrangement Period

800. The Authority has calculated revised values of the notional capital base for the second access arrangement period in accordance with the Authority's determinations under this Final Decision.
801. The revised notional capital base at the end of the second access arrangement period (30 June 2012) for the transmission network of \$3,314.54 million compares with a value of \$4,150.51 million originally proposed by Western Power (in dollar values of 30 June 2009).
802. The revised notional capital base at the end of the second access arrangement period (30 June 2012) for the distribution network of \$3,772.35 million compared with a value of \$4,129.19 million originally proposed by Western Power (in dollar values of 30 June 2009).
803. The calculation of the revised capital base values, for each of the transmission and distribution networks, is shown in Table 67 and Table 68.

Table 67 **Final Decision: Authority's revised notional capital base values for the second access arrangement period for the transmission network (real \$ million at 30 June 2009)**

	2009/10	2010/11	2011/12
Opening asset value	2,147.41	2,362.05	2,807.48
New facilities investment	283.48	519.03	590.33
Redundant assets	0	0	0
Depreciation	-68.85	-73.59	-83.28
Closing asset base	2,362.05	2,807.48	3,314.54

Table 68 **Final Decision: Authority's revised notional capital base values for the second access arrangement period for the distribution network (real \$ million at 30 June 2009)**

	2009/10	2010/11	2011/12
Opening asset value	2,781.44	3,041.14	3,399.39
New facilities investment	404.93	515.73	546.60
Redundant assets	-3.84	-3.75	-3.66
Depreciation	-141.39	-153.72	-169.99
Closing asset base	3,041.14	3,399.39	3,772.35

Weighted Average Cost of Capital

Access Code Requirements

804. Section 6.64 of the Access Code requires that the access arrangement set out the weighted average cost of capital (**WACC**) for a covered network.
805. Section 6.65 of the Access Code provides for the Authority to make a determination of the preferred methodology for calculating the WACC in access arrangements for covered networks under the Access Code. If a determination has been made by the Authority, section 6.64(a) of the Access Code requires Western Power to use the Authority's methodology in the determination unless Western Power can demonstrate that an access arrangement containing an alternative methodology would better achieve the objectives set out in section 6.4 of the Access Code and the Code objective.
806. On 25 February 2005, the Authority made a determination (**WACC Determination**) under section 6.65 of the Access Code on the preferred WACC methodology.³⁴⁸
807. This determination has effect for five years from 25 February 2005 to 25 February 2010. As a final decision on the proposed access arrangement revisions will be made while the 2005 WACC determination is still effective, the 2005 WACC Determination will apply in respect of the proposed access arrangement revisions.

Proposed Revisions

808. The WACC applied under the current access arrangement is 6.76 per cent pre-tax real.
809. Western Power has proposed a WACC of 8.95 per cent pre-tax real for the second access arrangement period. This value was determined after calculation of a "reasonable range" of WACC values according to the method established by the Authority's WACC Determination and by application of parameter values to the capital asset pricing model (**CAPM**) and WACC as shown in Table 69.

³⁴⁸ Economic Regulation Authority, 25 February 2005, Determination of the preferred methodology for calculating the weighted average cost of capital for covered electricity networks.

Table 69 WACC Values for the Current Access Arrangement and Proposed Access Arrangement Revisions

Parameter	Current Access Arrangement (Determined by the Authority) ³⁴⁹	Proposed Access Arrangement Revisions (Proposed by Western Power) ³⁵⁰
Nominal risk free rate (%)	5.81	6.45
Real risk free rate (%)	2.63	3.62
Inflation rate (%)	3.10	2.73
Capital structure (equity to total value, %)	40	40
Capital structure (debt to total value, %)	60	60
Equity beta	0.8 – 1.0	0.90 – 1.10
Market risk premium (%)	5.0 – 6.0	6.0 – 7.0
Debt margin (%)	1.225 – 1.425 (including debt establishment costs of 0.125%)	3.365 – 3.665 (including debt establishment costs of 0.125%)
Value of imputation credits (gamma, %)	30 – 60	0 – 50
Range for the real pre-tax WACC (%)	5.57 – 6.85	8.50 – 11.12
Applied real pre-tax WACC (%)	6.76	8.95

810. Western Power has included in the revised access arrangement information a report from KPMG that establishes the values of input parameters to the WACC calculation and establishes the range of WACC values.³⁵¹
811. Western Power established its proposed WACC value on the basis of a nominal risk free rate and a debt margin established from capital market data over a 60 trading-day period to 23 June 2008. Western Power indicated that the determination is subject to revision to reflect a prevailing risk free rate and updated inflation outlook at a time closer to the final decision or further final decision for the proposed access arrangement revisions.

³⁴⁹ Economic Regulation Authority, 2 March 2007, Final Decision on the Proposed Access Arrangement for the South West Interconnected Network, Appendix B.

³⁵⁰ Revised access arrangement information, Appendix 7 (Revenue Model).

³⁵¹ Revised access arrangement information, Appendix 6.

812. It was not clear from the proposed access arrangement revisions how Western Power intended to make such revisions given that the proposed WACC value is selected from within a broad range of values rather than being a calculated value. However, Western Power has further submitted that:³⁵²

... the value of WACC will be subject to revision to reflect the prevailing interest rates and the corresponding 10-year inflation outlook over a sampling period to be agreed (on a confidential basis) between the Authority and Western Power.

It is Western Power's intention to revise the plausible range for WACC based on the parameters recommended by KPMG and the revised market data from the agreed sampling period. It can be reasonably anticipated that Western Power will select a point value from the revised range based on the parameter values currently specified in Chapter 6A of the National Electricity Rules in relation to: equity beta (1.0); gamma (0.5); market risk premium (6%); and gearing (60%).

813. In a submission subsequent to the Draft Decision, Western Power submits that the WACC should be no less than the value obtained by applying the WACC parameters determined by the Australian Energy Regulator (**AER**) in respect of electricity transmission and distribution businesses in the National Electricity Market.³⁵³

Considerations of the Authority

814. Under the requirements of section 6.64 of the Access Code, the Authority must determine whether the WACC proposed by Western Power has been determined consistently with the method in the Authority's WACC Determination, or by an alternative method that has been demonstrated by Western Power to better achieve the objectives set out in section 6.4 of the Access Code and the Code objective.

815. The Authority's WACC Determination was that:³⁵⁴

- the CAPM be the method used for calculating the return on assets;
- financial modelling be applied in real terms;
- the WACC be formulated on a pre-tax basis, using the Officer formula with the taxation adjustment calculated using a forward transformation;
- the debt premium be based on market evidence of debt costs for businesses with a credit risk profile consistent with a BBB or BBB+ credit rating (sources of relevant market evidence may include CBASpectrum and Bloomberg estimates of corporate bond yields);
- nominal risk free rates be derived from Commonwealth 10-year bond rates with terms of 10 years, calculated on the basis of a 20 trading-day average of the yields, taken at the final day of the month prior to a decision on an access arrangement;

³⁵² Western Power submission of 17 December 2008, p.6.

³⁵³ Western Power submission of 10 September 2009.

³⁵⁴ Economic Regulation Authority, 25 February 2005, Determination of the preferred methodology for calculating the weighted average cost of capital for covered electricity networks, paragraph 5.

- real risk free rates to be derived from a 20 trading-day average of the yields on Commonwealth index-linked bonds with terms of 10 years, taken at the final day of the month prior to a decision on an access arrangement;
 - the inflation forecast for the relevant period is the difference between the nominal risk free rate and real risk free rate (calculated using the Fisher equation); and
 - an appropriate benchmark gearing assumption be adopted to encourage efficient financing decisions.
816. Relevant objectives for the WACC under section 6.4 of the Access Code and the Code objective are that the WACC should be set at a value that:
- gives the service provider an opportunity to earn revenue that meets the forward-looking and efficient cost of funds;
 - is commensurate with the commercial risks involved in the provision of covered services; and
 - promotes the economically efficient investment in, and operation and use of, the SWIN and the services provided by the SWIN
817. The Authority has considered Western Power's proposed WACC against the elements of methodology addressed in the Authority's WACC Determination and the values of parameters of the CAPM and WACC formulae that are applied under this methodology.
818. In considering Western Power's proposed WACC, the Authority has had regard to recent studies of regulatory rate of return values for utility businesses, including the determination of the AER on values of WACC parameters for electricity transmission and distribution businesses under the National Electricity Rules.³⁵⁵

General Method

819. The Authority's WACC Determination requires that:
- the CAPM be the method used for calculating the return on assets;
 - financial modelling be applied in real terms; and
 - the WACC be formulated on a pre-tax basis, using the Officer formula with the taxation adjustment calculated using a forward transformation.
820. Western Power has provided details of its financial modelling for the determination of total costs and target revenue and determination of the WACC as Appendix 7 of the revised access arrangement information. The Authority has scrutinised the financial model and WACC calculations and is satisfied that Western Power has undertaken financial modelling and calculated the WACC value in accordance with the general method of the Authority's WACC Determination. The Authority's

³⁵⁵ Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters. Australian Energy Regulator, May 2009, Electricity transmission and distribution network service providers, Statement of the revised WACC parameters (transmission), Statement of regulatory intent on the revised WACC parameters (distribution).

consideration of the WACC proposed by Western Power has therefore been limited to the values of parameters in the calculation of the WACC, rather than the general method of determination.

Risk Free Rate and Inflation

821. Western Power has determined a value of the nominal risk free rate of 6.45 per cent from the average of implied annualised yields on 10-year Commonwealth Government Securities (government bonds) over a 60 trading-day period to 23 June 2008. An inflation forecast of 2.73 per cent was derived by consideration of the short-term inflation forecasts and the long-term inflation targets of the Reserve Bank of Australia. A value of the real risk free rate was then calculated from the nominal risk free rate and inflation rate by the Fisher equation.³⁵⁶
822. Western Power indicates that this method for the derivation of the real risk free rate differs from the method applied by the Authority in its WACC Determination (observing a real risk free rate from implied yields on inflation-indexed government bonds), but that this method is consistent with the Authority's June 2008 determination of a WACC value for regulated railway infrastructure.³⁵⁷
823. The method applied by Western Power for derivation of the risk free rate also differs from the Authority's WACC Determination in that risk free rates are estimated from implied yields on government bonds over a 60 trading-day period, rather than a 20 trading-day period as applied by the Authority. Western Power indicates that the longer period is preferred as the 20 trading-day period may be too short for Western Power to re-finance or hedge a significant portion of its debt portfolio.
824. Western Power further indicated that it would seek an agreement with the Authority on the date at which the values of these market parameters are to be determined and the "sampling period" of capital-market data (the number of trading days over which average values for the risk free rate and debt margins are determined), with the agreed date and period to be kept confidential.³⁵⁸
825. Alinta Sales and Synergy have both submitted that Western Power has failed to justify either the 60-day sampling period of market data, or the confidentiality of the date at which market data is applied in determining the risk free rate and cost of debt.³⁵⁹
826. In previous regulatory determinations for electricity, gas and rail infrastructure services, the Authority has typically adopted a method for estimation of the risk free rates of taking the average of implied yields on 10-year government bonds over a 20 trading-day period to the end of the calendar month prior to the relevant determination. This method has not been mandated by any of the regulatory codes governing the Authority's determinations, but rather is a convention adopted by most Australian economic regulators taking into account:

³⁵⁶ Revised access arrangement information, p. 103.

³⁵⁷ Revised access arrangement information, p. 103.

³⁵⁸ Revised access arrangement information, pp. 104, 141.

³⁵⁹ Alinta Sales Pty Ltd submission of 17 December 2008; Synergy submission of 22 December 2008 on the Price Control.

- a benchmark assumption of financing of investment through long-term debt and equity instruments; hence, the observation of implied yields on 10-year government bonds rather than shorter-term securities;
 - the occurrence of day-to-day volatility in the pricing of government bonds; hence, the use of an average over 20 trading-days; and
 - the ability to avoid “cherry-picking” of market observations to achieve higher or lower estimates of the risk-free rate, by establishing a date of determination before the values of market observations at that date are known.
827. The Authority considers that, unless there is a demonstrated reason for change, maintaining the conventional practice in determining the risk free rate provides some certainty for regulated businesses in the manner in which the rate of return is to be determined, and is thereby consistent with maintaining incentives for investment in electricity network assets and with the Code objective.
828. With regard to Western Power’s proposal to determine the risk free rate by observation of implied yields on government bonds over a 60 trading-day period rather than a 20 trading-day period, the Authority believes the only reason to contemplate a longer period than a 20 trading-day period would be increased volatility in day-to-day observations of implied yields on government bonds that could introduce a bias into an average over a 20 day period. In addition, the Authority is of the view that CAPM is a forward looking model in which the risk free rate is a key parameter. This model requires a period as close as possible to the date the parameter is estimated. Western Power has not made any claim or provided any evidence for increased volatility and the Authority therefore maintains the view that it is appropriate to determine the risk free rate as the average of implied yields on 10-year government bonds over a 20 trading-day period.
829. Western Power has requested that the timing of the period to be used to determine the risk free rate be established by agreement with the Authority and not be dependent upon the timing of the Authority’s decision under the Access Code.
830. The Access Code does not make any explicit provision for the Authority to specify a time period for determination of the risk free rate. However, there are precedents in other Australian jurisdictions for the time of estimating the risk free rate to be fixed in the manner requested by Western Power.
831. The National Electricity Rules (at clauses 6.5.2(c)(2) and 6A.6.2(c)) make explicit provision for transmission and distribution service providers to propose a period for determination of the risk free rate, for the AER to not unreasonably withhold agreement to any such proposal, and for the period to be kept confidential until after the expiry of the period.
832. During the process of the Victorian Essential Services Commission’s most recent approval of revisions to access arrangements for the Victorian gas distribution businesses, a request was made to fix a date for determining the risk free rate,

which was set at 30 November 2007 and was ultimately about three months prior to the final decision.³⁶⁰ The Commission acceded to this request.

833. The Authority is satisfied that fixing the date of estimation of the risk free rate may facilitate Western Power's activities in financial transactions and ultimately provide for efficient financing of investment and efficient investment decisions. The Authority is further satisfied that there is justification for confidentiality of this date to be maintained until after the date. Public notice of a date of estimation of the risk free rate may effectively advertise to finance providers that Western Power intends to enter into financial arrangements at a particular date and may act to disadvantage Western Power in seeking a competitive cost of funds from these finance providers. The Authority is also satisfied that maintaining confidentiality of the date would not be to the disadvantage of users.
834. For the purposes of providing an indication of the WACC as part of the Authority's Draft Decision, the Authority assessed the proposed WACC on the basis of the risk free rate estimated at 30 June 2009. The WACC value has been revised for the Final Decision to reflect a nominal risk free rate estimated at 30 October 2009. This was indicated to Western Power in a letter from the Authority dated 25 September 2009.
835. With regard to the determination of the real risk free rate, the practice of regulators has changed over the past two years. While the Authority and other Australian economic regulators previously determined real risk free rates by observations of implied yields on inflation-indexed government bonds, an increasingly thin market for inflation-indexed government bonds has led to concerns over whether the implied yields on these bonds are indicative of risk free rates of return.³⁶¹ Accordingly, the Authority is satisfied that Western Power's proposed method of determining the risk free rate (by adjusting the nominal risk free rate by an assumed value of future inflation) better achieves an estimate of the cost of capital and therefore better achieves the objectives of section 6.4 of the Access Code.
836. The value of inflation applied by Western Power of 2.73 per cent per annum was determined on the basis of two inflation projections for Australia. First, the short to medium term inflation projection is from three to four per cent per annum. Second, a longer term view of inflation is 2.5 per cent per annum, being the midpoint of the Reserve Bank of Australia's target range for inflation of two to three per cent. The Authority is satisfied with this general approach to determining a forecast of inflation. However, since Western Power submitted the proposed access arrangement revisions in October 2008, there has been a substantial slowdown in economic activity and the forecast for short to medium term expectations of inflation is now lower. A recent statement on Monetary Policy from the Reserve Bank of Australia reveals that expectations of inflation are 2.75 per cent for the year to June 2010 and 2.0 per cent to June 2011.³⁶²

³⁶⁰ Essential Services Commission Victoria, 7 March 2008, Gas Access Arrangement Review 2008-2012 Final Decision – Public Version, p. 456.

³⁶¹ See, for example, Economic Regulation Authority, 23 June 2008, Final Determination 2008 Weighted Average Cost of Capital for the Freight (WestNet Rail) and Urban (Public Transport Authority) Railway Network, pp. 11 – 15. Essential Services Commission Victoria, 7 March 2008, Gas Access Arrangement Review 2008-2012 Final Decision – Public Version, pp. 450 – 460.

³⁶² Reserve Bank of Australia, August 2009, Statement on Monetary Policy, p. 75.

837. The Authority considers that the best estimate of the 10-year inflation forecast for this decision is a geometric mean of the Reserve Bank of Australia's short to medium term forecasts (currently extending out two years) and the mid-point of the Reserve Bank of Australia's target inflation range forecast of 2.5 per cent. Based on this approach and using the latest Reserve Bank of Australia forecasts in August 2009, the Authority has applied an inflation rate of 2.47 per cent in calculating a real risk free rate from the observed nominal risk free rate.
838. With an estimated nominal risk free rate of 5.51 per cent at 30 October 2009 and an assumed inflation rate of 2.47 per cent, the Authority estimates a real risk free rate of 2.97 per cent.

Debt Margin

839. The debt margin (also referred to as the debt premium) is a margin above the risk free rate reflecting the risk in provision of debt finance to the regulated activity.
840. Western Power has proposed determination of the WACC taking into account a range in values of the debt margin derived from fair-value yield estimates of BBB to BBB+ rated corporate bonds published by CBASpectrum, plus an amount of 12.5 basis points as an allowance for debt transaction costs. For the purposes of its proposed access arrangement revisions, Western Power determined the range of values for the debt margin from averages of fair value yield estimates over a 60 trading-day period to 23 June 2008. As with the risk free rate, Western Power proposes that the range of values of the debt margin be updated to reflect a determination over a 60 trading-day period to be agreed with the Authority.
841. The Authority's WACC Determination indicates a preferred method for estimating a debt margin as use of market evidence of debt costs for businesses with a credit risk profile consistent with a BBB or BBB+ credit rating, at the end of the month prior to a decision on proposed revisions to the access arrangement, with relevant sources of market evidence including CBASpectrum and Bloomberg. The WACC Determination also contemplates an allowance for debt issuance costs of 12.5 basis points.
842. The method applied by Western Power for derivation of the debt margin differs from the Authority's WACC Determination in that:
- the debt margin is determined with reference to market evidence over a 60 trading-day period to a date determined by agreement with the Authority, rather than a 20 trading-day period to the end of the month prior to the Authority's decision on proposed revisions to the access arrangement; and
 - consideration is given only to market information from CBASpectrum data and does not take into account data from Bloomberg.
843. On the use of a 60 trading-day period, the Authority considers that Western Power has not provided sufficient justification for a departure from the convention of using a 20 trading-day period, for the reasons set out in paragraphs 827 and 828 of this Final Decision.
844. The Authority accepts Western Power's submission that the debt margin should be determined over a period to be agreed with the Authority rather than over a period to the end of the month prior to the Authority's decision on proposed revisions to the access arrangement, as explained in paragraphs 830 to 834 of this Final Decision.

845. On the assumed credit rating for determination of the debt margin, Western Power has taken into account a range in values of the debt margin for credit ratings of BBB to BBB+. The AER has determined to apply a credit rating of BBB+, taking into account capital-market evidence that would support a credit rating assumption in the range of BBB+ to A-.³⁶³ Given the evidence considered by the AER, the Authority has assessed Western Power's proposed WACC on the basis of an assumed credit rating of BBB+.
846. The Authority has considered estimates of debt margins derived from information on debt costs from the CBASpectrum and Bloomberg data sources for Australian corporate bonds.
847. CBASpectrum publishes fair value yield estimates for 10-year BBB+ rated corporate bonds and debt margins can be determined directly from these estimates.
848. Bloomberg currently publishes fair value yield estimates for BBB rated bonds of up to seven years tenor, although the data used to produce these estimates are from both BBB and BBB+ rated bonds. Derivation of estimates of debt costs for 10-year BBB+ rated bonds from Bloomberg information must necessarily be by processes of extrapolation and interpolation from estimates for shorter duration bonds and bonds of different credit ratings.
849. Since the Draft Decision, the available methods for calculating the debt margin using Bloomberg data have become more limited due to a lack of liquidity in the Australian corporate bond market. In particular, the methods used by the Authority in the Draft Decision which made use of 10-year and eight year A rated bonds and eight year BBB/BBB+ rated bonds are no longer available.
850. The Australian Pipelines Industry Association submits that the lack of liquidity in the Australian corporate bond market indicates that the Authority should use a range of sources in calculating the debt margin.³⁶⁴
851. Given the limitations of the Bloomberg information, the Authority has considered estimates of debt margins derived by three methods:
- estimates directly from CBASpectrum for 10-year BBB+ rated bonds (Method 1);
 - using Bloomberg information only, taking the estimate for 7-year BBB/BBB+ rated bonds and adding a margin calculated as the spread between 7-year and 10-year AAA rated bonds as a proxy for the spread between the (unavailable) 7-year and 10-year BBB/BBB+ rated bonds (Method 2);³⁶⁵ and
 - using Bloomberg information only, the estimate obtained using Method 2 is adjusted by multiplying that estimate by the ratio of the spread between 10-year and 7-year A rated bonds and the spread between 10-year and

³⁶³ Australian Energy Regulator, May 2009, Electricity transmission and distribution network service providers, Statement of the revised WACC parameters (transmission), Statement of regulatory intent on the revised WACC parameters (distribution), p. 6. Australian Energy Regulator, May 2009, Final Decision, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, pp. 390 – 392.

³⁶⁴ Australian Pipeline Industry Association Ltd submission of 11 August 2009.

³⁶⁵ AAA rated bonds yields are used because yields on 10-year AA rated bonds are not available from Bloomberg.

7-year AAA rated bonds for the period 1 August 2007 to 18 August 2009 (Method 3).

852. Estimates of debt margins from these three methods for the 20 business-day period to 30 October 2009 are shown in Table 70.

Table 70 Estimates at 30 October 2009 of debt margins for 10-Year corporate bonds with credit ratings of BBB+ (percentage points)

Method 1	Method 2	Method 3
BBB+	BBB/BBB+	BBB/BBB+
4.08	4.44	4.19

853. The Authority considers that, for the purpose of providing an estimate of the debt margin using Bloomberg data, Method 3 is a more appropriate method than Method 2. The Authority has compared the spreads between 10-year and 7-year A rated bonds and between 10-year and 7-year AAA rated bond for the period from 1 October 2007 to 18 August 2009. While these two spreads were quite consistent in 2007 and early 2008, the difference in the spreads increased significantly since September 2008. The Authority considers that the spread between 10-year and 7-year AAA rated bonds is not a good proxy without an effective adjustment. The Authority considers that this spread should be adjusted as shown in Method 3.
854. A submission by the APIA indicated that use of the Bloomberg data is likely to under-estimate the debt margin.³⁶⁶ However, this is not evident from the estimates presented in Table 70. The differences between the estimates of debt margins derived directly from CBASpectrum information and from the various methods of deriving estimates from Bloomberg information are not as pronounced as they were at the time of the Draft Decision (the range in the estimates obtained using the three methods is 36 basis points, which compares to up to 275 basis points at the time of the Draft Decision).
855. The Authority also notes that the AER has used CBASpectrum data to estimate debt margins in its draft decision on the access arrangement proposal for the ACT, Queanbeyan and Palerang gas distribution network in November 2009.³⁶⁷ The Authority is aware that the AER compared the CBASpectrum and Bloomberg fair yield estimates (including the average of both estimates) to observed yields of actual BBB+ rated bonds in the market and concluded that, on this occasion, fair value estimates by CBASpectrum are more closely aligned to the actual observed yields than Bloomberg's fair value estimates.
856. For this decision, the Authority considers that estimates of 4.08 and 4.19 (derived from Method 1 and Method 3) provide a reasonable range of debt margins for BBB+ rated bonds at 30 October 2009.

³⁶⁶ Australian Pipeline Industry Association Ltd submission of 11 August 2009.

³⁶⁷ Australian Energy Regulator, November 2009, ActewAGL: Access arrangement proposal for the ACT, Queanbeyan and Palerang gas distribution network, p. 65.

Market Risk Premium

857. The market risk premium is the required return, over and above the risk free rate, on a fully diversified portfolio of assets.
858. Western Power has proposed determination of the WACC taking into account a range in values of the market risk premium of 6.0 to 7.0 per cent based on historical data on the realised equity premium in Australia over the period 1958 to 2005 (for which the data are considered to be more reliable than longer term data) and an observation that a value of 6.0 per cent is the value most commonly used by independent experts in valuation of companies subject to takeovers.³⁶⁸
859. The Authority's WACC Determination does not specify a value for the market risk premium, although a value of 6.0 per cent is indicated as a possible value.
860. The Authority accepts Western Power's contention that historically realised equity premia are relevant evidence in determining a value for the market risk premium. In contending that historically realised equity premia since 1958 indicate a range of values for the market risk premium of 6.0 to 7.0 per cent, Western Power appears to be relying on a study indicating values of:
- 6.3 per cent for 1958 to 2005, with no value ascribed to imputation credits;
 - 6.7 per cent for 1958 to 2005, with imputation credits valued at 50 per cent; and
 - 7.0 per cent for 1958 to 2005, with imputation credits valued at 100 per cent.³⁶⁹
861. The Authority observes that, subsequent to Western Power submitting its proposed access arrangement revisions, updated analysis by the AER from the study and period that Western Power has appeared to rely on, taking into account data on market returns through to 14 April 2009, indicates values of:
- 5.7 per cent, with no value ascribed to imputation credits;
 - 6.1 per cent, with imputation credits valued at 50 per cent; and
 - 6.4 per cent, with imputation credits valued at 100 per cent.³⁷⁰
862. The Authority further observes that the AER concluded in its recent WACC determination that it is appropriate to "gross up" the historical estimates of the market risk premium to account for the value of imputation credits, with an appropriate estimate of the value of imputation credits being 65 per cent. The AER

³⁶⁸ Revised access arrangement information, Appendix 6: pp. 3, 33 – 43.

³⁶⁹ Brailsford, T., Handley, J.C. and Maheswaran, K, April 2007, A re-examination of the historical equity risk premium in Australia, Working Paper; cited in the revised access arrangement information, Appendix 6 p. 36.

³⁷⁰ Australian Energy Regulator, May 2009, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, Attachment B (John C Handley, 14 April 2009, Further comments on the historical equity risk premium).

noted that with this adjustment the historical estimate of the market risk premium calculated over the period from 1958 to 2008 is 6.2 per cent.³⁷¹

863. The Authority accepts Western Power's contention that most market practitioners apply a value of 6.0 per cent to the market risk premium in valuation studies. The Authority observes that a wider range of surveys of market practice confirm this contention, but also indicate a significant number of market practitioners (22 per cent) apply values of less than 6.0 per cent, while a significant number of market practitioners (28 per cent) apply values of 6.0 per cent.³⁷²
864. The WAMEU submitted in response to the Authority's Issues Paper³⁷³ that the assumed market risk premium should be between 5.0 and 6.0 per cent to reflect observations of realised equity premia over the last 20 to 25 years, but does not provide nor cite evidence in support of this submission.³⁷⁴
865. The Authority considered in the Draft Decision that a reasonable range of estimates for the market risk premium is 5.0 to 7.0 per cent.
866. Western Power's submission in response to the Draft Decision provides analysis by Officer and Bishop indicating that the decline in the 10-year Commonwealth bond Rate over 2008 and the increase in market volatility has resulted in the prevailing short to medium term market risk premium being well above 6 per cent.³⁷⁵
867. The APIA's submission in response to the Draft Decision raised concerns with the range of estimates for the market risk premium in the decision compared to the AER's determination of 6.5 per cent. The Association did not consider there to be any compelling evidence to suggest that the lower bound of the range of reasonable estimates of the market risk premium is below 6 per cent.³⁷⁶
868. The Financial Investor Group's submission in response to the Draft Decision claimed that insufficient consideration has been given by the Authority to the return on equity presently demanded by investors in the utilities sector in order to fund capital expenditure.³⁷⁷ It was submitted that the Draft Decision incorporates a cost of equity that is inadequate to support private sector investment in regulated infrastructure in Western Australia.
869. The Financial Investor Group submitted information to the Authority, which indicated that companies that it represents are having to provide returns on equity that are substantially higher than provided for in the Authority's Draft Decision. The Group pointed to information on the level of discount to the share price that was required in order to seek to have equity raisings fully subscribed. This analysis indicates that the average implied cost of new equity (post tax, nominal) for the

³⁷¹ Australian Energy Regulator, May 2009, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, p. 215.

³⁷² G. Truong, G. Partington and M. Peat, 'Cost of capital estimation and capital budgeting practices in Australia', Australian Journal of Management, Vol. 33, No. 1, June 2008, p.155.

³⁷³ Economic Regulation Authority, 5 November 2008, Issues Paper on Proposed Revisions to the Access Arrangement for the South West Interconnected Network.

³⁷⁴ Western Australia Major Energy Users submission of 16 December 2008, pp. 45 – 47.

³⁷⁵ Western Power submission 10 September 2009, Attachment H.

³⁷⁶ Australian Pipeline Industry Association Ltd submission of 11 August 2009.

³⁷⁷ Financial Investor Group submission of September 2009.

companies that the Group represents ranges from 15 per cent to 18 per cent, whereas the Authority's cost of equity range in its Draft Decision was 8.1 per cent to 11.2 per cent.

870. The Group also pointed to information on trading yields (the ratio of expected dividends to the volume weighted average share price calculated over a particular period) that were currently being offered by companies that it represents as an indication on the cost of equity for their existing operations. This analysis indicates that the trading yields for the companies that the Group represents have ranged from 9.8 per cent to 15.0 per cent over the period 2005 to 2009.
871. The Authority has considered the data on market returns for the periods detailed in Table 71, which were also the periods considered by the AER in its WACC determination to the end of 2008. The Authority has had regard to the analysis by the AER in its WACC determination. However, the Authority does not have access to the data set prepared by Associate Professor Handley, the AER's consultant on the market risk premium, on which the AER has derived its conclusions on the issue. The Authority has also had regard to its own data set.

Table 71 Estimates of the market risk premium over a range of different periods³⁷⁸

Value of Imputation Credits	1883 - 2008	1937 - 2008	1958 - 2008	1980 - 2008	1988 - 2008
0%	7.1	6.2	6.0	4.8	3.4
65%	7.3	6.5	6.5	5.6	4.6

872. Table 71 shows that the range of estimates of the market risk premium over the various periods using the Authority's data set, when an adjustment is made for the value of imputation credits (65 per cent), is 4.6 per cent to 7.3 per cent.
873. In reviewing the information provided to it by the Financial Investor Group, the Authority notes that the equity raisings were not necessarily indicative of the cost of raising equity to fund capital expenditure, for the reason that the equity raisings were in many instances intended to address balance sheet concerns. In addition, the Authority observed that the equity raisings were sometimes during periods of significant share price volatility and uncertainty surrounding credit rating announcements. In its recent WACC determination, the AER considered that caution should be exercised in interpreting trading yields based on daily share prices. The Authority further notes that the information submitted by the Financial Investor Group relates to estimates of the cost of equity for businesses that have both regulated and non-regulated activities.
874. Taking into account the above evidence of realised equity premia over recent decades, market practice and information presented in submissions on the current cost of equity, the Authority considers that there is no justification for departing from the range indicated in its Draft Decision in which a reasonable range of estimates for the market risk premium is 5.0 to 7.0 per cent.

³⁷⁸ The adjustments for the value of imputation credits have been assumed to be the same as those made by the AER in its WACC determination, p. 209.

Systematic Risk (Beta)

875. The systematic risk (beta) of a firm is the measure of how the changes in the returns to the firm's stock are related to the changes in returns to the market as a whole. It reflects the business's exposure to non-diversifiable risk, which is that portion of the variance in the return on an asset that arises from market-wide economic factors that affect returns on all assets, and which cannot be avoided by holding the assets as part of a diversified portfolio of assets.
876. In the CAPM, the equity beta value is a scaling factor applied to the market risk premium to reflect the relative risk to equity funds in the particular firm or activity in question.
877. Western Power has proposed a determination of the WACC taking into account a range in values of the equity beta of 0.9 to 1.1 (at a financial gearing of 60 per cent debt to assets) based on reasoning that:
- there is a regulatory precedent for using an equity beta value of 1.0;
 - the substantial estimation error that characterises statistical estimates of beta values for comparable businesses to Western Power, which – despite statistical estimates of beta values for comparable businesses of substantially less than 1.0 – does not allow regulators to have a sufficient degree of confidence in the statistical estimates to depart from regulatory precedent; and
 - specification of a reasonable range for the equity beta should, therefore, be a range about the value of 1.0.³⁷⁹
878. The WAMEU submitted in response to the Authority's Issues Paper that the increasing amount of capital market evidence on beta values for energy infrastructure businesses supports an argument for an equity beta of no more than 0.7 and potentially much lower.³⁸⁰
879. The Authority's WACC Determination does not specify a value for the equity beta. A value of 1.0 (at a financial gearing of 60 per cent debt to assets) is indicated as a possible value.
880. The Authority concurs with Western Power's contention that regulatory precedent in values of WACC parameters is important in maintaining some certainty and predictability of regulatory determinations and therefore maintaining incentives of efficient investment. However, the Authority also considers that regulatory precedents should be considered in the proper context of those precedents and be considered together with current capital market evidence.
881. There have been a substantial number of regulatory determinations for electricity and gas networks that have determined WACC values applying an equity beta of 1.0.³⁸¹ The first such determination was by the then Office of the Regulator General in Victoria in 2000. Even at that time, the value of 1.0 was at or above the

³⁷⁹ Revised access arrangement information, Appendix 6: pp. 3, 44 – 54.

³⁸⁰ Western Australia Major Energy Users submission of 16 December 2008, pp. 51 – 53.

³⁸¹ Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, p. 183.

upper bound of a range evident from capital market evidence and was adopted recognising the limited debate that had occurred at that time on issues of methodology in considering beta values for regulatory purposes.³⁸² Since this time, there have been many further empirical studies of beta values that have been subject to considerable scrutiny and debate as part of regulatory processes. This has resulted in greater weight being given by regulators to capital market evidence on beta values and a consequent downward trend in the beta values being applied in regulatory decisions. This has occurred most recently with the Victorian Essential Services Commission determining an (effective) value of 0.8 for the Victorian gas distribution businesses³⁸³ and the AER making a determination for a value of 0.8 for electricity transmission and distribution businesses in the National Electricity Market.³⁸⁴

882. The Authority considers that in ascribing a value to the equity beta, primary reliance should be placed on capital market evidence and statistical estimates of beta values.
883. Detailed statistical analysis of beta values for electricity transmission and distribution businesses have recently been undertaken as part of the AER's review of parameters for calculating the WACC for transmission and distribution businesses under the National Electricity Rules. This includes analysis undertaken for the businesses³⁸⁵ as well as analysis undertaken by, or for, the AER.³⁸⁶ The analysis applied a range of statistical methods for estimation of beta values and dealt with estimation error.
884. An analysis undertaken by the Allen Consulting Group for electricity transmission and distribution businesses estimated beta values for individual Australian and USA electricity and gas network businesses and portfolios of the businesses using monthly return data over the historical period of 1990 – 1998 and 2002 – 2008 (with the period 1999 to 2001 excluded as an abnormal period affected by the “tech bubble” in world equity markets) and a recent five year period.³⁸⁷ Three statistical estimation techniques were applied (ordinary least squares, re-weighted ordinary least squares and least absolute variation). Summary results for individual stocks and portfolios of stocks are shown in Table 72 and Table 73. All values shown are equity beta values at a financial gearing of 60 per cent debt to assets.

³⁸² Office of the Regulator-General, Victoria, September 2000, Electricity Distribution Price Determination 2001-05: Volume 1 Statement of Purpose and Reasons, pp. 263 – 283.

³⁸³ Essential Services Commission Victoria, 7 March 2008, Gas Access Arrangement Review 2008-2012 Final Decision – Public Version, p. 13.

³⁸⁴ Australian Energy Regulator, May 2009, Electricity transmission and distribution network service providers, Statement of the revised WACC parameters (transmission), Statement of the revised WACC parameters (transmission), Statement of regulatory intent on the revised WACC parameters (distribution), p. 6.

³⁸⁵ Allen Consulting Group, 17 September 2008, Beta for regulated electricity transmission and distribution: report to Energy Networks Association, Grid Australia and APIA.

³⁸⁶ Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, pp. 181 – 253 and Attachment C (Olan T Henry, 28 November 2008, Econometric advice and beta estimation).

³⁸⁷ The actual period of returns for individual businesses varies depending on the period for which the business existed as a separate listed entity.

Table 72 Allen Consulting Group equity beta estimates and 95 per cent confidence intervals for individual Australian electricity and gas network businesses (1990 – 1998 and 2002 – 2008)³⁸⁸

Business and number of data points	Estimation method		
	OLS*	Re-weighted OLS*	LAV*
Full period			
Alinta (68)	0.81 (0.02 – 1.60)	0.90 (0.17 – 1.62)	0.95 (0.22 – 1.68)
AGL (155)	0.84 (0.43 – 1.26)	0.67 (0.32 – 1.02)	0.84 (0.17 – 1.51)
Australian Pipeline Trust (77)	0.68 (0.22 – 1.14)	0.70 (0.26 – 1.15)	0.81 (0.43 – 1.20)
GasNet (59)	0.38 (0.00 – 0.77)	0.31 (-0.02 – 0.64)	0.34 (-0.04 – 0.72)
Envestra (78)	0.36 (0.00 – 0.73)	0.33 (-0.01 – 0.67)	0.04 (-0.31 – 0.40)
DUET (36)	0.38 (0.12 – 0.65)	0.30 (0.13 – 0.47)	0.38 (0.02 – 0.73)
Hastings**(41)	0.54 (-0.10 – 1.17)	0.64 (0.10 – 1.19)	0.80 (0.13 – 1.46)
SP AusNet (27)	0.25 (-0.12 – 0.61)	0.23 (-0.11 – 0.57)	0.06 (-0.71 – 0.83)
Spark Infrastructure (29)	0.57 (0.24 – 0.91)	0.56 (0.23 – 0.89)	0.59 (0.09 – 1.09)
Average	0.53	0.52	0.53
Latest five year period			
Alinta (51)	1.29 (0.15 – 2.43)	1.26 (0.16 – 2.35)	1.29 (0.16 – 2.41)
AGL (41)	0.57 (-1.15 – 2.29)	-0.39 (-1.59 – 0.81)	0.13 (-1.43 – 1.69)
Australian Pipeline Trust (60)	0.87 (0.42 – 1.33)	0.89 (0.44 – 1.34)	0.85 (0.35 – 1.34)
GasNet (36)	0.38 (0.12 – 0.65)	0.30 (0.13 – 0.47)	0.38 (0.02 – 0.73)
Envestra (60)	0.51 (0.15 – 0.87)	0.46 (0.13 – 0.80)	0.61 (0.22 – 1.00)
DUET (42)	0.51 (-0.04 – 1.06)	0.42 (-0.07 – 0.91)	0.27 (-0.23 – 0.78)
Hastings* (41)	0.54 (-0.10 – 1.17)	0.64 (0.10 – 1.19)	0.80 (0.13 – 1.46)
SP AusNet (27)	0.25 (-0.12 – 0.61)	0.23 (-0.11 – 0.57)	0.06 (-0.71 – 0.83)
Spark Infrastructure (29)	0.57 (0.24 – 0.91)	0.56 (0.23 – 0.89)	0.59 (0.09 – 1.09)
Average	0.61	0.49	0.55

* OLS = ordinary least squares, LAV = lease absolute variation.

** Hastings Diversified Utilities Fund

³⁸⁸ Allen Consulting Group, 17 September 2008, Beta for regulated electricity transmission and distribution: report to Energy Networks Association, Grid Australia and APIA, pp. 43, 44.

