

Determination on the Proposed 2009/10 Price List for the South West Interconnected Network

Submitted by Western Power

18 May 2009

Economic Regulation Authority
 WESTERN AUSTRALIA

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DETERMINATION

1. On 24 April 2009, Western Power submitted a proposed 2009/10 price list for the South West Interconnected Network (**SWIN**) to the Economic Regulation Authority (**Authority**) for the Authority's approval under Chapter 8 of the *Electricity Networks Access Code 2004* (**Access Code**).¹
2. Western Power's proposed price list has been submitted under terms of the current access arrangement that applies to the SWIN and that commenced on 1 July 2007.² While proposed revisions to the current access arrangement have been submitted to the Authority with the intention for the revisions to have effect from 1 July 2009, the Authority has not yet completed its assessment of the proposed revisions. The current access arrangement therefore continues to have effect until revisions are approved and, accordingly, the proposed price list for 2009/10 must comply with relevant terms of the current access arrangement.³
3. The Authority has assessed the proposed 2009/10 price list and considers that the proposed price list complies with the price control and pricing methods of the current access arrangement.
4. The Authority observes that section 6 of Western Power's proposed price list contains a list of fees referred to as non-reference service tariffs. This Determination does not apply to these stated fees/tariffs, as the Authority is not required to assess or approve such fees/tariffs as part of its price list determination.
5. In accordance with the requirements of section 8.2 of the Access Code, the Authority approves the proposed price list and determines that this price list has effect from 1 July 2009. The Authority has published the proposed price list and price list information on its web site.⁴

REASONS FOR DETERMINATION

Requirements of the Access Code

6. Chapter 8 of the Access Code sets out requirements for a service provider to submit proposed prices lists, and for the Authority to approve and publish the proposed price lists and related price list information. The relevant sections of the Access Code are reproduced below.

¹ Western Power, 24 April 2009, 2009/10 Price List and 2009/10 Price List Information.

A revised price list was subsequently submitted to the Authority on 7 May 2008 to correct discrepancies between the previously submitted price list and price list information.

² Western Power, 2 April 2007, Amended Proposed Access Arrangement for the South West Interconnected Network owned by Western Power (hereafter cited as "**current access arrangement**").

³ The current access arrangement was approved by the Authority on 26 April 2007 with a commencement date of 1 July 2007. Under the Access Code, this current version of the access arrangement continues in effect until proposed revisions that have been assessed and approved by the Authority come into effect. Western Power submitted proposed revisions to its access arrangement on 1 October 2008, with a target revisions commencement date of 1 July 2009. Based on current timelines, the assessment process will not be completed until sometime after 1 July 2009.

⁴ http://www.era.wa.gov.au/2/486/48/price_determina.pm

Approval of price lists if required

- 8.1 If a service provider's access arrangement requires it to submit price lists to the Authority for approval, the service provider must, at least 45 business days before the start of each pricing year (except for the first pricing year), submit to the Authority:
 - (a) a proposed price list to apply for the next pricing year; and
 - (b) price list information.
- 8.2 If the Authority considers that a service provider's proposed price list complies with:
 - (a) the price control in the service provider's access arrangement; and
 - (b) the pricing methods in the service provider's access arrangement,then the Authority must:
 - (c) approve and publish the service provider's proposed price list which has effect from a date specified by the Authority; and
 - (d) publish the service provider's price list information.
- 8.3 The Authority must not approve a service provider's proposed price list if the proposed price list does not comply with sections 8.2(a) and 8.2(b), and must notify the service provider that it does not approve the proposed price list and provide reasons.
- 8.4 If a service provider is notified under section 8.3 that the Authority does not approve a proposed price list submitted by the service provider, the service provider may at any time submit a revised proposed price list to the Authority.
- 8.5 If the Authority:
 - (a) notifies a service provider under section 8.3 that it does not approve a proposed price list submitted by the service provider; and
 - (b) has not approved a revised proposed price list,then the price list most recently in effect continues in effect until the Authority approves a revised proposed price list submitted by the service provider under section 8.4.
- 8.6 If the Authority has not notified a service provider that it does not approve a proposed price list within 15 business days after receiving either:
 - (a) the proposed price list; or
 - (b) any further information the Authority has requested in relation to the proposed price list,(whichever is later), then the Authority is to be taken to have approved the price list.

