



# **2009/10 Price List Information**

ELECTRICITY NETWORKS CORPORATION  
("WESTERN POWER")

ABN 18 540 492 861

## Table of contents

1	Introduction	1
	1.1 Code Requirements	1
	1.2 Cessation of transition tariffs	1
2	2009/10 Price List derivation	2
3	2009/10 Price List compliance with Access Arrangement	3
	3.1 Compliance with the Price Control	3
	3.1.1 Forecast revenue recovery	3
	3.1.2 Reasonable estimate of 2009/10 revenue cap	4
	3.1.3 K-factor calculation for 2009/10	4
	3.1.4 Inflation factor	5
	3.1.5 Reasonable range for 2009/10 maximum regulated revenue	5
	3.1.6 Conclusion	6
	3.2 Compliance with Side Constraint	7
	3.3 Compliance with the pricing methods	7
	3.3.1 Cost Allocations	7
	3.3.2 Incremental and stand-alone cost of service provision	7
	3.3.3 Conclusion	8
4	Format of 2009/10 Price List	9
5	Reference Tariff Structure	10
	5.1 Reference Services & Tariff Structure	10
	5.2 Exit Service Tariff Overview	10
	5.2.1 RT1 – Anytime Energy (Residential)	10
	5.2.2 RT2 – Anytime Energy (Business)	10
	5.2.3 RT3 – Time of Use Energy (Small)	11
	5.2.4 RT4 – Time of Use Energy (Large)	11
	5.2.5 RT5 – High Voltage Metered Demand	11
	5.2.6 RT6 – Low Voltage Metered Demand	12
	5.2.7 RT7 – High Voltage Contract Maximum Demand	12
	5.2.8 RT8 – Low Voltage Contract Maximum Demand	12
	5.2.9 RT9 – Streetlighting	12
	5.2.10 RT10 – Un-Metered Supplies	13
	5.2.11 TRT1 – Transmission	13
	5.3 Entry Service Tariff Overview	13

---

5.3.1	RT11 – Distribution	13
5.3.2	TRT2 – Transmission	14
6	Price Changes from 2008/09	15
6.1	Use of System Prices	15
6.2	Connection Prices	19
6.3	Common Service Prices	19
6.4	Metered Demand Prices	19
6.5	Demand Prices	20
6.6	Demand Length Prices	23
6.7	Control System Service Prices	24
6.8	Metering Prices	24
6.9	Administration Prices	25
6.10	Low Voltage Prices	25
6.11	Streetlight Asset Prices	25
	Appendix A - Price Setting for New Transmission Nodes Policy	A-1
	Appendix B - Revenue Model	B-1

# 1 Introduction

This document is Western Power's Price List Information, as defined in the Electricity Networks Access Code 2004 (the Code).

## 1.1 Code Requirements

Section 8.1 of the Code requires Western Power to submit Price List Information to the Authority.

The Code defines Price List Information as:

"price list information" means a document which sets out information which would reasonably be required to enable the Authority, users and applicants to:

- (a) understand how the service provider derived the elements of the proposed price list; and
- (b) assess the compliance of the proposed price list with the access arrangement.

## 1.2 Cessation of transition tariffs

Western Power will cease to offer transition tariffs on 30 June 2009. The 2008/09 Transition Price List is the final price list for transition tariffs.

From 1 July 2009 customers on transition tariffs will be offered an equivalent reference service (charged at the associated reference tariff) as outlined in the following table:

Table 1 - Equivalent reference services

Transition tariff	Equivalent reference service
Distribution high voltage transition tariff	A7 – High Voltage Contract Maximum Demand Exit Service
Distribution low voltage transition tariff	A8 – Low Voltage Contract Maximum Demand Exit Service
Distribution entry transition tariff	B1 – Distribution Entry Service
Transmission exit transition tariff	A11 – Transmission Exit Service
Transmission entry transition tariff	B2 – Transmission Entry Service

## 2 2009/10 Price List derivation

On 1 October 2008 Western Power submitted proposed revisions and revised access arrangement information to the Authority which included a 2009/10 Price List and associated Price List Information.

As at 24 April 2009, the Authority has not approved the proposed revisions and the associated 2009/10 Price List.

Under section 3.10 of the Access Arrangement and section 8.1 of the Code Western Power is obliged to submit a 2009/10 Price List by 24 April 2009 for approval by the Authority. The Price List submitted with the proposed revisions on 1 October 2008 does not comply with the Access Arrangement (given that the proposed revisions are not yet approved). Therefore Western Power has submitted a revised 2009/10 Price List on 24 April 2009.

The 2009/10 Price List submitted to the Authority on 24 April 2009 has been derived by increasing all tariff components by CPI+5% (7.5%) when compared to the 2008/09 Price List. Note: Some tariff component increases are slightly below CPI+5% by necessity due to rounding effects.

### 3 2009/10 Price List compliance with Access Arrangement

The following sections detail how the 2009/10 Price List complies with the Access Arrangement.

#### 3.1 Compliance with the Price Control

Western Power's Access Arrangement adopts a revenue cap form of price control. However, the Access Arrangement does not define a revenue cap for 2009/10. Without a defined revenue cap for 2009/10 it is difficult to demonstrate compliance with the price control.

Western Power's approach to demonstrating compliance with the price control is to demonstrate that the amount of revenue that is forecast to be recovered from the reference tariffs (by applying the prices in the 2009/10 Price List) is less than or within a reasonable range of estimates of the 2009/10 revenue cap. The actual 2009/10 price control will only be known once the Authority has approved the proposed revisions to the Access Arrangement.

This approach should allow the Authority to approve the 2009/10 Price List without having to predetermine the outcomes of the Authority's review of the proposed revisions to the Access Arrangement.

##### 3.1.1 Forecast revenue recovery

The following table sets out the forecast reference service revenue, by tariff, that is forecast to be collected when applying the 2009/10 Price List:

Table 2 - Revenue Forecast for 2009/10 (\$M Nominal)

	kWh	Number Customers	Forecast Transmission Revenue Recovered	Forecast Distribution Revenue Recovered
TRT1 – Transmission Exit	N/A	27	19.3	0.0
TRT2 – Transmission Entry (includes LV Gens etc.)	N/A	26	46.6	0.0
RT1 - Anytime Energy (Residential)	5,112,296,250	856,826	69.5	273.5
RT2 - Anytime Energy (Business)	1,605,849,347	98,160	26.2	89.8
RT3 - Time of Use Energy (Residential)	159,593,976	15,797	2.1	7.1
RT4 - Time of Use Energy (Business)	1,912,186,676	12,451	24.9	57.6
RT5 - High Voltage Metered Demand	288,150,192	97	3.3	4.5
RT6 - Low Voltage Metered Demand	1,117,985,739	955	15.0	23.6
RT7 - High Voltage Contract Maximum Demand	3,034,636,365	190	41.8	20.7
RT8 - Low Voltage Contract Maximum Demand	303,036,136	53	4.1	4.5
RT9 – Streetlighting	103,494,423	210,015	1.1	15.6
RT10 - Un-Metered Supplies	32,386,702	14,441	0.2	1.7
RT11 - Distribution Entry	0	0	0.0	0.0
<b>TOTAL</b>	<b>13,669,615,806</b>	<b>1,209,038</b>	<b>254.1</b>	<b>498.7</b>