Table 73 Allen Consulting Group equity beta estimates and 95 per cent confidence intervals for portfolios of Australian and USA electricity and gas network businesses (1990 – 1998 and 2002 – 2008)³⁸⁹

Sample and number of data points	Estimation method		
	OLS	Re-weighted OLS	LAV
Full period			
Australia –mean portfolio (174)	0.72 (0.43 – 1.02)	0.65 (0.40 – 0.90)	0.80 (0.50 – 1.10)
Australia –median portfolio (174)	0.72 (0.42 – 1.03)	0.65 (0.39 – 0.92)	0.87 (0.56 – 1.18)
USA –mean portfolio (177)	0.68 (0.52 – 0.85)	0.61 (0.47 – 0.75)	0.58 (0.46 – 0.71)
USA –median portfolio (177)	0.65 (0.50 – 0.81)	0.63 (0.49 – 0.78)	0.54 (0.33 – 0.75)
Last 5 years			
Australia –mean portfolio (60)	0.65 (0.46 – 0.85)	0.65 (0.45 – 0.85)	0.64 (0.40 – 0.88)
Australia –median portfolio (60)	0.65 (0.36 – 0.94)	0.64 (0.36 – 0.93)	0.68 (0.32 – 1.04)
USA –mean portfolio (60)	0.97 (0.65 – 1.29)	0.95 (0.63 – 1.27)	0.65 (0.21 – 1.09)
USA –median portfolio (60)	1.05 (0.66 – 1.43)	0.99 (0.63 – 1.36)	0.72 (0.15 – 1.29)

885. An analysis undertaken by Associate Professor Olan Henry for the AER produced estimates of beta values for Australian electricity and gas network businesses and portfolios of the businesses using weekly return data over a period of six years and eight months from 1 January 2002 to 1 September 2008. Two statistical estimation techniques were applied (ordinary least squares and least absolute variation). Summary results are shown in Table 74 and Table 75. All values shown are equity beta values at a financial gearing of 60 per cent debt to assets.

³⁸⁹ Allen Consulting Group, 17 September 2008, Beta for regulated electricity transmission and distribution: report to Energy Networks Association, Grid Australia and APIA, p. 42. “Average portfolio” estimates refer to average returns across all businesses during the relevant time interval, which is equivalent to an equally-weighted portfolio of the securities. “Median portfolio” estimates refer to the median return that would have been delivered by any of the securities in the set of comparable entities during the relevant time interval.

Table 74 Henry equity beta estimates and 95 per cent confidence intervals for individual Australian electricity and gas network businesses (2002 – 2008)³⁹⁰

Business and number of data points	Estimation method	
	OLS	LAV
Alinta (294)	0.93 (0.58 – 1.28)	0.59 (0.22 – 0.96)
AGL (252)	0.74 (0.35 – 1.13)	0.54 (0.19 – 0.89)
Australian Pipeline Trust (348)	0.73 (0.51 – 0.95)	0.63 (0.41 – 0.85)
GasNet (255)	0.32 (0.14 – 0.50)	0.24 (0.06 – 0.42)
Envestra (348)	0.25 (0.15 – 0.35)	0.10 (-0.02 – 0.22)
DUET (212)	0.35 (0.21 – 0.49)	0.25 (0.11 – 0.39)
Hastings* (194)	1.01 (0.68 – 1.34)	0.50 (0.15 – 0.85)
SP AusNet (142)	0.27 (0.03 – 0.51)	0.23 (-0.01 – 0.47)
Spark Infrastructure (79)	0.59 (0.16 – 1.02)	0.76 (0.33 – 1.19)
Average	0.58	0.43

* Hastings Diversified Utilities Fund

Table 75 Henry/AER equity beta estimates and 95 per cent confidence intervals for portfolios of Australian electricity and gas network businesses (2002 – 2008)³⁹¹

Sample and number of data points	Estimation method	
	OLS	LAV
Australia – mean portfolio (348)	0.44 (0.34 – 0.54)	0.44 (0.36 – 0.52)

886. Statistical estimates of beta values for Australian energy network businesses in the period since 2002 point to a value of equity beta at a gearing of 60 per cent debt to assets to be in the range of 0.45 to 0.7. Higher estimates of up to about 1.0 are produced by some estimation methods from the longer period of data for Australian businesses or data for USA businesses.
887. In determining a reasonable range for the equity beta to apply in consideration of Western Power's proposed WACC, the Authority considers that some account should be taken of:

³⁹⁰ Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, p. 234.

³⁹¹ Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, p. 236.

- the high level of statistical imprecision of the beta estimates, with upper bounds of confidence intervals for portfolio estimates of between 0.85 and 1.05 for beta values estimated over the most recent period by conventional consideration of monthly returns; and
- evidence of higher beta values for USA electricity and gas network businesses, with values up to about 1.0.

888. Having regard to these matters, but relying primarily on the best estimates of beta values for comparable businesses, the Authority determined in its Draft Decision that a reasonable range for the equity beta at a gearing level of 60 per cent debt to assets is 0.50 to 0.80.

889. Western Power submitted in response to the Draft Decision that the range of estimates for the value of the equity beta in the Draft Decision compares to the AER's determination of 0.8 for this parameter. In addition, Western Power submitted that the historical data used in the past to justify an equity beta of 0.8 does not take into account the period incorporating the downturn in economic activity since the last quarter of 2008 which is likely to have resulted in an increase in the equity beta.³⁹²

890. The APIA submitted that a report by the Allen Consulting Group concluded that a value for the equity beta of 1.0 for Australian electricity distribution and transmission assets could not be rejected within a 95 per cent degree of confidence.³⁹³ The Authority observes that the report and conclusions of the Allen Consulting Group were made in a context of the assessment being undertaken by the AER of CAPM parameters for the transmission and distribution businesses of the National Electricity Market. In this assessment, the AER was determining whether there was sufficient evidence to change values of parameters from the values previously applied. This is a different exercise to that being undertaken by the Authority, which is to consider best estimates of parameters of the CAPM.

891. The AER determination on the WACC concluded that:

The empirical evidence considered by the AER suggests that the equity beta of a benchmark efficient NSP is in the range of 0.41 (average portfolio estimated by the AER for Australian businesses post 'technology bubble') to 0.68 (average portfolio estimated by the ACG for the JIA using a five-year estimation period).³⁹⁴

892. Further, the AER commented:

The Sharpe CAPM is a reasonable predictor of equity returns, though at the same time the AER acknowledges that it is not without limitations. In determining the equity beta, the AER has adopted a value higher than that suggested by empirical estimates using the Sharpe CAPM (specifically 0.12 to 0.39 higher), meaning that any possible issue of bias is likely to have been negated.³⁹⁵

³⁹² Western Power submission of 10 September 2009.

³⁹³ Australian Pipeline Industry Association Ltd submission of 11 August 2009.

³⁹⁴ Australian Energy Regulator, May 2009, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, p. xvi.

³⁹⁵ Australian Energy Regulator, May 2009, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, p. xvii.

893. The Authority considers that the range that the Authority proposed in its Draft Decision (0.5 to 0.8) was consistent with the analysis presented by the AER in its WACC determination, which suggests an equity beta of between 0.41 and 0.68.
894. The Authority considers that a reasonable range for the equity beta at a gearing level of 60 per cent debt to assets is 0.50 to 0.80.

Taxation

895. There are two WACC parameters that determine the cost of taxation allowed for in the Officer pre-tax WACC – the rate of tax applying to corporate profits and the value of dividend imputation.
896. Western Power has applied a taxation rate equal to the statutory corporate taxation rate of 30 per cent.
897. The Authority's WACC Determination does not specify a value for the rate of taxation. A value of 30 per cent (at a financial gearing of 60 per cent debt to assets) is indicated as a possible value. The Authority considers that the use of the corporate taxation rate in determination of the WACC is uncontroversial and reasonable.
898. The value of dividend imputation is the value of franking credits distributed to shareholders of the regulated business. The value of franking credits, represented in the WACC by the parameter "gamma", depends on the proportion of the franking credits that are created by the firm that are distributed, and the value that the investor attaches to the credit, which depends on the investor's tax circumstances (that is, their marginal tax rate). As these will differ across investors, the value of franking credits may be between nil and full value (i.e. a gamma value between zero and one).
899. Western Power has proposed a determination of the WACC taking into account a range in values of gamma of zero to 0.5 based on reasons that:
- there is no basis for regulators to argue for an increase in the value of gamma above 0.5;
 - a value of 0.5 is likely to overstate the appropriate value for gamma;
 - there is good reason to question the appropriateness of a value of gamma of 0.5 since it relies upon evidence from studies that suffer from methodological flaws; and
 - a value for gamma of zero is consistent with the market evidence and would appear to be consistent with a value for the market risk premium of 6.0 per cent.³⁹⁶
900. The Authority's WACC Determination does not specify a gamma value. A value of 0.5 is indicated as a possible value.
901. In Australia, regulators of utility infrastructure have, to date, generally adopted a value of gamma of about 50 per cent. This value was originally derived from a

³⁹⁶ Revised access arrangement information, Appendix 6: pp. 4, 55 – 65.

1999 study by Hathaway and Officer, which estimated market-average values of gamma at close to 0.50.³⁹⁷ More recently, regulators (including the Authority) have tended to apply a value of 0.5 or to contemplate a range of values around 0.5, having regard to an updated study by Hathaway and Officer that indicated market-average gamma values of between 0.28 and 0.36,³⁹⁸ and considerations that the value may be higher for benchmark utility businesses due to higher values of franking credits for utility businesses relative to other Australian businesses.³⁹⁹

902. In considering the value of imputation credits, the Authority has had regard to the detailed consideration given by the AER to this element of the WACC calculation.⁴⁰⁰

903. In accordance with mainstream finance theory, the AER has considered the value of gamma as being the product of the proportion of franking credits created by the regulated businesses that is distributed to shareholders (the distribution rate or payout ratio, F) and the value of franking credits in the hands of shareholders as a proportion of the face value of the franking credits (the utilisation rate, θ):

$$\text{gamma} = F \cdot \theta$$

904. The AER has adopted a distribution rate of 1.0 reflecting advice that this assumption is consistent with a standard assumption of valuation practice that all free cash flows are paid out to investors.⁴⁰¹ On this basis, the AER has rejected use of empirically-observed market-average distribution ratios. Advice to the AER also indicates that an assumed distribution rate of 1.0 is also consistent with the Officer WACC, which is applied by Western Power in determination of the rate of return.⁴⁰²

905. The AER has considered two sources of information on the utilisation rate.

906. First, the AER has placed significant weight on an estimate of the utilisation rate of 0.57 derived in a dividend drop-off study over the period 2001 to 2004,⁴⁰³ taking into account that this study:

³⁹⁷ Hathaway, N. and R.R. Officer (1999), *The Value of Imputation Tax Credits*, Unpublished Manuscript, Graduate School of Management, University of Melbourne.

³⁹⁸ Hathaway, Neville and Officer, Bob (2004), *The Value of Imputation Tax Credits: Update 2004*, Capital Research Pty Ltd, p. 8.

³⁹⁹ For example, Essential Services Commission, 28 August 2007, Gas Access Arrangement Review 2008-2012 Draft Decision, pp. 418 – 433.

⁴⁰⁰ Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, pp. 287 – 340. Australian Energy Regulator, May 2009, Final decision, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, pp. 393 – 469.

⁴⁰¹ Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, p. 302.

⁴⁰² Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, Attachment G: John C Handley, 12 November 2008, A note on the valuation of imputation credits.

⁴⁰³ Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, p 327, citing Beggs, D. and Skeels C.L., 2006, Market arbitrage of cash dividends and franking credits, *The Economic Record* vol 82 no.258, p. 247. Australian Energy Regulator, May 2009, Final decision, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, pp. xix, 466.

- is directly relevant to the current imputation tax regime, assessing the value of imputation credits over the period post 2000 after changes in tax law that allowed Australian taxpayers to claim a full cash rebate for unused imputation credits;
 - is able to be verified on the basis of statistical tests presented in the paper; and
 - is an independent and credible published study that has been through the academic refereeing process.
907. Second, the AER has had regard to estimates of the utilisation rate from taxation statistics, indicating a range of values of the utilisation rate, θ , from 0.67 (pre 2000) to 0.81 (post 2000) and a point estimate of 0.74.⁴⁰⁴
908. Given the studies of the value of imputation credits reviewed and undertaken by the AER, the Authority does not accept Western Power's contentions of an absence of reputable studies of the value of imputation credits that would provide reason to consider that a gamma of 0.5 overstates the value of imputation credits, or that there is no reason to contemplate a value of gamma of greater than 0.5.
909. In the Draft Decision, the Authority concluded that a reasonable range in the value of gamma is 0.57 to 0.81, based on a distribution rate of 1.0 in combination with a range of values of the utilisation rate of 0.57 to 0.81.
910. The range applied by the Authority in its Draft Decision was bounded by the 2006 study by Beggs and Skeel (producing the lower bound estimate of 0.57) and the 2008 study by Handley and Maheswaran (producing a range from 0.67 to 0.81, of which the Authority derived the upper bound estimate of 0.81).
911. The submission by Western Power in response to the Draft Decision requested the Authority consider the SFG Consulting study using the same data as Beggs and Skeel, but for an extended period, which indicates an utilisation rate of 0.37.
912. The Financial Investor Group submitted in response to the Draft Decision that a range of estimates of the gamma in the Authority's Draft Decision, of 0.57 to 0.81, compares to the AER's determination of 0.65 for this parameter. Submissions by Western Power claim that the information relied on by the Authority in its Draft Decision, which was also relied on by the AER in its determination, does not support the Authority's Draft Decision (or the AER's determination) for this parameter. According to these submissions, the studies used by the Authority indicate that there is no reason to depart from the previously determined gamma value of 0.5.⁴⁰⁵
913. The Authority notes that the AER considered the SFG Consulting study and concluded:

⁴⁰⁴ Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, p 333, citing Handley, J. C. and Maheswaran, K., A measure of the efficacy of the Australian Imputation Tax System, The Economic Record vol. 84 no. 264 p.91. Australian Energy Regulator, May 2009, Final decision, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, pp. xix, xx, 466, 467.

⁴⁰⁵ Financial Investor Group submission of September 2009.

In summary, based on its detailed analysis, the AER has concerns over the quality of the market data used in the SFG study, and the robustness of its regression results. The AER's concerns in this regard also relate to the methodology employed, the sampling selection and the filtering process undertaken by SFG....

Given these concerns, and the likely material impact on the results, the AER does not consider that the SFG study provides persuasive evidence regarding the value of imputation credits.⁴⁰⁶

914. The Authority also notes that the AER considered the points made by the Financial Investor Group and maintained its view that it is appropriate to assume that all free cash flows are paid out to investors and the range of estimates of the utilisation rate that is provided in the study of tax statistics by Handley and Maheswaran is relevant and reliable.
915. For the purposes of assessment of the proposed WACC, the Authority has taken into account a range of possible values for gamma of 0.57 to 0.81.

Financial Structure

916. Financial structure refers to the proportions of the value of the regulated business assumed to be financed by debt and equity. Financial gearing refers to the ratio of debt to total asset value.
917. Western Power has proposed a determination of the WACC on the basis of a financial structure of 60 per cent debt. This is consistent with regulatory precedent and observations of financial gearing for seven listed energy infrastructure businesses (range of 42 to 83 per cent, with an average of 65 per cent, calculated as a ratio of debt to debt plus the market value of equity).
918. The Authority's WACC Determination does not specify a value for the level of gearing, but requires that an appropriate benchmark gearing assumption be adopted to encourage efficient financing decisions. A financial gearing of 60 per cent debt to assets is indicated as a possible value.
919. The WAMEU submit that the assumed gearing for Western Power should be increased from 60 per cent to 70 per cent debt to assets, citing observed levels of gearing for a range of electricity and gas infrastructure businesses calculated as a ratio of total liabilities to a book value of assets.⁴⁰⁷ Gearing levels derived as a ratio of debt or liabilities to a book value of assets will typically indicate a higher level of gearing than a ratio of debt to a market value of assets.
920. In its review of WACC parameters under the National Electricity Rules, the AER has examined gearing levels for electricity and gas businesses using a range of samples of businesses, a range of data sources, a range of methods for ascribing values to total debt and total assets and a range of time periods. Having regard primarily to electricity businesses, a book value of debt and market value of equity and data from the period 2002 to 2007, the AER observed average values of financial gearing of 62 to 65 per cent and concluded that there is not persuasive

⁴⁰⁶ Australian Energy Regulator, May 2009, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, p. 441.

⁴⁰⁷ Western Australia Major Energy Users submission of 16 December 2008, pp. 45 – 47.

evidence to depart from the regulatory precedent of a financial gearing of 60 per cent.⁴⁰⁸

921. Taking into account the data on gearing levels cited by Western Power and the analysis undertaken by the AER, the Authority accepts Western Power's proposal that a gearing level of 60 per cent debt to equity is reasonable for the purposes of calculation of the WACC.

WACC

922. The parameter values (or ranges in values) that the Authority considers may reasonably be applied in consideration of the WACC for the SWIN are set out in Table 76.

Table 76 Parameter values determined by the Authority for estimation of the WACC for the SWIN

Parameter	Value
Nominal risk free rate (%)	5.51
Real risk free rate (%)	2.97
Inflation rate (%)	2.47
Capital structure (equity to total value, %)	40
Capital structure (debt to total value, %)	60
Equity beta	0.50 – 0.80
Market risk premium (%)	5.0 – 7.0
Debt margin (excluding debt transaction costs, %)	4.08 – 4.19
Corporate taxation rate (%)	30
Value of imputation credits (gamma, %)	57 – 81

923. The ranges in the estimated cost of equity corresponding to the ranges in the values of the WACC parameters are as shown in Table 77.

⁴⁰⁸ Australian Energy Regulator, December 2008, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, pp. 61 – 86. Australian Energy Regulator, May 2009, Final decision, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters, pp. xii.

Table 77 Estimated cost of equity from ranges in WACC parameter values

	Nominal %	Real %
Post-tax	8.01 – 11.11	5.41 – 8.43
Pre-tax	8.49 – 12.76	5.88 – 10.04

924. The ranges in estimated WACC values corresponding to the ranges in the values of the WACC parameters are as shown in Table 78.

Table 78 Estimated WACC values from ranges in WACC parameter values

	Nominal %	Real %
Post-tax (Vanilla)	9.03 – 10.34	6.40 – 7.68
Pre-tax (forward transformation of the Officer WACC)	9.23 – 11.00	6.59 – 8.32

925. The role of the Authority is to consider whether the WACC proposed by Western Power meets the objectives for the WACC under section 6.4 of the Access Code and the Code objective, being that the WACC should be set at a value that:
- gives the service provider an opportunity to earn revenue that meets the forward-looking and efficient cost of funds;
 - is commensurate with the commercial risks involved in the provision of covered services; and
 - promotes the economically efficient investment in, and operation and use of, the SWIN and the services provided by the SWIN.
926. The Authority considers that a proposed WACC would meet these objectives if it comprised of a reasonable estimate of the cost of funds at the assumed credit rating and financial structure for Western Power's business.
927. Applying the extremes of ranges in WACC parameter values and estimates of the cost of debt returns wide ranges in estimates of the WACC – a range of 6.59 to 8.32 per cent, pre-tax real. The wide ranges in estimates of the WACC result from the multiplicative effect of differences in assumptions for WACC parameters.
928. The Authority considers that the range of values from which an estimated value of the WACC could be drawn is narrower than the ranges that the extremes of ranges in WACC parameters would suggest. An approach by a service provider to a determination of the WACC that adopted the highest value within the reasonable range for each of the relevant WACC parameters would not, in the Authority's view, result in a value for the WACC that different minds, acting reasonably, would attribute to the WACC. Similarly it would not be reasonable for a regulator to make a determination based on, or implying, a WACC at the lower extreme of the range.
929. The Authority has given consideration to defining a reasonable range of estimates of the WACC that would best meet the objectives of the Access Code, which would be narrower than the range that may be derived by the application of the extremes

of values for each of the parameters of the WACC. However, while the Authority recognises that no reasonable person would adopt the extremes of this range, the Authority is of the view that there is no apparent rigorous statistical or other method for determining precisely at which point values close to the extreme values of the range do not reflect a reasonable view of the current market for funds.

930. In consideration of the WACC applied under the current access arrangement, the Authority took the view that the range of values of the WACC that would best meet the objectives of the Access Code should not include the values that lie within the lower 10 per cent or upper 10 per cent of the range that is derived by the application of the extremes of values for each of the parameters of the WACC. Applying this same method to the WACC values derived by the Authority for the purposes of consideration of the revised proposed access arrangement produces a range of values of 6.77 per cent to 8.15 per cent, pre-tax real.
931. The WACC proposed by Western Power of 8.95 per cent falls outside of this range of values. Accordingly, the Authority considers that the WACC value proposed by Western Power does not meet the Code objective and the objectives of section 6.4 of the Access Code.
932. In response to the Draft Decision, Western Power submitted that the cost of capital faced by a Western Australian electricity network business should not be any lower than that determined by the AER as being applicable to similar businesses in the National Electricity Market. Western Power submits that the pre-tax real WACC value specified in Required Amendment 29 of the draft determination is materially below the value obtained by applying the WACC parameters determined by the AER.⁴⁰⁹
933. The Authority calculates that the pre-tax real WACC value that is consistent with the AER's WACC determination is 7.98 per cent. This value has been calculated by applying the same values for the nominal risk free rate, real risk free rate and inflation rate as have been applied in this Final Decision. In addition, the calculation assumes that the debt margin is the average of the range of values that has been applied in this decision.
934. The Authority notes that the pre-tax real WACC value that is consistent with the AER's WACC determination is also within the range of values presented in paragraph 930.
935. In the Draft Decision, the Authority considered that there are no particular circumstances of the SWIN that would cause a value of the WACC in either the lower or upper part of the range of values of the WACC (when adjusted to remove the upper and lower 10 per cent of the range) to better meet the relevant objectives of the Access Code than the central value of the range.
936. The Authority is yet to receive an amended revised proposed access arrangement (i.e. amended proposed access arrangement revisions) from Western Power. However, the Authority accepts that Western Power's implicit proposal to apply a pre-tax real WACC of 7.98 per cent meets the requirements of the Access Code as it falls within the range of the values presented in paragraph 930.

⁴⁰⁹ Western Power submission of 10 September 2009.

937. The Authority requires the following amendment to the proposed access arrangement revisions.

Required Amendment 28

The target revenue should be revised to reflect a real pre-tax WACC value of 7.98 per cent.

Return on Working Capital

Access Code Requirements

938. "Working capital" refers to a stock of funds that must be maintained by a service provider to pay costs as they fall due. In circumstances where, on average, the costs of providing services are incurred before the revenues from provision of services are received, a stock of working capital may need to be derived from a capital investment in the business. The cost of this stock of working capital (the required return on the capital investment) is a cost to the service provider in operating its business and providing services.
939. The Access Code does not explicitly contemplate a return on working capital as a cost.
940. The objectives for a price control, set out in section 6.4 of the Access Code, include the objective of giving the service provider an opportunity to earn an amount of target revenue that meets the forward looking and efficient costs of providing covered services, including a return on investment commensurate with the commercial risks involved.
941. In order to achieve this objective, it is necessary that the target revenue determined in accordance with Chapter 6 of the Access Code be sufficient to ensure that the service provider has appropriate incentives to continue to invest in the provision of covered services. This requires that investors be provided with an expectation that with efficient management they will earn a rate of return equal to the opportunity cost of funds employed in the provision of the reference service. The Authority considers that this may include a return on an amount of capital investment needed to provide working capital.

Current Access Arrangement

942. The values of target revenue applying under the price control of the current access arrangement include an allowance for a return on working capital.
943. For each of the transmission and distribution networks, a cost of working capital for each year of the current access arrangement was determined as the difference between the implicit cost incurred by Western Power by providing credit to users of services and the implicit benefit to Western Power of receiving credit from suppliers.
944. The requirement for working capital was calculated as the difference between the sum over 45 days of the average daily covered service revenue and the sum over

25 days of the average daily expenses for the year (new facilities investment and non-capital costs). This was based on:

- an assumed revenue lag of 45 days, based on meter reading cycles and payment terms of the electricity transfer access contract; and
- an average expense lead of 20 days on operating and capital expenditure based on –
 - an expense lead of 10 days on labour costs, comprising 18 per cent of costs for the distribution network and 23 per cent of costs for the transmission network;
 - an expense lead of 30 days on direct costs of materials and services, comprising 35 per cent of costs for the distribution network and 63 per cent of costs for the transmission network; and
 - no expense lead on internal costs of materials and services or other costs.

945. The cost of working capital was calculated as the value of working capital in each year of the access arrangement period multiplied by the WACC.

Proposed Revisions

946. Western Power has included in the proposed target revenue for the second access arrangement period an allowance for a cost of working capital derived by the same calculation method as applied for the current access arrangement. The proposed costs of working capital are indicated in Table 79 and Table 80.

Table 79 Proposed Cost of Working Capital – Transmission Network
(\$ million, dollar values of 30 June 2009)⁴¹⁰

	2009/10	2010/11	2011/12
Net covered service revenue	391.34	462.51	546.13
Expenses			
Forecast new facilities investment	729.98	869.86	593.79
Forecast non-capital costs	100.90	105.97	112.78
Total expenses	830.88	975.83	706.57
Working capital requirement			
Receivables (45 days)	48.25	57.02	67.15
Creditors (20 days)	-45.53	-53.47	-38.61
Working capital requirement	2.72	3.55	28.54
Return on working capital at WACC = 8.95%	0.24	0.32	2.55

⁴¹⁰ Revised access arrangement information, Appendix 7 (Revenue Model). Forecast new facilities investment includes capital contributions.

Table 80 Proposed Cost of Working Capital – Distribution Network
 (\$ million, dollar values of 30 June 2009)⁴¹¹

	2009/10	2010/11	2011/12
Net covered service revenue	805.14	878.64	952.54
Expenses			
Forecast new facilities investment	520.87	566.27	636.21
Forecast non-capital costs	393.99	416.48	436.37
Total expenses	914.85	982.74	1,072.58
Working capital requirement			
Receivables (45 days)	99.26	108.33	117.12
Creditors (20 days)	-50.13	-53.85	-58.61
Working capital requirement	49.14	54.48	58.50
Return on working capital at WACC = 8.95%	4.40	4.88	5.24

Considerations of the Authority

947. In determining proposed allowances for working capital, Western Power has determined a “stock” of working capital that is varied from year-to-year according to the costs and revenues for each year and assumptions of time periods of credit made available to Western Power by suppliers and credit made available by Western Power to network users. A cost of working capital is determined as a return on the funds invested in the stock of working capital in the same manner as funds invested in the physical assets (capital base) of the network.
948. To the extent that an allowance for costs of working capital can reasonably be included in the costs of providing network services,⁴¹² the Authority considers that the treatment of a stock of working capital as a capital asset of the network business is appropriate and a return on this asset, calculated at the WACC, is a reasonable estimate of the cost of working capital to the business. However, the Authority observes that there is an inconsistency in Western Power’s determination of a return on the stock of working capital with the determination of a return on the capital base. Western Power calculates the return on working capital as a return on the closing value of the stock of working capital in each year, whereas the return on the capital base is calculated on the opening value of the capital base in each year.

⁴¹¹ Revised access arrangement information, Appendix 7 (Revenue Model).

⁴¹² The Authority is aware that regulators in other Australian jurisdictions have questioned whether an allowance for costs of working capital can reasonably be included in the determination of regulated revenues for utility businesses. The Authority intends to give this matter further consideration outside of the process of assessment of proposed revisions to the access arrangement for the SWIN.

949. In the Draft Decision, the Authority required the following amendment to correct the inconsistency between determination of a cost of working capital and determination of a return on the capital base.

Draft Decision Amendment 30

The target revenue should be revised to reflect an allowance for a cost of working capital calculated as a return on the opening value of a stock of working capital in each year of the second access arrangement period.

950. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the required amendment.⁴¹³
951. The Authority has revised the allowance for the cost of working capital to make the correction in the calculation method and in accordance with revisions to the forecasts of new facilities investment and non-capital costs, and the revised WACC applied under this Final Decision (Table 81 and Table 82).

**Table 81 Authority's revised cost of working capital – transmission network
(real \$ million at 30 June 2009)**

	2009/10	2010/11	2011/12
Net covered service revenue	315.67	358.40	410.71
Expenses			
Forecast new facilities investment (less contributions)	283.48	519.03	590.33
Forecast non-capital costs	75.46	96.32	103.40
Total expenses	358.94	615.34	693.74
Working capital requirement			
Receivables (45 days)	38.92	44.19	50.50
Creditors (20 days)	-19.67	-33.72	-37.91
Working capital requirement at end of year	19.25	10.47	12.59
Opening value of working capital (carried over from first access arrangement period for 2008/09)	16.35	19.25	10.47
Closing value of working capital	19.25	10.47	12.59
Return on opening value of working capital at WACC = 7.98%	1.30	1.54	0.84

⁴¹³ Western Power submission of 13 August 2009.

**Table 82 Revised cost of working capital – distribution network
(real \$ million at 30 June 2009)**

	2009/10	2010/11	2011/12
Net covered service revenue	648.02	757.27	859.02
Expenses			
Forecast new facilities investment (less contributions)	404.93	515.73	546.60
Forecast non-capital costs	280.84	357.11	414.11
Total expenses	685.76	872.84	960.71
Working capital requirement			
Receivables (45 days)	79.89	93.36	105.62
Creditors (20 days)	-37.58	-47.83	-52.50
Working capital requirement	42.32	45.54	53.12
Opening value of working capital (carried over from first access arrangement period for 2008/09)	20.71	42.32	45.54
Closing value of working capital	42.32	45.54	53.12
Return on opening value of working capital at WACC = 7.98%	1.65	3.38	3.63

952. The Authority requires amendment of the proposed access arrangement revisions to include these values of a cost of working capital.

Required Amendment 29

The target revenue should be revised to reflect an allowance for a cost of working capital as follows (real \$ million at 30 June 2009):

	2009/10	2010/11	2011/12
Transmission:	19.25	10.47	12.59
Distribution:	42.32	45.54	53.12
Total:	61.57	56.00	65.71

Revenue Adjustments

Access Code Requirements

953. Section 6.4 of the Access Code provides for the target revenue for an access arrangement period to include certain amounts “carried over” from the previous access arrangement period, including:

- an amount in respect of costs incurred as a result of a force majeure event under sections 6.6 to 6.8 of the Access Code;
- an amount in respect of costs incurred as a result of changes to the Technical Rules for which no allowance was made in the access arrangement, under sections 6.9 to 6.12 of the Access Code;
- an amount under an investment adjustment mechanism under sections 6.13 to 6.18 of the Access Code;
- an amount under a gain sharing mechanism under sections 6.19 to 6.28 of the Access Code; and
- an amount under a service standards adjustment mechanism under sections 6.29 to 6.37 of the Access Code.

Proposed Revisions

954. Western Power has proposed adjustments to target revenue for the second access arrangement period under an investment adjustment mechanism specified under clauses 5.11 and 5.49 to 5.53 and Appendix 8 of the current access arrangement. The amount of the adjustment is \$49.258 million in dollar values of 30 June 2009, comprising \$16.396 million for the transmission network and \$32.862 million for the distribution network.⁴¹⁴
955. Western Power has not proposed any adjustments to target revenue for the second access arrangement period in respect of unforeseen events or changes to the Technical Rules.
956. The current access arrangement makes no provision for adjustments to target revenue for the second access arrangement period under a gain sharing mechanism or a service standards adjustment mechanism and, accordingly, Western Power has not proposed any such adjustments.
957. Under the price control applied in the first access arrangement period, there is a carry-over amount of revenue from the first to second access arrangement period in respect of forecast and realised capital contributions (the capital contributions adjustment mechanism under clauses 5.12, 5.32, 5.43 and Appendix 8 of the current access arrangement). Western Power has recorded capital contributions in excess of forecast contributions for the first access arrangement period and, accordingly, has deducted the amount of the excess from target revenue for the second access arrangement period. The amount is \$132.606 million in dollar values of 30 June 2009, comprising \$40.968 million for the transmission network and \$91.638 million for the distribution network.⁴¹⁵

Considerations of the Authority

958. The Authority has undertaken analysis to verify the amounts of adjustments to target revenue proposed in respect of the investment adjustment mechanism and

⁴¹⁴ Revised access arrangement information, Appendix 7 (Revenue Model).

⁴¹⁵ Revised access arrangement information, Appendix 7 (Revenue Model). Capital contribution amount for the transmission network corrected to real dollar values using inflation factors applied by Western Power.

the capital contributions adjustment mechanism. The results of this analysis are set out below for each of the two adjustments.

Investment Adjustment Mechanism

959. The investment adjustment mechanism is set out in clauses 5.50 to 5.53 of the current access arrangement, as follows.

5.50 The investment adjustment mechanism will apply to both transmission and distribution capital expenditure. The purpose of the investment adjustment mechanism is to adjust Western Power's target revenue in the next access arrangement period in a manner that exactly corrects for the economic loss or gain to Western Power as a result of forecasting errors in relation to particular categories of capital expenditure (the investment difference) in this access arrangement period. In order to give effect to this purpose, the investment adjustment mechanism must take account of:

- (a) The effects of inflation, both in this access arrangement period and the next access arrangement period;
- (b) The time value of money as reflected by the real pre-tax WACC as applied in this access arrangement period and the next access arrangement period; and
- (c) The cost of depreciation and the value of capital additions to the capital base at the next access arrangement period.

5.51 Given the requirements of the investment adjustment mechanism as described in section 5.50 above, Western Power's preferred approach is to:

- (a) use the Authority's revenue model (as adopted in this access arrangement period) to calculate the difference in present value terms between:
 - i. The target revenue that would have been calculated for this access arrangement period if the investment difference had been zero (i.e. there was no forecasting error in relation to the capital expenditure categories that are subject to the investment adjustment mechanism); and
 - ii. The target revenue that actually applied in this access arrangement period.

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

5.52 For the avoidance of doubt, the target revenue that actually applied in this access arrangement period includes the deemed capital contributions as set out in sections 5.29 and 5.40 of this Access Arrangement, and not the actual capital contributions received.

5.53 For the purposes of calculating the investment adjustment mechanism, the categories of capital expenditure that are used in calculating the investment difference are:

- (a) new facilities investment arising from the connection of new generation capacity to the transmission or distribution network from 1 July 2006;
- (b) new facilities investment arising from the connection of new load to the transmission system or distribution system from 1 July 2006;
- (c) new facilities investment in relation to the augmentation of the capacity of the transmission system or distribution system for the provision of covered services from 1 July 2006; and

- (d) new facilities investment undertaken for augmentation of the distribution system under the regional power improvement program and state underground power program.

960. Western Power has calculated amounts of adjustments under the investment adjustment mechanism as compound returns on amounts of above-forecast new facilities investment under the relevant categories at the rate of return applying under the current access arrangement (6.76 per cent, pre-tax real). No allowance for depreciation has been included in the adjustments. These calculations are summarised in Table 83 and Table 84.

Table 83 Proposed adjustments to target revenue under the investment adjustment mechanism – transmission network (real \$ million at 30 June 2009)⁴¹⁶

	2006/07	2007/08	2008/09
<u>Forecast new facilities investment</u>			
Demand related			
System Capacity	92.03	113.60	108.62
Customer Driven – Bulk Loads	33.09	58.43	12.35
Customer Driven – Generation	77.38	43.11	25.02
Total	202.48	215.14	146.00
<u>Actual new facilities investment</u>			
Demand related			
System Capacity	125.54	107.52	188.26
Customer Driven – Bulk Loads	18.98	74.47	47.80
Customer Driven – Generation	119.50	89.38	139.53
Total	264.02	271.37	375.59
<u>Above-forecast investment</u>			
Demand related			
System Capacity	33.51	-6.08	79.64
Customer Driven – Bulk Loads	-14.11	16.04	35.45
Customer Driven – Generation	42.12	46.27	114.51
Total	61.53	56.23	229.59
<u>Adjustment to target revenue</u>⁴¹⁷			
Compound return to 2009/10 at 6.76 per cent for 2006/07 to 2008/09 and 8.95 per cent for 2009/10	0	4.44	7.96
Amount added to target revenue in 2009/10	13.51		

⁴¹⁶ Revised access arrangement information, Appendix 7 (Revenue Model).

⁴¹⁷ Calculated as a compound return on the previous year's above-forecast investment, consistent with the general method of financial modelling with the return calculated only on the opening asset value for each year.

Table 84 Proposed adjustments to target revenue under the investment adjustment mechanism – distribution network (real \$ million at 30 June 2009)⁴¹⁸

	2006/07	2007/08	2008/09
<u>Forecast new facilities investment</u>			
Demand related			
Distribution Capacity	35.49	35.93	40.91
Customer Driven	105.01	116.75	131.10
Customer Driven – Vested Assets	18.05	21.08	24.29
Other			
State Underground Power Program	19.37	17.21	17.36
Rural Power Improvement Program	11.62	11.20	12.18
Total	189.54	202.17	225.84
<u>Actual new facilities investment</u>			
Demand related			
Distribution Capacity	80.46	62.30	89.20
Customer Driven	191.92	192.26	131.89
Customer Driven – Vested Assets	23.32	20.60	94.30
Other			
State Undergrounding Power Program	22.32	22.32	29.29
Rural Power Improvement Program	10.20	23.94	22.00
Total	328.22	321.42	366.68
<u>Above-forecast investment</u>			
Demand related			
Distribution Capacity	44.97	26.37	48.29
Customer Driven	86.90	75.52	0.79
Customer Driven – Vested Assets	5.27	-0.49	70.01
Other			
State Undergrounding Power Program	2.96	5.11	11.93
Rural Power Improvement Program	-1.42	12.74	9.82
Total	138.68	119.25	140.84
<u>Adjustment to target revenue⁴¹⁹</u>			
Compound return to 2009/10 at 6.76 per cent for 2006/07 to 2008/09 and 8.95 per cent for 2009/10	0	10.01	17.44
Amount added to target revenue in 2009/10	29.90		

⁴¹⁸ Revised access arrangement information, Appendix 7 (Revenue Model).

⁴¹⁹ Calculated as a compound return on the previous year's above-forecast investment, consistent with the general method of financial modelling with the return calculated only on the opening asset value for each year.

961. In assessing the amounts determined by Western Power under the investment adjustment mechanism, the Authority has addressed:
- whether the amounts to be added to the target revenue for the second access arrangement period have been calculated correctly and consistently with the methods of financial modelling applied for the determination of target revenue; and
 - whether the above-forecast new facilities investment is able to be added to the capital base for the network under section 6.51A of the Access Code, allowing Western Power to earn a return on the investment.
962. Consistency of the calculation of amounts to be added to target revenue with the methods of financial modelling applied for the determination of target revenue requires consistency with the implicit timing assumptions for costs and revenues and with the methods applied in calculation of the capital base. The Authority has verified the calculations of Western Power and is satisfied that the method of calculations has been undertaken appropriately. However, the Authority has not accepted the actual amounts, which are subject to adjustment as discussed below.
963. Under this Final Decision, the Authority has determined that the entire amount of new facilities investment does not meet the requirements of section 6.51A of the Access Code for addition to the capital base and has required that the amount added to the capital base be reduced from the amount proposed by Western Power. The Authority has also determined a different value for the WACC than proposed by Western Power. As a consequence, the amount of adjustment under the investment adjustment mechanism also changes in the calculation of target revenue, as shown in Table 85 and Table 86.

Table 85 Authority's amended adjustments to target revenue under the investment adjustment mechanism – transmission network by asset class (real \$ million at 30 June 2009)

	2006/07	2007/08	2008/09
<u>Forecast new facilities investment subject to the investment adjustment mechanism</u>			
Transmission cables	3.74	4.82	4.67
Transmission steel towers	72.17	92.61	46.21
Transmission wood poles	6.35	8.19	7.95
Transmission transformers	36.79	35.31	26.92
Transmission reactors	2.54	1.48	0.87
Transmission capacitors	17.24	11.74	8.04
Transmission circuit breakers	29.52	29.86	26.39
SCADA and communications	1.00	0.93	0.80
Land and easements	18.81	23.97	21.98
Total	188.15	208.91	143.84
<u>Actual new facilities investment subject to the investment adjustment mechanism</u>			
Transmission cables	5.36	4.55	5.07
Transmission steel towers	85.13	118.97	91.24
Transmission wood poles	9.11	7.73	8.63
Transmission transformers	54.89	47.32	48.78
Transmission reactors	4.17	3.09	3.35
Transmission capacitors	27.83	21.03	22.84
Transmission circuit breakers	44.79	35.95	39.66
SCADA and communications	1.54	1.22	1.34
Land and easements	26.56	23.75	25.36
Total	259.36	263.61	246.26
<u>Above-forecast investment</u>			
Transmission cables	1.62	-0.27	0.40
Transmission steel towers	12.97	26.36	45.03
Transmission wood poles	2.76	-0.46	0.68
Transmission transformers	18.09	12.01	21.85
Transmission reactors	1.64	1.61	2.48
Transmission capacitors	10.59	9.29	14.80
Transmission circuit breakers	15.26	6.09	13.27
SCADA and communications	0.54	0.28	0.54
Land and easements	7.75	-0.22	3.38
Total	71.21	54.70	102.42
<u>Adjustment to target revenue</u> ⁴²⁰			
Compound return to 2009/10 at 6.76 per cent for 2006/07 to 2008/09 and 7.98% for 2009/10	0	5.14	8.51
Amount added to target revenue in 2009/10	14.74		

⁴²⁰ Calculated as a compound return on the previous years above-forecast investment, consistent with the general method of financial modelling with the return calculated only on the opening asset value for each year.