Publication of price lists if approval not required

- 8.7 If a service provider's access arrangement does not require it to submit price lists to the Authority for approval, the service provider must, at least 25 business days before the start of each pricing year (except for the first pricing year), submit to the Authority a copy of:
 - (a) a price list to apply in respect of the next pricing year which complies with:
 - (i) the price control in the service provider's access arrangement; and
 - (ii) the pricing methods in the service provider's access arrangement;and
 - (b) price list information.
- 8.8 Where a service provider submits a price list and price list information to the Authority under section 8.7, the Authority must publish the price list and price list information.

Submission of the Proposed Price List

7. Clause 3.10 of the current access arrangement for the SWIN requires Western Power to submit to the Authority a proposed price list, together with price list information at least 45 business days before the start of each pricing year (except for the first pricing year).
8. On 24 April 2009, Western Power submitted a proposed 2009/10 price list and price list information for the SWIN to the Authority.
9. Western Power has provided the Authority with spreadsheets containing supporting information and calculations to indicate the forecast of revenue associated with the proposed price list. These spreadsheets have been provided on a confidential basis and, accordingly, the Authority has not published this information.

Compliance of the Proposed Price List with the Price Control

Specification of the Price Control under the Current Access Arrangement

10. Clauses 5.25 to 5.48 of the current access arrangement establish revenue cap price controls for each of the transmission and distribution networks. The operation of these price controls within an access arrangement period is set out in clauses 5.35 to 5.37 and 5.46 to 5.48 of the current access arrangement as follows.
- 5.35 For this access arrangement period, the maximum regulated transmission revenue MTR_t is determined as follows:

$$MTR_t = TR_t + TK_t$$

Where:

TR_t is the dollar amount in money of the day terms (current prices) for the financial year t calculated from the dollar amounts (expressed in 30 June 2006 prices) set out in the table below.

**Transmission revenues to be used for calculating TR_t
(\$million real as at 30 June 06)**

2006/07	2007/08	2008/09
223.5	230.6	227.1

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

For the purpose of determining compliance with this revenue cap and calculating TR_t, TK_t and therefore MTR_t, in each financial year CPI adjustments will be effected by using published CPI data relating to the relevant March quarters.

- 5.36 For financial years commencing on 1 July 2007 and 1 July 2008:

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

Where:

MTR_{t-1} is the maximum regulated revenue for Western Power's transmission network in the previous financial year.

ATR_{t-1} is the actual regulated transmission revenue in the previous financial year as defined in accordance with section 5.29 of this Access Arrangement.

$WACC_{\text{pre-tax real}}$ is 0.0676

For the financial year commencing on 1 July 2006, $TK_t = 0$.

For the avoidance of doubt, it should be noted that the annual tariff-setting process for financial year t typically takes place before the end of financial year $t-1$. Therefore, TK_t will need to be estimated in the first instance, and then recalculated in the subsequent financial year when ATR_{t-1} is known.

- 5.37 The correction factor, TK_t , will also apply in the first year of the next access arrangement period to adjust for any difference between maximum regulated transmission network revenue and actual transmission network revenue, in relation to the financial year commencing on 1 July 2008.

...

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

$$MDR_t = DR_t + TEC_t + DK_t$$

Where:

DR_t is the dollar amount in money of the day terms (current prices) for the financial year t calculated from the dollar amounts (expressed in 30 June 2006 prices) set out in the table below.

Distribution revenues to be used for calculating DR_t
(\$million real as at 30 June 06)

2006/07	2007/08	2008/09
352.4	437.7	475.3

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

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

For the purpose of determining compliance with this revenue cap and calculating DR_t , DK_t and therefore MDR_t , in each financial year CPI adjustments will be effected by using published CPI data relating to the relevant March quarters.

- 5.47 For financial years commencing on 1 July 2007 and 1 July 2008:

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

Where:

MDR_{t-1} is the maximum regulated revenue for Western Power's distribution network in the previous financial year.