### 3.1.2 Reasonable estimate of 2009/10 revenue cap

In determining a reasonable estimate of the 2009/10 revenue cap Western Power has adopted an approach that will define the upper and lower bound of a reasonable range for the 2009/10 revenue cap:

1. It is reasonably expected that the lower bound of the revenue cap can be determined based on the parameters within the Access Arrangement (without regard to Western Power's forecast costs in the proposed revisions for 2009/10); and
2. It is reasonably expected that the upper bound of the revenue cap will be the revenue cap specified in the proposed revisions submitted to the Authority on 1 October 2008.

The following table details the expected 2009/10 transmission and distribution revenue cap lower and upper bound derived as described above:

Table 3 - Revenue Cap Reasonable Range for 2009/10 (\$M real as at 30 June 2006)

	Transmission Revenue Cap (TR <sub>2009/10</sub> )	Distribution Revenue Cap (DR <sub>2009/10</sub> )	Source
<b>Lower bound</b> (Revenue cap based on AA#1 parameters)	256.8	466.8	Appendix B: COS sheet – row 117
<b>Upper bound</b> (Proposed revisions revenue cap)	312.3	592.0	AAI Appendix 7: Revenue Model Outputs [1 Oct 2008] (deflated per Appendix B inflation assumptions)

### 3.1.3 K-factor calculation for 2009/10

The following tables set out the derivation of the k-factor for this pricing year in accordance with sections 5.36 and 5.47 of the Access Arrangement.

Table 4 –Transmission K-Factor for 2009/10 (\$M real as at 30 June 2006)

	2007/08	2008/09
TR <sub>t</sub>	230.6	227.1
plus TK <sub>t</sub>	-2.4	6.4
<b>MTR<sub>t</sub></b>	<b>228.1</b>	<b>233.5</b>
Deemed Capital Contribution <sub>t</sub>	27.4	13.4
plus Covered Services Revenue Collected <sub>t</sub>	194.7 (Actual)	210.0 (Forecast)
<b>ATR<sub>t</sub></b>	<b>222.1</b>	<b>223.4</b>
<b>(Over)/Under Revenue Collection<sub>t</sub></b>	6.0	10.1

Table 5 –Distribution K-Factor for 2009/10 (\$M real as at 30 June 2006)

	2007/08	2008/09
DR <sub>t</sub>	437.7	475.3
plus TEC <sub>t</sub>	67.9	66.5
plus DK <sub>t</sub>	-7.8	-9.6
<b>MDR<sub>t</sub></b>	<b>497.8</b>	<b>532.3</b>
Deemed Capital Contribution <sub>t</sub>	106.8	122.3
plus Covered Services Revenue Collected <sub>t</sub>	400.0	420.7
	(Actual)	(Forecast)
<b>ADR<sub>t</sub></b>	<b>506.8</b>	<b>543.0</b>
<b>(Over)/Under Revenue Collection<sub>t</sub></b>	<b>-9.0</b>	<b>-10.7</b>

### 3.1.4 Inflation factor

Western Power's approach to inflating the reference service revenue from real terms to nominal terms is to use the relevant published March quarter CPI data (refer sections 5.35 and 5.46 of the Access Arrangement), where available, and to use forecast inflation in accordance with the revenue model in all other instances.

Table 6 - Derivation of 2009/10 Inflation Factor

March 2006 – March 2007 – Actual	2.4%
March 2007 – March 2008 – Actual	4.2%
March 2008 – March 2009 – Actual	2.5%
March 2009 – March 2010 – Forecast	2.5%
Derived Inflation Factor	1.121

### 3.1.5 Reasonable range for 2009/10 maximum regulated revenue

Western Power's assessment of the lower and upper bound of the reasonable estimate of the 2009/10 maximum regulated revenue is set out in the tables below.

Table 7 –Estimate of Transmission reference service revenue for 2009/10

Calculation Parameter	Basis	Lower bound (\$million)	Upper bound (\$million)
TR <sub>2009/10</sub>	Real \$ as at 30 June 2006	256.8	312.3
plus TK <sub>2009/10</sub>	Real \$ as at 30 June 2006	10.8	10.8
<b>MTR<sub>2009/10</sub></b>	Real \$ as at 30 June 2006	<b>267.6</b>	<b>323.1</b>
minus Deemed Capital Contributions <sub>2009/10</sub>	Real \$ as at 30 June 2006	13.4	13.4
minus Non-Reference Service Revenue <sub>2009/10</sub>	Real \$ as at 30 June 2006	6.7	6.7
<b>Reference Service Revenue<sub>2009/10</sub></b>	Real \$ as at 30 June 2006	<b>247.6</b>	<b>303.1</b>
Inflation Factor		1.121	1.121
<b>Reference Service Revenue<sub>2009/10</sub></b>	Nominal \$	<b>277.6</b>	<b>339.8</b>



Table 8 – Estimate of Distribution reference service revenue for 2009/10

Calculation Parameter	Basis	Lower Bound (\$million)	Upper Bound (\$million)
DR <sub>2009/10</sub>	Real \$ as at 30 June 2006	466.8	592.0
plus TEC <sub>2009/10</sub>	Real \$ as at 30 June 2006	104.1	104.1
plus DK <sub>2009/10</sub>	Real \$ as at 30 June 2006	-11.4	-11.4
<b>MTR<sub>2009/10</sub></b>	Real \$ as at 30 June 2006	<b>559.5</b>	<b>684.8</b>
minus Deemed Capital Contributions <sub>2009/10</sub>	Real \$ as at 30 June 2006	122.3	122.3
minus Non-Reference Service Revenue <sub>2009/10</sub>	Real \$ as at 30 June 2006	11.1	11.1
<b>Reference Service Revenue<sub>2009/10</sub></b>	Real \$ as at 30 June 2006	<b>426.2</b>	<b>551.4</b>
Inflation Factor		1.121	1.121
<b>Reference Service Revenue<sub>2009/10</sub></b>	Nominal \$	<b>477.8</b>	<b>618.2</b>

For the avoidance of doubt, the price control that will apply in 2009/10 is subject to the approval of the Authority and will be approved at the time that the proposed revisions to the Access Arrangement are approved. The information presented above is a reasonable estimate for the purposes of justifying the CPI+5% increase proposed for 2009/10 and is not binding on Western Power.