Table 86 Authority's amended adjustments to target revenue under the investment adjustment mechanism – distribution network by asset class (real \$ million at 30 June 2009)

	2006/07	2007/08	2008/09
<u>Forecast new facilities investment subject to the investment adjustment mechanism</u>			
Wooden pole lines	27.04	29.23	33.19
Underground cables	92.70	103.15	116.65
Transformers	28.23	32.26	36.82
Switchgear	19.20	21.61	24.51
Street lighting	8.95	10.07	11.33
Total	176.11	196.32	222.50
<u>Actual new facilities investment subject to the investment adjustment mechanism</u>			
Wooden pole lines	45.95	52.56	62.11
Underground cables	170.99	161.48	221.74
Transformers	53.72	51.30	73.32
Switchgear	33.90	35.49	48.90
Street lighting	15.67	15.52	22.53
Total	320.25	316.36	428.60
<u>Above-forecast investment</u>			
Wooden pole lines	18.91	23.33	28.93
Underground cables	78.30	58.33	105.08
Transformers	25.50	19.04	36.50
Switchgear	14.70	13.88	24.38
Street lighting	6.72	5.45	11.20
Total	144.14	120.03	206.10
<u>Adjustment to target revenue</u> ⁴²¹			
Compound return to 2009/10 at 6.76 per cent for 2006/07 to 2008/09 and 7.98% for 2009/10	0	10.40	17.86
Amount added to target revenue in 2009/10	30.52		

Capital Contributions Adjustment Mechanism

964. The capital contributions adjustment mechanism described in clauses 5.32 and 5.43 of the current access arrangement (for the transmission and distribution networks respectively) provides a mechanism for correcting for differences between forecast and actual amounts of capital contributions made to Western Power in respect of new facilities investment.
965. The capital contributions adjustment mechanism has relevance under the treatment of capital contributions established under the access arrangement for the first access arrangement period. Under this treatment, any new facilities investment financed by capital contributions is added to the capital base for the network and offset by the deduction of revenue from capital contributions from revenue able to

⁴²¹ Calculated as a compound return on above-forecast investment in the previous year, consistent with the general method of financial modelling with the return calculated only on the opening asset value for each year.

be earned under the price control. For the purposes of establishing the price control for the first access arrangement period, a forecast of capital contributions was taken into account. The capital contributions adjustment mechanism makes an adjustment to target revenue in the second access arrangement period to correct for differences between the forecast and actual amounts of capital contributions in the first access arrangement period, corrected for the time value of money at a discount rate equal to the rate of return applied in the first access arrangement period.

966. Western Power indicates that actual capital contributions in the first access arrangement period were greater than forecast for both the transmission network and distribution network resulting in necessary adjustments to target revenue for the second access arrangement period (in present value terms) of –\$42.48 million for the transmission network and –\$143.35 for the distribution network. The derivation of these amounts is shown in Table 87 and Table 88.

Table 87 Proposed adjustments to target revenue under the capital contributions adjustment mechanism – transmission network
(real \$ million at 30 June 2009)⁴²²

	2006/07	2007/08	2008/09
Forecast capital contributions	17.42	29.66	14.45
Actual capital contributions	35.90	53.11	10.83
Difference	-18.48	-23.45	3.62
Escalation to 30 June 2009 at 6.76 per cent per annum	-21.07	-25.04	3.62
Amount added to target revenue (present value at 30 June 2009)	-42.48		

Table 88 Proposed adjustments to target revenue under the capital contributions adjustment mechanism – distribution network
(real \$ million at 30 June 2009)⁴²³

	2006/07	2007/08	2008/09
Forecast capital contributions	99.16	115.55	133.33
Actual capital contributions	179.72	143.99	153.51
Difference	-80.55	-28.44	-21.18
Escalation to 30 June 2009 at 6.76 per cent per annum	-91.81	-30.36	-21.18
Amount added to target revenue (present value at 30 June 2009)	-143.35		

⁴²² Western Power submission of 10 September 2009, confidential supporting documents (Revenue Model, DMS#6439363v1).

⁴²³ Western Power submission of 10 September 2009, confidential supporting documents (Revenue Model, DMS#6439363v1).

967. In assessment of the amounts determined by Western Power under the capital contributions adjustment mechanism, the Authority has addressed whether the amounts to be added to the target revenue for the second access arrangement period have been calculated correctly and consistently with the methods of financial modelling applied for the determination of target revenue. The Authority has verified the calculations of Western Power and is satisfied that the calculations have been undertaken appropriately.

Total Cost and Target Revenue

Access Code Requirements

968. Under section 6.2 of the Access Code, the target revenue for a price control may be set by reference to the service provider's approved total costs; or by reference to tariffs in previous access arrangement periods and changes to costs and productivity growth in the electricity industry, or using a combination of these two methods.

969. Objectives to be observed in setting the level of target revenue are set out in sections 6.4(a) and 6.5 of the Access Code.

6.4 The price control in an access arrangement must have the objectives of:

- (a) giving the service provider an opportunity to earn revenue ("target revenue") for the access arrangement period from the provision of covered services as follows:
 - (i) an amount that meets the forward-looking and efficient costs of providing covered services, including a return on investment commensurate with the commercial risks involved;
plus:
 - (ii) for access arrangements other than the first access arrangement, an amount in excess of the revenue referred to in section 6.4(a)(i), to the extent necessary to reward the service provider for efficiency gains and innovation beyond the efficiency and innovation benchmarks in a previous access arrangement;
plus:
 - (iii) an amount (if any) determined under section 6.6 [adjustments for unforeseen events];
plus:
 - (iv) an amount (if any) determined under section 6.9 [adjustments for technical rule changes];
plus:
 - (v) an amount (if any) determined under an investment adjustment mechanism (see sections 6.13 to 6.18);
plus:
 - (vi) an amount (if any) determined under a service standards adjustment mechanism (see sections 6.29 to 6.32);
plus –
 - (vii) an amount (if any) determined under section 6.37A [tariff equalisation contributions];

...

- 6.5 The amount determined in seeking to achieve the objective specified in section 6.4(a)(i) is a target, not a ceiling or a floor.

Proposed Revisions

970. Western Power has proposed to set the target revenue for the second access arrangement period by reference to an amount of approved total costs and a range of adjustments. The elements of total costs and some of the adjustments applied by Western Power have been examined above, including:

- non-capital costs;
- the capital base and new facilities investment that form the basis for determination of capital costs (a rate of return on the capital base and depreciation allowances);
- the rate of return (WACC); and
- adjustments in respect of the investment adjustment mechanism and capital contributions adjustment mechanism.

971. Other features of Western Power's proposed determination of target revenue are as follows.

972. First, Western Power has determined an amount of target revenue for recovery through the provision of reference services. This has been undertaken by deducting from total costs an amount of costs attributed to the provision of non-reference services.

973. Secondly, Western Power has proposed an adjustment to target revenue for the second access arrangement under a mechanism to defer recovery of an amount of revenue until the third or later access arrangement periods. Western Power states that the purpose of the proposed deferral of revenue is to reduce proposed increases in reference tariffs in the second access arrangement period. The increases stem from a change in the treatment of capital contributions in determination of the amount of new facilities investment that may be added to the capital base (paragraph 783 and following of this Final Decision) and forecast increases in costs in the second access arrangement period.⁴²⁴ The effect of the proposed deferral of revenue would be to spread the increase in reference tariffs over a period longer than just the second access arrangement period.

974. Western Power's proposed values of target revenue for the second access arrangement period are shown in Table 89 and Table 90.

⁴²⁴ Western Power submission of 17 December 2008.

Table 89 Proposed target revenue for the transmission network (real \$ million at 30 June 2009)⁴²⁵

	2009/10	2010/11	2011/12
Non-capital costs	100.90	105.97	112.78
Depreciation	74.25	86.14	100.36
Accelerated depreciation (redundant assets)	0	0	0
Return on assets	216.18	270.40	332.99
Return on working capital	0.24	0.32	2.55
Total Costs	391.58	462.83	548.68
Non-reference service revenue	-6.32	-6.00	-6.28
Investment adjustment mechanism	16.40	0	0
Capital contribution adjustment mechanism	-45.04	0	0
Net reference service revenue	356.62	456.83	542.41
Deferred reference service revenue	-4.31	-5.70	-7.53
Target reference service revenue	352.31	451.13	534.87
Present Value	1,117.02		

Table 90 Proposed target revenue for the distribution network (real \$ million at 30 June 2009)⁴²⁶

	2009/10	2010/11	2011/12
Non-capital costs	393.89	416.48	436.37
Depreciation	146.78	164.74	183.24
Accelerated depreciation (redundant assets)	3.78	3.68	3.59
Return on assets	260.59	293.74	329.34
Return on working capital	4.40	4.88	5.24
Total Costs	809.54	883.51	957.77
Non-reference service revenue	-4.69	-5.56	-6.41
Investment adjustment mechanism	32.86	0	0
Capital contribution adjustment mechanism	-91.64	0	0
Net reference service revenue	746.08	877.95	951.36
Deferred reference service revenue	-55.76	-69.71	-87.13
Target reference service revenue	690.31	808.25	864.23
Present Value	1,982.78		

⁴²⁵ Revised access arrangement information, Appendix 7 (Revenue Model).⁴²⁶ Revised access arrangement information, Appendix 7 (Revenue Model).

Considerations of the Authority

975. The Authority has given consideration already in this Draft Decision to elements of total cost and is requiring amendments to forecast non-capital costs, the value of new facilities investment added to the capital base for the first access arrangement period, the forecast of new facilities investment for the second access arrangement period, the rate of return (WACC), and adjustments to target revenue under the investment adjustment mechanism and capital contributions adjustment mechanism.
976. Further matters relevant to the Authority's assessment of Western Power's determination of target revenue are the treatment of expected revenue from non-reference services, the proposed deferral of revenue from the second access arrangement period to the third and subsequent access arrangement periods, and the effects on target revenue (and reference tariffs) of Western Power's proposed change in treatment of capital contributions. Submissions to the Authority have indicated concerns of interested parties with the methods applied by Western Power to derive the amount of target revenue to apply under the price control. These matters are addressed in turn as follows.

Revenue from Non-Reference Services

977. Western Power has proposed that the amount of target revenue established under the price control for the second access arrangement period be an amount in respect of reference services. The derivation of target revenue involves subtraction from total costs of an amount of forecast revenue for non-reference services. Under this proposed specification of target revenue and the price control, revenue earned by Western Power from the provision of non-reference services would not fall under the revenue cap price control.
978. Alinta Sales submitted that the expected revenue from non-reference services should not be excluded from the target revenue. Rather, Alinta Sales submits that the Access Code requires that the target revenue be set with respect to covered services, which include both reference and non-reference services. The effect of this would be that revenue from non-reference services would fall under the price control and revenue cap.⁴²⁷
979. The Authority considers that section 6.4 of the Access Code and the Code objective would allow a form of price control that excludes revenue from non-reference services.
980. Section 6.2 of the Access Code explicitly contemplates that a price control may comprise price caps for individual reference services. Under such a price control, the target revenue applied in setting price caps would necessarily be an amount for reference services only, and exclude any amount of costs or forecast revenue for non-reference services. As such, section 6.4 of the Access Code cannot be constrained in the manner suggested by Alinta Sales.
981. If the Access Code were to require that the target revenue and price control cover the provision of non-reference services, the tariffs of non-reference services would necessarily be constrained by the price control. The Authority considers that this is

⁴²⁷ Alinta Sales Pty Ltd submission of 17 December 2008.

contrary to the distinction in the Access Code between reference services and non-reference services and would reduce the incentive for Western Power to offer non-reference services and to negotiate with users on terms and prices for the provision of these services. The Authority considers that this would be contrary to the Code objective of efficiency in the provision and use of network services.

982. Taking these matters into account, the Authority is satisfied that Western Power's proposed exclusion of forecast revenue from non-reference services from the target revenue and price control is consistent with requirements of section 6.4 of the Access Code and the Code objective. The Authority also observes that this approach is consistent with provisions under the National Electricity Rules for network businesses in the National Electricity Market to provide negotiated services and to determine prices for these services unfettered by a price control.
983. Notwithstanding that the Authority is satisfied that the exclusion of non-reference services revenue from target revenue is consistent with requirements of the Access Code, the Authority observes that the value of non-reference services revenue taken into account in determining target revenue for the distribution network is less than the amount of non-capital costs attributed by Western Power to the provision of non-references (Table 91).

Table 91 Western Power forecast costs and revenue for the provision of non-reference services (real \$ million at 30 June 2009)⁴²⁸

	2009/10	2010/11	2011/12
Transmission network			
Forecast non-capital costs for non-reference services	5.99	5.67	5.94
Forecast revenue from non-reference services	6.32	6.00	6.28
Distribution network			
Forecast non-capital costs for non-reference services	7.42	8.61	9.81
Forecast revenue from non-reference services	4.69	5.56	6.41

984. In the Draft Decision, the Authority took the view that the implied pricing of non-reference services at less than the avoidable cost of provision is contrary to the Code objective of efficiency in the provision and use of network services. The Authority accordingly required that the proposed access arrangement revisions be revised to take into account revenue from non-reference services of an amount at least equal to the costs attributed to the provision of these services.

⁴²⁸ Revised access arrangement information, Appendix 7, Appendix 9.

985. In the Draft Decision, the Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 31

The proposed access arrangement revisions should be amended to determine the target revenue for reference services taking into account a forecast revenue from non-reference services at least equal to the forecast of non-capital costs attributed to provision of these services.

986. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the required amendment.⁴²⁹ In a revised revenue model submitted to the Authority, Western Power has attributed an amount of revenue to non-reference services equal to the forecast costs of providing these services.⁴³⁰ The Authority accepts that this proposed revision meets the requirements of Draft Decision Amendment 31.
987. In accordance with Western Power's response to Draft Decision Amendment 31, the Authority requires the value of target revenue for the transmission and distribution networks to take into account a forecast of revenue for non-reference services equal to a value of non-capital costs attributed to provision of non-reference services and incorporated in revised forecasts of non-capital costs.
988. The Authority requires the following amendment to the proposed access arrangement revisions.

Required Amendment 30

The proposed access arrangement revisions should be amended to determine the target revenue for reference services taking into account forecast revenues from non-reference services as follows (real \$ million at 30 June 2009):

	2009/10	2010/11	2011/12
Transmission:	0.86	0.92	0.93
Distribution:	10.13	10.85	11.39

Treatment of Capital Contributions and Deferral of Revenue

989. Western Power has proposed that recovery of part of the target revenue for the second access arrangement period be deferred to the third or later access arrangement periods. Western Power states that the purpose of the proposed deferral of revenue is to reduce proposed increases in reference tariffs in the second access arrangement period that stem from a change in the treatment of

⁴²⁹ Western Power submission of 13 August 2009.

⁴³⁰ Western Power submission of 10 September 2009, confidential supporting documents (Revenue Model, DMS#6439363v1).

capital contributions in the calculation of target revenue and forecast increases in costs in the second access arrangement period.⁴³¹

990. The amounts of revenue proposed to be deferred are \$17.54 million for the transmission network and \$212.60 million for the distribution network (in real dollar values of 30 June 2009 and corresponding to present values of \$14.58 million and \$177.28 million, respectively).
991. The Authority has addressed the proposed deferral of revenue in terms of a proposed adjustment mechanism to operate under the access arrangement (paragraph 1177 and following of this Final Decision). Several interested parties expressed concern that the change in treatment of contributions gives rise to a price shock and questioned whether the change might be contrary to the objective of section 6.4(c) of the Access Code that the price control should avoid price shocks, defined as sudden material tariff adjustments between succeeding years.⁴³²
992. In the Draft Decision, the Authority took the view that the deferral of revenue from the second to the third and subsequent access arrangement periods should fully offset the effect of the change in the treatment of capital contributions. As the change in treatment of capital contributions is such as to have no net commercial impact on Western Power in present value terms, the Authority considered that the deferral of revenue should be undertaken in such a manner as to minimise the price-shock effects on network users. The Authority considered that this would be best achieved by deferring an amount of revenue equal to the total effect of the change in treatment of capital contributions. Taking this into account, the Authority determined that the deferral of revenue to offset an effect of the change in treatment of capital contributions on target revenue and reference service tariffs is consistent with the objective of section 6.4(c) of the Access Code by avoiding a price shock for users of network services.
993. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 32

The proposed access arrangement revisions should be amended to provide for deferral of revenue from the second to the third and subsequent access arrangement periods in an amount that fully offsets the effect of the change in the treatment of capital contributions in the determination of target revenue.

994. In a submission subsequent to the Draft Decision, Western Power has accepted the requirement of Draft Decision Amendment 32 to defer an amount of revenue that fully offsets the effect on target revenue of the change in treatment of capital contributions, although Western Power indicates that this is subject to the Authority

⁴³¹ Western Power submission of 17 December 2008.

⁴³² Verve Energy submission of 2 December 2008; Western Australia Major Energy Users submission of 16 December 2008; Griffin Energy Development Pty Ltd submission of 17 December 2008; Chamber of Commerce and Industry Western Australia submission of 17 December 2008; Alinta Sales Pty Ltd submission of 17 December 2008; Department of Treasury and Finance, submission of 17 December 2008; Perth Energy submission of 17 December 2008.

agreeing that the deferred revenue should be able to be recovered by addition to target revenue in the third access arrangement period.⁴³³

995. The Authority maintains the view that Western Power's proposed change in the treatment of capital contributions should not cause a price shock in the level of reference tariffs. Accordingly, and taking into account the increase in reference tariffs in the second access arrangement period that are a result of other factors, the Authority maintains the view that this requires deferring an amount of revenue equal to the total effect of the change in treatment of capital contributions. The Authority has addressed as a separate issue the time period over which the amount of deferred revenue may be recovered (paragraph 1177 and following of this Final Decision).
996. With other revisions made by the Authority to the calculation of total costs and target revenue for the purposes of this Final Decision, the Authority has determined that the change in treatment of capital contributions accounts for \$64.5 million of target revenue for the transmission network and \$484.2 million of target revenue for the distribution network, in present value terms and in real dollar values of 30 June 2009. For this Final Decision, the Authority has determined an amount of target revenue for reference services on the basis of deferral of these amounts.
997. The Authority accordingly requires the following amendment to the proposed access arrangement revisions.

Required Amendment 31

The proposed access arrangement revisions should be amended to provide for deferral of an amount of \$64.5 million of revenue for the transmission network and \$484.2 million of revenue for the distribution network (in present value terms and in real dollar values of 30 June 2009) from the second to the third and subsequent access arrangement periods, being an amount that fully offsets the effect of the change in the treatment of capital contributions in the determination of target revenue.

Target Revenue

998. The Authority has determined values of target revenue for reference services taking into account determinations and required amendments of individual elements of target revenue as set out in this Final Decision. The values of target revenue determined by the Authority are set out for the transmission and distribution networks in Table 92 and Table 93. These tables also show the "smoothed" target revenue that becomes the revenue cap under the price control.

⁴³³ Western Power submission of 10 September 2009.

**Table 92 Authority's revised target revenue for the transmission network
(real \$ million at 30 June 2009)**

	2009/10	2010/11	2011/12
Non-capital costs	75.46	96.32	103.40
Depreciation	68.85	73.59	83.28
Accelerated depreciation (redundant assets)	0	0	0
Return on assets	171.36	188.49	224.04
Return on working capital	1.30	1.54	0.84
Total Costs	316.97	359.94	411.55
Non-reference service revenue	-0.86	-0.92	-0.93
Investment adjustment mechanism	14.74	0	0
Capital contribution adjustment mechanism	-45.87	0	0
Net costs after adjustments	284.98	359.02	410.62
Present value	897.97		
Deferred reference service revenue	-8.88	-14.83	-54.78
Target reference service revenue after deferred revenue	276.09	344.19	355.84
Present value	833.52		
Smoothed reference service revenue (revenue cap)	262.90	332.05	384.33
Present value	833.52		

**Table 93 Authority's revised target revenue for the distribution network
(real \$ million at 30 June 2009)**

	2009/10	2010/11	2011/12
Non-capital costs	280.84	357.11	414.11
Depreciation	141.39	153.72	169.99
Accelerated depreciation (redundant assets)	3.84	3.75	3.66
Return on assets	221.96	242.68	271.27
Return on working capital	1.65	3.38	3.63
Total Costs	649.67	760.65	862.65
Tariff equalisation contribution	121.13	170.39	171.10
Non-reference service revenue	-10.13	-10.85	-11.39
Investment adjustment mechanism	30.52	0	0
Capital contribution adjustment mechanism	-154.79	0	0
Net costs after adjustments	636.40	920.19	1,022.37
Present value	2,190.61		
Deferred reference service revenue	-44.52	-142.33	-404.04
Target reference service revenue after deferred revenue	591.87	777.86	618.33
Present value	1,706.39		
Smoothed reference service revenue (revenue cap)	510.16	681.04	818.16
Present value	1,706.39		

999. Summary comparisons of the target revenue proposed by Western Power and that determined by the Authority under this Final Decision are set out in Table 94, Table 95 and Table 96.

Table 94 Transmission network target revenue comparison: Western Power's proposal and Final Decision

	Western Power Proposal	Final Decision
Present value of total costs (\$ million)	1,173.59	929.13
Present value of net costs after adjustments (\$ million)	1,131.59	897.97
Present value of target reference service revenue after deferred revenue (\$ million)	1,117.02	833.52
Discounted weighted average tariff (\$/MWh)	24.20	18.31
Forecast average tariff increase 2008/09 to 2009/10	CPI + 42.2%	CPI + 12.87% ⁴³⁴
Forecast average tariff increase 2009/10 to 2010/11	CPI + 32.2%	CPI + 12.87%
Forecast average tariff increase 2010/11 to 2011/12	CPI + 32.2%	CPI + 12.87%

Table 95 Distribution network target revenue comparison: Western Power's proposal and Final Decision

	Western Power Proposal	Final Decision
Present value of total costs (\$ million)	2,227.95	2,333.43
Present value of net costs after adjustments (\$ million)	2,160.06	2,190.61
Present value of target reference service revenue after deferred revenue (\$ million)	1,982.78	1,706.39
Discounted weighted average tariff (\$/MWh)	56.08	48.74
Forecast average tariff increase 2008/09 to 2009/10	CPI + 42.2%	CPI + 17.66% ⁴³⁵
Forecast average tariff increase 2009/10 to 2010/11	CPI + 25.0%	CPI + 17.66%
Forecast average tariff increase 2010/11 to 2011/12	CPI + 25.0%	CPI + 17.66%

⁴³⁴ Refers to tariff increase from commencement date of approved revised access arrangement.

⁴³⁵ Refers to tariff increase from commencement date of approved revised access arrangement.

Table 96 Total transmission and distribution network target revenue comparison: Western Power's proposal and Final Decision

	Western Power Proposal	Final Decision
Present value of total costs (\$ million)	3,401.55	3,262.57
Present value of net costs after adjustments (\$ million)	3,291.66	3,088.59
Present value of target reference service revenue after deferred revenue (\$ million)	3,099.80	2,539.91
Forecast average tariff increase 2008/09 to 2009/10	CPI + 42.2%	CPI + 16.32% ⁴³⁶
Forecast average tariff increase 2009/10 to 2010/11	CPI + 27.5%	CPI + 16.32%
Forecast average tariff increase 2010/11 to 2011/12	CPI + 27.6%	CPI + 16.32%

1000. The forecast average tariff increases, together with the Authority's revised values of target revenue, are shown in the above tables. The forecast increases are based on an expectation of tariffs revisions (through revisions to the price list) at times of March 2010, July 2010 and July 2011.

1001. The comparisons of target revenue shown in the above tables do not separately identify the effect of tariff equalisation contributions on target revenue and average annual increases in target revenue. Tariff equalisation contributions were not included in Western Power's proposed target revenue. In the absence of tariff equalisation contributions, the target revenue approved by the Authority under this Final Decision would be 23 per cent lower for the distribution network. The average annual rate of increase of distribution tariffs would be CPI + 2.03 per cent, rather than CPI + 17.66 per cent. The average annual rate of increase of tariffs for the combined transmission and distribution networks would be CPI + 5.40 per cent, rather than CPI + 16.32 per cent.

Form of the Price Control

Access Code Requirements

1002. "Price Control" is defined in Chapter 1 of the Access Code as:

"price control" means the provisions in an access arrangement under section 5.1(d) and Chapter 6 which determine target revenue.

1003. Sections 6.1 to 6.3 of the Access Code establish requirements for the form of the price control:

- 6.1 Subject to section 6.3, an access arrangement may contain any form of price control provided it meets the objectives set out in section 6.4 and otherwise complies with this Chapter 6.

⁴³⁶ Refers to tariff increase from commencement date of approved revised access arrangement.

- 6.2 Without limiting the forms of price control that may be adopted, price control may set target revenue:
- (a) by reference to the service provider's approved total costs; or
 - (b) by setting tariffs with reference to:
 - (i) tariffs in previous access arrangement periods; and
 - (ii) changes to costs and productivity growth in the electricity industry:
 or
 - (c) using a combination of the methods described in sections 6.2(a) and 6.2(b).
1004. Section 6.3 of the Access Code constrains the choice of price control for the first access arrangement period, which is not relevant to the proposed access arrangement revisions.
1005. Section 6.4 of the Access Code sets out objectives for the price control, which relate to the setting of an amount of target revenue for the access arrangement period (section 6.4(a)) as well as objectives of:
- enabling a user to predict the likely annual changes in target revenue during the access arrangement period (section 6.4(b)); and
 - avoiding price shocks (that is, sudden material tariff adjustments between succeeding years (section 6.4(c))).

Current Access Arrangement

1006. The current access arrangement applies a revenue cap form of price control. A separate revenue cap is applied to each of the transmission and distribution networks.
1007. Under the revenue caps:
- reference tariffs were set for 2006/07 on the basis of an amount of required revenue for 2006/07, and in 2007/08 and 2008/09 on the basis of an amount of required revenue, plus corrections (by way of a correction factor) for under-recovery or over-recovery of required revenue in the preceding year or years;
 - the “correction factor” for under-recovery or over-recovery of required revenue has effect over two years – a correction is made in the first year following a particular pricing year on the basis of a combination of recorded and forecast actual revenues, and a further correction is made in the second year following a particular pricing year to take into account the complete records of actual revenues; and
 - a “side constraint” applies to changes in reference tariffs from year to year such that the maximum proportional change in any reference tariff is –
 - +/- (percentage change in the CPI + 5 percentage points),
 which is referred to as a side constraint of “CPI + 5 per cent”.

Proposed Revisions

1008. Western Power has proposed retaining a revenue cap form of price control for the second access arrangement period, as set out in sections 5.25 to 5.48 of the revised proposed access arrangement.
1009. The specifications of the price controls for transmission and distribution under clauses 5.35 and 5.46 of the proposed access arrangement revisions have been changed so that the maximum revenue for each network in each year of the second access arrangement period includes an amount in respect of adjustments to target revenue for unforeseen events, technical rule changes, the investment adjustment mechanism and the capital contributions adjustment mechanism as these applied for the first access arrangement period.
1010. The values of the side constraints on changes to reference tariffs for the transmission and distribution networks, which are indicated under clauses 3.11, 5.35 and 5.46 of the proposed access arrangement revisions, have been changed such that the maximum proportional change in any reference tariff from 2009/10 to 2010/11 and from 2010/11 to 2011/12 is:
- +/- (percentage change in the CPI + 37.2 percentage points) for the transmission network; and
 - +/- (percentage change in the CPI + 30.0 percentage points) for the distribution network.

Considerations of the Authority

1011. Under sections 6.1 and 6.2 of the Access Code, the form of price control is a matter for determination by the service provider subject to the selected form of price control complying with the requirements of section 6.2, the objectives of section 6.4, and otherwise complying with Chapter 6. In considering a proposed form of price control for the purposes of a decision to approve or not approve the proposed access arrangement revisions, the Authority must also have regard to the Code objective, which requires that the price control promote the economically efficient investment in and operation and use of, networks and services of networks in Western Australia in order to promote competition in markets upstream and downstream of the networks.
1012. A revenue cap is explicitly contemplated in the note to section 6.2(a) of the Access Code as one of several forms of price control that may be adopted. While section 1.5(e) provides that notes are to be disregarded in interpreting the Access Code, the description of price control in section 6.2 is not limited to the matters set out in sections 6.2(a), 6.2(b) and 6.2(c) and the Authority considers that a revenue cap would be consistent with section 6.2.
1013. A revenue cap form of price control creates an incentive for a service provider to out-perform the forecast of costs on which the price control was established, or at least to minimise any under-performance relative to that forecast. This incentive arises from the service provider bearing the risk of under-performance relative to cost forecasts, but also retaining the benefits of out-performance of forecasts.

1014. The WAMEU and Alinta Sales submitted that the revenue cap form of price control provides inadequate incentives for Western Power to service new demand and reduce costs.⁴³⁷ Alinta Sales submitted that values of actual non-capital costs in excess of forecast costs for the first access arrangement period are evidence of inadequate incentives to reduce costs. Alinta Sales further submitted that a “CPI – X” form of price control should be preferred to the revenue cap, with the X value reflecting a presumption of efficiency gains over the access arrangement period.
1015. The Authority does not accept the contention of the WAMEU and Alinta Sales that actual costs in excess of forecasts is evidence of a lack of incentive under the price control for Western Power to achieve cost efficiencies. Such under-performance against forecasts may be the result of inadequacies in the process of setting the forecasts or changes in circumstances during the access arrangement period that were not taken into account in setting the forecasts. Either way, the service provider would have an incentive to minimise the extent of any under-performance.
1016. The Authority also does not accept the contention of Alinta Sales that a “CPI – X” form of price control would provide greater incentives for Western Power to seek efficiency gains. In referring to a “CPI – X” price control, the Authority presumes that Alinta Sales refers to a time path of increases in regulated tariffs or revenue whereby the increase is limited to inflation less an amount, “X”, that reflects a projection or assumption of efficiency gains that may possibly be achieved by Western Power during the course of the access arrangement period, over and above any projected efficiency gains already reflected in cost forecasts. In this Final Decision, the Authority has not considered efficiency gains or productivity improvements over and above any that may be reflected in forecasts of costs. The Authority considers that an additional allowance for expected efficiency gains, as contemplated by Alinta Sales, would be inconsistent with the objective of section 6.4(a) of the Access Code for Western Power is to be provided with an opportunity to recover the forward looking and efficient costs for the provision of covered services.
1017. The Authority accepts that a revenue cap form of price control does not provide incentives for the service provider to seek to increase demand for services and thereby increase revenue. The absence of incentives under the price control could, all other things being equal, create incentives for a service provider to fail to provide timely services at new connection points. The absence of incentives under the price control is, however, countered by other mechanisms to ensure provision of services. For Western Power, these include requirements under the *Code of Conduct for the Supply of Electricity to Small Use Customers*, the Metering Code, and requirements of the applications and queuing policy of the access arrangement.
1018. The Authority also accepts that the revenue cap form of price control could create incentives for Western Power to increase the amount of revenue that it seeks to obtain through contributions. With the treatment of contributions under the proposed access arrangement revisions, revenue obtained from contributions does not fall under the revenue cap. As such, any revenue collected by Western Power from contributions over and above forecasts is retained. However, the Authority considers that Western Power is adequately constrained in its ability to charge

⁴³⁷ Western Australia Major Energy Users submission of 16 December 2008; Alinta Sales Pty Ltd submission of 17 December 2008.

contributions by the contributions policy of the access arrangement that limits the circumstances in which contributions may be charged. As part of this Final Decision, the Authority is requiring strengthening of the protections available to users under the contributions policy, including greater transparency in the determination of amounts of contributions (paragraph 1332 and following).

1019. Taking into account the matters addressed above, the Authority is satisfied that the proposed revenue cap form of price control is consistent with the requirements of the Access Code.
1020. Synergy and Verve Energy submitted that the side constraint on changes to reference tariffs, which allows for large changes in values of reference tariffs from year to year, is inconsistent with the objective of section 6.4(c) of the Access Code that the price control should seek to avoid price shocks (that is, sudden material tariff adjustments between succeeding years).⁴³⁸
1021. The Authority acknowledges the concerns of Synergy and Verve Energy that the proposed side constraint on year-to-year changes in reference tariffs provides for very substantial increases. The Authority observes that this stems from the substantial increases in costs forecast by Western Power, and the side constraint indicates the year-to-year increases in tariffs that would occur with a “smoothed” tariff path. While the Authority acknowledges that the tariff increases permitted by the side constraint could be seen as contrary to the objective of section 6.4(c) of the Access Code of avoiding price shocks, the Authority considers that, consistent with section 2.3(b) and taking into account the Code objective, the objective in section 6.4(a) of allowing for recovery of efficient costs of the provision of services should prevail over the objective of section 6.4(c).
1022. Under the Draft Decision, the Authority required the values of the side constraints to be amended to reflect a revised (and lower) value of target revenue. The following amendment to the proposed access arrangement revisions was required.

Draft Decision Amendment 33

The proposed access arrangement revisions should be amended such that clauses 3.11, 5.35 and 5.46 provide for maximum proportional changes in reference tariffs from 2009/10 to 2010/11 and from 2010/11 to 2011/12 of:

- +/- (percentage change in the CPI + 13 percentage points) for the transmission network; and
- +/- (percentage change in the CPI + 7 percentage points) for the distribution network.

1023. In a submission subsequent to the Draft Decision, Western Power recognises that the side constraints are appropriately adjusted to reflect revised tariff outcomes. Western Power also contends that the side constraints should also provide for a small additional margin to allow for prudent re-balancing of reference tariffs.⁴³⁹
1024. The Authority accepts that providing a regulated business with an opportunity to re-balance tariffs and tariff charges will generally provide the business with the

⁴³⁸ Synergy submission of 22 December 2008 on the Price Control; Verve Energy submission of 2 December 2008.

⁴³⁹ Western Power submission of 10 September 2009.

opportunity to develop efficient tariff levels and structures. However, the revisions to reference tariffs for the SWIN for the second access arrangement period will include large increases in reference tariffs. Allowing a margin in the side constraints on tariff changes for rebalancing of tariffs will potentially have the effect of exacerbating price shocks for some network users. In these circumstances, the Authority considers that a balance between objectives of efficiency in the level and structure of reference tariffs and avoiding price shocks is best achieved by setting the side constraints on adjustments to reference tariffs at a level just sufficient to provide for recovery of target revenue and a smooth path of tariff changes over the second access arrangement period.

1025. Under this Final Decision the Authority is requiring the price control to be established with revised values of target revenue for the access arrangement period than proposed by Western Power. The Authority has calculated the necessary proportional changes in reference tariffs from one pricing year to the next during the second access arrangement period (contemplating revisions to the price list in approximately March 2010, and at 1 July 2010 and 1 July 2011) and determined side constraints as these proportional changes rounded up to a whole percentage point:

- +/- (percentage change in the CPI + 13 percentage points) for the transmission network; and
- +/- (percentage change in the CPI + 18 percentage points) for the distribution network.

1026. The Authority requires the following amendment to the proposed access arrangement revisions.

Required Amendment 32

The proposed access arrangement revisions should be amended such that clauses 3.11, 5.35 and 5.46 provide for maximum proportional changes in reference tariffs at times of revision of the price list of:

- +/- (percentage change in the CPI + 13 percentage points) for the transmission network; and
- +/- (percentage change in the CPI + 18 percentage points) for the distribution network.

PRICING METHODS, PRICE LIST AND PRICE LIST INFORMATION

Access Code Requirements

Pricing Methods

1027. Section 5.1(e) of the Access Code requires an access arrangement to include pricing methods in accordance with the requirements of Chapter 7 of the Access Code.
1028. Section 7.1 of the Access Code indicates that “pricing methods” means the structure of reference tariffs included in an access arrangement.
1029. Section 7.2 of the Access Code indicates that an access arrangement may contain any pricing methods, provided that the pricing methods collectively meet the objectives set out in sections 7.3 and 7.4 and otherwise comply with the requirements of Chapter 7. A note under section 7.2 also gives examples of tariffs that may result from pricing methods, indicating that tariffs or parts of tariffs may be set to take into account matters such as different classes of users, different voltage levels, different connection points, demand levels, energy quantities and times of use.
1030. Sections 7.3 and 7.4 of the Access Code set out the objectives for pricing methods, as follows:
- 7.3 Subject to sections 7.5, 7.7 and 7.12, the pricing methods in an access arrangement must have the objectives that:
 - (a) reference tariffs recover the forward-looking efficient costs of providing reference services; and
 - (b) the reference tariff applying to a user:
 - (i) at the lower bound, is equal to, or exceeds, the incremental cost of service provision; and
 - (ii) at the upper bound, is equal to, or is less than, the stand-alone cost of service provision.
 - 7.4 Subject to sections 7.5, 7.7 and 7.12, the pricing methods in an access arrangement must have the objectives that:
 - (a) the charges paid by different users of a reference service differ only to the extent necessary to reflect differences in the average cost of service provision to the users; and
 - (b) the structure of reference tariffs so far as is consistent with the Code objective accommodates the reasonable requirements of users collectively; and
 - (c) the structure of reference tariffs enables a user to predict the likely annual changes in reference tariffs during the access arrangement period; and
 - (d) the structure of reference tariffs avoids price shocks (that is, sudden material tariff adjustments between succeeding years).
1031. Section 7.5 of the Access Code requires that the Authority, in reconciling any conflicting objectives for the pricing methods or determining which objective should

prevail, should have regard to the Code objective and should permit the objectives of section 7.3 to prevail over the objectives of section 7.4.

1032. Section 7.6 of the Access Code provides guidance for establishing components of tariffs:

- 7.6 Unless an access arrangement containing alternative pricing methods would better achieve the Code objective, for a reference service:
- (a) the incremental cost of service provision should be recovered by tariff components that vary with usage or demand; and
 - (b) any amount in excess of the incremental cost of service provision should be recovered by tariff components that do not vary with usage or demand.

1033. Section 7.7 of the Access Code requires that tariffs be established as “postage stamp” tariffs in certain circumstances:

- 7.7 The tariff applying to a standard tariff user in respect of a standard tariff exit point must not differ from the tariff applying to any other standard tariff user in respect of a standard tariff exit point as a result of differences in the geographic locations of the standard tariff exit points.

1034. Section 7.9 of the Access Code provides for “prudent discounts” to be made available to some users:

- 7.9 A service provider may propose in its access arrangement to discriminate between users in its pricing of services to the extent that it is necessary to do so to aid economic efficiency, including:
- (a) by entering into an agreement with a user to apply a discount to the equivalent tariff to be paid by the user for a covered service; and
 - (b) then, recovering the amount of the discount from other users of reference services through reference tariffs.

1035. Section 7.10 of the Access Code provides for discounts for users connecting distributed generation plant:

- 7.10 If a user seeks to connect distributed generating plant to a covered network, a service provider must reflect in the user’s tariff, by way of a discount, a share of any reductions in either or both of the service provider’s capital-related costs or non-capital costs which arise as a result of the entry point for distributed generating plant being located in a particular part of the covered network by:
- (a) entering into an agreement with a user to apply a discount to the equivalent tariff to be paid by the user for a covered service; and
 - (b) then, recovering the amount of the discount from other users of reference services through reference tariffs.

1036. Section 7.11 of the Access Code requires that an access arrangement include a detailed policy setting out how discounts under sections 7.9 and 7.10 are to be applied, including a detailed mechanism for determining when a user will be entitled to receive a discount and for calculating the discount to which the user will be entitled.