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

$WACC_{\text{pre-tax real}}$ is 0.0676

For the financial year commencing on 1 July 2006, $DK_t = 0$.

For the avoidance of doubt, it should be noted that the annual tariff-setting process for financial year t typically takes place before the end of financial year $t-1$. Therefore, DK_t will need to be estimated in the first instance, and then recalculated in the subsequent financial year when ADR_{t-1} is known.

- 5.48 The correction factor, DK_t , will also apply in the first year of the next access arrangement period to adjust for any difference between maximum regulated distribution network revenue and actual distribution network revenue, in relation to the financial year commencing on 1 July 2008.

11. Clause 3.11 of the current access arrangement establishes a side constraint on price changes that allows individual reference tariff charges to change by a factor of plus or minus “CPI + 5 per cent” per annum.⁵

Revenue Cap and Side Constraint for 2009/10

12. In the absence of a known revenue cap for 2009/10 under the current access arrangement, Western Power has estimated ranges of “maximum transmission regulated revenue” and “maximum distribution regulated revenue” that may apply for 2009/10 under approved revisions to the access arrangement.⁶
13. Western Power has determined the lower bound of the ranges for transmission and distribution revenues by a building block calculation applying parameters established under the current access arrangement and including:
- rolling forward the opening capital base of 2008/09, as specified under the current access arrangement, to an opening value for 2009/10 by applying the forecast new facilities investment for 2008/09 as set out in the current access arrangement;
 - depreciation allowances consistent with the depreciation schedules of the current access arrangement;
 - the same weighted average cost of capital as applied under the current access arrangement; and
 - a value of forecast non-capital costs as approved under the current access arrangement for 2008/09.
14. Western Power has determined the upper bound of the ranges for transmission and distribution revenues as values specified in its proposed access arrangement revisions for 2009/10 with an adjustment for inflation.
15. Western Power’s calculation of a range of maximum reference service revenue for transmission services is summarised in Table 1.⁷

⁵ The actual side constraint is plus or minus (+/-) the total of the percentage change in the CPI plus five percentage points.

⁶ Price list information, pp. 3 – 8, Appendix B.

⁷ Price list information, section 3.1.5, Table 7.

Table 1 Western Power's determination of required revenue from transmission reference services for 2009/10

Calculation Parameter	Lower Bound Value (\$million)	Upper Bound Value (\$million)	Source
Revenue cap ($TR_{2009/10}$, dollar values of 30 June 2006)	256.8	312.3	2009/10 Price List Information, Table 3
Correction factor ($TK_{2009/10}$, dollar values of 30 June 2006)	10.8	10.8	2009/10 Price List Information, section 3.1.3, Table 4
Maximum regulated transmission revenue (MTR_{2009/10}, dollar values of 30 June 2006)	267.6	323.1	
Deemed capital contributions (dollar values of 30 June 2006)	(13.4)	(13.4)	2009/10 Price List Information, Appendix B - Revenue Model, Transmission_COS (line 116)
Forecast non-reference service revenue (dollar values of 30 June 2006)	(6.7)	(6.7)	2009/10 Price List Information, Appendix B - Revenue Model, Transmission_COS (line 114)
Reference service revenue (dollar values of 30 June 2006)	247.6	303.1	
Inflation factor	1.121	1.121	2009/10 Price List Information, Table 6
Reference service revenue (nominal dollar values)	277.6	339.8	

16. The transmission correction factor ($TK_{2009/10}$) is calculated from required and collected revenues for 2007/08 and 2008/09 as indicated in Table 2.⁸

⁸ Price list information, section 3.1.3, Table 4.