### 3.1.6 Conclusion

Section 3.1.5 demonstrates the upper and lower bounds of the reasonable range for the maximum regulated revenue that may apply in 2009/10. The following table compares the reasonable range with the forecast revenue recovery set out in section 3.1.1:

Table 9 – Reference Service Revenue Summary for 2009/10 (\$M Nominal)

	Lower bound of revenue estimate	Upper bound of revenue estimate	Forecast revenue recovery	Comment
<b>Transmission</b>	277.6	339.8	254.1	The forecast revenue is less than the lower bound of the reasonable range.
<b>Distribution</b>	477.8	618.2	498.7	The forecast revenue is within the reasonable range but near the lower bound

It can be concluded that the amount of revenue that is forecast to be recovered from transmission reference tariffs (by applying the prices in the 2009/10 Price List) is less than the reasonable range for transmission reference service. Therefore increasing all transmission tariff components by CPI+5% (7.5%) is reasonable and complies with the price control.

It can also be concluded the amount of revenue that is forecast to be recovered from distribution reference tariffs (by applying the prices in the 2009/10 Price List) is at the lower end of the reasonable range for distribution reference service revenue. Therefore increasing all distribution tariff components by CPI+5% (7.5%) is reasonable and complies with the price control.

### 3.2 Compliance with Side Constraint

The side constraint that applies to reference tariffs is set out in section 3.11 of the Access Arrangement as follows:

#### Side constraints on reference tariff movements

- 3.11 For each year of this *access arrangement period*, Western Power will not increase or decrease any *reference tariff* by more than CPI+5% per annum. For *reference services A1 to A10 and B1*, Western Power will give effect to this side constraint by ensuring that no tariff component increases or decreases in any financial year by more than CPI+5% per annum.

Section 6 of this document demonstrates that the 2009/10 Price List complies with the side constraint.

### 3.3 Compliance with the pricing methods

#### 3.3.1 Cost Allocations

The pricing methods (cost allocations) are set out in section 9.4 of the Access Arrangement as follows:

#### Overview of Pricing Method

- 9.4 *Reference tariffs* are derived from an analysis of the cost of service provision which entails:
- (a) identifying the costs of providing *reference services*;
  - (b) allocating the costs of providing *reference services* to particular customer groups;
  - (c) translating the costs of serving particular customer groups to the costs of providing *reference tariffs*; and
  - (d) determining a structure of *reference tariffs* in a manner that reflects the underlying cost structure, in accordance with section 7.6 of the Code.

As the Access Arrangement does not define a revenue cap for 2009/10 (or the costs of providing reference services in 2009/10) it is difficult to quantitatively demonstrate compliance with the cost allocations of the pricing methods and as a result Western Power has made no attempt to do so in this Price List Information.

Western Power asserts that the 2009/10 Price List complies with the cost allocations of the pricing methods in section 9.4 of the Access Arrangement due to:

1. The 2008/09 Price List complied with section 9.4 of the Access Arrangement;
2. The 2009/10 Price List increases all tariff components by CPI+5% when compared to the 2008/09 Price List; and
3. No changes have been proposed to the structure of the reference tariffs.

#### 3.3.2 Incremental and stand-alone cost of service provision

The pricing methods requirement for reference tariffs to be between incremental and stand-alone cost of service provision is set out in section 7.3 (b) of the Code as follows:

- 7.3 Subject to sections 7.5, 7.7 and 7.12<sup>177</sup>, 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*.

As the Access Arrangement does not define a revenue cap for 2009/10 (or the costs of providing reference services in 2009/10) it is difficult to quantitatively demonstrate compliance with section 7.3 (b) of the Code and as a result Western Power has made no attempt to do so in this Price List Information.

Western Power asserts that the 2009/10 Price List complies with the pricing methods in section 7.3(b) of the Code due to:

1. The 2008/09 Price List complied with section 7.3 (b) of the Code;
2. The 2009/10 Price List increases all tariff components by CPI+5% when compared to the 2008/09 Price List; and
3. No changes have been proposed to the structure of the reference tariffs.

### 3.3.3 Conclusion

In conclusion, with regard to the pricing methods, increasing all tariff components by CPI+5% (7.5%) is reasonable and complies with the pricing methods set out in the Code and the Access Arrangement.

## 4 Format of 2009/10 Price List

The 2009/10 Price List is presented as GST exclusive and based on daily rates (for the fixed charges). This compares with the historic Price Lists being presented with GST inclusive prices and with fixed charges expressed on an annual basis.

To assist interested parties to adjust to the new format of the 2009/10 Price List, Western Power has included the GST inclusive and annual equivalent charges for information purposes only.

The change is driven by the introduction of a new network billing system (NetCIS) within Western Power. As part of the new network billing system a Network Billing Specification has been developed to define the business to business (B2B) process for the electronic exchange of network billing related transactions between Western Power and code participants. The B2B specification is driving the Price List to detail GST exclusive prices based on daily rates to enable code participants to verify the prices in the network billing transactions. Further information on the Network Billing Specification is available on Western Power's website:

[http://www.westernpower.com.au/mainContent/workingWithPower/NetworkAccessServices/Network\\_billing\\_specification.html](http://www.westernpower.com.au/mainContent/workingWithPower/NetworkAccessServices/Network_billing_specification.html)

## 5 Reference Tariff Structure

This section provides an overview of the reference tariffs that apply to the transmission and distribution system.

### 5.1 Reference Services & Tariff Structure

The following table details the relationship between the reference services, detailed in the Access Arrangement, and the reference tariffs.

Table 10 - Reference Services

Reference Service	Reference Tariff
A1 – Anytime Energy (Residential) Exit Service	RT1
A2 – Anytime Energy (Business) Exit Service	RT2
A3 – Time of Use Energy (Small) Exit Service	RT3
A4 – Time of Use Energy (Large) Exit Service	RT4
A5 – High Voltage Metered Demand Exit Service	RT5
A6 – Low Voltage Metered Demand Exit Service	RT6
A7 – High Voltage Contract Maximum Demand Exit Service	RT7
A8 – Low Voltage Contract Maximum Demand Exit Service	RT8
A9 – Streetlighting Exit Service	RT9
A10 – Un-Metered Supplies Exit Service	RT10
A11 – Transmission Exit Service	TRT1
B1 – Distribution Entry Service	RT11
B2 – Transmission Entry Service	TRT2

### 5.2 Exit Service Tariff Overview

An overview of the structure of each of the reference tariffs applicable to exit services is presented in the following sections.