1037. Section 7.12 of the Access Code requires that the value of any tariff equalisation contributions be recovered as a tariff component from users of the distribution network:

- 7.12 If an amount is added to the target revenue under section 6.37A and is intended to be recovered from users of reference services through one or more reference tariffs, then the recovery must have the objective of:
- (a) applying only to users of reference services provided in respect of exit points on the distribution system; and
 - (b) being equitable in its effect as between users referred to in section 7.12(a); and
 - (c) otherwise being consistent with the Code objective.

Price List and Price List Information

1038. Section 5.1(f) of the Access Code requires an access arrangement to include a price list in accordance with the requirements of Chapter 8 of the Access Code. A “price list” is defined in the Access Code as a schedule of reference tariffs.
1039. Chapter 8 of the Access Code sets out the requirements and processes for a service provider to submit price lists to the Authority for approval and for the Authority to approve or not approve a proposed price list.
1040. An access arrangement may or may not include a requirement on a service provider to submit price lists to the Authority for approval. A determination of whether or not price lists must be approved by the Authority occurs under section 4.36 of the Access Code:
- 4.36 The Authority must, as a condition of approval of a proposed access arrangement, require a service provider to submit each price list under the access arrangement to the Authority under section 8.1 for approval, if:
- (a) the service provider requests such a condition; or
 - (b) the Authority considers that the submission of price lists under the access arrangement to the Authority under section 8.1 for approval would improve the operation of the access arrangement.
1041. If a service provider's access arrangement requires the service provider to submit price lists to the Authority for approval, then section 8.1 of the Access Code requires that the service provider must submit a proposed price list to the Authority at least 45 business days before the start of each pricing year other than the first pricing year. A proposed price list must be accompanied by price list information. “Price list information” is defined as a document that would reasonably be required to enable the Authority, users and applicants to understand how the service provider derived the elements of the proposed price list and assess the compliance of the proposed price list with the access arrangement.
1042. Sections 8.2 to 8.6 of the Access Code set out the process for the Authority to approve or not approve a proposed price list. The Authority is obliged to approve a proposed price list if it determines that the proposed price list complies with the price control and pricing methods in the service provider's access arrangement.

Current Access Arrangement

1043. The current access arrangement includes pricing methods set out at clauses 9.1 to 9.30. The pricing methods indicate that reference tariffs are derived from an amount of required revenue for a pricing year by a method of cost allocation indicated at clause 9.4 to involve:

- identifying the costs of providing reference services;
 - allocating the costs of providing reference services to particular customer groups;
 - translating the costs of serving particular customer groups to the costs of providing reference services; and
 - determining a structure of reference tariffs in a manner that reflects the underlying cost structures, in accordance with section 7.6 of the Access Code.
1044. Clauses 9.7 to 9.22 of the current access arrangement comprise statements, and some supporting evidence, of compliance of the pricing methods with the objectives of sections 7.3 and 7.4 of the Access Code.
1045. Clauses 9.23 to 9.27 of the current access arrangement comprise a policy for offering prudent discounts, indicating that Western Power may offer a prudent discount to a user if the user is able to demonstrate that an alternative supply option will provide a comparable supply service at a lower price than a service offered by Western Power's reference services and reference tariffs. The discounted price offer will be set to reflect the greater of the cost of the alternative supply option or the incremental cost of service provision.
1046. Clauses 9.28 to 9.30 of the current access arrangement comprise a policy for discounts on services for distributed generation. This policy indicates that Western Power will offer a discount to a user that connects distributed generation, with the amount of the discount determined as an annualised amount of forecast savings in costs for Western Power as a result of the connection of the distributed generation.
1047. The current access arrangement, as approved by the Authority in 2007, included a price list for 2006/07 in Appendix 5 and price list information in Appendix 6. Subsequent to approval of the current access arrangement, the Authority has approved price lists (with accompanying price list information) for 2007/08, 2008/09 and 2009/10.⁴⁴⁰

Proposed Revisions

1048. Western Power has proposed changes to the pricing methods (clauses 9.1 to 9.30 of the proposed access arrangement revisions) to:
- indicate the proposed deferral of revenue from the second access arrangement period to the third and subsequent access arrangement periods, for the purpose of preserving cost allocations established in the first access arrangement period (clause 9.7) and avoiding a price shock for users (clause 9.19A); and
 - remove from the main access arrangement document, information demonstrating compliance of the pricing methods with the relevant objectives under the Access Code, and to instead indicate that the information is

⁴⁴⁰ Economic Regulation Authority, 28 May 2007, 9 May 2008 and 18 May 2009. Determinations available from the Economic Regulation Authority web site: http://www.era.wa.gov.au/2/486/48/price_determina.pm

provided in the price list information (involving deletion of clauses 9.12 to 9.14 of the current access arrangement).

1049. The proposed access arrangement revisions include a proposed price list for 2009/10 (at Appendix 5) and associated price list information (at Appendix 6). Subsequent to submission of the proposed access arrangement revisions, and in light of the proposed revisions not having been approved by 24 April 2009, Western Power submitted an alternative proposed price list for 2009/10 and associated price list information in accordance with requirements of the current access arrangement and section 8.1 of the Access Code. The Authority subsequently approved this price list.⁴⁴¹ As a consequence, the price list provided as part of the proposed access arrangement revisions is now redundant.

Considerations of the Authority

1050. As indicated above, the Authority has approved a price list for 2009/10 outside of the approval process for the proposed access arrangement revisions. Accordingly, in this Final Decision, the Authority has not considered the price list included in the proposed access arrangement revisions.

1051. Western Power has proposed a change to provisions of the access arrangement to allow Western Power to have a revised price list to take effect from the start date of the revised access arrangement.⁴⁴² The Authority issued a notice on 24 September 2009 to make interested parties aware of the proposed change and advising that interested parties may make submissions on the matter by 9 October 2009.

1052. Synergy submits that Western Power's proposal for a revised price list that takes effect from the start of the revised access arrangement may leave it financially exposed to the extent that it cannot pass through the proposed network increases as part of its residential retail tariff, which is still regulated by the State Government.⁴⁴³ Synergy's submission also states that such a decision would be contrary to section 4.34 of the Access Code which provides that the Authority must not approve a proposed access arrangement which would, if approved, have the effect of depriving a person of a contractual right that existed prior to the submission deadline for the proposed access arrangement or the date on which the proposed access arrangement was submitted.

1053. Synergy's submission does not set out a specific contractual right, in existence at the requisite time, which is alleged to be affected by this Final Decision (or more specifically, an access arrangement which complies with this Final Decision). Based on the limited information provided by Synergy, the Authority considers that an access arrangement which complies with this Final Decision would not deprive Synergy of an existing contractual right to recover network charges. What Synergy may not be able to recover is any increases in network charges above the regulated tariff cap. However, it is not clear to the Authority whether Synergy has a present contractual right to recover such amounts due to the legislative provisions

⁴⁴¹ Economic Regulation Authority, 18 May 2009, Determination on the Proposed 2009/10 Price List for the South West Interconnected Network.

⁴⁴² Western Power submission of 10 September 2009.

⁴⁴³ Synergy submission of 4 November 2009.

concerning the tariff cap. Accordingly, any restriction on a right to recover increases in network tariffs is not a result of the Final Decision (or an access arrangement which complies with the Final Decision), but is the result of the operation of the legislative framework concerning regulated tariffs.

1054. The Authority considers that while Chapter 8 of the Access Code appears to contemplate that price lists would be established and revised on an annual basis (a “pricing year”) there are no explicit provisions that would prevent price lists being revised on other than an annual basis.
1055. The Authority considers that a revision of the price list at the time the access arrangement revisions come into effect (expected to be in approximately February/March 2010) would assist in avoiding price shocks to users in the second and third years of the second access arrangement period. For this reason, and taking into account the timing of the approvals process for the proposed access arrangement revisions, the Authority will not reject the changes to the access arrangement proposed by Western Power.
1056. As the Authority is not approving a price list as part of this Final Decision, the Authority has restricted its attention to the pricing methods applied by Western Power in determining the levels of reference tariffs and the component charges of the reference tariffs.
1057. The pricing methods and price list information of the proposed access arrangement revisions indicate that Western Power determines the value of individual reference tariffs and the individual charges of the reference tariffs by applying a cost allocation model. Under this model, the capital and non-capital components of total costs are allocated to cost pools and location zones, then to customer groups (corresponding to reference services), and then to charges that make up each reference tariff. Criteria for the allocation of costs relate generally to:
- the characteristics of a user at a connection point and measures of each user’s proportional share of use of the network relative to other users; and
 - the amount of costs that can be allocated to a user at a connection point such that the total charges paid by the user under a reference tariff comprise an amount generally between the incremental cost of service provision and the stand-alone cost of service provision.
1058. Submissions made by the Department of Treasury and Finance and Mr Noel Schubert express concern that the structures of reference tariffs do not adequately provide for pricing of network services according to levels and times of peak demand, which are considered to be important drivers of the costs of network services.⁴⁴⁴
1059. These parties variously submitted that:
- setting tariff charges to apply to the peak demand and coincident-peak demand of the user should be a priority in the setting of reference tariffs, with the charges reflecting the long-run marginal cost of network augmentation necessary to meet peak demand;

⁴⁴⁴ Department of Treasury and Finance submission of 17 December 2008; Mr Noel Schubert submission of 16 December 2008.

- the tariff charges based on peak demand or coincident peak demand should be location-specific, reflecting network constraints and costs of augmenting network capacity at each location; and
- current and proposed reference tariff charges are not efficient due to the charges not being related to the peak energy demand of the user (reference tariffs RT1 and RT2), the charges for non-peak demand set higher than the variable costs of energy supply at non-peak times (reference tariffs RT3 and RT4), or having charges based on the peak demand of an individual user rather than coincident peak demand (reference tariffs RT5, RT6, RT7 and RT8).

1060. The WAMEU submitted that the Authority should seek to ensure that variable energy charges for small customers (with accumulation meters) are not set too high, allowing for recovery of revenue in excess of the costs that these customers cause for the network.⁴⁴⁵

1061. The submissions made to the Authority by the Department of Treasury and Finance and Mr Noel Schubert refer generally to a different process of setting network prices implemented by Western Power, with a greater objective of economic efficiency of network prices. This would involve establishing prices such that the price charged to a user for a network service reflects the extent to which the incremental use of the network may result in a need to invest in greater network capacity, or brings forward in time a need to invest in greater network capacity. That is, prices would reflect the cost that a user would cause to be incurred by consuming an additional unit of a network service, where that additional consumption results in a need for investment in network capacity, or a need for investment in network capacity to be required earlier than would otherwise be the case.

1062. The relevant measure of the cost of contributing to a need for earlier investment in network capacity is the long-run marginal cost of augmentations to network capacity. Long-run marginal cost is an incremental cost of network capacity calculated on the basis of forecast costs of increments to network capacity and the time at which these costs are expected to occur.

1063. Under a long-run marginal cost approach to pricing of network services the price paid by a user for network services at a particular location and at a particular time would reflect the contribution that the user makes to congestion of the network at that location and time, and the cost of investment necessary to relieve this congestion. Long-run marginal cost pricing contributes to efficient investment in network capacity by providing a price signal to users of the future costs that will result from increasing demand for network services. Long-run marginal cost pricing would also address the concerns of the WAMEU by ensuring that the structure of network tariffs constitutes an efficient balance of fixed and variable charges.

1064. The efficiency benefits of long-run marginal cost pricing are recognised in the National Electricity Rules, under which tariff charges for distribution networks are required to be set taking into account the long-run marginal cost of the service or component of the service, having regard to whether customers of the relevant tariff class are able or likely to respond to price signals.⁴⁴⁶

⁴⁴⁵ Western Australia Major Energy Users submission of 16 December 2008.

⁴⁴⁶ National Electricity Rules, Rule 6.18.5.

1065. The Authority considers that there could be efficiency benefits of long-run marginal cost pricing of electricity network services provided by the SWIN. However, in considering the pricing methods under the proposed access arrangement revisions, the Authority does not have a role in approving levels and structures of reference tariffs to the level of detail that would enable the Authority to impose particular tariff structures, such as a structure that would reflect long-run marginal costs.
1066. The role of the Authority in approving pricing methods proposed by Western Power is to assess whether the pricing methods satisfy the objectives for pricing methods under the Access Code. The objectives of section 7.3 of the Access Code require only that reference tariffs recover the forward-looking efficient costs of providing reference services and are within the bounds of the incremental and stand-alone costs of service provision. Further, section 7.4 does not mandate that the pricing methods must be based on long-run marginal cost pricing to the exclusion of other tariff structures. The pricing methods under the proposed access arrangement revisions satisfy the objectives of sections 7.3 and 7.4 of the Access Code despite not being based on long-run marginal cost pricing and, hence, potentially not producing efficient tariff structures that engender efficient use of network services.
1067. The Authority is also aware of a number of concerns that have been expressed in regard to the proposed structure of the reference tariff for the bi-directional reference service that the Authority is requiring to be included in the access arrangement. For this service, Western Power is proposing a reference tariff that is a “time of use” tariff with on-peak, shoulder and off-peak components:
- a fixed use of system charge that is payable each day;
 - an on-peak use of system variable charge calculated by multiplying the on-peak energy price by the quantity of on-peak electricity transferred out of the network at the bi-directional point (expressed in kWh);
 - an off-peak use of system variable charge calculated by multiplying the off-peak energy price by the quantity of off-peak electricity transferred out of the network at the bi-directional point (expressed in kWh);
 - a shoulder use of system variable charge calculated by multiplying the shoulder energy price by the quantity of shoulder electricity transferred out of the network at the bi-directional point (expressed in kWh);
 - a fixed metering charge which is payable each day;
 - an on-peak variable metering charge calculated by multiplying the on-peak variable price by the quantity of on-peak electricity transferred out of the network at the bi-directional point (expressed in kWh);
 - an off-peak variable metering charge calculated by multiplying the off-peak variable price by the quantity of off-peak electricity transferred out of the network at the bi-directional point (expressed in kWh); and
 - a shoulder variable metering charge calculated by multiplying the shoulder variable price by the quantity of shoulder electricity transferred out of the network at the bi-directional point (expressed in kWh).⁴⁴⁷

⁴⁴⁷ Western Power submission of 5 October 2009.

1068. Western Power indicates that the variable charges of the reference tariff apply only to the quantity of energy transferred out of the network, and that energy transferred into the network does not provide a credit to, or impose a charge on, the user.
1069. A consultation process conducted by Western Power on the proposed bi-directional reference service and reference tariff attracted submissions that expressed concerns with the proposed reference tariff, including that:
- the tariff is complex and confusing;
 - the magnitude of the tariff may act as a disincentive for environmentally conscious customers to take up small-scale renewable energy systems;
 - the tariff is inefficient in that it includes variable charges to recover a fixed metering cost; and
 - the on-peak, off-peak and shoulder periods may be inappropriately set to reflect demand on residential feeders, rather than demand on the transmission network that drives most investment required to meet peak energy demand.
1070. The Authority concurs with some of the submissions made to Western Power that the tariff structure for the bi-directional reference service has some characteristics of inefficiency, most notably in the use of variable charges to recover fixed costs, and a potential lack of alignment of time-of-use periods with periods of peak demand on parts of the network that are associated with peak-demand driven costs.
1071. Notwithstanding this, however, the role of the Authority in assessing and approving the magnitude and structure of particular reference tariffs is limited. The Authority is only concerned with whether the proposed pricing methods will result in reference tariffs meeting the relevant requirements of the Access Code, notably the objectives of sections 7.3 and 7.4 of the Access Code. The efficiency requirements of these objectives are broad, requiring only that the reference tariffs recover the forward-looking efficient costs of providing reference services and that the reference tariff applying to a user recovers an amount of revenue that is greater than the incremental cost of service provision and less than the stand-alone cost of service provision. The Authority is satisfied that the pricing methods applied by Western Power will cause the reference tariff for the bi-directional service to meet these broad efficiency criteria, even though other characteristics of the tariff may be inefficient.
1072. Taking the above matters into account, the Authority is satisfied that the pricing methods applied by Western Power are consistent with the objectives of sections 7.3 and 7.4 of the Access Code.

ADJUSTMENTS TO TARGET REVENUE IN THE NEXT ACCESS ARRANGEMENT PERIOD

1073. Sections 6.6 to 6.32 of the Access Code provide for the target revenue for an access arrangement period to be adjusted to reflect certain events or outcomes of the previous access arrangement period. In the circumstances of the access arrangement for the SWIN, these provisions of the Access Code provide for the target revenue for the third access arrangement period (due to commence in

July 2012) to be adjusted for the relevant events or outcomes in the second access arrangement period, to the extent enabled by the access arrangement.

1074. The events and outcomes that may give rise to adjustments to target revenue under these sections of the Access Code are:

- the service provider incurring certain costs during the previous access arrangement period as a result of unforeseen or “force majeure” events (sections 6.6 to 6.8);
- the service provider incurring greater or lesser non-capital costs or capital related costs as a result of changes in the Technical Rules for the SWIN (sections 6.9 to 6.12);
- the amount, nature and timing of new facilities investment in the previous access arrangement period being different to that forecast for that period, consistent with an investment adjustment mechanism set out in the access arrangement (sections 6.13 to 6.18);
- demand growth and/or efficiency gains achieved by the service provider, consistent with a gain sharing mechanism set out in the access arrangement (sections 6.19 to 6.28); and
- the service provider achieving service standards during the previous access arrangement period that are different to the service standard benchmarks established in the access arrangement, consistent with a service standards adjustment mechanism set out in the access arrangement (sections 6.29 to 6.32).

Current Access Arrangement

1075. The current access arrangement includes adjustment mechanisms for unforeseen events (clauses 5.4 and 5.5) and changes to the Technical Rules (clauses 5.7 to 5.9). These mechanisms allow for certain costs incurred by Western Power to be carried over from the one access arrangement period to the next and, under the adjustment mechanism applying to changes in the Technical Rules, a carryover also of benefits to the second access arrangement period.

1076. The current access arrangement includes an investment adjustment mechanism (clauses 5.11 and 5.49 to 5.53, and Appendix 8). The investment adjustment mechanism allows for the carryover from one access arrangement period to the next period of costs or benefits arising from differences in forecast and actual capital costs associated with differences between forecast and actual new facilities investment. The investment adjustment mechanism applies only to certain classes of new facilities investment:

- new facilities investment arising from the connection of new generation capacity to the transmission or distribution network from 1 July 2006;
- new facilities investment arising from the connection of new load to the transmission system or distribution system from 1 July 2006;
- new facilities investment in relation to the augmentation of the capacity of the transmission system or distribution system for the provision of covered services from 1 July 2006; and

- new facilities investment undertaken for augmentation of the distribution system under the Regional Power Improvement Program and State Underground Power Program.

1077. The current access arrangement does not include a gain sharing mechanism.

1078. The current access arrangement includes a services standards adjustment mechanism (clauses 5.15 to 5.24). This mechanism specifies “normal performance ranges” for services standards and requires reporting to the Authority of actual performance outside of these ranges. The service standards adjustment mechanism does not make provision for adjustment of target revenue in the second access arrangement period as a consequence of performance on service standards.

1079. In addition to the adjustment mechanisms contemplated explicitly by the Access Code, the current access arrangement includes a “capital contributions adjustment mechanism” (clauses 5.12, 5.32 and 5.43, and Appendix 8). This adjustment mechanism facilitates the operation of the price control applying under the current access arrangement, in particular the treatment of capital contributions under the price control. Under the current access arrangement, the target revenue for the price control was determined taking into account a notional roll forward of the capital base that included forecast new facilities investment financed by capital contributions, but with target revenue specified as net of the forecast value of capital contributions. The capital contributions adjustment mechanism allows for an adjustment of target revenue in the second access arrangement period to correct for differences between the forecast and actual values of capital contributions in the first access arrangement period.

Proposed Revisions

1080. In the proposed access arrangement revisions, Western Power has maintained the adjustment mechanisms included in the current access arrangement, with the exception of the capital contributions adjustment mechanism. The removal of the capital contributions adjustment mechanism reflects a different treatment of capital contributions in the determination of target revenue.

1081. Western Power has proposed changes to the adjustment mechanism for unforeseen events and to the service standards adjustment mechanism.

1082. The adjustment mechanism for unforeseen events under the proposed access arrangement revisions includes a new clause 5.6 to indicate that:

For the avoidance of doubt, a force majeure event includes but is not limited to any costs arising from the introduction of an emissions trading scheme; full retail contestability; and the roll-out of Advanced Interval Meters to the extent that such costs were not included in the calculation of target revenue for the access arrangement period or otherwise addressed through the Trigger Event provisions in section 8 of this Access Arrangement.

1083. The service standards adjustment mechanism under the proposed access arrangement revisions no longer includes requirements to report to the Authority, but includes (at clauses 5.24A and 5.24B) a scheme of penalties and rewards for

under-performing or out-performing against the service standard benchmarks established in the access arrangement.⁴⁴⁸

1084. Western Power has proposed inclusion of a gain sharing mechanism in the access arrangement (clauses 5.13 to 5.14G of the proposed access arrangement revisions). The gain sharing mechanism provides a financial reward to Western Power for out-performance of the forecast of operating expenditure in the second access arrangement period. Under the proposed gain sharing mechanism, the average annual amount of out-performance of forecast operating expenditure in the second access arrangement period is added to target revenue in each of the five years subsequent to the revisions commencement date for the next access arrangement period. The gain sharing mechanism does not include any penalty for under-performing against the forecast of operating expenditure.
1085. Western Power has also included in the proposed access arrangement revisions two further adjustment mechanisms that are not explicitly contemplated by the Access Code:
- a deferral of revenue for an amount of \$191.9 million (in present value terms at 30 June 2009), with the deferred amount (escalated for inflation and by the rate of return) to be included in target revenue in the third access arrangement period and/or some subsequent access arrangement period (clauses 5.37A and 5.48A of the proposed access arrangement revisions); and
 - an adjustment mechanism referred to as the “D-factor scheme” under which Western Power is able to carry-over to the third access arrangement period certain costs incurred in the second access arrangement period arising from a deferral of capital projects and from the implementation of demand management initiatives (clauses 5.54 to 5.57).

Considerations of the Authority

1086. The considerations of the Authority on adjustment mechanisms proposed to apply under the access arrangement for the second access arrangement period are set out below for each of the adjustment mechanisms included in the proposed access arrangement revisions.

Adjustment for Unforeseen Events

1087. Western Power indicates that the proposed clause 5.6 (set out at paragraph 1082, above) has been included in the proposed access arrangement revisions to make it clear that the events indicated in the clause could lead to unexpected and significant cost increases in the second access arrangement period.
1088. Synergy submitted that the events specified under the proposed clause 5.6 should not be *force majeure* events as Western Power is able to exert some control over the occurrence and consequences of these events.⁴⁴⁹

⁴⁴⁸ Notwithstanding this Western Power has reporting obligations for service standards under Chapter 11 of the Access Code.

⁴⁴⁹ Synergy submission of 17 December 2008 on Applications and Queuing Policy.

1089. The use of the phrase “force majeure” in the Access Code is somewhat misleading as the definition contemplates broader circumstances than the common usage of force majeure. The Authority accepts that the regulatory initiatives referred to in the proposed clause 5.6 are uncertain in nature and timing, and impact on the costs that would potentially be incurred by Western Power. The Authority also accepts that the regulatory initiatives and at least some of the costs that could be imposed on Western Power under such initiatives are beyond Western Power’s control and that Western Power may not be able to prevent or overcome these costs. The Authority accepts Synergy’s submission in part. That is, it is likely that some of such costs would be able to overcome by a reasonable and prudent person. However, this does not mean that the regulatory initiatives referred to in the proposed clause 5.6 should not be considered as events that fall within the scope of the adjustment mechanism for unforeseen events under sections 6.6 to 6.8 of the Access Code.
1090. The Authority is satisfied that clause 5.6 of the proposed access arrangement revisions is declaratory in nature and includes events and costs that may, in the absence of the proposed clause 5.6, be taken into account in adjustments for unforeseen events as allowed for under sections 6.6 to 6.8 of the Access Code and clauses 5.4 and 5.5 of the proposed access arrangement revisions. The Authority notes that not all costs contemplated by Western Power may be incurred by a force majeure event as defined by Western Power. However, in the absence of details about the regulatory initiatives, the Authority is satisfied with the definition proposed by Western Power. Importantly, merely specifying such events as force majeure events does not automatically adjust target revenue for costs incurred as a result of those events. Rather, such adjustments are subject to adequate demonstration, under section 6.8 of the Access Code, that the costs would have been incurred by a service provider efficiently minimising costs. Therefore, to the extent that the definition of “force majeure” events includes costs which, once the regulatory initiative is implemented, are able to be lawfully minimised or avoided by Western Power, such costs would not comply with section 6.8 of the Access Code and therefore would not be added to target revenue.

Adjustment for Changes in the Technical Rules

1091. Western Power has not proposed any changes to the adjustment mechanism that applies for changes in the Technical Rules.
1092. Submissions made to the Authority on the proposed access arrangement revisions have not addressed this adjustment mechanism.
1093. Taking into account the absence of submissions on the adjustment mechanism for changes in the Technical Rules, the Authority is satisfied that the mechanism is consistent with sections 6.9 to 6.12 of the Access Code.

Investment Adjustment Mechanism

1094. Western Power has not proposed any changes to the investment adjustment mechanism that applies under the current access arrangement.

1095. Synergy submitted that the investment adjustment mechanism reduces incentives for Western Power to seek efficiencies in capital expenditure and for efficient substitution of non-network solutions for network solutions to address network constraints.⁴⁵⁰
1096. The Authority accepts that the investment adjustment mechanism may reduce some incentives for efficiency in new facilities investment by allowing *ex post* adjustments of Western Power's revenue for differences between actual and forecast costs. The Authority also considers that the investment adjustment mechanism creates some offsetting incentives for efficiency, particularly in maintaining incentives for Western Power to make timely investments for new connections.
1097. The Access Code makes explicit provision for an access arrangement to include an investment adjustment mechanism. As such, the Authority considers that it is necessary to accommodate the incentive effects of such a mechanism by giving greater scrutiny to new facilities investment to ensure that only efficient investment is added to the capital base. The Authority has done this for the purpose of the current review of the access arrangement. The Authority has also recognised the incentive effects of the investment adjustment mechanism in design of the gain sharing mechanism.
1098. With these measures, and taking into account the explicit provisions of the Access Code for an investment adjustment mechanism, the Authority is satisfied that the inclusion of the investment adjustment mechanism in the access arrangement is consistent with the requirements of the Access Code.

Gain Sharing Mechanism

1099. Sections 6.19 and 6.20 of the Access Code provide for an access arrangement to include a gain sharing mechanism:
- 6.19 A "gain sharing mechanism" is a mechanism:
- (a) in an access arrangement which the Authority must apply at the next access arrangement review to determine an amount to be included in the target revenue for one or more of the following access arrangement periods; and
 - (b) which operates as set out in sections 6.20 to 6.28.
- 6.20 An access arrangement must contain a gain sharing mechanism unless the Authority determines that a gain sharing mechanism is not necessary to achieve the objective in section 6.4(a)(ii).
1100. The required objectives for a gain sharing mechanism are set out in sections 6.21 and 6.22 of the Access Code:
- 6.21 A gain sharing mechanism must have the objective of:
- (a) achieving an equitable allocation over time between users and the service provider of innovation and efficiency gains in excess of efficiency and innovation benchmarks; and
 - (b) being objective, transparent, easy to administer and replicable from one access arrangement to the next; and

⁴⁵⁰ Synergy submission of 22 December 2008 on the Price Control.

- (c) giving the service provider an incentive to reduce costs or otherwise improve productivity in a way that is neutral in its effect on the timing of such initiatives.
- 6.22 A gain sharing mechanism must be sufficiently detailed and complete to enable the Authority to apply the gain sharing mechanism at the next access arrangement period, including by prescribing the basis on which returns are to be determined for the purposes of section 6.23.
- 1101. Western Power has included a gain sharing mechanism in the proposed access arrangement revisions (clauses 5.13 to 5.14G). The gain sharing mechanism provides a reward to Western Power for out-performance of an efficiency and innovation benchmark in respect of “operating expenditure” in the second access arrangement period.
- 1102. Under clause 5.14C of the proposed access arrangement revisions, an “efficiency and innovation benchmark” is defined as:

The approved aggregate forecast operating expenditure for this access arrangement period adjusted for inflation, plus any operating expenditure adjustments allowed by the Authority in respect of that year (including trigger events, the D factor scheme, unforeseen events, or technical rule changes).
- 1103. The approved aggregate forecast operating expenditure is indicated to be the total amount allowed by the Authority in its final decision or further final decision (as appropriate) to approve Western Power’s proposed access arrangement, or the Authority’s own approved access arrangement in accordance with section 4.24 of the Access Code.
- 1104. An “above-benchmark surplus” is defined in clause 5.14C of the proposed access arrangement revisions to be the amount by which the efficiency and innovation benchmark (i.e. aggregate forecast operating costs) exceeds the aggregate actual operating expenditure in the access arrangement period, where the aggregate operating expenditure excludes any penalty amount payable under the service standard adjustment mechanism and adjustments are made to account for inflation and changes in costs brought about by trigger events, unforeseen events and changes to the Technical Rules.
- 1105. Clause 5.14D of the proposed access arrangement revisions derives an amount of an “efficiency gain attributed to management effort” as the amount of the above-benchmark surplus minus any aggregate penalty incurred by Western Power under the service standard adjustment mechanism.
- 1106. Clause 5.14E of the proposed access arrangement revisions provides for an “annual efficiency bonus” to be calculated as one third of the efficiency gain attributable to management effort, and for this annual efficiency bonus to be added to the target revenue for each of the five years following the target revisions commencement date.
- 1107. Under the proposed gain sharing mechanism, the average annual amount of out-performance of forecast operating expenditure in the second access arrangement period, if any, is added to target revenue in each of the five years subsequent to 1 July 2012. The gain sharing mechanism does not include any penalty for under-performing against the forecast of operating expenditure.

1108. Western Power submits that the proposed gain sharing mechanism complies with the requirements of sections 6.21 to 6.28 of the Access Code for reasons that:⁴⁵¹

- the use of an average annual efficiency gain in the calculation addresses any regulatory concern that Western Power might engage in strategic cost shifting within the access arrangement period;
- the gain sharing mechanism provides an equitable sharing of the calculated efficiency gains between Western Power and its customers; and
- the “above-benchmark surplus” is reduced by the amount of any penalties incurred by reason of not achieving service standard benchmarks, ensuring that Western Power does not receive any efficiency gain reward in respect of any reductions in operating expenditure that have occurred at the expense of service levels.

1109. The Authority has given consideration to the gain sharing mechanism proposed by Western Power against the objectives for a gain sharing mechanism under section 6.21 of the Access Code and the specific requirements under sections 5.25, 5.26 and 6.22 to 6.28. In doing so, the Authority has dealt with matters of:

- determining efficiency and innovation benchmarks and an above-benchmark surplus;
- determining the increase in target revenue;
- the allocation of benefits of efficiency gains between Western Power and users and incentives effects of the gain sharing mechanism; and
- objectivity, transparency, ease of administration and ability to be replicated from one access arrangement period to the next.

1110. In the Draft Decision, the Authority determined that Western Power’s proposed gain sharing mechanism did not meet the requirements of the Access Code in respect of each of these matters. The Authority determined an alternative form of a gain sharing mechanism and required that this be included in the proposed access arrangement revisions by the following required amendment.⁴⁵²

Draft Decision Amendment 34

The proposed access arrangement revisions should be amended to specify a gain sharing mechanism as follows.

- (a) Subject to paragraph (b) of this required amendment, an above-benchmark surplus is to be calculated for each of the years 2009/10 to 2011/12 as:

$$ABS_{2009/10} = EIB_{2009/10} - A_{2009/10}$$

$$ABS_{2010/11} = (EIB_{2010/11} - A_{2010/11}) - (EIB_{2009/10} - A_{2009/10})$$

$$ABS_{2011/12} = (EIB_{2011/12} - A_{2011/12}) - (EIB_{2010/11} - A_{2010/11}),$$

where

⁴⁵¹ Revised access arrangement information, pp. 177 – 179.

⁴⁵² In the Draft Decision, Requirement Amendment 34, Part (d) made reference to “clause (d)”. This reference was stated incorrectly. The reference should have been a reference to “paragraph (c)” and has been corrected accordingly in this Final Decision.

ABS_t is the above-benchmark surplus in year t ;

EIB_t is the efficiency and innovation benchmark for year t , being the forecast of non-capital cost for year t applied in the determination of target revenue for year t , adjusted for inflation as appropriate and adjusted to include any relevant adjustments for unforeseen events and changes to the Technical Rules as allowed for under sections 6.6 and 6.9 of the Access Code;

A_t is the actual non-capital costs incurred by Western Power in year t , adjusted for inflation as appropriate, adjusted to include any relevant adjustments for unforeseen events and changes to the Technical Rules as allowed for under sections 6.6 and 6.9 of the Access Code and to exclude any amount of non-capital costs incurred by Western Power in implementing a non-network alternative to a capital project the costs of which are included in target revenue for the access arrangement period.

- (b) In any year in which Western Power fails to meet service standard benchmarks for that year, the above-benchmark surplus for that year is zero.
- (c) Subject to paragraph (d) of this required amendment, the following amounts may be added to target revenue for one or more access arrangement periods covering the years 2012/13 to 2016/17:

$$GSMA_{2012/13} = ABS_{2009/10} + ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2013/14} = ABS_{2009/10} + ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2014/15} = ABS_{2009/10} + ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2015/16} = ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2016/17} = ABS_{2011/12}$$

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

- (d) In any year where the amount of an adjustment to target revenue determined under paragraph (c) is a negative value, the amount of the adjustment to target revenue in that year is zero.

1111. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the requirement of Draft Decision Amendment 34, with the exception of the requirement of Part (b) of this required amendment that, in any year in which Western Power fails to meet service standard benchmarks for that year, the above benchmark surplus for that year is zero.⁴⁵³

1112. The Authority's requirement under Part (b) of Draft Decision Amendment 34 addressed the requirement of section 6.26 of the Access Code that an above-benchmark surplus not exist to the extent that a service provider achieved efficiency gains or innovation in excess of the efficiency and innovation benchmarks by failing to comply with the requirement under section 11.1 of the Access Code to meet service standard benchmarks.

1113. In the proposed access arrangement revisions submitted in October 2008, Western Power addressed the requirement of section 6.26 of the Access Code by reducing the above-benchmark surplus by the amount of any penalties incurred for reason of not achieving service standard benchmarks (clause 5.14D of the proposed access

⁴⁵³ Western Power submission of 10 September 2009, Attachment K.

arrangement revisions). Western Power contended that this ensures that Western Power does not receive any efficiency gain reward in respect of any reductions in operating expenditure that have occurred at the expense of service levels.

1114. In the Draft Decision, the Authority took the view that this mechanism is not consistent with the requirements of section 6.26 of the Access Code as it would still provide for Western Power to achieve an above-benchmark surplus at the expense of service standards; for example, where the cost saving by reducing service standards is greater than the penalty incurred as a result of the service standards not meeting the service standard benchmarks.
1115. The Authority recognised that, in principle, the requirements of section 6.26 of the Access Code could be met by ensuring that the service standard adjustment mechanism under the access arrangement imposes an efficient penalty for underperformance against service standard benchmarks, as alluded to by Synergy in its submission to the Authority on the proposed access arrangement revisions.⁴⁵⁴ The rationale behind this would be that penalties would reflect the value to energy customers of service disruptions and Western Power would appropriately balance the cost of maintaining service reliability against the prospect of penalties that reflect avoided cost of disruptions to services. However, neither Western Power nor the Authority have established efficient values of penalties as part of the service standard adjustment mechanism to be introduced into the access arrangement. As such, it is not possible to rely on the arrangement proposed by Synergy.
1116. Instead, the Authority took the view in the Draft Decision that the requirement of section 6.26 of the Access Code would be best achieved by Western Power not benefiting from an above-benchmark surplus in any year in which the service standard benchmarks are not met. This means that where a positive value for the above-benchmark surplus is determined for a year in which the service standard benchmarks are not met, that value will be deemed to be zero for the purposes of determining the value of an increase to target revenue in the subsequent access arrangement period.
1117. Western Power submits that this requirement is unreasonable given that:
- perturbations in service standards from year to year arise from factors other than the actual level of total non-capital expenditure, in particular weather events;
 - there is no direct temporal link between annual total non-capital costs and service standards, with declines in services standards tending to occur as a trend decline after a period of inadequate maintenance activity; and
 - a significant proportion of non-capital costs (43 per cent for distribution and 60 per cent for transmission) does not have a direct bearing on network reliability.
1118. Western Power proposes a change to the Authority's required gain sharing mechanism to separate the non-capital expenditure budget into two categories of expenditure categories that can affect network reliability and expenditure categories not related to network reliability. The "above-benchmark surplus" should be separately determined for each category of non-capital expenditure that is classified

⁴⁵⁴ Synergy submission of 22 December 2008 on the Price Control.

as having an effect on network performance. The requirement under Part (b) of the Draft Decision Amendment 34 (that the above-benchmark surplus be zero for any year in which the service standard benchmark is not met) would apply only to the above benchmark surplus related to expenditure categories that can affect network reliability. In effect, Western Power's proposal is to split the gain sharing mechanism into two parts, one part being for the non-capital costs that relate to activities that have a direct bearing on network reliability and that is subject to meeting service standard benchmarks, and one part being for non-capital costs that relate to activities that do not have a direct bearing on network reliability.

1119. The Authority does not accept Western Power's contention that the requirement under part (b) of Draft Decision Amendment 34 is unreasonable. On the matter of susceptibility of reliability to weather conditions, the Authority notes that:

- the measures of service standards exclude the effects of major weather events (captured under a general exclusion of force majeure events);
- a significant part of non-capital costs relates to operating and maintenance activities that has a direct and immediate effect on service standards, particularly emergency responses to network failures and the maintenance activities that reduce susceptibility of the network to weather events; and
- while the amount of target revenue is determined having regard to a forecast of non-capital costs that is built up from a range of components, it is ultimately a matter for Western Power to determine what level of expenditure is incurred and how this is allocated to activities that have or do not have an effect on reliability.

1120. Relevant to the consideration of incentive mechanism is that, in this Final Decision, the Authority is approving an amount of target revenue that includes a very substantial increase in non-capital costs, designated by Western Power to be for maintenance activities with the specific objective of maintaining and improving network reliability. The Authority considers that Western Power should be held to account for this increase in target revenue and reference tariffs in the operation of the gain sharing mechanism and service standard adjustment mechanism.

1121. The Authority also considers that the mechanism proposed by Western Power would involve an undesirable need to account for specific categories of non-capital costs, which creates an undesirable degree of complexity in implementing the gain sharing mechanism.

1122. Taking these matters into account, the Authority considers that the gain sharing mechanism should remain subject to achievement of service standard benchmarks as contemplated by part (b) of Draft Decision Amendment 34. The Authority notes, however, that the wording of this requirement should be clarified to explicitly indicate that it is only where the above-benchmark surplus is calculated to be a positive value, that the above-benchmark surplus is deemed to be zero where service standard benchmarks for the year are not achieved.

1123. The Authority requires the following amendment of the proposed access arrangement revisions as indicated below.

Required Amendment 33

The proposed access arrangement revisions should be amended to specify a gain sharing mechanism as follows.

- (a) Subject to paragraph (b) of this required amendment, an above-benchmark surplus is to be calculated for each of the years 2009/10 to 2011/12 as:

$$ABS_{2009/10} = EIB_{2009/10} - A_{2009/10}$$

$$ABS_{2010/11} = (EIB_{2010/11} - A_{2010/11}) - (EIB_{2009/10} - A_{2009/10})$$

$$ABS_{2011/12} = (EIB_{2011/12} - A_{2011/12}) - (EIB_{2010/11} - A_{2010/11}),$$

where

ABS_t is the above-benchmark surplus in year t ;

EIB_t is the efficiency and innovation benchmark for year t , being the forecast of non-capital cost for year t applied in the determination of target revenue for year t , adjusted for inflation as appropriate and adjusted to include any relevant adjustments for unforeseen events and changes to the Technical Rules as allowed for under sections 6.6 and 6.9 of the Access Code;

A_t is the actual non-capital costs incurred by Western Power in year t , adjusted for inflation as appropriate, adjusted to include any relevant adjustments for unforeseen events and changes to the Technical Rules as allowed for under sections 6.6 and 6.9 of the Access Code and adjustments under the D-factor scheme.