Table 2 Western Power's determination of the 2009/10 correction factor for determination of maximum regulated transmission revenue

Calculation Parameter	Value (\$million)			
	2007/08	2008/09	2009/10	
		Lower Bound	Upper Bound	
TR _t	230.6	227.1	256.8	312.3
plus TK _t (= Over/Under Revenue Collection _{t-1} × 1.0676)	-2.4	6.4	10.8	10.8
MTR_t	228.1	233.5	267.6	323.1
Deemed Capital Contribution _t	27.4	13.4		
plus Covered Services Revenue Collected _t	194.7 (actual)	210.0 (forecast)		
ATR_t	222.1	223.4		
(Over)/Under Revenue Collection_t	6.0	10.1		

17. In determining values of the transmission correction factor, Western Power has applied values of “deemed capital contributions” in each of the years 2007/08 and 2008/09. These values are the values of capital contributions forecast prior to approval of the access arrangement. The Authority notes that the price control and treatment of capital contributions under the access arrangement will require a reconciliation of the actual and deemed values of capital contributions at the time of revision of the access arrangement.
18. Western Power's derivation of a range of maximum reference service revenue for distribution services is indicated in Table 3.⁹

⁹ Price list information, section 3.1.5, Table 8.

Table 3 Western Power's determination of required revenue from distribution reference-services for 2009/10

Calculation Parameter	Lower Bound Value (\$million)	Upper Bound Value (\$million)	Source
Revenue cap (DR _{2009/10} , dollar values of 30 June 2006)	466.8	592.0	2009/10 Price List Information, Table 3
Tariff equalisation contribution (dollar values of 30 June 2006)	104.1	104.1	2009/10 Price List Information, Appendix B - Revenue Model, Distribution_COS (line 115)
Correction factor (DK _{2009/10} , dollar values of 30 June 2006)	(11.4)	(11.4)	2009/10 Price List Information, section 3.1.3, Table 5
Maximum regulated distribution revenue (MDR_{2009/10}, dollar values of 30 June 2006)	559.5	684.8	
Deemed capital contributions (dollar values of 30 June 2006)	(122.3)	(122.3)	2009/10 Price List Information, Appendix B - Revenue Model, Distribution_COS (line 116)
Forecast non-reference service revenue (dollar values of 30 June 2006)	(11.1)	(11.1)	2009/10 Price List Information, Appendix B - Revenue Model, Distribution_COS (line 114)
Reference service revenue (dollar values of 30 June 2006)	426.2	551.4	
Inflation factor	1.121	1.121	2009/10 Price List Information, Table 6
Reference service revenue (nominal dollar values)	477.8	618.2	

19. The distribution correction factor (DK_{2009/10}) is calculated from required and collected revenues for 2007/08 and 2008/09 as indicated in Table 4.¹⁰

¹⁰ Price list information, section 3.1.3, Table 5.

Table 4 Western Power's determination of the 2009/10 correction factor for determination of maximum regulated distribution revenue

Calculation Parameter	Value (\$million)			
	2007/08	2008/09	2009/10	
		Lower Bound	Upper Bound	
DR _t	437.7	475.3	466.8	592.0
plus TEC _t	67.9	66.5	104.1	104.1
plus DK _t (= Over/Under Revenue Collection _{t-1} × 1.0676)	-7.8	-9.6	-11.4	-11.4
MDR_t	497.8	532.3	559.5	684.8
Deemed Capital Contribution _t	106.8	122.3		
plus Covered Services Revenue Collected _t	400.0 (actual)	420.7 (forecast)		
ADR_t	506.8	543.0		
(Over)/Under Revenue Collection_t	-9.0	-10.7		

20. In determining values of the distribution correction factor, Western Power has applied values of “deemed capital contributions” in each of the years 2007/08 and 2008/09. These values are the values of capital contributions forecast prior to approval of the access arrangement. The Authority notes that the price control and treatment of capital contributions under the access arrangement will require a reconciliation of the actual and deemed values of capital contributions at the time of revision of the access arrangement.
21. In determining a value of required distribution revenue, Western Power has included an amount of \$104.1 million as a tariff equalisation contribution (TEC_t) for 2009/10. Information provided to the Authority by the Department of Treasury and Finance indicates that a tariff equalisation contribution is intended to be established for 2009/10, at a value close to the value indicated by Western Power in supporting documents to the proposed price list. On this basis, the Authority accepts the inclusion of this amount in Western Power's estimates of required distribution revenue for 2009/10.
22. Western Power indicates in section 3.1.4 of the price list information that the inflation factor, of 1.121, used to calculate the estimated revenue from reference services in nominal dollar values is derived from actual inflation for the annual periods March 2006 to March 2007 (2.4 per cent); March 2007 to March 2008 (4.2 per cent); and March 2008 to March 2009 (2.5 per cent), and forecast inflation for the annual period March 2009 to March 2010 (2.5 per cent).
23. The side constraint applying to increases in charges from 2008/09 to 2009/10 would be +/- 7.5 per cent, with the limit of 7.5 per cent corresponding to the forecast of inflation applied by Western Power for the March 2009 to March 2010 year of 2.5 per cent, plus the additional 5 per cent limit imposed under the side constraint.