#### 5.2.1 RT1 – Anytime Energy (Residential)

The tariff structure for distribution is based on:

- A fixed charge per user, and
- A charge per kWh for calculated energy consumption.

The tariff structure for transmission is based on:

- A charge per kWh for calculated energy consumption.

Energy only tariffs have no incentive for users to improve their load factor or shift energy consumption to off-peak.

#### 5.2.2 RT2 – Anytime Energy (Business)

The tariff structure for distribution is based on:

- A fixed charge per user, and
- A charge per kWh for metered energy consumption.

The tariff structure for transmission is based on:

- A charge per kWh for metered energy consumption.

Energy only tariffs have no incentive for users to improve their load factor or shift energy consumption to off-peak

#### 5.2.3 RT3 – Time of Use Energy (Small)

The tariff structure for distribution is based on:

- A fixed charge per user,
- A charge per kWh for metered on peak energy consumption, and
- A charge per kWh for metered off peak energy consumption.

The tariff structure for transmission is based on:

- A charge per kWh for metered on peak energy consumption, and
- A charge per kWh for metered off peak energy consumption.

Time of use tariffs have the incentive for users to manage their energy consumption to shift energy consumption from on-peak to off-peak.

#### 5.2.4 RT4 – Time of Use Energy (Large)

The tariff structure for distribution is based on:

- A fixed charge per user,
- A charge per kWh for metered on peak energy consumption, and
- A charge per kWh for metered off peak energy consumption.

The tariff structure for transmission is based on:

- A charge per kWh for metered on peak energy consumption, and
- A charge per kWh for metered off peak energy consumption.

Time of use tariffs have the incentive for users to manage their energy consumption to shift energy consumption from on-peak to off-peak.

#### 5.2.5 RT5 – High Voltage Metered Demand

The tariff structure is based on the metered demand of the user, with a discount to the demand charge based on the ratio of off peak energy to total energy used. In addition the tariff has a demand length tariff component for users with demand greater than 1,000 kVA. There is a separate metering charge that picks up the capital and operating costs for the metering asset.

This tariff has a mix of incentives for the user to manage their electricity consumption.

The demand used is a running 12-month peak. This provides a clear incentive to manage the peak demand because any excessive demand recorded in one month then impacts upon the demand charge for the next 12 months. The demand length charge is also based on the running 12-month peak.

The second incentive is the off peak energy discount which is based upon the ratio of off peak energy to total energy used. The maximum discount is 50% for off peak energy usage only and for an equal use of on and off peak energy the discount is 25%.

#### 5.2.6 RT6 – Low Voltage Metered Demand

The tariff structure is identical to RT5 – High Voltage Metered Demand.

#### 5.2.7 RT7 – High Voltage Contract Maximum Demand

The tariff structure requires the user to nominate a contracted maximum demand (CMD) that reasonably reflects their expected annual peak demand. In addition the tariff has a demand length tariff component also based on the CMD. There is a monthly penalty for any demand excursion above the CMD. All prices are in terms of \$ per kVA.

The distribution component of the prices is zonal and there are 5 zones ranging from CBD to rural. This is because the costs of supply are seen to be dependent on the nature of the network that varies according to the location and consequent construction standard and cost.

There are also separate charges for administration and metering.

The transmission component of the tariff is nodal with prices based on the zone substation to which the user is connected.

This tariff has a mix of incentives for the user to manage their electricity consumption.

The demand is in kVA rather than kW so that there is a clear benefit from managing the power factor as close to unity as possible. For example, improving the power factor from 0.7 to 0.8 will reduce the demand charge by 12.5%.

The second incentive is to manage the peak demand, which can be achieved by improving the load factor and by containing the peak demand. This incentive is very strong and the user has flexibility in the options available for managing the demand. The penalty for exceeding the contract maximum demand provides additional incentive.

The demand length charge provides an incentive for the user to locate as close as possible to the zone substation. For existing users there is no real opportunity to respond to this incentive, but for new users there is some ability to respond.

The transmission component of the price is nodal so that there is a clear signal for users to locate near to the lower price substations. This may or may not be achievable depending on the individual user circumstances.

#### 5.2.8 RT8 – Low Voltage Contract Maximum Demand

The tariff structure is identical to RT7 – High Voltage Contract Maximum Demand with the addition of a low voltage charge that reflects the cost of usage of the low voltage distribution network.

#### 5.2.9 RT9 – Streetlighting

Street-lights do not have metering information to support either the initial setting of the tariff or the billing of users based on energy consumption or energy demand and therefore the energy consumption must be estimated.

The tariff structure for distribution is based on:

- A fixed charge per user, and
- A charge per kWh for calculated energy consumption.

The tariff structure for transmission is based on:

- A charge per kWh for calculated energy consumption.

In addition there is a charge to reflect the capital and operating costs of the street light asset itself. Western Power owns the assets and the revenue is included within the reference service revenue. The tariff structure for the street light asset is simply a fixed charge per light based on the type and rating of the light.

#### 5.2.10 RT10 – Un-Metered Supplies

Un-metered supplies do not have metering information to support either the initial setting of the tariff or the billing of users based on energy consumption or energy demand. However there is a requirement for the user to provide sufficient load data so that the energy consumption can be calculated. As such the available information is user connection and energy consumption.

The tariff structure for distribution is based on:

- A fixed charge per user, and
- A charge per kWh for calculated energy consumption.

The tariff structure for transmission is based on:

- A charge per kWh for calculated energy consumption.

#### 5.2.11 TRT1 – Transmission

The tariff is based on the zone substation to which the user is connected. The user will pay the “use of system”, “common service” and “control system service” charges. There is also a separate metering charge. All prices are in \$ per kW.

The tariff structure requires the user to nominate a contract maximum demand (CMD), in kW, that reasonably reflects their expected annual peak demand. There is a monthly penalty for any demand excursion above the CMD.

The incentive is clearly for the user to manage their peak demand through the initial nomination of the CMD and also the monthly penalty for exceeding the CMD.

### 5.3 Entry Service Tariff Overview

#### 5.3.1 RT11 – Distribution

The transmission charge is identical to the charge for a transmission connected generator in that the generator nominates a declared sent out capacity (DSOC) and the charge is based on the transmission nodal price at the nearest transmission entry point. The transmission charge for “use of system” is in \$ per kW. Unlike transmission exit reference tariff (TRT1) there is no “common service” charge. The generator must also pay the connection charge which is also expressed in terms of \$ per kW.



The generator DSOC is in kW and is corrected for losses from the zone substation to the generator site, for purposes of calculation of the transmission price component.

The distribution charge is based on the zonal CMD demand length price. There is no demand only charge. As such the distribution charge for generators with demand less than 1,000 kVA is zero. There is also a separate metering charge.