- (b) In any year in which an above-benchmark surplus is calculated to be a positive value but Western Power fails to meet service standard benchmarks for that year, the above-benchmark surplus for that year is deemed to be zero.
- (c) Subject to paragraph (d) of this required amendment, the following amounts may be added to target revenue for one or more access arrangement periods covering the years 2012/13 to 2016/17:

$$GSMA_{2012/13} = ABS_{2009/10} + ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2013/14} = ABS_{2009/10} + ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2014/15} = ABS_{2009/10} + ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2015/16} = ABS_{2010/11} + ABS_{2011/12}$$

$$GSMA_{2016/17} = ABS_{2011/12}$$

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

- (d) In any year where the amount of an adjustment to target revenue determined under paragraph (c) is a negative value, the amount of the adjustment to target revenue in that year is zero.

Service Standards Adjustment Mechanism

1124. Section 6.30 of the Access Code requires that an access arrangement include a services standards adjustment mechanism, defined under section 6.29 as a mechanism in an access arrangement detailing how the service provider's performance during the access arrangement period against the service standard benchmarks is to be treated by the Authority at the next access arrangement review.
1125. The service standards adjustment mechanism of the current access arrangement (clauses 5.15 to 5.24) specifies a "normal performance range" about the service standard benchmark for each parameter for which a service standard benchmark exists. Where actual service standards are outside of the normal performance range, Western Power is required to report to the Authority on:
- reasons for under-performance relative to the service standard benchmarks and actions that are being taken to improve future performance;
 - actions that have led to out-performance of service standard benchmarks; and
 - whether service standards are expected to fall outside of the normal performance range in the future.
1126. Western Power has proposed changes to the service standards adjustment mechanism to remove the current reporting regime and provide for financial incentives to achieve and out-perform the service standard benchmarks (clauses 5.24A and 5.24B of the proposed access arrangement revisions, for the transmission network and distribution network, respectively).
1127. Under the proposed service standard adjustment mechanism, each service standard for which there is a service standard benchmark has an accompanying specification of:
- a target value, which is set equal to the service standard benchmark for each year of the second access arrangement period;
 - a lower bound and an upper bound around the target value that together define a "dead-band" of values for the service standard; and
 - a "low limit" and a "high limit" outside of the dead-band.
1128. Where service standards are achieved within the range of the dead-band, no penalty or reward is imposed under the service standard adjustment mechanism. The rewards and penalties apply on a per unit basis to the under-performance or out-performance of the dead-band range, with the penalty or reward rates

increasing over each of the three years of the second access period (Table 97, Table 98 and Table 99, below).⁴⁵⁵

Table 97 Performance limits and incentive rates proposed to apply under the service standard adjustment mechanism for the transmission network

Service standard	Year	Dead-band					Incentive rate (\$ real at 30 June 2009 per 0.1% circuit availability and per 0.1 system minutes interrupted)
		Low Limit	Lower bound	Target	Upper bound	High Limit	
Circuit availability (%)	2009/10	97.0	97.5	98	98.5	99.0	165,094
	2010/11	97.0	97.5	98	98.5	99.0	218,215
	2011/12	97.0	97.5	98	98.5	99.0	288,532
System minutes interrupted (meshed network)	2009/10	7.4	8.4	9.3	10.2	11.2	84,322
	2010/11	7.4	8.4	9.3	10.2	11.2	111,474
	2011/12	7.4	8.4	9.3	10.2	11.2	147,369
System minutes interrupted (radial network)	2009/10	1.1	1.3	1.4	1.5	1.7	29,481
	2010/11	1.1	1.3	1.4	1.5	1.7	38,974
	2011/12	1.1	1.3	1.4	1.5	1.7	51,524

⁴⁵⁵ Proposed access arrangement revisions, clauses 5.24A and 5.24B.

Table 98 Performance limits and incentive rates proposed to apply for SAIDI under the service standard adjustment mechanism for the distribution network

Service standard	Year	Dead-band					Incentive rate (\$ real at 30 June 2009 per SAIDI minute)
		Low Limit	Lower bound	Target	Upper bound	High Limit	
SAIDI – CBD (minutes)	2009/10	30	34	38	42	46	89,845
	2010/11	30	34	38	42	46	118,877
	2011/12	30	34	38	42	46	155,200
SAIDI – urban (minutes)	2009/10	129	145	161	177	193	89,845
	2010/11	120	135	150	165	180	118,877
	2011/12	114	128	142	156	170	155,200
SAIDI – rural short (minutes)	2009/10	202	228	253	278	304	3,416
	2010/11	186	210	233	256	280	4,548
	2011/12	178	200	222	244	266	5,906
SAIDI – rural long (minutes)	2009/10	479	539	599	659	719	3,416
	2010/11	454	510	567	624	680	4,548
	2011/12	438	493	548	603	658	5,906

Table 99 Performance limits and incentive rates proposed to apply for SAIFI under the service standard adjustment mechanism for the distribution network

Service standard	Year	Dead-band					Incentive rate (\$ real at 30 June 2009 per SAIFI event ⁴⁵⁶)
		Low Limit	Lower bound	Target	Upper bound	High Limit	
SAIFI – CBD	2009/10	0.19	0.22	0.24	0.26	0.29	4,216,767
	2010/11	0.19	0.22	0.24	0.26	0.29	5,587,216
	2011/12	0.19	0.22	0.24	0.26	0.29	7,313,110
SAIFI – urban	2009/10	1.50	1.69	1.88	2.07	2.26	4,216,767
	2010/11	1.41	1.58	1.76	1.94	2.11	5,587,216
	2011/12	1.34	1.50	1.67	1.84	2.00	7,313,110
SAIFI – rural short	2009/10	2.44	2.75	3.05	3.36	3.66	183,284
	2010/11	2.26	2.55	2.83	3.11	3.40	243,520
	2011/12	2.16	2.43	2.70	2.97	3.24	317,136
SAIFI – rural long	2009/10	3.91	4.40	4.89	5.38	5.87	183,284
	2010/11	3.71	4.18	4.64	5.10	5.57	243,520
	2011/12	3.58	4.02	4.47	4.92	5.36	317,136

1129. Western Power proposes that the reward or penalty amounts are added to target revenue with escalation to ensure that the adjustments to target revenue are of the same present value, and have the same financial effect, as if the reward or penalty amounts are applied in the year immediately following the relevant performance year (clauses 5.24A(c) and 5.24B(c) of the proposed access arrangement revisions).

1130. Western Power has indicated that the service standards adjustment mechanism is similar to service standard incentive schemes initially adopted in other jurisdictions and continuing to be applied in several instances.⁴⁵⁷

1131. Western Power has further indicated that the rationales for particular features of the proposed mechanism are as follows.⁴⁵⁸

- The dead-bands establish a performance tolerance around the service standard benchmarks and are intended to eliminate random variation in service standards from the adjustment mechanism. The bounds of the dead-band were set by reference to historical data on system performance.

⁴⁵⁶ The proposed access arrangement revisions incorrectly state the incentive rate to be in units of dollars per SAIFI minute. The Authority has confirmed with Western Power that this is an error and the correct units are dollars per SAIFI event (email from Western Power to the Economic Regulation Authority of 6 April 2009).

⁴⁵⁷ Revised access arrangement information, p. 181.

⁴⁵⁸ Revised access arrangement information, pp. 181, 182.

- The values of penalty/reward rates were determined so that a maximum of 0.5 per cent of the proposed target revenue is at risk (calculated as the potential loss or gain if the realised values for all service standards are at the limits under the service standard adjustment mechanism). The values of reward and penalty rates are not based on values that consumers may attribute to reliability improvements, which is acknowledged by Western Power.
- For the transmission network, penalty/reward rates are such that the revenue at risk is divided evenly between the service standards of circuit availability and system minutes interrupted, reflecting a consideration that these two service standards are of a similar significance.
- For the distribution network, penalty/reward rates are such that the revenue at risk is allocated between SAIDI and SAIFI on a two-thirds one-third basis, and revenue at risk is allocated between CBD, urban, rural-long and rural-short categories on the basis of respective customer numbers in each category.

1132. The Authority is satisfied that the Code objective would be served by the access arrangement including a service standards adjustment mechanism with financial incentives for achieving and outperforming service standard benchmarks. There is sufficient historical data on service standards to be able to rigorously establish service standard benchmarks and financial incentives that are of value in countering any incentives for Western Power to benefit from achieving savings on operating costs at the expense of service standards.

1133. The Access Code does not provide guidance for the operation of a service standards adjustment mechanism other than the general requirements of section 6.31 for the mechanism to be:

- sufficiently detailed and complete to enable the Authority to apply the mechanism at the next access arrangement review; and
- consistent with the Code objective.

1134. In the context of the service standards adjustment mechanism, consistency with the Code objective requires that the mechanism provides incentives for a service provider to efficiently incur costs to achieve, and potentially improve on, service standards benchmarks established for the access arrangement period. These costs may be of a capital nature, such as costs of replacing network assets subject to failure, or a non-capital nature, such as costs of undertaking preventative maintenance or employing additional work crews to restore supply more quickly when an outage occurs.

1135. The Authority has assessed the consistency of the proposed services standards adjustment mechanism with the Code objective by giving attention to:

- the performance criteria proposed to be applied in determining the penalty and reward adjustments, in particular the proposed dead-band ranges and limits;
- the specification and operation of the proposed service standards adjustment mechanism and the resultant incentives for actions to achieve and out-perform service standard benchmarks; and

- the value of incentive rates proposed to be applied in determining penalty and reward adjustments.

1136. After consideration of these matters, the Authority determined in the Draft Decision that the service standard adjustment mechanism proposed by Western Power is inconsistent with the Code objective. The Authority determined that the service standards adjustment mechanism should be changed to provide for:

- performance to be assessed on the basis of year-on-year improvements in performance relative to benchmarks, rather than a comparison of performance against benchmarks in individual years;
- calculation of penalty and reward values without dead band ranges and limits; and
- increased values of penalties and rewards so that revenue at risk for Western Power would amount to approximately one per cent of target revenue if performance against service standard benchmarks is at a reasonable worst-case scenario for all service standards.

1137. Under the Draft Decision, the Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 35

The proposed access arrangement revisions should be amended to alter the specification of the service standard adjustment mechanism at clauses 5.24A and 5.24B to:

- remove the dead-bands and limits around target values of service standards; and
- calculate an amount of a difference between target and actual service standards as:

$$SSD_{2009/2010} = (SSB_{2009/10} - SSA_{2009/10})$$

$$SSD_{2010/2011} = (SSB_{2010/11} - SSA_{2010/11}) - (SSB_{2009/10} - SSA_{2009/10})$$

$$SSD_{2011/2012} = (SSB_{2011/12} - SSA_{2011/12}) - (SSB_{2010/11} - SSA_{2010/11})$$

Where:

SSD_t is the service standard difference in year t

SSB_t is the service standard benchmark in year t

SSA_t is the actual service standard in year t .

- increase the value of incentive rates by a factor of 2.5 for distribution services and 2.5 for transmission services.

1138. In a submission subsequent to the Draft Decision, Western Power responds to each element of Draft Decision Amendment 35.⁴⁵⁹ The elements of Draft Decision Amendment 35 and Western Power's response to each element are addressed below.

⁴⁵⁹ Western Power submission of 10 September 2009.

Performance Criteria under the Service Standard Adjustment Mechanism

1139. Under the proposed access arrangement revisions, Western Power has proposed that:

- the service standard benchmarks for each performance parameter comprise the performance targets under the service standard adjustment mechanism;
- a dead-band range apply under the service standard adjustment mechanism such that no adjustment occurs where actual service standards are within a specified range of the service standard benchmark; and
- low and high limits apply to the achieved service standards that may be taken into account in calculating the adjustments under the service standard adjustment mechanism.

1140. Western Power stated in the access arrangement information that the purpose of these arrangements is to cause the service standard adjustment mechanism to not have effect where variations to service standards occur as a result of random factors that do not reflect underlying changes in performance (such as normal variation in weather conditions), and to limit the revenue risk to which Western Power is exposed.

1141. The Authority took the view in the Draft Decision that neither the dead-band ranges nor the high and low limits serve to provide incentives for Western Power to efficiently incur costs to achieve, and potentially improve on, service standard benchmarks established for the access arrangement period. Reasons for this view of the Authority were as follows.

1142. First, the dead-band range would allow service standards to vary by material amounts from the service standard benchmarks (in the order of +/- 10 per cent) without penalties or rewards being incurred. Contrary to the intent of Western Power for the service standard adjustment mechanism to not have effect within this range, the Authority considers that it is this range of outcomes for service standards that the mechanism should be primarily directed. That is, the mechanism should be directed at providing incentives for Western Power to undertake the works and activities reflected in cost forecasts that are intended to allow service standard benchmarks to be achieved, and to motivate Western Power to seek opportunities to make incremental improvements to service standards during the access arrangement period over and above the service standard benchmarks. The effect of the dead-band range would be to substantially reduce the incentives for Western Power to meet the service standard benchmarks.

1143. Secondly, the Authority considered that the high and low limits on the achieved service standards that may be taken into account in calculating adjustments under the services standards adjustment mechanism are inconsistent with incentives for Western Power to act efficiently to achieve the service standard benchmarks. The limits do not distinguish between causes of under-performance and out-performance of service standard benchmarks that are within Western Power's control and those that are not. To the extent that Western Power is concerned about a risk of large penalties arising under the service standards adjustment mechanism from events that are outside of its control, the Authority considers that these risks would be better avoided by providing for certain events to be excluded from the calculation of achieved service standards where it can be clearly demonstrated that:

- the event was outside of the control of Western Power and Western Power was unable to mitigate the impact of the event (i.e. the event is in the nature of a force majeure event); and
 - the event had a material impact on Western Power's reliability performance.
1144. The Authority observed in the Draft Decision that such events are largely, if not entirely, excluded from the service standard adjustment mechanism by the "exclusions" for measurement of service standards in clauses 3.15 to 3.22 of the proposed access arrangement revisions. Accordingly, the Authority considered that Western Power is adequately protected from risks by the exclusions to the measurement of service standards and that further protection by the dead-bands and limits under the service standard adjustment mechanism is not consistent with the Code objective. Under Draft Decision Amendment 35, the Authority accordingly required dead-bands and limits to be removed from the service standard adjustment mechanism.
1145. In its submission subsequent to the Draft Decision, Western Power maintains the position that the proposed dead-bands and limits are appropriate as they minimise exposure to extreme random events. However, Western Power indicates a willingness to address the requirement to remove the dead-bands and limits to the extent that this is consistent with the service standard incentive mechanisms for network businesses in the National Electricity Market.⁴⁶⁰
1146. For the service standard adjustment mechanism as it applies to the transmission network, Western Power proposes to remove the dead-bands but to retain the limits, which have the effect of limiting the total revenue at risk at approximately one per cent of target revenue. Western Power contends that this is consistent with the "service target performance incentive scheme" applied by the AER to transmission businesses.
1147. For the service standard adjustment mechanism as it applies to the distribution network, Western Power proposes to remove the dead-bands and limits, but proposes that the total revenue at risk be capped at one per cent of target revenue. Again, Western Power contends that this is consistent with the incentive scheme applied by the AER to distribution businesses.⁴⁶¹
1148. The Authority considers that consistency with regulatory mechanisms of the AER is a relevant matter for consideration, but is secondary to consideration of whether the service standard adjustment mechanism is consistent with the Code objective.
1149. The Authority maintains the view expressed in the Draft Decision that the dead-bands and limits are inconsistent with the Code objective as they reduce incentives for efficient investment in the reliability of services, subject to the service provider being protected from the effects of events outside of the service provider's control under the definition of the measures of the service standards.
1150. Under the proposed access arrangement revisions, all of the measures of services standards for the transmission and distribution networks exclude force majeure

⁴⁶⁰ Australian Energy Regulator, March 2008, Electricity Transmission Network Service Providers: Service Target Performance Incentive Scheme.

⁴⁶¹ Australian Energy Regulator, March 2008, Electricity Transmission Network Service Providers: Service Target Performance Incentive Scheme.

events, which the Authority considers would include extreme weather events. For this reason, the Authority considers that the inclusion of limits on the values of service standards that may attract penalties and rewards under the service standard adjustment mechanisms are not a necessary protection for Western Power.

1151. On the matter of a cap on the total amounts of revenue at risk under the service standard adjustment mechanisms, the Authority also considers that a cap is not consistent with the Code objective in circumstances where Western Power is protected from the effects of extreme events by exclusions from the measures of service standards, as is the case under the proposed access arrangement revisions. Moreover, the incentive rates under the service standard adjustment mechanism that will apply for the second access arrangement period (addressed further below) are relatively low, and the risk to Western Power of penalties in excess of one per cent of revenue is small – requiring all service standards to depart from the benchmarks by considerable margins (in the order of 20 per cent).

Operation of the Service Standard Adjustment Mechanism

1152. The proposed service standard adjustment mechanism provides for a penalty or reward to be determined for each year of the access arrangement period according to the difference between a service standard benchmark and the actual service standard in each year.
1153. By addressing only the under-performance or out-performance of service standard benchmarks only in individual years of the access arrangement period, the proposed service standard adjustment mechanism potentially distorts incentives for investment in, and operation of, the network to maintain or improve service standards. In particular, the proposed mechanism would cause the value of incentives to maintain or improve service standards to vary over the course of an access arrangement period. Western Power would have a stronger incentive to undertake works to make a permanent improvement in service standards in the first year of the access arrangement period, attracting a reward for each of the three years of the access arrangement period, than in the last year of the access arrangement period, attracting a reward for only one year.⁴⁶²
1154. In the Draft Decision, the Authority took the view that consistency of the service standard adjustment mechanism with the Code objective requires that the incentives created by the mechanism for maintaining and improving service standards should be constant across the access arrangement period. The Authority determined that under-performance or out-performance of the service standard benchmarks should be calculated as a year-on-year change in performance relative to the service standard benchmarks. Under Draft Decision Amendment 35, the Authority required that this be achieved using the following general formula for each of the measures of service standards for the transmission and distribution networks:

$$SSD_t = (SSB_t - SSA_t) - (SSB_{t-1} - SSA_{t-1})$$

where

⁴⁶² This property of the service standard adjustment mechanism was observed by Synergy (submission of 22 December 2008 on the Price Control).

SSD_t is the service standard difference in year t ;

SSB_t is the service standard benchmark in year t ;

SSA_t is the actual service standard in year t ; and

SSD_{t-1} , SSB_{t-1} and SSA_{t-1} are the corresponding parameters in year $t - 1$.

1155. This formula can be readily applied to the second and third years of the second access arrangement period (2010/11 and 2011/12) for which service standard benchmarks exist for the previous year.⁴⁶³

1156. For the first year of the second access arrangement period (2009/10), the following formula can be applied:

$$SSD_t = SSB_t - SSA_t$$

1157. In its submission subsequent to the Draft Decision, Western Power observes that this method of calculation of performance against service standard benchmarks is inconsistent with the method contemplated by the AER, which is to consider only differences between target and actual service standards in individual years. On this basis, Western Power suggests that the Authority reconsider the appropriateness of the method required under Draft Decision Amendment 35.

1158. The AER has adopted a single-year calculation of performance against service standard benchmarks as a result of concern of perverse incentives of a year-on-year calculation in circumstances where a cap applies to maximum penalties under the incentive mechanism.⁴⁶⁴ That is, where a cap applies to maximum penalties and where a service provider envisages achieving poor service standard outcomes in a year that would attract penalties at the cap, the service provider may have an incentive to achieve even lower levels of service reliability as this would not increase the penalty (due to the cap), but would make improvements in service reliability (and the gaining of reward payments) easier to achieve in the next year.

1159. The Authority observes that the undesirable incentive of a year-on-year calculation of performance under a service standard incentive scheme exists only where there is a cap on the revenue at risk to the service provider. Under this Final Decision, the Authority is requiring that the service standard adjustment mechanism not include a cap on revenue at risk. As such, the undesirable incentive of the year-on-year calculation is not of concern.

1160. The Authority therefore maintains the view expressed in the Draft Decision that the under-performance or out-performance of the service standard benchmarks should be calculated as a year-on-year change in performance relative to the service standard benchmarks.

⁴⁶³ Performance information on services standards for the last year of an access arrangement period may not be available when revisions to the access arrangement are being assessed and the service standard adjustment mechanism is being applied. In such circumstances, it would be necessary to make the relevant adjustment to target revenue in a subsequent access arrangement period, keeping the value of the adjustment the same in present value terms.

⁴⁶⁴ Australian Energy Regulator, February 2009, Explanatory Statement, Proposed Amendment, Service Target Performance Incentive Scheme, pp. 7, 8.

Values of Incentive Rates

1161. A service standards adjustment mechanism would provide incentives for a service provider to efficiently incur costs to improve service standards if the value of the financial incentive to achieve an incremental improvement in service quality is set so that:

- the value of any penalty for under-performing against service standard benchmarks is equal to the economic loss that would be incurred as a result of the under-performance; and
- the value of any reward for out-performing against service standard benchmarks is equal to the value of the economic gain generated as a result of the out-performance.

1162. Western Power has proposed incentive rates derived from an amount of revenue at risk under the service standards adjustment mechanism. The rates have no relationship to either the cost of improving service standards or the value of improved service standards to electricity customers, which is acknowledged by Western Power.⁴⁶⁵ Western Power states that basing the incentive rates only on an amount of revenue at risk, rather than the cost or value of service quality, is intended to ensure that Western Power makes a “tangible financial commitment” to achieving service standard benchmarks rather than driving further improvements in service standards.

1163. The Authority considers that consistency with the Code objective ideally requires that incentive rates reflect the value of improvements in service quality. There is precedent for this in incentive schemes established in the National Electricity Market for distribution networks, although not for transmission networks.

1164. For distribution networks, precedent exists in Australia for establishing incentive rates under service-quality incentive schemes on the basis of either the cost or value of improvements in service quality. In first implementing incentive schemes for the Victorian electricity distribution networks in 2000, the Victorian Essential Services Commission determined incentive rates based on estimates of the cost to the distributors of improving service quality. The costs were specified as an annualised marginal cost of reliability, expressed in terms of dollars per megawatt hour of additional energy supply and converted to incentive rates per units of outage duration and frequency on the basis of assumptions of average durations of outages and average energy demand of customers.⁴⁶⁶ The incentive rates were based on costs to minimise the revenue risk to the distribution businesses with the introduction of the incentive schemes.⁴⁶⁷ The incentive schemes were revised in 2005 to apply incentive rates based on estimates of the value to electricity customers. As with the incentive rates applied in 2000, this value was derived initially as a value expressed in dollars per megawatt hour of energy supply and converted to incentive rates per units of outage duration and frequency.⁴⁶⁸ The

⁴⁶⁵ Revised access arrangement information, p. 181.

⁴⁶⁶ Office of the Regulator General, Victoria, May 2000, 2001 Electricity Distribution Price Review Draft Decision, pp. 268, 269.

⁴⁶⁷ Office of the Regulator General, Victoria, May 2000, 2001 Electricity Distribution Price Review Draft Decision, p. 56.

⁴⁶⁸ Essential Services Commission, October 2005, Electricity Distribution Price Review 2006-10 Final Decision Volume 1 Statement of Purpose and Reasons, p. 88.

AER has maintained incentive rates based on value of improvements in service quality in the reliability incentive scheme that it intends to apply to distribution networks.⁴⁶⁹

1165. For transmission networks, the guideline for service quality incentive schemes that has been developed by the AER for the National Electricity Market provides for incentive rates to be based on a percentage of regulated revenue at risk.⁴⁷⁰ It is not clear whether the incentive rate will reflect the economic value of changes in reliability (the guideline is vague on this design criterion). This approach may reflect a difficulty in determining a value of changes in service quality for transmission. For transmission, changes in service standards would not necessarily have a direct and readily identifiable effect on electricity customers. Instead, changes in transmission service quality would typically result in changes in outcomes in the electricity market, such as different electricity prices as higher or lower cost generation is dispatched.
1166. For the Western Power transmission and distribution networks, establishing incentive rates that reflect the economic value of changes in service standards would require studies to ascertain the relevant economic values. These studies would necessarily have to take into account the characteristics of the electricity market in Western Australia, the current reliability levels of the Western Power networks, and the characteristics of electricity customers.
1167. The Authority considers that it is not possible to undertake these studies within the timeframe for approval of the proposed access arrangement revisions. As such, the Authority is not able to determine effective incentive rates reflecting the benefits and/or costs of improvements in service quality.⁴⁷¹ Given this constraint, the Authority considers that the Code objective is best served by a service standard adjustment mechanism incorporating incentive rates determined according to an amount of regulated revenue at risk, rather than having no financial incentives at all.
1168. In considering the amount of revenue that may be placed at risk under the service standard adjustment mechanism, the Authority observes that:
- parties making submissions to the Authority on the proposed access arrangement revisions contend that the financial incentives under the proposed service standard adjustment mechanism may be too small to be effective;⁴⁷²
 - for transmission networks in the National Electricity Market, the National Electricity Rules require that a service target performance incentive scheme should ensure that the maximum revenue increment or decrement as a result

⁴⁶⁹ Australian Energy Regulator, May 2009, Electricity Distribution Network Service Providers: Service Target Performance Incentive Scheme.

⁴⁷⁰ Australian Energy Regulator, March 2008, Electricity transmission network service providers: service target performance incentive scheme, pp. 8, 11.

⁴⁷¹ For this reason, the Authority is also unable to determine whether the service standard adjustment mechanism should be symmetrical or asymmetrical in the value of penalties and rewards (implying different values of declines versus improvements in service quality), a matter raised in a submission to the Authority (Alinta Sales Pty Ltd submission of 17 December 2008).

⁴⁷² Western Australia Major Energy Users submission of 16 December 2008, Alinta Sales Pty Ltd submission of 17 December 2008.

of operation of the scheme will fall within one per cent and five per cent of the maximum allowed revenue for the relevant regulatory year;⁴⁷³

- for distribution networks in the National Electricity Market, the AER is proposing to establish incentive rates under a service target performance incentive scheme with a cap of five per cent of the regulated revenue target being at risk under the scheme;⁴⁷⁴
- for the South Australian electricity distribution network, the Essential Services Commission of South Australia determined incentive rates under an incentive scheme to provide for a maximum amount of rewards or penalties of 1.6 per cent of prescribed distribution revenue;⁴⁷⁵ and
- the Office of Gas and Electricity Markets in the United Kingdom has previously proposed an incentive scheme for service quality on electricity networks with penalties up to 1.75 per cent of revenue, and rewards up to 2 per cent of revenue.⁴⁷⁶

1169. Without the dead-band around targets for service standards, the incentive rates proposed by Western Power, applied under the service standard adjustment mechanism to be required by the Authority, would correspond to amounts of penalties or rewards of approximately 0.26 per cent of Western Power's proposed target reference service revenue if all achieved service standards were at values the same as the limits proposed by Western Power (which are approximately at values of plus or minus 20 per cent of the target values for each service standard).

1170. Taking into account the precedents of the National Electricity Rules and decisions of regulators in other jurisdictions, the Authority took the view in the Draft Decision that the incentive rates should provide for approximately one per cent of revenue to be at risk under reasonable worst-case scenarios of Western Power underperforming against all service standard benchmarks, which the Authority has taken to be service standard outcomes at the under-performance limits that were proposed by Western Power.

1171. On this basis, the Authority determined in the Draft Decision that incentive rates proposed by Western Power are inadequate and should be increased by a factor of 2.5 for distribution services and 2.5 for transmission services.

1172. In its submission in response to the Draft Decision, Western Power accepted the increase in incentive rates for all service standard parameters except for "system minutes interrupted", and subject to the Authority accepting a cap on revenue at risk of one per cent of target revenue.

1173. For the reasons set out above (paragraph 1151), the Authority will not allow a cap to apply on revenue at risk under the service standard adjustment mechanism. The Authority nevertheless maintains the view that incentive rates should provide for approximately one per cent of revenue to be at risk under reasonable worst-case

⁴⁷³ National Electricity Rules, Rule 6A.7.4(b)(3).

⁴⁷⁴ Australian Energy Regulator, February 2009, Explanatory Statement, proposed Amendment, Service Target Performance Incentive Scheme, Electricity Distribution Network Service Providers, p. 9.

⁴⁷⁵ Essential Services Commission of South Australia, April 2005, 2005 – 2010 Electricity Distribution Price Determination Part A – Statement of Reasons, p. 48.

⁴⁷⁶ Office of Gas and Electricity Markets, December 2001, Information and Incentives Project Incentives Schemes: Final Proposals, pp. 6, 10.

scenarios of Western Power underperforming against all service standard benchmarks.

1174. In its submission subsequent to the Draft Decision, Western Power has proposed incentive rates that satisfy this criterion (although not in all cases complying with the Draft Decision requirement of increasing incentive rates by a multiple of 2.5) as well as providing for the same incentive rates to apply in all years of the second access arrangement period.⁴⁷⁷ The revised incentive rates are shown in Table 100. The Authority accepts that these incentive rates would satisfy requirements under this Final Decision for amendment of the service standard adjustment mechanism.

⁴⁷⁷ Western Power submission of 10 September 2009, Attachment L.

Table 100 Original and revised incentive rates proposed to apply under the service standard adjustment mechanism

Service standard	Year	Originally proposed Incentive rate (\$)	Revised proposed Incentive rate (\$)
Circuit availability (%)	2009/10	165,094	375,000
	2010/11	218,215	375,000
	2011/12	288,532	375,000
System minutes interrupted (meshed network)	2009/10	84,322	75,000
	2010/11	111,474	75,000
	2011/12	147,369	75,000
System minutes interrupted (radial network)	2009/10	29,481	25,000
	2010/11	38,974	25,000
	2011/12	51,524	25,000
SAIDI – CBD (minutes)	2009/10	89,845	220,000
	2010/11	118,877	220,000
	2011/12	155,200	220,000
SAIDI – urban (minutes)	2009/10	89,845	220,000
	2010/11	118,877	220,000
	2011/12	155,200	220,000
SAIDI – rural short (minutes)	2009/10	3,416	8,200
	2010/11	4,548	8,200
	2011/12	5,906	8,200
SAIDI – rural long (minutes)	2009/10	3,416	8,200
	2010/11	4,548	8,200
	2011/12	5,906	8,200
SAIFI – CBD	2009/10	4,216,767	10,300,000
	2010/11	5,587,216	10,300,000
	2011/12	7,313,110	10,300,000
SAIFI – urban	2009/10	4,216,767	10,300,000
	2010/11	5,587,216	10,300,000
	2011/12	7,313,110	10,300,000
SAIFI – rural short	2009/10	183,284	450,000
	2010/11	243,520	450,000
	2011/12	317,136	450,000
SAIFI – rural long	2009/10	183,284	450,000
	2010/11	243,520	450,000
	2011/12	317,136	450,000

1175. The Authority notes that the incentive rates under the service standard adjustment mechanism are relatively low for distribution services in comparison with the incentive scheme to be applied by the AER that allows for an amount of revenue at risk of five per cent. Taking into account that the target revenue and reference tariffs for the second access arrangement period include substantial increases in maintenance costs to increase maintenance activities and address a backlog of maintenance works that would be expected to improve reliability into the future, the Authority considers that users of the network could reasonably expect greater incentive rates to apply in the third and subsequent access arrangement periods.

Conclusion and Required Amendment

1176. For the reasons set out above, the Authority maintains the requirement for amendment of the service standard adjustment mechanism as determined under the Draft Decision.

Required Amendment 34

The proposed access arrangement revisions should be amended to alter the specification of the service standard adjustment mechanism at clauses 5.24A and 5.24B to:

- (a) remove the dead-bands and limits around target values of service standards; and
- (b) calculate an amount of a difference between target and actual service standards as:

$$SSD_{2009/2010} = (SSB_{2009/10} - SSA_{2009/10})$$

$$SSD_{2010/2011} = (SSB_{2010/11} - SSA_{2010/11}) - (SSB_{2009/10} - SSA_{2009/10})$$

$$SSD_{2011/2012} = (SSB_{2011/12} - SSA_{2011/12}) - (SSB_{2010/11} - SSA_{2010/11})$$

Where:

SSD_t is the service standard difference in year t

SSB_t is the service standard benchmark in year t

SSA_t is the actual service standard in year t .

- (c) include incentive rates as specified in Attachment L of Western Power's submission of 10 September 2009.

Deferral of Revenue

1177. Western Power has proposed new provisions to the access arrangement that provide for a deferral of target revenue from the second access arrangement period to the third or subsequent access arrangement periods. Clauses 5.37A and 5.48A

of the proposed access arrangement revisions provide for amounts of \$14.6 million of target revenue for the transmission network and \$177.3 million of target revenue for the distribution network (in present value terms and dollar values at 30 June 2009) to be deducted from target revenue for the second access arrangement period and added to target revenue (at a constant present value) in the third or subsequent access arrangement periods.

1178. Western Power states that the purpose of the proposed deferral of revenue is to reduce proposed increases in reference tariffs in the second access arrangement period that stem from a change in the treatment of capital contributions in the calculation of target revenue (addressed at paragraph 783 and following of this Final Decision) and forecast increases in costs in the second access arrangement period.⁴⁷⁸ The effect of the proposed deferral of revenue is to, in effect, spread the increase in reference tariffs over a period longer than just the second access arrangement period.
1179. Western Power's proposed deferral of revenue will involve adjustment of target revenue in future access arrangement periods to add amounts in respect of part or all of the deferred revenue from the second access arrangement period. Such adjustments are not contemplated under section 6.4(a) of the Access Code. The Authority considers, however, that a mechanism under the access arrangement to provide for the deferral of revenue to offset an immediate effect on network tariffs of a change in the treatment of capital contributions is reasonably necessary to meet the objective of section 6.4(c) of the Access Code to avoid price shocks for users.
1180. In the Draft Decision, the Authority gave consideration to the provisions of the proposed access arrangement revisions for deferral of revenue noting that the amount of revenue proposed to be deferred is less than the increment to target revenue that arises from the change in treatment of capital contributions,⁴⁷⁹ and the provisions to not establish a time period for future recovery of this revenue.
1181. The change in treatment of capital contributions is designed to have a neutral commercial effect on Western Power's business in present value terms. In this context, and having regard to the substantial increases in target revenue and reference tariffs that were otherwise determined to occur for the second access arrangement period, the Authority took the view in the Draft Decision that the price-shock effect of this change on users of the network should be minimised by deferral of the entire amount of the resultant increment to target revenue that would occur in the second access arrangement period.
1182. The Authority also took the view in the Draft Decision that the access arrangement should clearly establish a mechanism for recovery of the deferred revenue, including the time period over which the revenue is to be recovered. Again taking into account the context of the neutral commercial effect of the change in treatment of capital contributions on Western Power and the objective of avoiding price shocks for users, the Authority considered that the access arrangement should, in effect, capitalise the amount of deferred revenue and provide for the recovery of

⁴⁷⁸ Western Power submission of 17 December 2008.

⁴⁷⁹ Western Power has proposed an amount of deferred revenue of \$191.9 million in present value terms. Under the Authority's determination of target revenue for the purposes of this Final Decision, the increment to target revenue that arises from the change in treatment of capital contributions is \$548.7 million in present value terms.

this amount according to a defined schedule. In the absence of other relevant factors, the Authority considered that this schedule should provide for the recovery of the deferred revenue in a similar manner to the straight-line depreciation of physical network assets with a constant amount of recovery in each year subsequent to the second access arrangement period and over a total recovery period equal to the average life of network assets.

1183. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 36

The proposed access arrangement revisions should be amended to provide for the recovery of deferred revenue as a constant amount in each year subsequent to the second access arrangement period and over a total period of recovery equal to the average economic life of network assets.

1184. In a submission subsequent to the Draft Decision, Western Power indicates that Draft Decision Amendment 36 may adversely affect the long term financial performance of the business through the delay in cash flows, even though the effect of the deferral is neutral in present value terms.⁴⁸⁰
1185. Western Power presents modelling of the effects of Draft Decision Amendment 36, to assess the price path outcomes under alternative timeframes for recovery of deferred revenue. On the basis of this modelling, Western Power contends that:
- although the recovery of deferred revenue as required by the Authority under Draft Decision Amendment 36 has a neutral effect on Western Power in present value terms, the delay of cash flows to Western Power has a short-to-medium term adverse impact on Western Power's business in borrowings, financing costs and gearing levels in the intervening period; and
 - projections of costs and reference tariffs for the third access arrangement period indicate that the deferred revenue may be able to be recovered over the course of that period (of five years) with real year on year increases in average reference tariffs of only 2.5 per cent and, hence, without a significant price shock for customers.
1186. Western Power also contends that recovery of deferred revenue for a long period (as required by the Authority under Draft Decision Amendment 36) is contrary to the Code objective as it results in near-term tariffs being understated, which may lead to inefficiency in demand for network services.
1187. The Authority accepts that recovery of deferred revenue over a long period may have adverse effects on Western Power's business due to effects on cash flows and considers that this effect on Western Power's business should be taken into consideration in determining a time path for recovery of deferred revenue that avoids price shocks for users of reference services.
1188. While Western Power has presented projections of increases in reference tariffs to indicate that the recovery of deferred revenue may be able to occur in the third access arrangement period without a significant price shock for users, these projections are based on forecasts of costs that are subject to change. As such,

⁴⁸⁰ Western Power submission of 10 September 2009, Attachments H, I and J.

the Authority will not approve terms of the access arrangement that lock in the recovery of deferred revenue in the third access arrangement period.

1189. The Authority considers that the avoidance of price shocks would best occur through a planned recovery of deferred revenue by a pre-determined schedule over an extended period, such as by a real annuity amount over a period equal to the average life of network assets. However, the Authority will consider alternative timing of recovery, subject to approval by the Authority, at the time of revisions to the access arrangement and having regard to the extent of any change in reference tariffs that is caused by recovery of part or all of the amount of deferred revenue.
1190. The Authority requires the following amendment to the proposed access arrangement revisions.

Required Amendment 35

The proposed access arrangement revisions should be amended to provide for the recovery of deferred revenue over the third and subsequent access arrangement periods subject to approval by the Authority and avoidance of resultant price shocks to users of reference services.

“D-factor” Scheme

1191. Western Power has proposed new provisions to the access arrangement that provide for an adjustment mechanism, referred to as the “D-factor scheme”, that will apply to the determination of target revenue for the third access arrangement period (clauses 5.54 to 5.57 of the proposed access arrangement revisions).
1192. Under the proposed D-factor scheme, an amount will be added to target revenue in the third access arrangement period in respect of:
- any additional operating expenditure being incurred by Western Power as a result of deferring a capital expenditure project during the second access arrangement period (clause 5.55(a)); and
 - any additional operating or capital expenditure incurred by Western Power in relation to demand management initiatives (clause 5.55(b)).
1193. The proposed D-factor scheme is subject to:
- where an adjustment is made in respect of deferral of capital expenditure, the capital expenditure having been included in the forecast of costs taken into account in determination of target revenue for the access arrangement period; and
 - Western Power making available to the Authority a business case for the relevant operating or capital expenditure.
1194. Submissions to the Authority on the proposed access arrangement revisions indicated general support for the access arrangement to support efficient expenditure on non-network solutions to address network constraints, including demand management initiatives, and indicate that the proposed D-factor scheme

should at least be investigated.⁴⁸¹ Questions were raised, however, as to whether the proposed D-factor scheme is permitted, as it is not one of the adjustments contemplated under Chapter 6 of the Access Code, and whether the D-factor scheme would provide Western Power with an inappropriate competitive advantage in providing services in demand-side management.⁴⁸²

1195. The Authority accepts that a scheme such as the proposed D-factor scheme may have efficiency benefits in the provision of network services. The potential efficiency benefits of the proposed D-factor scheme arise due to the limited incentive that a service provider may have to seek efficiency in capital costs where an increase in non-capital costs is necessary to achieve this efficiency. For example, a saving of \$100 in capital expenditure during an access arrangement period relative to the forecast for that period will give rise to a “reward” to the service provider of an amount equal to the rate of return and depreciation allowance on the amount of \$100, say \$10 where the rate of return is 6 per cent and where depreciation of the capital asset is at 4 per cent per annum. However, under a conventional scheme of regulation, any (above-forecast) non-capital costs that would be incurred by the service provider in achieving the efficiency gain in capital costs are not recoverable. So, if additional non-capital costs of \$20 were required to achieve the \$100 saving on capital costs, the service provider would be worse off even though the substitution of non-capital costs for capital costs would have been efficient.
1196. Many non-network alternatives (including demand management programs) involve substituting non-capital costs for capital investment in a network to resolve network constraints. In circumstances where opportunities for non-network alternatives are not identified and addressed in cost forecasts for an access arrangement period, the potentially limited incentive to substitute non-capital costs for capital costs may create a barrier to developing and implementing efficient non-network alternatives. This barrier is heightened by efficiency incentive schemes, as any additional non-capital costs incurred by the service provider may not only be unrecoverable, but may also reduce incentive payments that may otherwise accrue to the service provider from other, unrelated, efficiency gains.
1197. The potential barrier to efficient use of demand management programs has been recognised in the National Electricity Rules. Under Rule 6.5.8(c), the AER, in developing and implementing an efficiency benefit-sharing scheme for a distribution network, must have regard to the possible effects of the scheme for the implementation of non-network alternatives. The AER proposes to address this requirement by excluding the non-capital costs associated with non-network alternatives from both the forecast and actual amounts of non-capital costs used to calculate carryover gains and losses and efficiency benefit sharing schemes implemented for distribution networks in Victoria.⁴⁸³
1198. The D-factor scheme proposed by Western Power would address the incentive barriers to implementing non-network alternatives to capital projects in resolving

⁴⁸¹ Department of Treasury and Finance submission of 17 December 2008; Mr Noel Schubert submission of 16 December 2008.