Proposed Price List

24. Western Power's price list information indicates that the proposed price list has been derived by increasing the value of all reference tariff charges by approximately 7.5 per cent.

Compliance of the Proposed Price List with the Price Control

25. The spreadsheets provided by Western Power to the Authority on a confidential basis comprise calculations of expected revenue from the component charges of reference tariffs set out in the proposed price list, given forecasts of the parameters of demand for each charge.
26. The forecast revenues for transmission and distribution reference services are toward the lower bound of Western Power's estimated ranges of revenue requirements for 2009/10 (Table 5).¹¹

Table 5 Western Power's forecast revenue from reference services for 2009/10

Revenue component	Value (\$million, nominal)
Transmission revenue	
Forecast revenue from transmission reference tariffs	254.1
Lower Bound / Upper Bound Target Reference Service Revenue (from paragraph 15, Table 1)	277.6 / 339.8
Distribution revenue	
Forecast revenue from distribution reference tariffs	498.7
Lower Bound / Upper Bound Target Reference Service Revenue (from paragraph 18, Table 3)	477.8 / 618.2

27. Western Power's price list information indicates the percentage changes in reference tariff charges from the charges established in the price list for 2008/09 to the proposed price list for 2009/10. These percentage changes are within the bounds established by the side constraint and comprise:
- increases in charges of distribution reference tariffs of between 6.5 and 7.5 per cent; and
 - increases in charges of transmission reference tariffs of 7.5 per cent.
28. Taking into account the derivation of estimated revenue from reference services, the forecast revenue from reference tariffs and the changes in reference tariff charges relative to the side constraint, the Authority is satisfied that the proposed

¹¹ Price list information, section 3.1.6, Table 9.

Western Power has derived its forecast revenue for transmission and distribution reference services by applying the 2009/10 tariffs set out in the proposed price list. The forecast revenue from the proposed tariffs comprise \$254.1 million in transmission revenue and \$498.7 million in distribution revenue over 2009/10.

2009/10 price list complies with the price control set out in the current access arrangement for the SWIN.

29. The Authority notes that a value of required revenue for the 2009/10 year will be determined as part of the Authority's assessment of the proposed access arrangement revisions. To the extent that the price list for 2009/10 results in an under-recovery or over-recovery of revenue relative to the value of required revenue, there will be a compensating correction to the required revenue and price list for 2010/11.

Compliance of the Price List with the Pricing Methods

30. The current access arrangement includes pricing methods set out at clauses 9.1 to 9.30.
31. 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 tariffs; 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.
32. These pricing methods are applied by Western Power to ensure compliance with the objectives for pricing methods under sections 7.3 and 7.4 of the Access Code.
33. Western Power has not demonstrated compliance of the proposed 2009/10 price list with the pricing methods as specified under the current access arrangement. Western Power indicates that this is difficult in the absence of values of forecast costs for 2009/10 under the approved access arrangement.
34. Western Power asserts, however, that the proposed 2009/10 price list complies with the cost allocations of the pricing methods for reasons that there have been no changes to the structures of reference tariffs or the relativities of reference tariff charges in deriving the proposed price list for 2009/10.¹²
35. Taking into account the circumstances in which the price list for 2009/10 is being approved, the Authority accepts that the proposed price list complies broadly with the pricing methods, recognising that the proposed price list is broadly consistent with one that would be derived by application of the pricing methods.

¹² Price list information, pp. 7, 8.