The DSOC must be nominated in kW for the transmission charge and in kVA for the distribution charge. However the power factor is assumed to be unity for the purpose of charging because the power factor will not generally be within the control of the generator.

The incentive for the distribution-connected generator is to locate as near as possible to the zone substation although for generators with a DSOC less than 1,000 kVA there is no such incentive. However small generators are not considered to require strong locational incentives because the network will generally not be impacted to any significant extent.

There is also the locational signal for the transmission component of the charge. Generators may or may not be able to respond to this signal depending on their individual circumstances.

#### 5.3.2 TRT2 – Transmission

The tariff is based on the zone substation to which the generator is connected. The generator will pay the entry point “use of system” and “control system service” charges. There is also a separate metering charge. All prices are in \$ per kW.

The tariff structure requires the generator to nominate a declared sent out capacity (DSOC), in kW, that reflects their maximum intended export capacity. There is a monthly penalty for any demand excursion above the DSOC.

## 6 Price Changes from 2008/09

The following tables detail the % change in the 2009/10 tariff components when compared to the 2008/09 tariff components.

### 6.1 Use of System Prices

The % changes in the following table are applicable for reference tariffs: **RT1, RT2, RT3, RT4, RT9 & RT10.**

Table 11

	Fixed Price	Energy Rates		
	% Change	Anytime % Change	On Peak % Change	Off Peak % Change
Reference tariff 1 - RT1				
Transmission		7.5%	-	-
Distribution	7.5%	7.5%	-	-
Bundled Tariff	7.5%	7.5%	-	-
Reference tariff 2 - RT2				
Transmission		7.5%	-	-
Distribution	7.5%	7.5%	-	-
Bundled Tariff	7.5%	7.5%	-	-
Reference tariff 3 - RT3				
Transmission		-	7.5%	7.5%
Distribution	7.5%	-	7.5%	7.5%
Bundled Tariff	7.5%	-	7.5%	7.5%
Reference tariff 4 - RT4				
Transmission		-	7.5%	7.5%
Distribution	7.5%	-	7.5%	7.5%
Bundled Tariff	7.5%	-	7.5%	7.5%
Reference tariff 9 - RT9				
Transmission		7.5%	-	-
Distribution	7.5%	7.5%	-	-
Bundled Tariff	7.5%	7.5%	-	-
Reference tariff 10 - RT10				
Transmission		7.5%	-	-
Distribution	7.5%	7.5%	-	-
Bundled Tariff	7.5%	7.5%	-	-

The % changes in the following table are applicable for reference tariff: **TRT1**.

Table 12

Substation	TNI	Use of System Price % Change
Albany	WALB	7.5%
Alcoa Pinjarra	WAPJ	7.5%
Amherst	WAMT	7.5%
Arkana	WARK	7.5%
Australian Fused Materials	WAFM	7.5%
Australian Paper Mills	WAPM	7.5%
Baandee (WC)	WBDE	7.5%
Beechboro	WBCH	7.5%
Beenup	WBNP	7.5%
Belmont	WBEL	7.5%
Black Flag	WBKF	7.5%
Boddington (Local)	WABD	7.5%
Boddington Reynolds	WRBD	7.5%
Boulder	WBLD	7.5%
Bounty	WBNY	7.5%
Bridgetown	WBTN	7.5%
British Petroleum	WBPM	7.5%
Broken Hill Kwinana	WBHK	7.5%
Bunbury Harbour	WBUH	7.5%
Busselton	WBSN	7.5%
Byford	WBYF	7.5%
Canning Vale	WCVL	7.5%
Capel	WCAP	7.5%
Carrabin	WCAR	7.5%
Cataby Kerr McGee	WKMC	7.5%
Chapman	WCPN	7.5%
Clarence Street	WCLN	7.5%
Cockburn Cement	WCCT	7.5%
Cockburn Cement Ltd	WCCL	7.5%
Collie	WCOE	7.5%
Collier	WCOL	7.5%
Cook Street	WCKT	7.5%
Coolup	WCLP	7.5%
Cottesloe	WCOT	7.5%
Cunderdin	WCUN	7.5%
Darlington	WDTN	7.5%
Edgewater	WEDG	7.5%
Edmund Street	WEDD	7.5%
Eneabba	WENB	7.5%
Forrest Ave	WFRT	7.5%
Forrestfield	WFFD	7.5%
Geraldton	WGTM	7.5%
Golden Grove	WGGV	7.5%
Gosnells	WGNL	7.5%
Hadfields	WHFS	7.5%
Hay Street	WHAY	7.5%

Substation	TNI	Use of System Price % Change
Herdsmen Parade	WHEP	7.5%
Joel Terrace	WJTE	7.5%
Kalamunda	WKDA	7.5%
Katanning	WKAT	7.5%
Kellerberrin	WKEL	7.5%
Kojonup	WKOJ	7.5%
Kondinin	WKDN	7.5%
Kwinana Alcoa	WAKW	7.5%
Landsdale	WLDE	7.5%
Malaga	WMLG	7.5%
Mandurah	WMHA	7.5%
Manjimup	WMJP	7.5%
Manning Street	WMAG	7.5%
Margaret River	WMRV	7.5%
Marriott Road Barrack Silicon Smelter	WBSI	7.5%
Marriott Road (Local)	WLMR	7.5%
Mason Road	WMSR	7.5%
Mason Road CSBP	WCBP	7.5%
Mason Road Hismelt	WHIS	7.5%
Mason Road Kerr McGee	WKMK	7.5%
Medical Centre	WMCR	7.5%
Medina	WMED	7.5%
Merredin 66kV	WMER	7.5%
Midland Junction	WMJX	7.5%
Milligan Street	WMIL	7.5%
Moora	WMOR	7.5%
Morley	WMOY	7.5%
Mt Barker	WMBR	7.5%
Muchea Kerr McGee	WKMM	7.5%
Muchea (Local)	WLMC	7.5%
Mullaloo	WMUL	7.5%
Murdoch	WMUR	7.5%
Mundaring Weir	WMWR	7.5%
Myaree	WMYR	7.5%
Narrogin	WNGN	7.5%
Nedlands	WNED	7.5%
North Beach	WNBH	7.5%
North Fremantle	WNFL	7.5%
North Perth	WNPH	7.5%
Northam	WNOR	7.5%
O'Connor	WOCN	7.5%
Osborne Park	WOPK	7.5%
Padbury	WPBY	7.5%
Parkeston	WPRK	7.5%
Parklands	WPLD	7.5%
Piccadilly	WPCY	7.5%
Picton 66kv	WPIC	7.5%
Pinjarra	WPNJ	7.5%
Rangeway	WRAN	7.5%