⁴⁸² Alinta Sales Pty Ltd submission of 17 December 2008.

⁴⁸³ Australian Energy Regulator, December 2008, Explanatory Statement, Proposed Demand Management Incentive Scheme, Citipower, Powercor, Jemna, SP AusNet and United Energy, Regulatory Control Period Commencing 1 January 2011, p. 8.

network constraints. While it has been submitted that this would alter the competitive position of Western Power in providing services in demand-side management *vis-à-vis* other providers of such services, the Authority does not accept that this would be the case. Rather, the Authority considers that removing disincentives for Western Power to implement non-network alternatives in resolving network constraints would increase the role of demand-side initiatives in the operation of the electricity market and would generally increase demand for services necessary to implement programs of demand management.

1199. Despite the potential efficiency benefits of the proposed D-factor scheme, the Authority took the view in the Draft Decision that the Access Code does not allow the scheme to be included in the access arrangement. Section 6.4(a) of the Access Code establishes objectives for a price control that include an objective for target revenue to include certain amounts, including a range of adjustments arising from the previous access arrangement period. An amount in respect of the D-factor scheme as proposed by Western Power does not fall within any of the amounts contemplated by section 6.4(a). Nor does the proposed D-factor scheme address any other objectives for the price control under section 6.4 of the Access Code.

1200. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 37

The proposed access arrangement revisions should be amended to delete the proposed D-factor scheme at clauses 5.54 to 5.57.

1201. In a submission subsequent to the Draft Decision, Western Power disagrees with the requirement for Draft Decision Amendment 37.⁴⁸⁴ Western Power acknowledges that the adjustment of target revenue in subsequent access arrangement periods in the manner of the proposed D-factor scheme is not expressly contemplated under section 6.4(a) of the Access Code. However, Western Power contends that the Authority should still allow the D-factor scheme for reason that:

- the Authority acknowledges the potential efficiency benefits in allowing the D-factor scheme, which are consistent with the Code objective;
- the D-factor scheme is consistent with the objective of section 6.4(a)(i) of the Access Code, being for the price control to give the service provider an opportunity to recover the forward-looking and efficient costs of providing covered services; and
- there are precedents in the current access arrangement and the Authority's Draft Decision for adjustments to target revenue in subsequent access arrangement periods that are in addition to the adjustments explicitly contemplated in sections 6.4(a) of the Access Code, being the capital contributions adjustment mechanism under the current access arrangement and the deferral of revenue required by the Authority in respect of the change in the treatment of capital contributions.

1202. The Authority considers, however, that the access arrangement should, where possible, foster incentives for adoption of efficient non-network alternatives. For

⁴⁸⁴ Western Power submission of 10 September 2009, Attachment M.

this reason, the Authority considers that the gain sharing mechanism to be included in the access arrangement for the second access arrangement period should include provision to exclude from actual non-capital costs any amount of non-capital costs that were incurred as a result of implementing a non-network alternative where such costs were not, and could not reasonably have been, included in the forecast of non-capital costs accounted for in target revenue for the access arrangement period.

1203. Having regard to Western Power's submission, the Authority has given further consideration to inclusion of the D-factor scheme under the proposed access arrangement.
1204. While the Authority remains reticent in having the access arrangement include provision for adjustments of target revenue in subsequent access arrangement periods in addition to those explicitly contemplated under section 6.4(a) of the Access Code, the Authority accepts that section 6.2 of the Access Code is not exclusive as to the specific methods of price control (including adjustment mechanisms) and sections 6.1, 6.2 and 6.4 provide discretion as to the form of price control provided it meets the objectives in section 6.4 and complies with Chapter 6.
1205. The Authority considers that it is appropriate to allow such adjustments under the access arrangement where there is a clear consistency with the objectives for a price control and the Code objective. On this basis, the Authority considers that the proposed D-factor scheme is consistent with the requirements of the Access Code and the Authority does not maintain the requirement for amendment of the proposed access arrangement revisions under Draft Decision Amendment 37.
1206. On the particular provisions of the D-factor scheme, the Authority considers that the scheme as set out in the proposed access arrangement revisions does not adequately constrain the operation of the scheme to circumstances where the deferral of capital expenditure or the implementation of demand management schemes is economically efficient. While clause 5.57 of the proposed access arrangement revisions requires that there be an "approved" business case for the D-factor scheme to apply to an amount of expenditure, there is no explicit requirement for the business case to demonstrate efficiency in the relevant costs.
1207. The Authority considers that operation of the D-factor scheme should be subject to Western Power demonstrating to the satisfaction of the Authority that the application of the scheme to any amount of operating expenditure or capital expenditure is subject to:
- any amount of operating expenditure satisfying the requirements of sections 6.40 and 6.41 of the Access Code, as relevant; and
 - any amount of capital expenditure satisfying the requirements of section 6.51A of the Access Code.
1208. The Authority requires the following amendment to the proposed access arrangement revisions.

Required Amendment 36

The proposed access arrangement revisions should be amended to provide for operation of the D-factor scheme to be subject to demonstration, to the Authority's satisfaction, that:

- any amount of operating expenditure satisfies the requirements of sections 6.40 and 6.41 of the Access Code, as relevant; and
- any amount of capital expenditure satisfies the requirements of section 6.51A of the Access Code.

1209. As a related matter, the Authority considers that the gain sharing mechanism to be included in the access arrangement for the second access arrangement period should include provision to exclude from actual non-capital costs any amount of non-capital costs that are subject to the D-factor scheme. This is addressed in Required Amendment 33 and paragraph 1123 of this Final Decision.

TRIGGER EVENTS

Access Code Requirements

1210. Under sections 5.34 of the Access Code, an access arrangement may specify one or more trigger events. A trigger event is defined in the Access Code as a set of one or more circumstances specified in the access arrangement, the occurrence of which requires a service provider to submit proposed revisions to the Authority under section 4.37 of the Access Code.

1211. Under section 5.35 of the Access Code, trigger events may be either proposed by the service provider or included in an access arrangement by the Authority.

1212. Under section 5.36 of the Access Code, before determining whether a trigger event is consistent with the Code objective, the Authority must consider:

- whether the advantages of including the trigger event outweigh the disadvantages of doing so, in particular the disadvantages associated with decreased regulatory certainty; and
- whether the trigger event should be balanced by one or more other trigger events.

Current Access Arrangement

1213. The current access arrangement includes a broad specification of trigger events under clause 8.1:

- 8.1 Any significant unforeseen development which has a materially adverse impact on the service provider and which is:

- (i) outside the control of the service provider; and
- (ii) not something that the service provider, acting in accordance with good electricity industry practice, should have been able to prevent or overcome; and
- (iii) an event the impact of which is so substantial that the advantages of making the variation before the end of the access arrangement period outweigh the disadvantages, having regard to the impact of the variation on regulatory certainty.

1214. Clause 8.2 of the current access arrangement requires that Western Power must submit proposed revisions to the Authority within 30 business days after a trigger event has occurred.

Proposed Revisions

1215. The proposed access arrangement revisions include a new clause 8.1A to provide further information on trigger events:

- 8.1A For the avoidance of doubt, a trigger event may include without limitation the introduction of an emissions trading scheme; full retail contestability; and the roll-out of Advanced Interval Meters to the extent that such costs were not included in the calculation of target revenue for the access arrangement period or otherwise addressed through the Unforeseen Event provisions in sections 5.4 to 5.6 of this Access Arrangement.

Considerations of the Authority

1216. The specification of trigger events under clause 8.1 of the current access arrangement is designed to shelter Western Power from risks of increases in costs beyond forecasts. The potential events that may give rise to such costs are not specified. Rather, the trigger event would only occur if Western Power itself considers that an event (and the associated increase in costs) occurs that warrants a review of the access arrangement.

1217. The Authority accepts that events of the type specified by Western Power under the proposed clause 8.1A are events that could potentially give rise to substantial costs for Western Power. As such, the Authority accepts that the events specified by Western Power potentially fall within the scope of the existing clause 8.1, and are simply declaratory in effect and do not constitute a material change from the current access arrangement.

SUPPLEMENTARY MATTERS

Access Code Requirements

1218. Section 5.1(k) of the Access Code requires that an access arrangement include provisions dealing with supplementary matters under sections 5.27 and 5.28.

1219. Section 5.27 indicates that supplementary matters comprise:

- (a) balancing; and

- (b) line losses; and
- (c) metering; and
- (d) ancillary services; and
- (e) stand-by; and
- (f) trading; and
- (g) settlement; and
- (h) any other matter in respect of which arrangements must exist between a user and a service provider to enable the efficient operation of the covered network and to facilitate access to services, in accordance with the Code objective.

1220. Section 5.28 of the Access Code requires that supplementary matters be dealt with in the access arrangement in accordance with other relevant regulatory requirements including written laws, the Wholesale Electricity Market Rules and the Technical Rules.

Current Access Arrangement

1221. Supplementary matters are dealt with in clauses 10.1 to 10.9 of the current access arrangement, addressing the particular matters listed under section 5.27 of the Access Code. These matters are dealt with by reference to the Wholesale Electricity Market Rules and Metering Code.

Proposed Revisions

1222. Western Power has not proposed any revisions to provisions of the access arrangement dealing with supplementary matters.

Considerations of the Authority

1223. Taking into account the absence of proposed revisions to the section of the access arrangement dealing with supplementary matters and the absence of submissions addressing this element of the access arrangement, the Authority considers that the existing proposed access arrangement provisions are consistent with the requirements of sections 5.1(k), 5.27 and 5.28 of the Access Code.

APPLICATIONS AND QUEUING POLICY

Access Code Requirements

1224. Section 5.1(g) of the Access Code requires that an access arrangement include an applications and queuing policy. Sections 5.7 to 5.11 of the Access Code set out the requirements that must be met by the applications and queuing policy.

- 5.7 An applications and queuing policy must:
- (a) to the extent reasonably practicable, accommodate the interests of the service provider and of users and applicants; and

- (b) be sufficiently detailed to enable users and applicants to understand in advance how the applications and queuing policy will operate; and
- (c) set out a reasonable timeline for the commencement, progressing and finalisation of access contract negotiations between the service provider and an applicant, and oblige the service provider and applicants to use reasonable endeavours to adhere to the timeline; and
- (d) oblige the service provider, subject to any reasonable confidentiality requirements in respect of competing applications, to provide to an applicant all commercial and technical information reasonably requested by the applicant to enable the applicant to apply for, and engage in effective negotiation with the service provider regarding, the terms for an access contract for a covered service including:
 - (i) information in respect of the availability of covered services on the covered network; and
 - (ii) if there is any required work:
 - A. operational and technical details of the required work; and
 - B. commercial information regarding the likely cost of the required work;
 and
- (e) set out the procedure for determining the priority that an applicant has, as against another applicant, to obtain access to covered services, where the applicants' access applications are competing applications; and
- (f) to the extent that contestable consumers are connected at exit points on the covered network, contain provisions dealing with the transfer of capacity associated with a contestable consumer from the user currently supplying the contestable consumer ("outgoing user") to another user or an applicant ("incoming user") which, to the extent that it is applicable, are consistent with and facilitate the operation of any customer transfer code; and
- (g) establish arrangements to enable a user who is:
 - (i) a 'supplier of last resort' as defined in section 67 of the Act to comply with its obligations under Part 5 of the Act; and
 - (ii) a 'default supplier' under regulations made in respect of section 59 of the Act to comply with its obligations under section 59 of the Act and the regulations; and
- (h) facilitate the operation of Part 9 of the Act, any enactment under Part 9 of the Act and the 'market rules' as defined in section 121(1) of the Act; and
- (i) if applicable, contain provisions setting out how access applications (or other requests for access to the covered network) lodged before the start of the relevant access arrangement period are to be dealt with.

5.8 The paragraphs of section 5.7 do not limit each other.

5.9 Under section 5.7(e), the applications and queuing policy may:

- (a) provide that if there are competing applications, then priority between the access applications is to be determined by reference to the time at which the access applications were lodged with the service provider, but if so the applications and queuing policy must:
 - (i) provide for departures from that principle where necessary to achieve the Code objective; and
 - (ii) contain provisions entitling an applicant, subject to compliance with any reasonable conditions, to:
 - A. current information regarding its position in the queue; and

- B. information in reasonable detail regarding the aggregated capacity requirements sought in competing applications ahead of its access application in the queue; and
- C. information in reasonable detail regarding the likely time at which the access application will be satisfied;

and

- (b) oblige the service provider, if it is of the opinion that an access application relates to a particular project or development:
 - (i) which is the subject of an invitation to tender; and
 - (ii) in respect of which other access applications have been lodged with the service provider,

(“project applications”) to, treat the project applications, for the purposes of determining their priority, as if each of them had been lodged on the date that the service provider becomes aware that the invitation to tender was announced.

5.9A If:

- (a) an access application (the “first application”) seeks modifications to a contract for services; and
- (b) the modifications, if implemented, would not materially impede the service provider’s ability to provide a covered service sought in one or more other access applications (each an “other application”) compared with what the position would be if the modifications were not implemented,

then the first application is not, by reason only of seeking the modifications, a competing application with the other applications.

5.10 An applications and queuing policy may:

- (a) be based in whole or in part upon the model applications and queuing policy, in which case, to the extent that it is based on the model applications and queuing policy, any matter which in the model applications and queuing policy is left to be completed in the access arrangement, must be completed in a manner consistent with:
 - (i) any instructions in relation to the matter contained in the model applications and queuing policy; and
 - (ii) sections 5.7 to 5.9;
 - (iii) the Code objective;
 and
- (b) be formulated without any reference to the model applications and queuing policy and is not required to reproduce, in whole or in part, the model applications and queuing policy.

5.11 The Authority:

- (a) must determine that an applications and queuing policy is consistent with sections 5.7 to 5.9 and the Code objective to the extent that it reproduces without material omission or variation the model applications and queuing policy; and
- (b) otherwise must have regard to the model applications and queuing policy in determining whether the applications and queuing policy is consistent with sections 5.7 to 5.9 and the Code objective.

Current Access Arrangement

1225. The current access arrangement includes, at Appendix 1, an applications and queuing policy describing the process that an applicant (i.e. a person who seeks to obtain or modify a covered service) must undertake with Western Power to form, or to modify, an access contract.

Proposed Revisions

1226. Western Power has proposed several revisions to the applications and queuing policy, some of which serve to clarify existing provisions and others of which are substantive changes to the policy. The substantive revisions are described as follows.

1227. Clause 3.2 of the applications and queuing policy deals with the commencement of the application process upon the submission of an application to Western Power. Under the current applications and queuing policy, the applicant is required to use reasonable endeavours to provide all information required in the application form. Western Power has proposed revisions to clause 3.2 to require the application to Western Power to be “complete”, where complete is defined as:

“complete”, in relation to an application or notice, means where the applicant or controller (as applicable) has:

- (a) used reasonable endeavours to accurately and completely address each item in the applicable application form (including by the provision of any supporting information required by the application form); and
- (b) with respect to an electricity transfer application, provided all of the information required under clauses 3.5 and 3.6 for the application; and
- (c) with respect to a connection application, provided all of the information required under clauses 3.5 and 3.7 for the application,

to Western Power's satisfaction, acting as a reasonable and prudent person.

1228. Clause 4.9 of the applications and queuing policy deals with requirements for the applicant to provide security to Western Power in respect of liabilities under an access contract. Under the current applications and queuing policy, Western Power is not entitled to require security where the applicant has a credit rating at or above a specified threshold. Western Power has proposed revisions to clause 4.9 to:

- introduce a new clause 4.9(c) to provide Western Power with discretion to require security in respect of a contribution regardless of the credit rating of the applicant; and
- revise the now clause 4.9(d) to provide that Western Power may perform a security assessment prior to making an access offer, rather than providing that Western Power must perform a security assessment within 30 days of receiving an application.

1229. Clause 10 of the applications and queuing policy comprises provisions for a change in the covered service applying to a connection point and change in capacity at a connection point. Western Power has proposed changes to clause 10, as follows.

- Clause 10 of the current applications and queuing policy applies to a change in the covered service at a connection point or an increase in contracted capacity at a connection point. Western Power proposes revisions to clause 10 so that the clause applies also to decreases in contracted capacity at a connection point.
- Under clause 10.1(d) of the current applications and queuing policy, a connection application submitted for a required increase in contracted capacity is afforded priority in the queue according to the date at which Western Power received the electricity transfer application that gave rise to the need for a connection application. Western Power proposes revisions to clause 10.1(d) to indicate that the priority of the connection application is determined according to the date of submission of the electricity transfer application, if the connection application is received within 20 business days of notice that the connection application is required, or otherwise at the date at which the complete connection application is received.
- Under the current applications and queuing policy, clause 10.1(f) provides for Western Power to refuse multiple applications in any 12-month period for a change in the covered service where the change is sought by reason of a seasonal nature of the business or operation at the connection point. Western Power proposes revisions to clause 10 that move the provisions of clause 10.1(f) to a new clause 10.3 and apply this power to refuse an application applicable not only to a change in covered service at a connection point, but also to an increase or decrease in capacity at a connection point.
- Under the current applications and queuing policy, clause 10.2(c) provides for Western Power to notify an applicant for an increase in capacity of the acceptance or rejection of the application within five business days of receipt of the application. Western Power has proposed revisions to clause 10.2(c) so that this clause applies also to an application for a decrease in capacity and to indicate that the period of five business days is subject to extension for “such further time as a prudent service provider would reasonably require to consider [the] application”.

1230. Three clauses of the applications and queuing policy (clauses 10.1(f), 11.2(f) and 14.3(f)), contain provisions dealing with determining the priority assigned to a connection application in circumstances where Western Power provides notice to the applicant that a connection application is required in respect of a notice or application from the applicant for an increase in capacity of a connection point, a re-energisation of a connection point, or combining or separating connection points. Under the current applications and queuing policy, the priority of the connection application is determined from the date of the original application or notice from the applicant. Under the proposed revisions to the applications and queuing policy, the priority of the connection application is determined as the date of the original application, if the connection application is received within 20 days of the notice from Western Power, or otherwise as the date on which the connection application is received.

1231. Clause 13 of the applications and queuing policy relates to the status of an exit point that is subject to an application as a contestable or non-contestable exit point in terms of contestability in the retail sale of electricity. Western Power has proposed a new clause 13.3 of the applications and queuing policy to indicate that “[w]here Western Power is not authorised under the *Electricity Industry Act 2004* or other written law to make an access offer for an application relating to an exit point that is not contestable, Western Power must reject the application”.

1232. Clause 19 of the applications and queuing policy relates to reporting during the processing by Western Power of a connection application. Under clause 19.1 of the current access arrangement, Western Power is required to provide an applicant with an initial response within 20 business days of the application. The initial response is required to include a “preliminary assessment” of the application, an indication of the time by which Western Power expects to make an access offer, and whether the application has caused Western Power to give notice to any person that another application will be “bypassed” in the queue. Western Power proposes revisions to clause 19.1 to relax the content requirements for the initial response, including:

- requiring only that the initial response indicate a time by which Western Power will provide a preliminary assessment and indicating that a preliminary assessment will only be provided “if requested”; and
- providing for the initial response to indicate only the time by which Western Power expects that it will be in a position to give notice to any person that another application will be bypassed in the queue.

1233. Clause 24 of the applications and queuing policy establishes queuing rules for connection applications. Western Power has proposed changes to the queuing rules as follows.

- A new clause 24.3 is proposed indicating that a transition application is not subject to the queue, where a transition application is defined as an application for modifications to an access contract or any other contract for services that would not materially impede Western Power’s ability to provide a covered service sought in one or more other applications.
- A change to clause 24.6(a) (currently clause 24.5(a)) is proposed that allows an application of another applicant to be bypassed where that other applicant has not obtained environmental or other approvals that it requires in order to proceed, whereas under the current access arrangement this provision for bypass only has effect where the other applicant has requested the application to be suspended.
- A change to clause 24.17 (currently clause 24.16) is proposed that requires Western Power to provide information on the queuing status of a “competing connection application” as part of a preliminary assessment, whereas under the current access arrangement this clause requires provision of this information in the initial response to the application.

Considerations of the Authority

1234. In considering the proposed applications and queuing policy, the Authority has given attention to the revisions proposed by Western Power as well as to whether, in view of practical experience, the provisions of the applications and queuing policy under the current access arrangement are consistent with the requirements of the Access Code. In doing so, the Authority has had regard to submissions made on the proposed access arrangement revisions. The considerations of the Authority are set out below under the following headings:

- effects on investment and the wholesale electricity market;
- current provisions of the applications and queuing policy; and

- proposed revisions to the applications and queuing policy.

Effects on Investment and the Wholesale Electricity Market

1235. Several parties have made submissions to the Authority that raise concerns over the operation of the applications and queuing policy.
1236. Synergy and Griffin Energy both submitted that substantial delays occur in Western Power's processing of connection applications.⁴⁸⁵ These submissions are consistent with observations of the Authority in its review of the wholesale electricity market; that is, that Western Power can take six to 12 months to commence processing a connection application and up to a further 18 months to provide an access offer.⁴⁸⁶
1237. Two parties with interests in generation submitted that the first-come first-served operation of the queue for connection applications is inconsistent with efficient investment in the network and in generation capacity.⁴⁸⁷ Aviva Corporation submitted that the allocation of network capacity and augmentation of the network according to a time-order of generation and load proposals is inconsistent with efficient planning and use of the network and with efficient decisions for investment in new generation capacity. Aviva Corporation cited an example of allocation of capacity rights on the network to intermittent generators ahead of its own coal-fired generation, by virtue of position in the queue, whereas a more coordinated allocation of capacity could achieve more efficient use of network infrastructure. Alinta Sales similarly submitted that the existing queuing rules may inhibit the efficient entry of generators into the wholesale electricity market.
1238. The Australian Energy Market Commission (**AEMC**) has addressed these matters in an unrelated study that examined, *inter alia*, the Western Australian electricity market. The AEMC attributes the long periods for assessment of connection applications to the structure of the wholesale electricity market, in particular the requirement for generators to have unconstrained access to the network:⁴⁸⁸

The "unconstrained" planning approach employed in the SWIS has led Western Power to connect only new generators where and when the network can accommodate the full output of the connected generator(s). ... [B]y linking the provision of the "local" generation connection to the deeper reinforcement required to allow for unconstrained access to the shared network, the complexity, and therefore time required, for both the assessment of the application and the construction of the resulting network augmentation is greatly increased.

Under this unconstrained approach, Western Power undertakes a number of modelling steps, a cost assessment and, potentially, an approvals process before potentially making a network access offer. This can take up to 18 months. The unconstrained planning approach can also affect the cost of the new connection,

⁴⁸⁵ Synergy submission of 17 December 2008 on the Applications and Queuing Policy, Griffin Energy Development Pty Ltd submission of 17 December 2008.

⁴⁸⁶ Economic Regulation Authority, 5 November 2008, Annual Wholesale Electricity Market Report for the Minister for Energy, p. 71.

⁴⁸⁷ Aviva Corporation submission of 16 December 2008; Alinta Sales Pty Ltd submission of 17 December 2008.

⁴⁸⁸ Australian Energy Market Commission, 23 December 2008, Review of Energy Market Frameworks in Light of Climate Change Policies, 1st Interim Report, p. 80.

and therefore potentially also the generator's locational decision, through the "deep" connection costs charged.

1239. The AEMC found that time periods and delays in processing connection applications are exacerbated by a high volume of connection applications, particularly by wind farms, and that this results in Western Power informing applicants for connection that the processing of applications will only commence six to 12 months after submission of the applications.⁴⁸⁹ The AEMC also found that the time periods for the processing of connection applications for the SWIN are lengthened by influences of the reserve capacity mechanism of the wholesale electricity market. Current rules of the wholesale electricity market require a generator to have an access offer before the generator can benefit from the reserve capacity mechanism. This, in combination with the first-come first-served queue for access requests, encourages developers to apply for connection of generation projects in the very early stages of development, resulting in incentives for developers to submit applications for projects that are only prospective, rather than certain, and to submit many connection applications to secure places in the queue, rather than limiting applications to projects with reasonable certainty of proceeding.⁴⁹⁰
1240. The Authority recognises the concerns with operation of the queue, but is required to determine that the first-come first-served queuing principle of the applications and queuing policy meets the requirements of the Access Code. The queuing rules of clause 24 of the applications and queuing policy are materially the same as the queuing rules under clauses A2.45 to A2.50 of the model applications and queuing policy under the Access Code. Accordingly, section 5.11 of the Access Code requires that the Authority determine that the first-come first-served queuing principle of the applications and queuing policy is consistent with the Code objective.
1241. Notwithstanding that the Authority is required to determine that the first-come-first-served queuing rules meet the requirements of the Access Code, the Authority considers that the first-come first-served queuing rules under the applications and queuing policy, in combination with the structure of the wholesale electricity market and reserve capacity mechanism, do not serve to promote efficient investment in the electricity network. The Authority considers that this deficiency of the wholesale electricity market and the queuing policy cannot be resolved through the queuing rules in the applications and queuing policy. Rather, this requires consideration in a broader review of regulatory arrangements for the electricity market that considers network planning processes, the functioning of the wholesale electricity market, the treatment of new investment under the Access Code, and the queuing rules. The Authority has recommended that this issue be addressed by the Office of Energy as the key policy-making body in the wholesale electricity market with a view to development of a "roadmap" laying out a strategy for future development of the wholesale electricity market.⁴⁹¹

⁴⁸⁹ Australian Energy Market Commission, 23 December 2008, Review of Energy Market Frameworks in Light of Climate Change Policies, 1st Interim Report, p. 80.

⁴⁹⁰ Australian Energy Market Commission, 23 December 2008, Review of Energy Market Frameworks in Light of Climate Change Policies, 1st Interim Report, p. 81.

⁴⁹¹ Economic Regulation Authority, 5 November 2008, Annual Wholesale Electricity Market Report for the Minister for Energy, p. ix.

1242. The Authority is aware that Western Power is currently pursuing a more substantial review of its applications and queuing policy outside of the proposed access arrangement revisions. As part of this separate review, Western Power is consulting with applicants seeking access to the network and other interested parties.⁴⁹² The Authority is of the understanding that Western Power intends to submit a proposed revised applications and queuing policy to the Authority for approval in early 2010. It is anticipated that Western Power will make the submission under the provisions of the Access Code that allow for revisions to an access arrangement during an access arrangement period.⁴⁹³

Current Provisions of the Applications and Queuing Policy

1243. Submissions from interested parties contend that there are practical difficulties with two provisions of the applications and queuing policy that are proposed to be maintained in the access arrangement for the second access arrangement period:

- confusing rules and processes under clause 10 of the applications and queuing policy and the electricity transfer access contract in the process for a change in capacity at a connection point; and
- inconsistency of the re-energisation process of clause 11.2 of the applications and queuing policy with the Metering Code and Model Service Level Agreement under the Metering Code, and the obligations of Synergy and Western Power under the Code of Conduct for the Supply of Electricity to Small Use Customers and under the *Electricity Industry (Obligation to Connect) Regulations 2005*.⁴⁹⁴

1244. These two matters are addressed in turn below.

1245. Clause 10 of the applications and queuing policy comprises a process for electricity transfer applications to modify an existing covered service. Under the proposed applications and queuing policy, clause 10 includes provisions for applications to increase or decrease contracted capacity (clause 10.2) and limitations on the ability of a user to change a covered service more than once in any 12-month period (clause 10.3).

1246. In the Draft Decision, the Authority addressed claimed inconsistencies between clause 10 of the applications and queuing policy and provisions of the electricity transfer access contract that deal with increases or decreases in contracted capacity, including the following.

- Clause 10.2 of the applications and queuing policy specifies that an electricity transfer application must be completed to increase contracted capacity, but clause 3.4(b) of the electricity transfer access contract provides that a user may make application for an increase in contracted capacity under the applications and queuing policy, the Customer Transfer Code or the electricity transfer access contract.

⁴⁹² Western Power, Major Customer Forum: Proposed Changes to the Applications and Queuing Policy, 17 August 2009, Mecure Hotel Perth.

⁴⁹³ Sections 4.41A to 4.45 of the Electricity Networks Access Code 2004.

⁴⁹⁴ Synergy submission of 24 October 2008 and submission of 17 December 2008 on the Applications and Queuing Policy.

- Clause 10.2(c) of the applications and queuing policy indicates that for an increase or decrease of contracted capacity, Western Power must within five business days notify the applicant whether or not it accepts the change in contracted capacity, but clause 3.5(b) of the electricity transfer access contract provides that Western Power must notify the user within 10 business days whether or not it accepts the application for a decrease in contracted capacity. There is no corresponding clause in the electricity transfer access contract dealing with requirements for notification associated with an increase in contracted capacity.
- Clause 10.3 of the applications and queuing policy sets out limitations on multiple changes in contracted capacity in any 12-month period. These limitations are inconsistently reproduced in clause 3.5(c)(i) of the electricity transfer access contract.

1247. Under clause 2.6 of the Access Code, the applications and queuing policy of the access arrangement prevails over a contract for services. Given this, the Authority determined in the Draft Decision that inconsistencies between clause 10 of the applications and queuing policy and clause 3.5 of the electricity transfer access contract may cause confusion over the operation of both instruments. The Authority considered that the prospect for such confusion causes the applications and queuing policy and the electricity transfer access contract to be inconsistent with requirements of sections 5.7 and 5.3 of the Access Code.

1248. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 38

The proposed access arrangement revisions should be amended to resolve inconsistencies between clause 10 of the applications and queuing policy and clauses 3.4 and 3.5 of the electricity transfer access contract in relation to changes to covered services, including increases or decreases in contracted capacity at a connection point.

1249. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the required amendment and proposes to revise clauses 3.4 and 3.5 of the electricity transfer access contract to resolve inconsistencies with the applications and queuing policy.⁴⁹⁵ The proposed revisions to the electricity transfer access contract comprise:

- a revision to clause 3.4 (and deletion of the existing clause 3.5) to indicate that any application for an increase or decrease of contracted capacity at a connection point must be made, and be processed by Western Power, under the applications and queuing policy; and
- a new clause 3.5 added to provide for the addition of a connection point to an access contract under either the applications and queuing policy or Customer Transfer Code, as applicable.

⁴⁹⁵ Western Power submission of 13 August 2009.

1250. Draft Decision Amendment 38 and Western Power's proposed response to this required amendment are supported by Alinta Sales.⁴⁹⁶

1251. Taking into account the submissions from Western Power and Alinta Sales, the Authority maintains the requirement for Draft Decision Amendment 38 and accepts that Western Power's proposed revisions to the electricity transfer access contract adequately address this requirement.

Required Amendment 37

The proposed access arrangement revisions should be amended to resolve inconsistencies between clause 10 of the applications and queuing policy and clauses 3.4 and 3.5 of the electricity transfer access contract in relation to changes to covered services, including increases or decreases in contracted capacity at a connection point.

1252. Clause 11.2 of the applications and queuing policy establishes an application process for re-energisation of an existing de-energised connection point:

11.2 Re-energisation

- (a) An applicant who seeks to re-energise an existing de-energised connection point must submit an electricity transfer application on the application form that is applicable for the type of facilities and equipment connected or to be connected at the connection point.
- (b) If the applicant does not have an electricity transfer access contract, then the lodgement fee for a new access contract applies to the application, plus costs associated with the re-energisation under the Metering Code.
- (c) If the de-energised connection point is not on the applicant's electricity transfer access contract, then the lodgement fee for a new connection point applies to the application, plus costs associated with the re-energisation under the Metering Code.
- (d) If the de-energised connection point is on the applicant's electricity transfer access contract, then only the costs associated with the re-energisation under the Metering Code apply to the application.
- (e) Western Power must determine, as a reasonable and prudent person, within 5 business days whether it will accept the request for re-energising.
- (f) If Western Power determines that it cannot accept the request for re-energising under clause 11.2(e), then:
 - (i) Western Power must notify the applicant that it must submit, or procure that its controller submits, a connection application; and
 - (ii) the priority of such connection application shall be determined:
 - (A) if a complete connection application is received by Western Power within 20 business days of the notice sent to the applicant under clause 11.2(f)(i), from the date Western Power

⁴⁹⁶ Alinta Sales Pty Ltd submission of 10 September 2009.

received the electricity transfer application under clause 11.2(a); and

- (B) otherwise, from the date Western Power received the complete connection application.

1253. In the Draft Decision, the Authority addressed submissions that raised concerns about interactions between the applications and queuing policy and the Model Service Level Agreement.
1254. Synergy submitted that the application process of clause 11.2 is not currently adhered to in Synergy's dealings with Western Power. Instead, Synergy makes re-energisation requests to Western Power in accordance with requirements under the Model Service Level Agreement and Communications Rules under the Metering Code. Synergy submitted that the process for re-energisation of a connection point should remain under the Model Service Level Agreement and be removed from the applications and queuing policy.
1255. Synergy further submitted that it is impractical to make an application under clause 11.2 for all connection points that require re-energisation and that the process established under clause 11.2 would be inconsistent with Synergy meeting its requirements for timely reconnection of customers under the Code of Conduct for the Supply of Electricity to Small Use Customers.
1256. The Model Service Level Agreement (at clause 3.3) provides for requests for metering services. A request for metering services does not necessarily address re-energisation of a connection point. While requests for metering services under the Model Service Level Agreement may have incorporated requests for re-energisation of connection points, this would appear to be a practice adopted outside of provisions of either the Model Service Level Agreement or the applications and queuing policy. The Authority determined in the Draft Decision that the re-energisation of a connection point is not addressed under the Model Service Level Agreement and, as such, is appropriately addressed in clause 11.2 of the applications and queuing policy.
1257. On the matter of consistency of clause 11.2 with the Code of Conduct for the Supply of Electricity to Small Use Customers, Part 8 of this Code establishes requirements for reconnection of an electricity supply to a customer after disconnection for a range of specified reasons, including the failure of the customer to pay an electricity bill. Part 8 includes requirements for reconnection of the customer by the distributor within certain specified periods after a request by the retailer. The specified periods range between one business day and six business days, depending upon whether the customer is in the metropolitan area or a regional area and the day and time of the request by the retailer for reconnection.
1258. Western Power advised the Authority that reconnection of a customer connection point under Part 8 of the Code of Conduct for the Supply of Electricity to Small Use Customers constitutes a re-energisation of a connection point within the meaning of clause 11.2 of the applications and queuing policy. It follows that the timeframes for Western Power to accept a request for re-energisation of a connection point under clause 11.2 (at clause 11.2(e), which allows for up to five days for processing of an application for re-energisation of a connection point) are inconsistent with the obligations of Western Power under the Code of Conduct to reconnect a customer, as contended by Synergy.

1259. Under regulations 7 and 8 of the *Electricity Industry (Obligation to Connect) Regulations 2005*, Western Power is obliged to energise or re-energise a connection point within certain specified periods after a request by the retailer. The specified periods are consistent with the periods established under Part 8 of the *Code of Conduct for the Supply of Electricity to Small Use Customers*. The timeframes for Western Power to accept a request for re-energisation of a connection point under clause 11.2 are, therefore, also inconsistent with the obligations of Western Power under these regulations, as contended by Synergy.
1260. Taking the above into account, the Authority determined in the Draft Decision that there are inconsistencies and incompatibilities between clause 11.2 of the applications and queuing policy, the *Code of Conduct for the Supply of Electricity to Small Use Customers* and the *Electricity Industry (Obligation to Connect) Regulations 2005*. These incompatibilities and inconsistencies cause clause 11.2 of the applications and queuing policy to be inconsistent with the requirements of clause 5.7 of the Access Code.
1261. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 39

The proposed access arrangement revisions should be amended such that clause 11.2 of the applications and queuing policy is amended to indicate that nothing in clause 11.2 provides Western Power with a derogation of obligations to energise connection points within the timeframes specified under clause 8.2 of the *Code of Conduct for the Supply of Electricity to Small Use Customers* or regulations 7 and 8 of the *Electricity Industry (Obligation to Connect) Regulations 2005*.

1262. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts Draft Decision Amendment 39 and proposes to address the required amendment by amending clause 11.2(e) and adding a new clause 11.2(g) of the applications and queuing policy as follows.

11.2 Re-energisation

...

- (e) Subject to clause 11.2(g), Western Power must determine, as a reasonable and prudent person, within 5 business days whether it will accept the request for reenergising.

...

- (g) Nothing in clause 11.2 derogates from the obligations of Western Power to reenergise a connection point within the timeframes specified in clause 8.2 of the Code of Conduct for the Supply of Electricity to Small Use Customers 2004 or regulations 7 and 8 of the *Electricity Industry (Obligations to Connect) Regulations 2005*.

1263. Taking into account the submission from Western Power, the Authority maintains the requirement for Draft Decision Amendment 39. The Authority accepts that Western Power's proposed revisions to the applications queuing policy adequately address this requirement.

Required Amendment 38

The proposed access arrangement revisions should be amended such that clause 11.2 of the applications and queuing policy is amended to indicate that nothing in clause 11.2 provides Western Power with a derogation of obligations to energise connection points within the timeframes specified under clause 8.2 of the Code of Conduct for the Supply of Electricity to Small Use Customers or regulations 7 and 8 of the *Electricity Industry (Obligation to Connect) Regulations 2005*.

1264. In addition to the practical difficulties in operation of the applications and queuing policy, Synergy submitted that the Authority should give consideration to two matters that are not currently addressed in the policy:
- the circumstances of a "supplier of last resort" and a "default supplier"; and
 - the transfer of capacity between users associated with the transfer of a contestable customer between electricity retailers.
1265. On the matter of a supplier of last resort and a default supplier, Synergy submitted that the Authority should consider requiring that the access arrangement include a trigger mechanism to enable the access arrangement to be reviewed at such time as regulations for suppliers of last resort and default suppliers come into being, so that any such regulations are reflected in the applications and queuing policy.
1266. The Authority observes that clause 24.5 of the proposed applications and queuing policy (currently clause 25.4) provides for a connection application to be bypassed:
- to the extent necessary to allow a supplier of last resort (as defined in section 67 of the *Electricity Industry Act 2004*) to comply with its obligations under Part 5 of the Act; and
 - to the extent necessary to allow a default supplier (as defined in section 59 of the *Electricity Industry Act 2004*) to comply with its obligations under section 59 of the Act.
1267. The Authority is of the view that the provisions of clause 24.5 adequately address the potential requirements of a supplier of last resort and a default supplier at the current time and in the absence of specific regulations dealing with either.
1268. On the matter of transfer of capacity between users associated with the transfer of a contestable customer between electricity retailers, Synergy submitted that the applications and queuing policy does not comply with the requirements of section 5.7(f) of the Access Code. Section 5.7(f) requires the applications and queuing policy to contain provisions dealing with the transfer of capacity associated with a contestable consumer from the user (outgoing user) currently supplying the contestable consumer to another user (incoming user) or an applicant which, to the

extent that it is applicable, are consistent with and facilitate the operation of any customer transfer code. Synergy submitted that the applications and queuing policy should include a mechanism to comply with section 5.7(f) of the Access Code.⁴⁹⁷

1269. Synergy also submitted that a mechanism under the applications and queuing policy to comply with section 5.7(f) of the Access Code should provide for the incoming user to have access to the contracted maximum demand of the outgoing user for the connection points relevant to the transfer of capacity. According to Synergy, this would enable the incoming user to make an informed determination of whether it can nominate a customer's requested change for contracted capacity without incurring costs under the contributions policy of the access arrangement.