Substation	TNI	Use of System Price % Change
Regans	WRGN	7.5%
Riverton	WRTN	7.5%
Rivervale	WRVE	7.5%
Rockingham	WROH	7.5%
Sawyers Valley	WSVL	7.5%
Shenton Park	WSPA	7.5%
Southern River	WSNR	7.5%
South Fremantle 66kV	WSFT	7.5%
Summer St	WSUM	7.5%
Tate Street	WTTS	7.5%
Three Springs	WTSG	7.5%
Tomlinson Street	WTLN	7.5%
University	WUNI	7.5%
Victoria Park	WVPA	7.5%
Wagerup	WWGP	7.5%
Wagin	WWAG	7.5%
Wanneroo	WWNO	7.5%
WEB Grating	WWEB	7.5%
Wellington Street	WWNT	7.5%
Welshpool	WWEL	7.5%
Wembley Downs	WWDN	7.5%
West Kalgoorlie	WWKT	7.5%
Western Collieries	WWCL	7.5%
Western Mining	WWMG	7.5%
Westralian Sands	WWSD	7.5%
Worsley	WWOR	7.5%
Wundowie	WWUN	7.5%
Yanchep	WYCP	7.5%
Yerbillon	WYER	7.5%
Yilgarn	WYLN	7.5%
Yokine	WYKE	7.5%

The % changes in the following table are applicable for reference tariffs: **RT11 & TRT2**.

Table 13

Substation	TNI	Use of System % Change
Albany Windfarm	WALB	7.5%
Boulder	WBLD	7.5%
Cockburn PWS	WCKB	7.5%
Collie PWS	WCPS	7.5%
Emu Downs	WEMD	7.5%
Geraldton GT	WGTN	7.5%
Kemerton PWS	WKEM	7.5%
Kwinana Alcoa	WAKW	7.5%
Kwinana PWS	WKPS	7.5%
Landwehr (Alinta)	WLWT	7.5%
Mason Road	WMSR	7.5%

Substation	TNI	Use of System % Change
Mason Road Hismelt	WHIS	7.5%
Muja PWS	WMPS	7.5%
Mungarra GTs	WMGA	7.5%
Oakley (Alinta)	WOLY	7.5%
Parkeston	WPKS	7.5%
Pinjar GTs	WPJR	7.5%
Alcoa Pinjarra	WAPJ	7.5%
Tiwest GT	WKMK	7.5%
Wagerup Alcoa	WAWG	7.5%
Walkaway Windfarm	WWWF	7.5%
West Kalgoorlie GTs	WWKT	7.5%
Worsley	WWOR	7.5%

## 6.2 Connection Prices

The % changes in the following table are applicable for reference tariff: **RT11**.

Table 14

	Connection Price % Change
Connection Price	7.5%

## 6.3 Common Service Prices

The % changes in the following table are applicable for reference tariff: **TRT1**.

Table 15

	Common Service Price % Change
Common Service Price	7.5%

## 6.4 Metered Demand Prices

The % changes in the following table are applicable for reference tariff: **RT5**.

Table 16

Demand (kVA) (Lower to upper threshold)	Transmission		Distribution		Bundled Tariff	
	Fixed % Change	Demand (in excess of lower threshold) % Change	Fixed % Change	Demand (in excess of lower threshold) % Change	Fixed % Change	Demand (in excess of lower threshold) % Change
0 to 300		7.5%	7.5%	7.5%	7.5%	7.5%
300 to 1000	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
1000 to 1500	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%

The % changes in the following table are applicable for reference tariff: **RT6**.

Table 17

Demand (kVA) (Lower to upper threshold)	Transmission		Distribution		Bundled Tariff	
	Fixed % Changes	Demand (in excess of lower threshold) % Changes	Fixed % Change	Demand (in excess of lower threshold) % Change	Fixed % Change	Demand (in excess of lower threshold) % Change
0 to 300		7.5%	7.5%	7.5%	7.5%	7.5%
300 to 1000	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
1000 to 1500	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%

## 6.5 Demand Prices

The % change in the following table are applicable for reference tariff: **RT7 & RT8**.

Table 18

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change	Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change	Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change
Cook Street	WCKT	CBD	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Forrest Avenue	WFRT	CBD	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Hay Street	WHAY	CBD	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Milligan Street	WMIL	CBD	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Wellington Street	WWNT	CBD	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Black Flag	WBKF	Goldfields Mining	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Boulder	WBLD	Goldfields Mining	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Bounty	WBNY	Goldfields Mining	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
West Kalgoorlie	WWKT	Goldfields Mining	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Albany	WALB	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Boddington	WBOD	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Bunbury Harbour	WBUH	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Busselton	WBSN	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Byford	WBYF	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Capel	WCAP	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Chapman	WCPN	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Darlington	WDTN	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Durlacher Street	WDUR	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Eneabba	WENB	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Geraldton	WGTM	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Marriott Road	WMRR	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Muchea	WMUC	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Northam	WNOR	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change	Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change	Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change
Picton	WPIC	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Rangeway	WRAN	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Sawyers Valley	WSVL	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Yanchep	WYCP	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Yilgarn	WYLN	Mixed	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%
Baandee	WBDE	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Beenup	WBNP	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Bridgetown	WBTN	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Carrabin	WCAR	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Collie	WCOE	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Coolup	WCLP	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Cunderdin	WCUN	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Katanning	WKAT	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Kellerberrin	WKEL	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Kojonup	WKOJ	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Kondinin	WKDN	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Manjimup	WMJP	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Margaret River	WMRV	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Merredin	WMER	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Moora	WMOR	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Mount Barker	WMBR	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Narrogin	WNGN	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Pinjarra	WPNJ	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Regans	WRGN	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Three Springs	WTSG	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Wagerup	WWGP	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Wagin	WWAG	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Wundowie	WWUN	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Yerbillon	WYER	Rural	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%
Amherst	WAMT	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Arkana	WARK	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Australian Paper Mills	WAPM	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Beechboro	WBCH	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Belmont	WBEL	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Bentley	WBTY	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Bibra Lake	WBIB	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
British Petroleum	WBPM	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Canning Vale	WCVE	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Clarence Street	WCLN	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Clarkson	WCKN	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Cockburn	WCCT	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%



Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change	Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change	Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change
Cement											
Collier	WCOL	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Cottesloe	WCOT	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Edmund Street	WEDD	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Forrestfield	WFFD	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Gosnells	WGNL	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Hadfields	WHFS	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Henley Brook	WHBK	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Herdsmen Parade	WHEP	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Joel Terrace	WJTE	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Kalamunda	WKDA	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Kambalda	WKBA	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Landsdale	WLDE	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Malaga	WMLG	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Mandurah	WMHA	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Manning Street	WMAG	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Mason Road	WMSR	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Meadow Springs	WMSS	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Medical Centre	WMCR	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Medina	WMED	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Midland Junction	WMJX	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Morley	WMOY	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Mullaloo	WMUL	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Mundaring Weir	WMWR	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Murdoch	WMUR	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Myaree	WMYR	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Nedlands	WNED	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
North Beach	WNBH	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
North Fremantle	WNFL	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
North Perth	WNPH	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
OConnor	WOCN	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Osborne Park	WOPK	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Padbury	WPBY	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Piccadilly	WPCY	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Riverton	WRTN	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Rivervale	WRVE	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Rockingham	WROH	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Shenton Park	WSPA	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Sth Ftle Power Station	WSFT	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Southern River	WSNR	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%

Zone Substation	TNI	Pricing Zone	Transmission			Distribution			Bundled		
			Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change	Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change	Fixed charge for first 1000 kVA % Change	Demand charge for 1000<kVA<7000 % Change	Demand Charge for kVA > 7000 % Change
Tate Street	WTTS	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
University	WUNI	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Victoria Park	WVPA	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Waikiki	WWAI	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Wanneroo	WWNO	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Welshpool	WWEL	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Wembley Downs	WWDN	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%
Yokine	WYKE	Urban	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.5%	7.5%

## 6.6 Demand Length Prices

The % changes in the following table are applicable for reference tariffs: **RT5, RT6, RT7, RT8 & RT11** and the CMD/DSOC is between 1,000 and 7,000 kVA.

Table 19

Pricing Zone	Demand-Length Charge	
	For kVA >1000 and first 10 km length % Change	For kVA >1000 and length in excess of 10 km % Change
CBD	-	-
Urban	7.5%	7.3%
Mining	7.0%	6.7%
Mixed	7.2%	7.2%
Rural	7.3%	7.4%

The % changes in the following table are applicable for reference tariffs: **RT7, RT8 & RT11** and the CMD/DSOC is at least 7,000 kVA.

Table 20

Pricing Zone	Demand-Length Charge	
	For first 10 km length % Change	For length in excess of 10 km % Change
CBD	-	-
Urban	7.5%	7.4%
Mining	7.2%	6.5%
Mixed	7.1%	7.2%
Rural	7.2%	6.9%

## 6.7 Control System Service Prices

The % changes in the following table are applicable for reference tariff: **RT11, & TRT2.**

Table 21

	Price % Change
Control System Service Price (Generators)	7.5%

The % changes in the following table are applicable for reference tariff: **TRT1.**

Table 22

	Price % Change
Control System Service Price (Loads)	7.5%

## 6.8 Metering Prices

The % changes in the following table are applicable for reference tariffs: **RT1, RT2, RT3 & RT4.**

Table 23

	Fixed Price	Variable Price		
	% Change	Anytime % Change	On Peak % Change	Off Peak % Change
Reference tariff 1 - RT1				
Metering Price	7.5%	7.5%	-	-
Reference tariff 2 - RT2				
Metering Price	7.5%	7.5%	-	-
Reference tariff 3 - RT3				
Metering Price	7.5%	-	7.5%	7.5%
Reference tariff 4 - RT4				
Metering Price	7.5%	-	7.5%	7.5%

The % changes in the following table are applicable for reference tariffs: **RT5, RT6, RT7, RT8 & RT11.**

Table 24

Metering Equipment Funding	Voltage	% Change
Western Power funded	High Voltage (6.6 kV or higher)	7.5%
	Low voltage (415 volts or less)	7.5%
Customer funded	High Voltage (6.6 kV or higher)	7.5%
	Low Voltage (415 volts or less)	7.5%

The % changes in the following table are applicable for reference tariffs: **TRT1 & TRT2.**

Table 25

	% Change
Transmission Metering	7.5%

## 6.9 Administration Prices

The % changes in the following table are applicable for reference tariffs: **RT7 & RT8.**

Table 26

Peak Demand	% Change
>=7,000 kVA	7.5%
<7,000 kVA	7.5%

## 6.10 Low Voltage Prices

The % changes in the following table are applicable for reference tariff: **RT8.**

Table 27

Category	% Change
Fixed	7.5%
Demand	7.5%

## 6.11 Streetlight Asset Prices

The % changes in the following table are applicable for reference tariff: **RT9.**

Table 28

Light Specification	Annual Charge % Change
50W MV	7.5%
70W MH	7.5%
70W HPS	7.5%
80W MV	7.5%
125W MV	7.5%
150W MH	7.5%
150W HPS	7.5%
250W MH	7.5%
250W HPS	7.5%
250W MV	7.5%
400W MV	7.5%

## Appendix A - Price Setting for New Transmission Nodes Policy

This policy applies when a new transmission node is established.

Transmission “use of system” prices for both entry and exit points are derived using the computer based analysis tool T-Price, based on historical load flow information. In the case of new sites, historical data is not available.

However, there is a need for both Western Power and the prospective user to have a fairly accurate TUOS price and connection price. Western Power requires the prices to determine future revenues from the connection, and any associated capital contribution. The user requires the price and capital contribution for the purposes of project feasibility, and their internal approval processes.

This policy addresses this issue by providing a degree of price certainty over the medium term.

### **Policy Statement – Transmission Use of System Price (TUOS)**

This policy will apply to new connection points on the transmission and distribution system where the prospect is that it will be a single connection point.

1. Western Power will nominate a TUOS price consistent with all the principles described in this document based on the best available knowledge of the network parameters including asset values and expected load flows. This would also include necessary assumptions for maximum demand and utilisation at the new connection and also any other new or forecast connections.
2. That nominated nodal TUOS price will then be adjusted annually in line with the average TUOS price adjustment for all transmission nodes.
3. Once that connection point is established the nominated TUOS price (adjusted in accordance with step (b)) will apply at the commencement of the access contract, with annual price adjustments at the start of each financial year of no greater than (plus or minus) the annual pricing side constraint as detailed in the Access Arrangement. (Thus, the nominated TUOS price will converge over time with and future price based on future T-Price runs.)
4. The TUOS price will be published once the connection point is commissioned.

5. Where another user subsequently connects to such a connection point the price that will apply will be the price applying to that connection point at the time.
6. The common service, metering and control system prices that apply in this circumstance will be the standard published prices.

### **Policy Statement – Transmission Connection Price**

The transmission connection price, for new connections where there was no previous connection point, is determined in accordance with the principles described below. There are two categories in which the new connection point can fit.

#### ***A connection that is unlikely to be shared by other users.***

In this case the connection asset would be dedicated to the single user. The asset can be constructed either by the user or by Western Power, and the user has the option to own the asset or to allow Western Power to own the asset.

Where Western Power will own the asset the capital contribution for the connection asset will be as determined by the Contributions Policy.