1270. The Authority considers that the particular concerns of Synergy, in respect of customer transfers, are adequately dealt with by provisions of the Customer Transfer Code and clause 9.1 of the applications and queuing policy. In coming to this view, the Authority has taken into account the following matters.

- The transfer of capacity between users that is associated with a transfer of a contestable customer is dealt with under part 4 of the Customer Transfer Code. Part 3 of the Customer Transfer Code establishes processes for an incoming user to seek information on standing data and historical consumption data for connection points relevant to a customer transfer.
- Clause 9.1 of the applications and queuing policy deals with customer transfers under the Customer Transfer Code and indicates that, where no new exit point is to be created or no new generation plant is to be connected, the applications and queuing policy does not apply to a customer transfer request under the Customer Transfer Code.

Proposed Revisions to the Applications and Queuing Policy

1271. Western Power has proposed several revisions to the applications and queuing policy, some of which serve to clarify existing provisions and others of which are substantive changes to the policy. The Authority's considerations on substantive revisions are as follows.

Requirement for an Application to be Complete

1272. Clause 3.2 of the applications and queuing policy deals with the commencement of the application process upon submission of an application to Western Power. Under the current applications and queuing policy, the applicant is required to use reasonable endeavours to provide all information required in the application form. Western Power has proposed revisions to clause 3.2 to require the application to Western Power to be "complete", where complete is defined as follows.

"complete", in relation to an application or notice, means where the applicant or controller (as applicable) has:

- (a) used reasonable endeavours to accurately and completely address each item in the applicable application form (including by the provision of any supporting information required by the application form); and

⁴⁹⁷ Synergy submission of 17 December 2008 on the Applications and Queuing Policy.

- (b) with respect to an electricity transfer application, provided all of the information required under clauses 3.5 and 3.6 for the application; and
- (c) with respect to a connection application, provided all of the information required under clauses 3.5 and 3.7 for the application,

to Western Power's satisfaction, acting as a reasonable and prudent person.

1273. Western Power states that the purpose of this revision to the applications and queuing policy is to prevent incomplete and ill-considered applications gaining priority in the queue, sometimes for strategic purposes. Western Power indicates that where applications have been accepted on the basis that an applicant wishes to connect, but does not have complete details of connection date, plant, equipment and the like, this has caused prolonged study times and adversely affected other applicants that have entered the queue with later priority.⁴⁹⁸

1274. The requirements for an application to be "complete" are opposed by some users of the network for reasons that:

- the requirement for an application to be complete does not address the problems of large numbers of applications and the delays in processing of applicants and granting of access;⁴⁹⁹ and
- the completeness of an application is subject to determination by Western Power and the criteria and processes of determination of whether an application is complete have not been specified and the requirement therefore introduces uncertainty into the applications process.⁵⁰⁰

1275. The Authority has reviewed the requirements of the proposed clause 3.2 of the applications and queuing policy and the associated definition of "complete" and observes that the proposed clause 3.2 maintains the requirement for the applicant to use "best endeavours" to provide the required information. The Authority also observes that the information required under clauses 3.5 to 3.7 of the applications and queuing policy is limited to forecast information for use of the connection point that may reasonably be expected to be necessary for Western Power to process the application. As such, the Authority considers that the proposed clause 3.2 is consistent with the orderly function of the applications process and the queue, and ensures that any applications made to Western Power are able to be processed in accordance with the applications and queuing policy.

1276. The Authority accepts that there are deficiencies in the operation of the queue in combination with other structural factors of the wholesale electricity market that cause delays in network investment (as addressed above at paragraph 1235 and following). However, the Authority considers that the proposed clause 3.2 and requirements for information in an application should assist in reducing these deficiencies by limiting the prospect of applications being made for services where there has not been sufficient information provided on service requirements for Western Power to be able to assess the application.

⁴⁹⁸ Revised access arrangement information, Appendix 10: p. 6.

⁴⁹⁹ Griffin Energy Development Pty Ltd submission of 17 December 2008.

⁵⁰⁰ Alinta Sales Pty Ltd submission of 17 December 2008; Synergy submission of 17 December 2008 on the Applications and Queuing Policy.

1277. Taking these matters into account, the Authority considers the proposed clause 3.2 to be consistent with the requirements of section 5.7 of the Access Code.

Requirements for Security

1278. Clause 4.9 of the applications and queuing policy deals with requirements for the applicant to provide security to Western Power in respect of liabilities under an access contract. Under the current applications and queuing policy, Western Power is not entitled to require security where the applicant has a credit rating at or above a specified threshold. Western Power has proposed revisions to clause 4.9 to:

- introduce a new clause 4.9(c) to provide Western Power with a discretion to require security in respect of a contribution, regardless of the credit rating of the applicant; and
- revise the now clause 4.9(d) to provide that Western Power may undertake a security assessment prior to making an access offer, rather than providing that Western Power must perform a security assessment within 30 days of receiving an application.

1279. Western Power indicates that the purpose of the proposed clause 4.9(c) of the applications and queuing policy is to align the security requirements under the applications and queuing policy with those of clause 10 of the electricity transfer access contract.

1280. In a submission on the proposed access arrangement revisions, Alinta Sales opposed the proposed clause 4.9(c) on the basis that this clause would be inconsistent with the intent of the limits under clause 4.9(b) on the ability of Western Power to require security where the user has a credit rating at or above specified threshold levels.⁵⁰¹

1281. Synergy also addressed the requirements for security and submitted that the Authority should ensure that the requirements for security under clause 4.9(c) of the applications and queuing policy are consistent with requirements for security under the electricity transfer access contract, and the Authority should require amendment of the applications and queuing policy to ensure that clause 4.9(c) cannot be applied to require additional security under an existing access contract.⁵⁰²

1282. The Authority has considered the security requirements under clause 10 of the electricity transfer access contract and determined that these requirements are reasonable, subject to amendment of the relevant provisions to ensure that the user cannot be required to provide security in respect of a contribution owed to Western Power by a customer that is not the user (see paragraph 274 and following of this Final Decision).

1283. The Authority observes that the proposed clause 4.9(c) of the applications and queuing policy relates to security in respect of contributions payable by the applicant and not to other liabilities under an access contract, which remain subject to the limits on the ability of Western Power to require security based on the credit

⁵⁰¹ Alinta Sales Pty Ltd submission of 17 December 2008.

⁵⁰² Synergy submission of 17 December 2008 on the Applications and Queuing Policy.

rating of the user (under clause 9 of the electricity transfer access contract and clause 4.9(b) of the applications and queuing policy). Accordingly, the Authority is satisfied that the requirements for security under the applications and queuing policy are consistent with the requirements under the electricity transfer access contract.

1284. Taking the above matters into account, the Authority is satisfied that the proposed clause 4.9(c) is consistent with the requirements of section 5.7 of the Access Code.
1285. Clause 4.9(d) of the proposed applications and queuing policy incorporates a change to the required timing of any security assessment by Western Power. Under the proposed clause, Western Power may perform a security assessment prior to making an access offer, rather than being required to perform a security assessment within 30 days of receiving an application.
1286. None of the submissions made to the Authority on the proposed access arrangement revisions addressed the proposed clause 4.9(d).
1287. The Authority considers that a security assessment undertaken by Western Power would reasonably take into account the terms of an access offer and, as such, it would be reasonable for the timing of the security assessment to coincide with the timing of an access offer rather than the timing of the application. Given this, and taking into account the absence of submissions on the proposed change to the timing of the security assessment, the Authority considers that the proposed change to clause 4.9(d) is consistent with the requirements of section 5.7 of the Access Code.

Changes to a Covered Service

1288. Clause 10 of the applications and queuing policy comprises provisions for a change in the covered service applying to a connection point and change in capacity at a connection point. Western Power has proposed changes to clause 10, as follows.
 - Clause 10 of the current applications and queuing policy applies to a change in the covered service at a connection point or an increase in contracted capacity at a connection point. Western Power proposes revisions to clause 10 so that the clause applies also to decreases in contracted capacity at a connection point.
 - Under clause 10.1(d) of the current applications and queuing policy, a connection application submitted for a required increase in contracted capacity is afforded priority in the queue according to the date at which Western Power received the electricity transfer application that gave rise to the need for a connection application. Western Power proposes revisions to clause 10.1(d) to indicate that the priority of the connection application is determined:
 - if the connection application is received within 20 business days of notice that the connection application is required, according to the date of submission of the electricity transfer application; or
 - otherwise, at the date at which the complete connection application is received.
 - Under the current applications and queuing policy, clause 10.1(f) provides for Western Power to refuse multiple applications in any 12-month period for a change in the covered service where the change is sought by reason of a

seasonal nature of the business or operation at the connection point. Western Power proposes revisions to clause 10 that move the provisions of clause 10.1(f) to a new clause 10.3 and apply these provisions not only to a change in a covered service at a connection point but also to an increase or decrease in capacity at a connection point.

- Under the current applications and queuing policy, clause 10.2(c) provides for Western Power to notify an applicant for an increase in capacity of the acceptance or rejection of the application within five business days of receipt of the application. Western Power has proposed revisions to clause 10.2(c) so that this clause applies also to an application for a decrease in capacity and to indicate that the period of five business days is subject to extension for “such further time as a prudent service provider would reasonably require to consider [the] application”.

1289. Western Power indicates that the proposed revisions to clause 10 of the applications and queuing policy that extend the clause to apply to decreases in contracted capacity are for reason that the same procedures should apply for decreases in capacity and the indication of this in the applications and queuing policy allows applicants to understand in advance how these types of applications will proceed.⁵⁰³

1290. No submissions made to the Authority addressed the proposed changes to clause 10 of the applications and queuing policy.

1291. The Authority has reviewed the proposed revisions to clause 10 and considers that, by setting out the process for applications for a decrease in contracted capacity, the proposed revisions are consistent with section 5.7 of the Access Code. The Authority considers that the other proposed revisions to clause 10 are procedural in nature and that these revisions do not materially alter or affect the interests of the service provider, users or applicants. Notwithstanding this, the Authority notes the requirement in this Final Decision for amendment of the proposed access arrangement revisions to ensure consistency of clause 10 of the applications and queuing policy and the electricity transfer access contract (paragraphs 1244 to 1247 of this Final Decision).

Priority of Connection Applications

1292. Three clauses of the applications and queuing policy (clauses 10.1(f), 11.2(f) and 14.3(f)) comprise provisions dealing with determination of the priority assigned to a connection application in circumstances where Western Power provides notice to the applicant that a connection application is required in respect of a notice or application from the applicant for:

- an increase in capacity of a connection point;
- a re-energisation of a connection point; or
- the combining or separating of connection points.

1293. Under the current applications and queuing policy, the priority of the connection application is determined from the date of the original application or notice from the

⁵⁰³ Revised access arrangement information, Appendix 10: pp. 6, 7.

applicant. Under the proposed applications and queuing policy, the priority of the connection application is determined as the date of the original application, if the connection application is received within 20 business days of the notice from Western Power, or otherwise as the date on which the connection application is received.

1294. No parties that made submissions to the Authority have addressed these proposed changes.
1295. The Authority considers that the proposed changes to provisions for determining the priority for connection applications are consistent with section 5.7 of the Access Code and, in particular, accommodate the interests of the service provider and of users and applicants as the proposed changes place an onus on an applicant to respond within a reasonable time to a requirement for a connection application if the priority of the application is to be maintained.

Assessment of Contestability of a Connection Point

1296. Clause 13 of the applications and queuing policy relates to the status of an exit point as a “contestable” or “non-contestable” exit point in terms of contestability in the retail sale of electricity. Clause 13 provides for Western Power to determine whether or not an exit point is contestable.
1297. Western Power has proposed a new clause 13.3 of the applications and queuing policy to indicate that “[w]here Western Power is not authorised under the [Electricity Industry] Act or other written law to make an access offer for an application relating to an exit point that is not contestable, Western Power must reject the application”. A note is included under the proposed clause 13.3 to indicate that, under section 54 of the *Electricity Corporations Act 2005*, Western Power is prohibited from making an access offer to an applicant to provide covered services to that applicant at or for an exit point that is not contestable, except where the applicant is the ‘Electricity Retail Corporation’ (as defined in section 3 of the *Electricity Corporations Act 2005*) or a subsidiary of the Electricity Retail Corporation.
1298. Western Power indicates that the proposed clause 13.3 is declaratory in nature and is included in the applications and queuing policy to assist applicants to understand how the applications and queuing policy will operate.
1299. Synergy submitted that clause 13 in its entirety should be deleted from the applications and queuing policy for reason that the Access Code does not contemplate Western Power assessing the contestability of a connection point or Western Power determining criteria by which the contestability of a connection point is determined.
1300. As indicated by Western Power, section 54 of the *Electricity Corporations Act 2005*, prohibits Western Power from making an access offer to an applicant to provide covered services to that applicant at or for an exit point that is not contestable, except where the applicant is the ‘Electricity Retail Corporation’ (as defined in section 3 of the *Electricity Corporations Act 2005*) or a subsidiary of the Electricity Retail Corporation. Contestability is determined by the Minister for Energy according to criteria of the demand for energy at a connection point.
1301. In order to ensure compliance with section 54 of the *Electricity Corporations Act 2005*, Western Power must make an assessment of the contestability of connection

points before making an access offer. As demand for energy at a connection point may vary from time to time around thresholds of contestability, it is reasonable that practical rules for determination of contestability are applied.

1302. Taking these matters into account, the Authority considers that the indication at clause 13.2 of the applications and queuing policy of the manner in which Western Power will assess the contestability of a connection point will assist users and applicants to understand in advance how the applications and queuing policy will operate. The Authority is therefore satisfied that clause 13 of the applications and queuing policy, including the proposed clause 13.3, is consistent with the requirements of section 5.7 of the Access Code.

Responses to a Connection Application

1303. Clause 19 of the applications and queuing policy provides for Western Power to report to an applicant during the processing by Western Power of a connection application. Under clause 19.1 of the current access arrangement, Western Power is required to provide an applicant with an “initial response” within 20 business days of the application. The initial response is required to include a “preliminary assessment” of the application, an indication of the time by which Western Power expects to make an access offer, and whether the application has caused Western Power to give notice to any person that another application will be “bypassed” in the queue. Western Power proposes revisions to clause 19.1 to relax the content requirements for the initial response, including:

- requiring only that the initial response indicate a time by which Western Power will provide a preliminary assessment and indicating that a preliminary assessment will only be provided “if requested”; and
- providing for the initial response to only indicate the time by which Western Power expects that it will be in a position to give notice to any person that the application will result in another application being bypassed in the queue.

1304. None of the submissions made to the Authority addressed the proposed changes to clause 19.1 of the applications and queuing policy.

1305. Taking into account the absence of submissions, the Authority considers that the proposed changes to clause 19.1 are procedural in nature and do not materially affect the rights of applicants or other parties and accordingly, are consistent with the requirements of section 5.7 of the Access Code.

Queuing Rules

1306. Clause 24 of the applications and queuing policy establishes queuing rules for connection applications. Western Power has proposed changes to the queuing rules as follows.

- A new clause 24.3 is proposed indicating that a “transition application” is not subject to the queue, where a transition application is defined as an application for modifications to an access contract or any other contract for services that would not materially impede Western Power’s ability to provide a covered service sought in one or more other applications.
- A change to clause 24.6 (currently clause 24.5) is proposed that allows an application of another applicant to be bypassed where that other applicant has not obtained environmental or other approvals that it requires in order to

proceed, whereas under the current access arrangement this provision for bypass only has effect where the other applicant has requested the application to be suspended.

- A change to clause 24.17(a) (currently clause 24.16(a)) is proposed that requires Western Power to provide information on the queuing status of a competing connection application as part of a preliminary assessment, whereas under the current access arrangement this clause requires provision of this information in the initial response to the application.

1307. Western Power indicates that the intent of the proposed clause 24.3 (that provides for an application to be treated as a “transition application”) is to allow customers on existing connection contracts to migrate to an electricity transfer access contract without having to be subject to the queue, if the migration meets the requirements to be considered as a transition application. The proposed clause is intended to apply particularly to customers on network access contracts under the previous access regime established by the *Electricity Transmission Regulations 1996*. Western Power further indicates that the new clause 24.3 is intended to allow for the processing of applications that meet the criteria of transition applications without utilising the bypass provisions of the queue with the associated notice and negotiation requirements.⁵⁰⁴
1308. Pacific Hydro raised concerns with the proposed clause 24.3, indicating that there should be mechanisms to make the processing of transition applications transparent to ensure that the transition application is not promoted for the benefit of Western Power’s network augmentation at the expense of current and future applicants.⁵⁰⁵
1309. The Authority considers that the intent of the treatment of transition applications under the proposed clause 24.3 is to allow a change in terms and conditions for an access contract without the application for the change in access contract being subject to the queue, with this clause applying where the modifications to the access contract would not materially impede Western Power’s ability to provide a covered service sought in one or more other applications.
1310. The Authority considers that the proposed clause 24.3 is expressly permitted by clause 5.9A of the Access Code, which specifically allows for such an application in the nature of Western Power’s transition application to not be a “competing application” and therefore to be not subject to the queue. Accordingly, the Authority considers that the proposed clause 24.3 is consistent with the requirements of the Access Code.
1311. Pacific Hydro opposes the proposed change to clause 24.6(a) (currently clause 24.5(a)) that allows an application of another applicant to be bypassed where that other applicant has not obtained environmental or other approvals that it requires in order to proceed, whereas under the current access arrangement this provision for bypass only has effect where the other applicant has requested the application to be suspended. Pacific Hydro indicates that this provision is inconsistent with the first-come first-served principle as environment and planning approvals are often

⁵⁰⁴ Revised access arrangement information, Appendix 10: p. 9.

⁵⁰⁵ Pacific Hydro submission of 2 December 2008.

beyond the direct control of the applicant and the applicant may have used reasonable endeavours to progress the approvals.⁵⁰⁶

1312. The Authority observes that clause 24.6(a) of the proposed applications and queuing policy provides that a connection application in a queue may be bypassed where that applicant is unable to proceed to a signed access contract or otherwise progress through the applications process. The circumstance of the applicant not having obtained environmental or other approvals is indicated as an example of where clause 24.6(a) may apply. Both this overarching provision and the example are consistent with clause A2.52 of the model applications and queuing policy under the Access Code. As such, the Authority is required to determine that clause 24.6(a) is consistent with the requirements of the Access Code.
1313. None of the submissions made to the Authority addressed the proposed change to clause 24.17(a) of the applications and queuing policy. The proposed clause 24.17(a) requires Western Power to provide information on the queuing status of a competing connection application as part of a preliminary assessment, whereas under the current access arrangement this clause requires provision of this information in the initial response to the application.
1314. The proposed change to clause 24.17(a) is contrary to the model applications and queuing policy, which (at clause A.2.69) requires the service provider to provide an applicant with information on the queuing status of an application upon initial lodgement of the application. Under the proposed change to clause 24.17(a) of the applications and queuing policy, Western Power would not be required to provide this information until the preliminary assessment, which may not be until some substantial time after the application is lodged. Western Power has not provided explanation or reasons for the proposed change.
1315. In the Draft Decision, the Authority determined that such a delay in providing information to the applicant on the queuing status of an application does not adequately accommodate the interests of the applicant, for whom the information may be of substantial commercial significance, and is therefore inconsistent with section 5.7 of the Access Code.
1316. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 40

The proposed access arrangement revisions should be amended such that the proposed change to clause 24.17(a) of the applications and queuing policy is deleted and the obligation is maintained for Western Power to provide queue information in the initial response to an application.

1317. In a submission subsequent to the Draft Decision, Western Power indicates that the proposed change to clause 24.17(a) should be considered in the context of clause 19.1 of the applications and queuing policy, for which the Authority's Draft Decision approved changes that involved a removal of the requirement for Western Power to undertake a preliminary assessment of an application within 20 business days of receipt of the application and to provide the results of the preliminary assessment in the initial response. Western Power contends that the proposed

⁵⁰⁶ Pacific Hydro submission of 2 December 2008.

changes to clause 24.17(a) are consistent with the relaxed requirements to undertake a preliminary assessment, envisaging that information on the queuing status of an application would be provided at the time a preliminary assessment has been undertaken. Western Power further contends that the delay in undertaking a preliminary assessment allows for an adequate time frame for the assessment of whether there are competing applications.⁵⁰⁷

1318. Notwithstanding these contentions, Western Power proposes to address the requirements for Draft Decision Amendment 40 by revising clause 24.17(a) to maintain the requirement to provide queuing information as part of the initial response “to the extent Western Power is reasonably able to do so, but in any case as part of the preliminary assessment under clause 19.3 with respect to an application”.
1319. The Authority accepts that Western Power’s proposed response to Draft Decision Amendment 40 adequately addresses the Authority’s reasons for this required amendment when considered in the context of the relaxed requirements for Western Power to undertake a preliminary assessment under clause 19 of the applications and queuing policy. The Authority has revised its required amendment of clause 24.17(a) accordingly.

Required Amendment 39

The proposed access arrangement revisions should be amended such that clause 24.17(a) of the applications and queuing policy includes an obligation for Western Power to provide queue information in the initial response to an application to the extent that Western Power is reasonably able to do so, but in any case as part of a preliminary assessment under clause 19.3.

CONTRIBUTIONS POLICY

Access Code Requirements

1320. The contributions policy sets out the principles and processes for determining when a contribution will be required from a user, including for a network augmentation, and for determining the amount of the contribution. A “contribution” is defined in section 1.3 of the Access Code as a capital contribution, a non-capital contribution or a headworks charge.
1321. Section 5.1(h) of the Access Code requires that an access arrangement include a “contributions policy”, defined in section 1.3 of the Access Code as a policy in an access arrangement under section 5.1(h) dealing with contributions by users.
1322. The particular requirements for a contributions policy are set out in sections 5.12 to 5.17D of the Access Code:

⁵⁰⁷ Western Power submission of 13 August 2008, Attachment E.

- 5.12 The objectives for a contributions policy must be that:
- (a) it strikes a balance between the interests of:
 - (i) contributing users; and
 - (ii) other users; and
 - (iii) consumers; and
 - (b) it does not constitute an inappropriate barrier to entry.
- 5.13 A contributions policy must facilitate the operation of this Code, including:
- (a) sections 2.10 to 2.12; and
 - (b) the test in section 6.51A; and
 - (ba) sections 5.14 and 5.17D; and
 - (c) the regulatory test.
- 5.14 Subject to section 5.17A and a headworks scheme, a contributions policy:
- (a) must not require a user to make a contribution in respect of any part of new facilities investment which meets the new facilities investment test; and
 - (b) must not require a user to make a contribution in respect of any part of non-capital costs which would not be incurred by a service provider efficiently minimising costs; and
 - (c) may only require a user to make a contribution in respect of required work; and
 - (d) without limiting sections 5.14(a) and 5.14(b), must contain a mechanism designed to ensure that there is no double recovery of new facilities investment or non-capital costs.
- 5.15 A contributions policy must set out:
- (a) the circumstances in which a contributing user may be required to make a contribution; and
 - (b) the method for calculating any contribution a contributing user may be required to make; and
 - (c) for any contribution:
 - (i) the terms on which a contributing user must make the contribution; or
 - (ii) a description of how the terms on which a contributing user must make the contribution are to be determined.
- 5.16 A contributions policy may:
- (a) be based in whole or in part upon the model contributions policy, in which case, to the extent that it is based on the model contributions policy, any matter which in the model contributions policy is left to be completed in the access arrangement, must be completed in a manner consistent with:
 - (i) any instructions in relation to the matter contained in the model contributions policy; and
 - (ii) sections 5.12 to 5.15; and
 - (iii) the Code objective;
 and
 - (b) be formulated without any reference to the model contributions policy and is not required to reproduce, in whole or in part, the model contributions policy.
- 5.17 The Authority:

- (a) must determine that a contributions policy is consistent with sections 5.12 to 5.15 and the Code objective to the extent that it reproduces without material omission or variation the model contributions policy; and
 - (b) otherwise must have regard to the model contributions policy in determining whether the contributions policy is consistent with sections 5.12 to 5.15 and the Code objective.
- 5.17A Despite section 5.14, Electricity Networks Corporation may require a contribution for Appendix 8 work of up to the maximum amount determined under Appendix 8 for the relevant type of Appendix 8 work.
- 5.17B From 1 July 2007 until the first revisions commencement date for the Western Power Network access arrangement, section 5.17A prevails over any inconsistent provisions of the Western Power Network access arrangement.
- 5.17C Despite section 5.14, the Authority may approve a contributions policy that includes a “headworks scheme” which requires a user to make a payment to the service provider in respect of the user’s capacity at a connection point on a distribution system because the user is a member of a class, whether or not there is any required work in respect of the user.
- 5.17D A headworks scheme must:
- (a) identify the class of works in respect of which the scheme applies, which must not include any works on a transmission system or any works which effect a geographic extension of a network; and
 - (b) not seek to recover headworks charges in an access arrangement period which in aggregate exceed 1% of the distribution system target revenue for the access arrangement period; and
 - (c) identify the class of users who must make a payment under the scheme; and
 - (d) set out the method for calculating the headworks charge, which method:
 - (i) must have the objective that headworks charges under the headworks scheme will, in the long term, and when applied across all users in the class referred to in section 5.17D(c), recover no more than the service provider’s costs (such as would be incurred by a service provider efficiently minimising costs) of any headworks; and
 - (ii) must have the objective that the headworks charge payable by one user will differ from that payable by another user as a result of material differences in the users’ capacities and the locations of their connection points, unless the Authority considers that a different approach would better achieve the Code objective; and
 - (iii) may use estimates and forecasts (including long term estimates and forecasts) of loads and costs; and
 - (iv) must contain a mechanism designed to ensure that there is no double recovery of costs in all the circumstances, including the manner of calculation of other contributions and tariffs; and
 - (v) may exclude a rebate mechanism (of the type contemplated by clauses A4.13(d) or A4.14(c)(ii) of Appendix 4) and may exclude a mechanism for retrospective adjustments to account for the difference between forecast and actual values.

Current Access Arrangement

1323. A capital contributions policy is contained in Appendix 3 of the current access arrangement.

Proposed Revisions

1324. Western Power has proposed several changes to the capital contributions policy.

1325. The capital contributions policy has been re-titled as the “contributions policy” that allows for contributions to be required from users in respect of amounts of costs of either a “capital” or “non-capital” nature. This is consistent with amendments made to the Access Code on 22 October 2008.⁵⁰⁸

1326. Where contributions are required in respect of costs of a capital nature, the proposed contributions policy retains provisions of the current capital contributions policy that enable Western Power to require a contribution where:

- the costs do not satisfy the new facilities investment test under section 6.52 of the Access Code (clause 2(c)(i) of the proposed contributions policy); or
- the costs relate to certain types of works listed in Appendix 8 of the Access Code that include works for subdivisions; pole-to-pillar connections; development of existing buildings; “supply extensions schemes”; augmentations in excess of standard requirements; temporary connections; streetlights; unmetered connections; asset relocations; and “undergrounding” of assets (clause 2(b)).

1327. Western Power has proposed revisions in the contributions policy to also allow contributions to be required in respect of costs of works in circumstances where the works form part of a “distribution headworks scheme” (clause 2(c)(iv) and clause 6). Such contributions are intended to comprise “headworks charges” in accordance with Western Power’s “Distribution Headworks Scheme” for upgrading network infrastructure in locations at the edge of the SWIN.⁵⁰⁹

1328. For contributions required in respect of costs of a non-capital nature, the proposed contributions policy includes new provisions that enable Western Power to require a contribution where:

- the costs are incurred for works undertaken in providing an “alternative option” to investment in augmentation of the network (clause 2(c)(ii) of the proposed contributions policy); and
- the costs are incurred for “non-capital works” required in response to a connection application, where the non-capital costs associated with such works are costs that would not be incurred by a service provider efficiently minimising costs (clause 2(c)(iii)).

1329. Where a contribution is made in respect of works that enable several new users to obtain network services over a period of time, the current capital contributions policy allows for contributions to be apportioned over multiple new users within a period of 10 years. Western Power proposes changes in the contributions policy to enable a longer period to be taken into account in apportioning contributions (clause 2.4(c)).

⁵⁰⁸ Western Australian Government Gazette, 22 October 2008, No. 160, pp. 4631 – 4665.

⁵⁰⁹ Further information on this scheme is available on Western Power’s web site: http://www.westernpower.com.au/mainContent/projects/EdgeGrid/Edge_of_grid.html

1330. On the matter of the terms under which contributions are made, Western Power has proposed two substantive changes to provisions of the contributions policy:

- an extended ability of Western Power to require security from an applicant in respect of the amount of revenue from charges for services to be provided to the applicant that were forecast in planning an augmentation and that were taken into account in calculating the amount of a contribution (clause 1.3); and
- provision for contributions to be adjusted to reflect actual costs of works where the value of contributions is in excess of \$1 million.

Considerations of the Authority

1331. In considering the proposed contributions policy, the Authority has given attention to the revisions proposed by Western Power as well as to whether, in view of practical experience, the provisions of the capital contributions policy under the current access arrangement are consistent with the requirements of the Access Code. In doing so, the Authority has had regard to submissions made on the proposed access arrangement revisions. The considerations of the Authority are set out below under headings of current provisions of the capital contributions policy and proposed revisions to be incorporated into the contributions policy.

Current Provisions of the Capital Contributions Policy

1332. Several parties that made submissions to the Authority on the proposed access arrangement revisions indicate that there are practical difficulties with broad principles and particular provisions of the current capital contributions policy that are proposed to be maintained in the contributions policy for the second access arrangement period. The particular matters of concern are:

- the charging of contributions in respect of costs of “deep” augmentations of the network, which may create barriers to entry for new generators and loads, result in inefficient market entry in generation and reduce competition in electricity markets;
- an absence of transparency in Western Power’s determination of contributions which limits the ability of network users to scrutinise the determination of contributions and ensure that contributions have been determined in accordance with the contributions policy and Access Code;
- an absence of guidance and transparency in the apportionment of contributions amongst multiple users, including expected future users; and
- an absence of an explicit obligation for Western Power to undertake works financed by contributions.

1333. These matters are interrelated and are addressed by the Authority as follows.

1334. The primary determinant of the amount of a contribution that can be required in respect of new facilities investment to augment a network is the amount of the new facilities investment that does not satisfy the new facilities investment test under section 6.52 of the Access Code. Under section 5.14 of the Access Code, a contributions policy must not require a user to make a contribution in respect of any new facilities investment that meets the new facilities investment test, with the

exception of contributions required under a “headworks scheme” or new facilities investment for works of certain types specified in Appendix 8 of the Access Code.

1335. Where the provision of a service to a user will require works for “deep” augmentation of a network, the amount of a contribution to be required in respect of the new facilities investment for these works will depend upon how much of the new facilities investment is determined as meeting the new facilities investment test.
1336. The current capital contributions policy and the proposed contributions policy are consistent with this requirement by indicating, at clause 2(c)(i), that a contribution in respect of new facilities investment may only be required in respect of an amount that does not meet the new facilities investment test.
1337. In determining the amount of a contribution to be required in respect of new facilities investment, other than for exceptions provided for under Appendix 8 of the Access Code and under a headworks scheme, Western Power must necessarily determine the amount of the new facilities investment that meets the new facilities investment test. The new facilities investment test is the mechanism that prevents double recovery of the costs of the new facilities investment as Western Power may only require contributions in respect of new facilities investment that does not satisfy the test.
1338. Applying the new facilities investment test for the purposes of determining the amount of a contribution involves addressing the individual components of the test:
- ensuring that the forecast amount of the new facilities investment does not exceed the amount that would be invested by a service provider efficiently minimising costs;
 - determining the amount of anticipated incremental revenue that would be gained or enabled by the works, which would include incremental revenue from both the user potentially liable for the contribution and from other users of the network;
 - determining whether all or part of the new facilities investment falls under a “modified test” under sections 6.52(b)(i)B and 6.53 of the Access Code;⁵¹⁰
 - determining the nature and value of any net benefits arising from the new facilities investment, which might be diverse in nature and include such benefits as, for example, increased reliability of network services and improved outcomes in electricity markets; and
 - determining the extent to which any part of the new facilities investment is necessary to maintain the safety and reliability of the network or its ability to provide contracted covered services.
1339. While not indicated to this level of detail in the proposed contributions policy, the Authority is satisfied that these requirements are implicit in the provisions of clause 5.2 of the proposed contributions policy that sets out the calculation of a contribution and that indicates that a contribution in respect of new facilities investment excludes any amount that meets the new facilities investment test.

⁵¹⁰ Neither the current access arrangement nor the proposed access arrangement includes a modified test and, hence, this element of the new facilities investment test is not relevant to calculation of the amount of a contribution.

1340. Whether or not contributions should be charged in respect of new facilities investment for deep augmentations of the network is a matter to be determined according to a determination of the amount of new facilities investment that satisfies the new facilities investment test. Western Power necessarily undertakes this determination in the first instance, although any determination is ultimately subject to approval by the Authority.⁵¹¹ As part of an approval, the Authority will assess whether Western Power has appropriately applied the new facilities investment test, including whether Western Power has appropriately taken into account any net benefits of deep augmentations of the network to those who generate, transport and consume electricity in the network.
1341. In applying the new facilities investment test and determining the amount of a contribution, Western Power is likely to take into account its expectations of the Authority's ultimate assessment and approval. However, it is not a role of the Authority to decide whether Western Power has determined an amount of a contribution in accordance with the contributions policy. A dispute over the amount of a contribution is a matter to be resolved by negotiation between Western Power and the user, or by the dispute resolution mechanisms of Chapter 10 of the Access Code.
1342. Pacific Hydro, Alinta Sales and Synergy have all indicated concern over an absence of transparency in Western Power's determination of contributions. Synergy further submits that the current capital contributions policy and proposed contributions policy provide insufficient guidance and transparency as to how any contribution is apportioned.⁵¹²
1343. Discipline on Western Power to determine contributions in accordance with the contributions policy is afforded primarily by a user negotiating an amount of a contribution with potential resort to dispute resolution. Given this, the Authority considers that availability to a user of the details of Western Power's calculation of a contribution payable by the user is necessary to ensure that the contributions policy is applied correctly and thereby facilitates operation of the Access Code. Accordingly, the Authority considers that an obligation on Western Power to provide this information is necessary for the policy to meet the requirements of section 5.13 of the Access Code.
1344. The Authority considers that the requirement for transparency in the application of the contributions policy should extend to all elements of the determination of the amount of a contribution payable by a user, including determination of contributions with respect to non-capital costs, determination of contributions under a headworks scheme and apportioning contributions amongst multiple users.
1345. The Authority required the following amendment to the proposed access arrangement revisions under the Draft Decision.

⁵¹¹ The Authority must ultimately approve an amount of new facilities investment for any given capital project or program that satisfies the new facilities investment test, for the purposes of determining an amount that may be added to the capital base of the network under section 6.51A of the Access Code. The Authority may not, however, make this approval until some time after the investment has occurred and the amount of a contribution has been agreed.

⁵¹² Pacific Hydro submission of 2 December 2008; Alinta Sales Pty Ltd submission of 17 December 2008; Synergy submission of 17 December 2008 on Contributions Policy and ENAC Amendments.

Draft Decision Amendment 41

The proposed access arrangement revisions should be amended such that the contributions policy includes an obligation on Western Power to provide an applicant or user with details of the calculation of any contribution to be required from the applicant or user including:

- where the contribution is in respect of new facilities investment, details of assessment of the new facilities investment against the requirements of the new facilities investment test and details of the calculation of the amount that does not meet the new facilities investment test;
- where the contribution is made in respect of non-capital costs related to alternative options, details of assessment of the non-capital costs against the alternative options test and details of the calculation of the amount that does not satisfy the alternative options test;
- details of assumptions and calculations applied in the apportionment of any forecast cost of works between the user or applicant and other users or applicants or Western Power under clause 5.4 of the contributions policy; and
- details of the calculation of a headworks contribution under clause 6 of the contributions policy.

1346. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the required amendment and proposes the addition of a new clause to the contributions policy with materially the same wording as Draft Decision Amendment 41.⁵¹³ Accordingly, the Authority maintains the requirement for this amendment.

⁵¹³ Western Power submission of 13 August 2009.

Required Amendment 40

The proposed access arrangement revisions should be amended such that the contributions policy includes an obligation on Western Power to provide an applicant or user with details of the calculation of any contribution to be required from the applicant or user including:

- where the contribution is in respect of new facilities investment, details of assessment of the new facilities investment against the requirements of the new facilities investment test and details of the calculation of the amount that does not meet the new facilities investment test;
- where the contribution is made in respect of non-capital costs related to alternative options, details of assessment of the non-capital costs against the alternative options test and details of the calculation of the amount that does not satisfy the alternative options test;
- details of assumptions and calculations applied in the apportionment of any forecast cost of works between the user or applicant and other users or applicants or Western Power under clause 5.4 of the contributions policy; and
- details of the calculation of a headworks contribution under clause 6 of the contributions policy.

1347. Where a contribution is provided in respect of any required work, Western Power is obliged to undertake the required work. This obligation arises under sections 2.10 and 2.11 of the Access Code.
1348. Synergy submits that the contributions policy should be amended to require that Western Power must undertake required works if the applicant enters into a contract with Western Power for the provision of a contribution, in accordance with the obligation under sections 2.10 and 2.11 of the Access Code.
1349. The obligation under sections 2.10 and 2.11 of the Access Code for Western Power to undertake works applies regardless of whether or not there is a provision to the same effect under the contributions policy. The Authority considers that it is not necessary to re-state this obligation in the contributions policy.

Proposed Revisions to the Contributions Policy

1350. Western Power has proposed several revisions to the contributions policy, some of which serve to clarify existing provisions and others of which are substantive changes to the policy. The Authority's considerations on substantive revisions are set out as follows.

Headworks Contributions

1351. Western Power has proposed revisions in the contributions policy to allow "headworks contributions" to be required in respect of costs of works where the works form part of a "headworks scheme" (clause 2(c)(iv) and clause 6).

1352. Sections 5.17C and 5.17D of the Access Code make explicit provision for a contributions policy to include a headworks scheme, with particular requirements for a headworks scheme set out in section 5.17D. These particular requirements and the manner in which they are addressed in the headworks scheme of the proposed contributions policy are examined as follows.
1353. Section 5.17D(a) of the Access Code requires that a headworks scheme must identify the class of works in respect of which the scheme applies, which must not include any works on a transmission system or any works that result in a geographic extension of a network.
1354. Western Power identifies the class of works in clause 6.1(a) of the proposed contributions policy as the class of works falling within the definition of headworks. “Headworks” is defined in the proposed contributions policy as meaning enhancements required to the existing high-voltage three-phase distribution system that provides for an increase in capacity of that system.
1355. The Authority is satisfied that this definition of headworks adequately excludes works on a transmission system and works that result in a geographic extension of a network. The Authority therefore considers that the headworks scheme meets the requirements of section 5.17D(a) of the Access Code for an identification of the class of works to which the headworks scheme applies.
1356. Section 5.17D(b) of the Access Code requires that a headworks scheme not seek to recover headworks charges in an access arrangement period that in aggregate exceed one per cent of the distribution system target revenue for the access arrangement period.
1357. Western Power has provided a forecast of revenue from headworks contributions of \$2 million in each year of the second access arrangement period.⁵¹⁴ This equates to 0.25 per cent of the target reference service revenue for the distribution network originally proposed by Western Power, and 0.30 per cent of target reference service revenue for the distribution network determined by the Authority under this Final Decision. Based on this forecast, the headworks scheme therefore meets the requirements of section 5.17D(b) of the Access Code.
1358. Section 5.17D(c) of the Access Code requires that a headworks scheme identify the class of users who must make a payment under the scheme.
1359. Clause 6.1(b) of the proposed contributions policy indicates that the headworks scheme applies to “the class of users who make a connection application in relation to the distribution system within a relevant area”. A relevant area is defined in the proposed contributions policy to mean “any area where the relevant connection point is located at a distance along the line feeder route equal to or greater than 25 km from the relevant zone substation within the network in the rural zone or mixed zone”. The proposed contributions policy indicates that “rural zone” and “mixed zone” are defined in section 4.3 of the price list information in the proposed access arrangement revisions, although no such definitions exist.
1360. The Authority is satisfied that the class of users to whom the headworks scheme would apply is adequately defined by the indication of the zone of the network

⁵¹⁴ Email from Western Power to the Economic Regulation Authority of 23 April 2009.

within which the connection point will be located and the criterion of the distance of the connection point from the relevant zone substation. However, “rural zone” and “mixed zone” are not defined in section 4.3 of the price list information as appears to be intended in the proposed contributions policy.

1361. The Authority required the following amendment to the proposed access arrangement revisions under the Draft Decision.

Draft Decision Amendment 42

The proposed access arrangement revisions should be amended to include definitions of “rural zone” and “mixed zone” as these terms are used in the proposed contributions policy to define a class of user who must make a payment under the headworks scheme.

1362. In a submission subsequent to the Draft Decision, Western Power indicates that the absence of definitions of “rural zone” and “mixed zone” is the result of an error in the cross reference in the contributions policy to section 4.3 of the price list information rather than the correct section 5.3, where these terms are defined. The Authority has revised the required amendment to require correction of this cross reference.

Required Amendment 41

The proposed access arrangement revisions should be amended such that the contributions policy includes definitions of “rural zone” and “mixed zone” by cross reference to definitions of these terms in clause 5.3 of the price list information.

1363. Section 5.17D(d) of the Access Code requires that a headworks scheme set out a method for calculating the headworks charge, including that this method:

- (i) must have the objective that headworks charges under the headworks scheme will, in the long term, and when applied across all users in the class referred to in section 5.17D(c), recover no more than the service provider’s costs (such as would be incurred by a service provider efficiently minimising costs) of any headworks; and
- (ii) must have the objective that the headworks charge payable by one user will differ from that payable by another user as a result of material differences in the users’ capacities and the locations of their connection points, unless the Authority considers that a different approach would better achieve the Code objective; and
- (iii) may use estimates and forecasts (including long term estimates and forecasts) of loads and costs; and
- (iv) must contain a mechanism designed to ensure that there is no double recovery of costs in all the circumstances, including the manner of calculation of other contributions and tariffs; and
- (v) may exclude a rebate mechanism (of the type contemplated by clauses A4.13(d) or A4.14(c)(ii) of Appendix 4) and may exclude a mechanism for retrospective adjustments to account for the difference between forecast and actual values.

1364. Clauses 6.3 to 6.8 of the proposed contributions policy indicate that the amount of a headworks contribution is to be determined on the basis of the capacity requirement at the connection point, the distance of the connection point to the relevant zone

substation and the relevant voltage for the connection point, which are together used to derive two “price components” indicated in clause 6.8(a) to be:

- a price based on capacity sought, in terms of dollars per kVA; and
- a price based on the capacity sought and the distance from the relevant zone substation to the relevant connection point, less 25 km, in terms of dollars per kVA.km.

1365. Clause 6.8(b) indicates that separate prices will be determined for 22 kV connections and 33 kV connections.

1366. The provisions of the proposed contributions policy dealing with determination of the headworks contribution are general in nature and indicate the parameters of a connection point that are to be applied to determine the headworks contributions, and the general structure of the headworks charges. Absent from the provisions are:

- an indication of the manner in which the amount of costs to be recovered from the headworks contributions are determined and how the magnitude of headworks contributions are determined;
- a method of ensuring that headworks contributions will, in the long term, recover no more than Western Power’s costs of the headworks; and
- mechanisms to ensure that any amount of the costs of headworks recovered by headworks contributions are not also recovered, or sought to be recovered, through other contributions or through tariffs for services.

1367. The Authority considers that including in the access arrangement of more detail on these matters is important in ensuring the transparency of contributions required as part of a headworks scheme. Under a headworks scheme, Western Power is charging contributions that are not necessarily directly related to particular capital projects. As such, the amount of a headworks contribution is not tied directly to either a forecast cost for particular works or an assessment of the extent to which the new facilities investment for a particular network augmentation satisfies the new facilities investment test. Inclusion in the contributions policy of transparent mechanisms for the calculation and recording of headworks contributions is necessary to ensure that the magnitude of a headworks contribution reasonably reflects a forecast cost of related network augmentations and that Western Power does not recover revenue in excess of the capital costs of network augmentations by both collecting headworks contributions and adding related new facilities investment to the capital base of the network.

1368. For reason of these deficiencies, the Authority determined in the Draft Decision that the headworks scheme under the proposed contributions policy does not satisfy the requirements of section 5.17D(d) of the Access Code.

1369. The Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 43

The proposed access arrangement revisions should be amended such that clause 6 of the contributions policy sets out:

- the method or calculation and assumptions applied in determining the amount of costs to be recovered by headworks contributions;

- the method or calculation and assumptions applied in determining the allocation of costs across a forecast of connections to the network and determining the magnitude of headworks contributions;
- the procedures or methods applied by Western Power to ensure that headworks contributions will, in the long term, recover no more than Western Power's costs of the headworks; and
- a mechanism, which may involve a system of accounting records, to ensure that any amount of the costs of headworks recovered by headworks contributions are not also recovered, or sought to be recovered, through other contributions or through tariffs for services.

1370. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts the required amendment.⁵¹⁵

1371. For the first three requirements under Draft Decision Amendment 43, Western Power proposes to include the required information in a new Appendix 9 to the access arrangement that will be cross referenced in the contributions policy. A draft of this appendix has been provided to the Authority.⁵¹⁶ The Authority has reviewed this draft and is satisfied that the draft adequately addresses these requirements.

1372. For the fourth requirement of Draft Decision Amendment 43, Western Power contends that clause 6.2(b) of the proposed contributions policy already addresses the requirement of ensuring that any amount of the costs of headworks recovered by headworks contributions are not also recovered, or sought to be recovered, through other contributions. Clause 6.2(b) reads:

- (b) Where a headworks contribution is made by an applicant in accordance with clause 6.2(a) no further contribution shall be required from the applicant in relation to the headworks in question.

1373. The Authority is not satisfied that clause 6.2(b) addresses the relevant requirement under Draft Decision Amendment 43. While 6.2(b) establishes an obligation for Western Power, it does not constitute a mechanism that provides assurance that this obligation will be met. Under the headworks scheme proposed by Western Power, the headworks charges payable by an applicant for a service is not directly related to any particular augmentations of the network or other works that may be deemed to be headworks. As such, clause 6.2(b) would appear to be unworkable.

1374. The Authority considers that the headworks scheme should include a mechanism to ensure that where the cost of augmentations of the network have been factored into the determination of headworks charges, that no other contribution is payable in respect of these costs. Such a mechanism may comprise, for example:

- a record being kept of the forecast augmentations of the distribution network that have been taken into account in the determination of headworks charges, and a process being established to ensure that no party is required to pay a contribution in respect of works for provision for a service that would be made possible by these augmentations; and/or
- a provision under the contributions policy to indicate that no applicant will be required to pay a contribution in respect of "deep" augmentations of the

⁵¹⁵ Western Power submission of 10 September 2009.

⁵¹⁶ Western Power submission of 10 September 2009, Attachment N.

distribution network that may be necessary to provide a service at a location for which a headworks charge may be payable.

1375. Western Power further proposes a new clause 6.2(c) of the contributions policy to address the requirement that any amount of the costs of headworks recovered by headworks contributions are not also recovered, or sought to be recovered, through tariffs for services:

- (c) For the purpose of this contributions policy, the headworks contribution is a capital contribution.

1376. Under this new clause 6.2(c), Western Power seeks to ensure that any amount of headworks charges are deducted from new facilities investment in determining the amount of new facilities investment that is to be added to the capital base for the SWIN. This would be in accordance with the general scheme proposed by Western Power for the treatment of capital contributions in determination of the capital base of the SWIN. The Authority is satisfied that the proposed clause 6.2(c) addresses the relevant requirement of Draft Decision Amendment 43.

1377. The Authority maintains the requirement for amendment of the proposed access arrangement revisions in accordance with Draft Decision Amendment 43. With the exception of the requirement that the contributions policy include a mechanism to ensure that any amount of the costs of headworks recovered by headworks contributions are not also recovered, or sought to be recovered, through other contributions, the Authority is satisfied that the revisions proposed by Western Power address this required amendment.

Required Amendment 42

The proposed access arrangement revisions should be amended such that clause 6 of the contributions policy sets out:

- the method or calculation and assumptions applied in determining the amount of costs to be recovered by headworks contributions;
- the method or calculation and assumptions applied in determining the allocation of costs across a forecast of connections to the network and determining the magnitude of headworks contributions;
- the procedures or methods applied by Western Power to ensure that headworks contributions will, in the long term, recover no more than Western Power's costs of the headworks; and
- a mechanism, which may involve a system of accounting records, to ensure that any amount of the costs of headworks recovered by headworks contributions are not also recovered, or sought to be recovered, through other contributions or through tariffs for services.

Contributions in Respect of Non-Capital Costs

1378. The Access Code allows for Western Power to require contributions in respect of non-capital costs subject to the general objectives of a contributions policy under

sections 5.12 and 5.13, and subject to the particular requirements of section 5.14 that:

- a contributions policy must not require a user to make a contribution in respect of any part of non-capital costs that would not be incurred by a service provider efficiently minimising costs (section 5.14(b));
- contributions may only be required in respect of required work (section 5.14(c)); and
- the contributions policy must contain a mechanism designed to ensure that there is no “double recovery” of non-capital costs (section 5.14(d)).

1379. The proposed contributions policy includes provisions that enable Western Power to require a contribution in respect of non-capital costs where:

- the costs are incurred in works undertaken in providing an “alternative option”, but the costs do not satisfy the “alternative options test” under section 6.41 of the Access Code that would otherwise enable recovery of these costs as part of the target revenue recovered from reference tariffs (clause 2(c)(ii) of the proposed contributions policy); and
- the costs are incurred in “non-capital works” required in response to a connection application where the non-capital costs associated with such works are costs that would not be incurred by a service provider efficiently minimising costs (clause 2(c)(iii)).

1380. The second of these provisions for requiring contributions in respect of non-capital costs is in direct contravention of section 5.14(b) of the Access Code that prohibits a contributions policy requiring a user to make a contribution in respect of any part of non-capital costs that would not be incurred by a service provider efficiently minimising costs. Whatever Western Power’s intention in providing for contributions to be required in these circumstances, such contributions are expressly not permitted under the Access Code.

1381. In the Draft Decision, the Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 44

The proposed access arrangement revisions should be amended to delete the proposed clause 2(c)(iii) of the contributions policy that seeks to allow Western Power to require a contribution in respect of non-capital costs required in response to a connection application, where the non-capital costs associated with such works are costs which would not be incurred by a service provider efficiently minimising costs.

1382. In a submission subsequent to the Draft Decision, Western Power indicates that it accepts Draft Decision Amendment 44 and proposes to delete clause 2(c)(iii). Accordingly, the Authority maintains the requirement for this amendment in its Final Decision.

Required Amendment 43

The proposed access arrangement revisions should be amended to delete the proposed clause 2(c)(iii) of the contributions policy that seeks to allow Western Power to require a contribution in respect of non-capital costs required in response to a connection application, where the non-capital costs associated with such works are costs which would not be incurred by a service provider efficiently minimising costs.

1383. Turning to the first of the above-mentioned provisions for contributions, clause 2(c)(ii) of the proposed contributions policy, in respect of non-capital costs, Western Power proposes that contributions in respect of non-capital costs be charged where the relevant costs do not satisfy a test contained in section 6.41 of the Access Code.
1384. The “alternative options test” under section 6.41 of the Access Code is a test to determine whether certain non-capital costs may be included in the amount of total costs taken into account under section 6.2(a) of the Access Code in determining an amount of target revenue for recovery under the price control applying to the network.
1385. Under section 6.41 of the Access Code, an “alternative option” is defined in relation to a major augmentation of the network and means an alternative to part or all of a major augmentation, including demand-side management and generation solutions (such as distributed generation), either instead of or in combination with network augmentation. Under section 6.41, non-capital costs associated with an alternative option may be included in the amount of total costs calculated for the network if:
- under section 6.41(a), the relevant non-capital costs do not exceed the amount of alternative option non-capital costs that would be incurred by a service provider efficiently minimising costs; and
 - under section 6.41(b), at least one of the following conditions is satisfied:
 - the additional revenue for the alternative option is expected to at least recover the alternative option non-capital costs; or
 - the alternative option provides a net benefit in the covered network over a reasonable period of time that justifies higher reference tariffs; or
 - the alternative option is necessary to maintain the safety or reliability of the covered network or its ability to provide contracted covered services.
1386. For the purposes of the proposed contributions policy, Western Power modifies the test of section 6.41 of the Access Code by applying a broader definition of alternative options as “alternatives to part or all of a network enhancement, including demand-side management and generation solutions (such as distributed generation) either instead of or in combination with a network enhancement”. Under the proposed contributions policy, an alternative option may exist for any enhancement of the network and not just for a major augmentation of the network.

1387. The Authority accepts that Western Power may incur non-capital costs in implementing alternative options as defined under the contributions policy such as, for example, establishing and managing a demand-side management scheme, and the leasing and operating of generation plant for the purposes of using generation for network support as an alternative to augmentation of the network. In modifying and applying the test under section 6.41 to these non-capital costs, Western Power seeks to ensure that it is able to recover non-capital costs arising in the implementation of an alternative option where these costs may not otherwise be recoverable.
1388. The Authority considers that this provision for requiring contributions facilitates operation of the Access Code and is consistent with the Code objective for the reason that it negates any possible disincentive for Western Power to implement alternative options where those alternative options cause Western Power to incur non-capital costs, rather than costs of new facilities investment.
1389. Furthermore, the Authority considers that applying the test of section 6.41 of the Access Code in determining an amount of a contribution in respect of non-capital costs provides a mechanism for ensuring that contributions in respect of non-capital costs are limited to costs that may not be recoverable under the price control applying to covered network services, thus not allowing the double recovery of costs and ensuring consistency with section 5.14(d) of the Access Code. However, the Authority considers that provision under the contributions policy for contributions in respect of non-capital costs incurred in the implementation of an alternative option is unnecessary to allow Western Power to recover the relevant non-capital costs, at least to the extent that the costs are able to be forecast and allowed to be recovered under the price control applying for the relevant access arrangement period.
1390. Under section 6.40 of the Access Code, the total costs able to be recovered under the price control may include non-capital costs that would be incurred by a service provider efficiently minimising costs. "Efficiently minimising costs" is defined in the Access Code as meaning "the service provider incurring no more costs than would be incurred by a prudent service provider, acting efficiently, in accordance with good electricity industry practice, seeking to achieve the lowest sustainable cost of delivering covered services and without reducing service standards below the service standard benchmarks set for each covered service in the access arrangement or contract for services".
1391. There is nothing under section 6.40 of the Access Code that would prevent Western Power from recovering, as part of total costs recoverable under the price control, any non-capital costs arising in implementation of an alternative option and that are forecast prior to the price control being established for an access arrangement period. Moreover, to the extent that these costs are able to be included in forecasts applied in setting the price control, the Code objective would be better served by allowing for recovery of the costs through the price control, rather than through contributions, as recovery through the price control would carry desirable incentives for achieving cost efficiencies.
1392. The only non-capital costs that might be incurred by Western Power in implementing an alternative option (and acting as a service provider efficiently minimising costs), but that may not be recovered under the price control would be those costs that were not included in the forecasts of costs applied in setting the price control. A mechanism to allow recovery of these non-capital costs through contributions would facilitate the operation of the Access Code and be consistent

with the Code objective by ensuring that there is no disincentive for Western Power to implement alternative options of a non-capital nature in preference to new facilities investment in network augmentation. The Authority therefore considers that consistency with section 5.13 of the Access Code and the Code objective requires that contributions in respect of non-capital costs be allowed for only in these circumstances. In any case, the Authority considers that the test of section 6.41 of the Access Code should apply to ensure that the non-capital costs recovered by contributions are limited to that part of the costs of works that benefits only the user paying the contribution, rather than users of the network more generally.

1393. In the Draft Decision, the Authority required the following amendment to the proposed access arrangement revisions.

Draft Decision Amendment 45

The proposed access arrangement revisions should be amended such that the contributions policy only allows for contributions in respect of non-capital costs incurred in the implementation of an alternative option where:

- the alternative option is being implemented in response to a connection application; and
- the costs are costs that would be incurred by a service provider efficiently minimising costs; and
- Western Power is able to clearly demonstrate that the costs were not included, and could not reasonably have been included, in forecasts of non-capital costs taken into account in setting the price control; and
- the conditions of section 6.41(b) of the Access Code are not satisfied.

1394. In a submission subsequent to the Draft Decision, Western Power separately addresses each of the requirements under Draft Decision Amendment 45.⁵¹⁷

1395. The first requirement under Draft Decision Amendment 45 is that contributions in respect of non-capital costs incurred in the implementation of an alternative option only be permitted where the alternative option is being implemented in response to a connection application. Western Power submits that this requirement is already met by clauses 2(a) and 2(c) of the proposed contributions policy as an alternative option is captured within the scope of the term “works” within the meaning of the contributions policy, which only includes works being undertaken in response to a connection application. The Authority accepts that this is the case and this requirement for amendment of the proposed contributions policy is unnecessary.

1396. The second requirement under Draft Decision Amendment 45 is that contributions, in respect of non-capital costs incurred in the implementation of an alternative option, only be permitted where the non-capital costs would be incurred by a service provider efficiently minimising costs. Western Power submits that this requirement is adequately addressed by clause 3 of the proposed contributions policy, which relates to contributions generally and states:

A contribution with respect to covered services sought by an applicant must not exceed the amount that would be required by a prudent service provider acting

⁵¹⁷ Western Power submission of 13 August 2009.

efficiently, in accordance with good electricity industry practice seeking to achieve the lowest sustainable cost of providing the covered services.

1397. The Authority accepts that this is the case and this requirement for amendment of the proposed contributions policy is unnecessary.

1398. The third requirement under Draft Decision Amendment 45 is that contributions in respect of non-capital costs incurred in the implementation of an alternative option only be permitted where Western Power is able to clearly demonstrate that the costs were not included, and could not reasonably have been included, in forecasts of non-capital costs taken into account in setting the price control. Western Power indicates that it accepts this required amendment and proposes that this requirement be addressed by a new clause 2(c)(iii) of the proposed contributions policy:

(c) An applicant is required to pay a contribution for works in any (including any combination of) the following circumstances:

...

(iii) in the case of non-capital works including alternative options, where the costs of the works were not included, and could not reasonably have been included, in forecasts of non-capital costs taken into account in setting the price control,

1399. The fourth requirement under Draft Decision Amendment 45 is that contributions in respect of non-capital costs incurred in the implementation of an alternative option only be permitted where the conditions of section 6.41(b) of the Access Code are not satisfied. Western Power submits that this requirement is already met by clause 2(c)(ii) of the proposed contributions policy:

(c) An applicant is required to pay a contribution for works in any (including any combination of) the following circumstances:

...

(ii) in the case of works related to alternative options, where the non-capital costs associated with such works do not satisfy the alternative options test,

1400. The Authority does not accept that clause 2(c)(ii) of the proposed contributions policy adequately addresses the fourth requirement of Draft Decision Amendment 45. Clause 2(c)(ii) of the proposed contributions policy refers to the whole of section 6.41 of the Access Code, rather than just section 6.41(b), and would allow a contribution to be charged where the relevant costs are costs that would not be incurred by a service provider efficiently minimising costs (under section 6.41(a)). This would be in direct contravention of section 5.14(b) of the Access Code, as addressed above (paragraph 1380 and following).

1401. Taking Western Power's submission into account, the Authority maintains the third and fourth requirements under Draft Decision Amendment 45 for amendment of the proposed contributions policy.

Required Amendment 44

The proposed access arrangement revisions should be amended such that the contributions policy only allows for contributions in respect of non-capital costs incurred in the implementation of an alternative option where:

- Western Power is able to clearly demonstrate that the costs were not included, and could not reasonably have been included, in forecasts of non-capital costs taken into account in setting the price control; and
- the conditions of section 6.41(b) of the Access Code are not satisfied.

Requirements for Security

1402. Western Power has proposed new provisions in the contributions policy relating to the ability of Western Power to require security from an applicant in respect of the amount of revenue from charges for services to be provided to the applicant that were forecast in planning an augmentation and that were taken into account in calculating the amount of a contribution.
1403. Under clause 4.3 of the current capital contributions policy, Western Power is able to require security in respect of forecast revenue from the applicant where the forecast costs with respect to the connection application are greater than \$50,000. Western Power is able to require the security to be maintained for an initial period of 12 months and a maximum period of 24 months. After this period, the amount of any contribution may be re-assessed.
1404. Western Power has proposed changes to clause 4.3 to distinguish between circumstances where the forecast costs in respect of a connection application are between \$50,000 and \$1 million, and greater than \$1 million, and to allow Western Power to extend the periods for which security is to be maintained:
- where the forecast costs are greater than \$50,000 and less than \$1 million, security may be required for an initial period of 24 months and a maximum period of 36 months, or other such periods as reasonably determined by Western Power acting as a reasonable and prudent operator; and
 - where the forecast costs are equal to or greater than \$1 million, Western Power may require the applicant to provide security on terms acceptable to Western Power acting as a reasonable and prudent person.
1405. Western Power has not provided information on the reasons for the proposed changes to the requirements for security.
1406. Alinta Sales submits that the potentially open-ended requirement for security has the potential to impose material and unquantifiable costs on applicants, creating barriers to entry to the electricity market and reduce competition in the electricity market.⁵¹⁸

⁵¹⁸ Alinta Sales Pty Ltd submission of 17 December 2008.

1407. The Authority considers that the requirements for security in respect of the amount of revenue from charges for services to be provided to the applicant should be assessed in the context of the purpose of contributions.
1408. Under the regulatory scheme of the Access Code, the new facilities investment test and provisions for contributions are intended to promote efficiency of new facilities investment. Under this scheme, any new facilities investment that is not to the general benefit of all network users is financed by contributions from the party that obtains a private benefit from the investment (i.e. the applicant for connection). In determining whether or not to pay the amount of the contribution, the applicant will assess whether the private benefits of the investment exceed the amount of the contribution. If so, the new facilities investment is efficient, the applicant has an incentive to pay the contribution, and the efficient investment will proceed.
1409. Part of the determination of the amount of new facilities investment that satisfies the new facilities investment test is an assessment of the amount of anticipated (or forecast) incremental revenue enabled by the investment. A forecast of revenue from the charges to be paid by the applicant may form a significant part of the incremental revenue.
1410. Within this context, the function of security against the forecast of revenue from the charges to be paid by the applicant is to motivate the applicant to make a reasonable forecast, as the applicant may otherwise have an incentive to overstate a forecast of its use of network services and so reduce the contribution payable.
1411. In the absence of any justifying information from Western Power, the Authority considers that the existing requirements for security under the current capital contributions policy are likely to be sufficient to fulfil this function. The Authority considers that expanded requirements for security may impose a significant additional cost on applicants for connection to the network without any commensurate benefit in efficiency of investment.

Draft Decision Amendment 46

The proposed access arrangement revisions should be amended to delete the expanded requirements for security proposed under clause 4.3 of the contributions policy.

1412. In a submission subsequent to the Draft Decision, Western Power has rejected Draft Decision Amendment 46, but proposed to address the Authority's reasons for the required amendment by a revised clause 4.3 of the contributions policy, as follows.⁵¹⁹

4.3 Applicant must provide security for new revenue

- (a) Where the forecast costs with respect to a connection application are greater than \$50,000, but less than \$500,000, Western Power may require the applicant to procure before the commencement of the works, and maintain for a period of 18 months after the commencement of the associated exit service or entry service, an unconditional, irrevocable bank guarantee, or equivalent financial instrument, in terms acceptable to Western Power (acting as a reasonable and prudent person), guaranteeing the portion of new revenue that was used to calculate the contribution and is expected to come from providing an exit service or entry service using the works.

⁵¹⁹ Western Power submission of 13 August 2009.

- (b) Where an applicant has provided security under clause 4.3(a), then after 12 months, Western Power may:
 - (i) redetermine the contribution under this contributions policy, and recover from, or rebate to, the applicant any difference from the amount of the original contribution; or
 - (ii) require the applicant to maintain the bank guarantee or equivalent financial instrument for a further 12 months before redetermining the contribution in accordance with clause 4.3(a)(i).
- (c) Where the forecast costs with respect to a connection application are equal to or greater than \$500,000 but less than \$15,000,000, Western Power may require the applicant to procure before the commencement of the works, and maintain for a period of up to 36 months after the commencement of the associated exit service or entry service, an unconditional, irrevocable bank guarantee, or equivalent financial instrument, in terms acceptable to Western Power (acting as a reasonable and prudent person), guaranteeing the portion of new revenue that was used to calculate the contribution and is expected to come from providing an exit service or entry service using the works. Western Power (acting as a reasonable and prudent person) may require the applicant to maintain the bank guarantee or equivalent financial instrument for a period greater than 36 months where the forecast use of network services has not been achieved.
- (d) Where the forecast costs with respect to a connection application are equal to or greater than \$15,000,000, Western Power may require the applicant to procure before the commencement of the works, an unconditional, irrevocable bank guarantee, or equivalent financial instrument, in terms acceptable to Western Power (acting as a reasonable and prudent person), guaranteeing the portion of new revenue that was used to calculate the contribution and is expected to come from providing an exit service or entry service using the works.

1413. Of the proposed changes to clause 4.3, clauses 4.3(a) and (b) set out provisions for determination of security where the cost of required works is less than \$500,000. Western Power indicates that this includes the majority of projects for which contributions are required.

1414. Under the proposed clauses 4.3(a) and (b), security against forecast revenue from network charges may be required for an initial period of 18 months. A review after 12 months may be used to adjust the amount of the contribution or to extend the period for which security is required by 12 months, meaning that the maximum period for which security may be required is 30 months. The difference from clause 4.3 under the current capital contributions policy is a six month extension in the maximum period for which security may be required. Western Power contends that this extended period is a practical measure, with the initial 18 month period allowing an opportunity for a full 12 months use of the services before either the value of the contribution or the requirement for security are reviewed.

1415. The proposed clause 4.3(c) sets out provisions for determination of security where the cost of required works is greater than \$500,000 and less than \$15 million. This proposed clause allows for security against forecast revenue from network charges to be required for an initial period of up to 36 months, with this period extendable indefinitely where the forecast use of network services has not been achieved.

1416. Western Power contends that the provision for requirement of security for an initial period of up to three years is appropriate for works of this value that are mostly for connections to the transmission network, and for which there may be a significant period of time until the customer's use of network services reaches the normal

operating level. Western Power further contends that the provision of extension of this period provides the applicant with a greater opportunity to demonstrate compliance with the forecast.

1417. The proposed clause 4.3(d) sets out provisions for determination of security where the cost of required works is greater than \$15 million and allows for all terms of security against forecast revenue from network charges to be determined by negotiation.

1418. In addressing Draft Decision Amendment 46, Western Power still proposes to amend the contributions policy to allow Western Power to extend the periods for which security against revenue from network charges may be required from the maximum period of two years under the current access arrangement. In a further submission to the Authority, Western Power has indicated that the expanded ability of Western Power to require security is appropriate in circumstances that include the following.

- Where the applicant's forecast energy usage is believed by Western Power to be well in excess of what will actually occur. In this circumstance the applicant may not agree to an alternative assessment of the energy forecast. In this case, security provides an option where the capital contribution is in accordance with the applicant's forecast but the applicant is held to account.
- Where the applicant's business is of a nature that the connection may not be long term (such as a mine). In this circumstance the applicant may prefer to pay a lower capital contribution while providing security over the access revenue for a period of time well in excess of one year.
- Where the applicant has forecast energy usage to increase in stages over several years. In this case it may be appropriate that the security over the access revenue be taken over a period that aligns with the applicant's energy forecast timeframe.
- Where the investment to connect the applicant is significant and a reasonable allocation of the risk of future revenue is to the applicant.⁵²⁰

1419. In this same submission, Western Power provides details of 19 projects ranging in value from \$54,302 to \$253,619 for which a contribution was payable, and for which there was a subsequent re-calculation (either upwards or downwards) of the amount of contribution payable. An example is provided of a single project where Western Power and the applicant were unable to agree on a forecast of maximum demand on the basis of which the value of a contribution would be determined, and a further set of six examples of very large projects are described to indicate the arrangements for security that have been agreed by negotiation.

1420. In proposing alternative changes to clause 4.3 of the contributions policy, Western Power has provided examples to show that the ability to require security may be desirable, but has still not provided any evidence for the current provisions of the contributions policy being inadequate. That is, Western power has not provided evidence for the current maximum two-year period for the provision of security being inadequate for discouraging applicants from exaggerating forecasts of demand for services.

⁵²⁰ Email from Western Power to the Economic Regulation Authority of 3 November 2009.

1421. In the absence of such evidence, the Authority remains concerned that requirements for the provision of security may unduly expose applicants to uncertainty over the ultimate cost of providing security and the value of contributions to be made in respect of a network augmentation. As such, the Authority remains of the view that the proposed expanded requirements for security may impose a significant additional cost on applicants for connection to the network, without any commensurate benefit in efficiency of investment in the network. The Authority therefore considers that clause 4.3 of the proposed contributions policy should be amended to remove provision for security to be required for a total period of greater than two years. The Authority does, however, accept that security arrangements for very large projects (indicated by Western Power to be projects with a cost of equal to or greater than \$15 million in value) are appropriately determined by negotiation.

Required Amendment 45

The proposed access arrangement revisions should be amended to delete provisions proposed under clause 4.3 of the contributions policy that allow for security to be required for a total period of greater than two years where forecast costs with respect to a connection application are less than \$15,000,000.

Apportioning Contributions Across Users

1422. Clause 2.4(c) of the current capital contributions policy provides for Western Power to apportion contributions across users that connect to the network at different times within a 10-year time period from the date of the first applicant's connection application.
1423. Western Power proposes changes to clause 2.4(c) to allow the period taken into account for the apportioning of contributions to be longer than 10 years, if so determined by Western Power acting as a reasonable and prudent person.
1424. Western Power has not provided information on the reasons for the proposed changes and none of the parties making submissions to the Authority addressed these proposed changes.
1425. Taking into account the absence of submissions, the Authority considers that allowing flexibility in the time period over which apportioning of contributions may occur is consistent with the requirements of section 5.12 of the Access Code for a balance between the interests of contributing users and other users.

Adjustment of Contributions to Reflect Actual Costs

1426. Clause 8 of the current capital contributions policy and the proposed contributions policy deals with the manner in which a contribution may be paid.
1427. Western Power has proposed a new provision under clause 8.1 of the proposed contributions policy that allows Western Power and an applicant, in circumstances where the amount of a contribution is greater than \$1 million, to negotiate for the

amount of a contribution to be adjusted to reflect the actual costs of the required works.

1428. Synergy submits that allowing for adjustment of contributions to reflect actual costs only where contributions are in excess of \$1 million is inconsistent with ensuring, for all contributions, that there is no double recovery of costs.⁵²¹
1429. Under both the current capital contributions policy and the proposed contributions policy, contributions are determined on the basis of forecasts of costs. A mechanism of the policy to ensure that there is no double recovery of costs operates by determining the amount of the forecast costs that may be recovered by contributions as distinct from the amounts that may be recovered by other means.
1430. The Authority considers that the determination of contributions on the basis of cost forecasts is consistent with the requirements of the Access Code for a contributions policy and facilitates the operation of the Access Code by ensuring that Western Power has incentives to seek cost efficiencies in undertaking the relevant works by virtue of Western Power bearing risks of cost overruns.
1431. The proposed provision of the contributions policy to allow Western Power and an applicant to negotiate to adjust the amount of a contribution to reflect actual costs provides an opportunity for Western Power and the applicant to enter into alternative arrangements for the sharing of cost risk. As there is no obligation on either Western Power or the applicant to enter into such negotiations, or to agree to an *ex post* adjustment of contributions the Authority considers that the proposed provision can only result in improved outcomes for Western Power and the applicant. As such, the Authority considers that the proposed provision is consistent with the Code objective.

TRANSFER AND RELOCATION POLICY

Access Code Requirements

1432. Section 5.1(i) of the Access Code requires that an access arrangement include a transfer and relocation policy. The particular requirements for a transfer and relocation policy are set out in sections 5.18 to 5.24 of the Access Code:
- 5.18 A transfer and relocation policy:
- (a) must permit a user to make a bare transfer without the service provider's consent; and
 - (b) may require that a transferee under a bare transfer notify the service provider of the nature of the transferred access rights before using them, but must not otherwise require notification or disclosure in respect of a bare transfer.
- 5.19 For a transfer other than a bare transfer, a transfer and relocation policy:
- (a) must oblige the service provider to permit a user to transfer its access rights and, subject to section 5.20, may make a transfer subject to the service provider's prior consent and such conditions as the service provider may impose; and

⁵²¹ Synergy submission of 17 December 2008 on Contribution Policy and ENAC Amendments.

- (b) subject to section 5.20, may specify circumstances in which consent will or will not be given, and conditions which will be imposed, under section 5.19(a).
- 5.20 Under a transfer and relocation policy, for a transfer other than a bare transfer, a service provider:
 - (a) may withhold its consent to a transfer only on reasonable commercial or technical grounds; and
 - (b) may impose conditions in respect of a transfer only to the extent that they are reasonable on commercial and technical grounds.
- 5.21 A transfer and relocation policy:
 - (a) must permit a user to relocate capacity at a connection point in its access contract to another connection point in its access contract, (a 'relocation') and, subject to section 5.22, may make a relocation subject to the service provider's prior consent and such conditions as the service provider may impose; and
 - (b) subject to section 5.22, may specify in advance circumstances in which consent will or will not be given, and conditions which will be imposed, under section 5.21(a).
- 5.22 Under a transfer and relocation policy, for a relocation a service provider:
 - (a) must withhold its consent where consenting to a relocation would impede the ability of the service provider to provide a covered service that is sought in an access application; and
 - (b) may withhold its consent to a relocation only on reasonable commercial or technical grounds; and
 - (c) may impose conditions in respect of a relocation only to the extent that they are reasonable on commercial and technical grounds.
- 5.23 An example of a thing that would be reasonable for the purposes of sections 5.20 and 5.22 is the service provider specifying that, as a condition of its agreement to a transfer or relocation, the service provider must receive at least the same amount of revenue as it would have received before the transfer or relocation, or more revenue if tariffs at the destination point are higher.
- 5.24 Section 5.23 does not limit the things that would be reasonable for the purposes of sections 5.20 and 5.22.

1433. The Access Code does not provide a model transfer and relocation policy.

Current Access Arrangement

1434. The current access arrangement includes a transfer and relocation policy at Appendix 2.

1435. The transfer and relocation policy of the current access arrangement is indicated at clause 2.1 to apply to any access contract unless otherwise explicitly stated in the access contract, and includes:

- definitions of terms and rules of interpretation (clause 1);
- indication that the transfer and relocation policy applies to any access contract, unless otherwise explicitly stated in the access contract (clause 2) and prohibition of any transfer of rights under an access contract except as allowed for under the transfer and relocation policy (clause 3);
- provision for bare transfers of rights under an access contract (clause 4);

- provision for assignments of rights under an access contract other than a bare transfer, subject to consent of Western Power (clause 5); and
- provision for a relocation by a user of contracted capacity at one connection point to another connection point, where the user has an access contract for both connection points (clause 6).

Proposed Revisions

1436. Western Power has proposed revisions to the provisions of clause 1 of the transfer and relocation policy dealing with definitions and interpretation. No revisions have been proposed for the substantive provisions of the policy.

1437. Material changes proposed to definitions of terms at clause 1.1 of the transfer and relocation policy comprise only a change in the definition of contracted capacity:

~~“contracted capacity”, at a connection point, means the maximum rate a user is permitted to transfer electricity at that connection point under the user’s access contract~~ for a connection point, means the maximum rate at which a user is permitted to transfer electricity to or from the network at the connection point, being either:

- the rate specified in the user’s access contract from time to time; or
- if no rate is specified in the user’s access contract, the maximum rate of electricity permitted to be transferred under the reference service eligibility criteria for the reference service for that connection point in the user’s electricity transfer access contract; or
- if no rate is specified in the user’s access contract or in the reference service eligibility criteria, the maximum rate of electricity permitted to be transferred through the connection assets under the technical rules,

as applicable, and is measured in Watts or Volt-Amps.

1438. Proposed changes to clause 1.2, dealing with interpretation, comprise the deletion of several provisions dealing with interpretation of common terms and replacement with a general provision to indicate that a term with a defined meaning in the Access Code has the same meaning in the transfer and relocation policy, unless the contrary intention is apparent or the term has been redefined in clause 1.1 of the transfer and relocation policy.

Submissions

1439. No submissions made to the Authority on the proposed access arrangement revisions address the transfer and relocation policy.

Considerations of the Authority

1440. The Authority has reviewed the proposed revisions to the transfer and relocation policy and considers that the proposed revisions do not affect the operation of the substantive provisions of the policy.

1441. Taking into account the absence of submissions on the transfer and relocation policy, the Authority considers that the transfer and relocation policy of the proposed access arrangement revisions are consistent with the requirements of the Access Code.

APPENDICES

APPENDIX A: TARGET REVENUE CALCULATION (REVENUE MODEL)

The target revenue calculation (revenue model) sets out the Authority's determination and, in the event of inconsistency, the numbers in the calculation prevail over any other statement of these values in this decision.

The numbers in the revenue model are shown to 3 decimal places.

Due to size and formatting, Appendix A is provided as a separate document to this Final Decision and is available from the Authority's web site.⁵²²

⁵²² Economic Regulation Authority web site: http://www.era.wa.gov.au/3/719/48/access_arrangem.pm

APPENDIX B: CONSULTANT REPORTS COMMISSIONED BY THE AUTHORITY

The following consultant reports were commissioned by the Authority:⁵²³

- BDO Kendalls, 2 July 2009, Regulatory Financial Audit: Western Power.
- Geoff Brown & Associates Ltd, 14 July 2009, Review of New Facilities Investment Test Compliance: Western Power AA1 Projects.
- Geoff Brown & Associates Ltd, 14 July 2009, Review of Expenditure Governance: Western Power.
- Wilson Cook & Co Limited, May 2009, Review of Western Power's Expenditures for Second Access Arrangement. Final Report.

⁵²³ Reports are available from the Economic Regulation Authority web site:
http://www.era.wa.gov.au/3/719/48/access_arrangem.pm

APPENDIX C: TERMS / ABBREVIATIONS

Term

Access Code	<i>Electricity Networks Access Code 2004</i>
Act	<i>Electricity Industry Act 2004</i>
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
APIA	Australian Pipeline Industry Association Ltd
AS	Australian standard
Authority	Economic Regulation Authority
CAPM	capital asset pricing model
Communication Rules	<i>Electricity Industry Metering Code 2005 Communication Rules</i>
Customer Transfer Code	<i>Electricity Industry Customer Transfer Code 2004</i>
Griffin Energy	Griffin Energy Development Pty Ltd
IMO	Independent Market Operator
LGP	Landfill Gas and Power
MAIFI	momentary average interruption frequency index
Market Rules	<i>Electricity Industry (Wholesale Electricity Market) Regulations 2004</i>
Metering Code	<i>Electricity Industry Metering Code 2005</i>
Model Service Level Agreement	Metering Code Model Service Level Agreement
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SCADA	supervisory control and data acquisition
SCNRRR	Steering Committee on National Regulatory Reporting Requirements
SKM	Sinclair Knight Merz
SWIN	South West Interconnected Network
SWIS	South West Interconnected System
Technical Rules	<i>Technical Rules</i> (published by Western Power for the South West Interconnected Network)
WA Electrical Requirements	<i>WA Electricity Requirements, July 2008</i> (published by the Director of Energy Safety of Energy Safety WA under the provisions of the <i>Electricity (Licensing) Regulations 1991</i>)
WACC	weighted average cost of capital
WACOSS	Western Australian Council of Social Services
WAMEU	Western Australia Major Energy Users

APPENDIX D: CONFIDENTIAL ANNEXURE

Not published.