The annual connection price is calculated to recover to expected operations and maintenance costs for the connection asset and is currently set at 2.1% of the full capital cost. This percentage is based on the ratio of the Operations and Maintenance cost and the GODV of the transmission network. Once the annual connection price has been determined for a particular connection point, the price is adjusted annually by the all capitals consumer price index (CPI).

#### ***A connection point where there is a high likelihood that other users will connect in the future.***

In this circumstance the user still retains the option of owning the connection asset. If the user prefers this option Western Power may require the ability to build connection assets for other users on the same site. Where the user does select this option the calculation of the capital contribution and the associated connection access price is on the same basis as the first option.

Where the user would prefer Western Power to own the connection asset, the connection access price would be the published price that applies to all multi-user substations within the SWIS. This published price would be used by Western Power to calculate the capital contribution for the connection asset.

Western Power will offer this option at its discretion depending on the likelihood of future users connecting to the connection point.

## Appendix B - Revenue Model

Western Power has extended the revenue model to include the 2009/10 financial year to derive the lower bound of the revenue cap.

This model assumes that the costs for the 2009/10 financial year are identical to the forecast costs of the 2008/09 financial year.

## Western Power Amended Access Arrangement Real Pre-tax Model [Updated 24 April 2009]

WACC Updated as at

02-Apr-07

All model inputs are entered into the inputs cells of this worksheet denoted as;

13.480

Ref	2	3	5	7	9
			Total WPC	Distribution	Transmission
6			Real	Real	Real
7		<b>30/06/2006 Asset Value [m\$ 30/06/06]</b>			
8		Asset Value	2,981.078	1,594.515	1,386.564
9		Working Capital	30.646	21.954	8.692
10		Regulatory Asset Base	3,011.724	1,616.468	1,395.256
11		<b>30/06/2009 Asset Value [m\$ 30/06/06]</b>			
12		Asset Value	4,002.773	2,162.613	1,840.160
13		Working Capital	34.238	19.133	15.105
14		Regulatory Asset Base	4,037.012	2,181.746	1,855.266
15		<b>PV of Gross Cost of Service [m\$ 30/06/06]</b>			
16		Opex	688.304	507.010	181.295
17		Depreciation	410.930	271.252	139.678
18		Redundant Assets (Accelerated Depreciation)	9.797	9.797	-
19		Return on Assets	588.461	313.083	275.378
20		Return on Working Capital	5.443	3.566	1.877
21		Cost of Service	1,702.936	1,104.708	598.228
22		<b>PV of Gross Regulatory Revenue [m\$ 30/06/06]</b>			
23		Opex	688.304	507.010	181.295
24		Capex	1,317.651	776.886	540.765
25		Asset Opening Value	2,981.078	1,594.515	1,386.564
26		Asset Residual Value	-3,289.541	-1,777.269	-1,512.272
27		Working Capital Variation	5.443	3.566	1.877
28		Gross Regulatory Revenue	1,702.936	1,104.708	598.228
29		<b>Check</b>	<b>OK</b>	<b>OK</b>	<b>OK</b>
30		<b>PV of Net Reference Service Revenue [m\$ 30/06/06]</b>			
31		Gross CoS	1,702.936	1,104.708	598.228
32		Non Reference Service Revenue	-87.279	-38.814	-48.465
33		Tariff Equalisation	177.747	177.747	-
34		Capital Contribution	-330.068	-279.977	-50.090
35		Net Reference Service Revenue	1,463.336	963.664	499.672
36		<b>PV of Reference Service Revenue [m\$ 30/06/06]</b>			
37		PV of Reference Service Revenue	1,463.336	963.664	499.672
38		<b>Check</b>	<b>OK</b>	<b>OK</b>	<b>OK</b>
39		Year 1 Reference Service Revenue [m\$ 30/06/06]	502.815	313.813	189.002
40		Revenue Smoothing Factor		-5.20%	-5.20%
41		<b>PV of Net Cash Flow [m\$ 30/06/06]</b>			
42		Reference Service Revenue	1,463.336	963.664	499.672
43		Opex	-688.304	-507.010	-181.295
44		Capex	-1,317.651	-776.886	-540.765
45		Non Reference Service Revenue	87.279	38.814	48.465
46		Tariff Equalisation	-177.747	-177.747	-
47		Capital Contribution	330.068	279.977	50.090
48		Asset Opening Value	-2,981.078	-1,594.515	-1,386.564
49		Asset Residual Value	3,289.541	1,777.269	1,512.272
50		Working Capital Variation	-5.443	-3.566	-1.877
51		Net Cash Flow	-	-	-
52		<b>Check</b>	<b>OK</b>	<b>OK</b>	<b>OK</b>
53		<b>Internal Rate of Return</b>	<b>Pre-tax WACC</b>		
54		Real	6.76%	6.76%	6.76%
55		Nominal	10.07%	10.07%	10.07%
56		<b>Check</b>		<b>OK</b>	<b>OK</b>
57		<b>Check</b>		<b>OK</b>	<b>OK</b>



### Western Power Amended Access Arrangement Real Pre-tax Model [Updated 24 April 2009]

Ref	2	3	5	6	7	8	9
3		<b>Determination of the Weighted Average Cost of Capital (WACC)</b>	<b>WPC</b>	<b>WPC</b>	<b>WPC</b>	<b>WPC</b>	<b>WPC</b>
4			<b>Lo</b>	<b>Hi</b>	<b>Lo + 10%</b>	<b>Hi - 10%</b>	<b>Proposed</b>
5		<b>Date of Risk Free Rates</b>	<b>2-Apr-07</b>	<b>2-Apr-07</b>	<b>2-Apr-07</b>	<b>2-Apr-07</b>	<b>2-Apr-07</b>
6		<b>Nominal Risk Free Rate (Rfn)</b>	<b>5.81%</b>	5.81%	5.81%	5.81%	5.81%
7		<b>Real Risk Free Rate (Rfr)</b>	<b>2.63%</b>	2.63%	2.63%	2.63%	2.63%
8		Inflation Rate (I)	3.10%	3.10%	3.10%	3.10%	3.10%
9		<b>Debt Proportion (D)</b>	<b>60%</b>	60%			
10		Equity Proportion (E)	40%	40%			
11		<b>Cost of Debt; Debt Risk Premium (Drp)</b>	<b>1.100%</b>	<b>1.300%</b>			
12		<b>Cost of Debt; Debt Issuing Cost (Disc)</b>	<b>0.125%</b>	<b>0.125%</b>			
13		Cost of Debt; Risk Margin (DRm)	1.225%	1.425%			
14		Australian Market Risk Premium (Rp)	<b>5.00%</b>	<b>6.00%</b>			
15		Debt Beta (Bd)	0.25	0.24			
16		<b>Equity Beta (Be)</b>	<b>0.80</b>	<b>1.00</b>			
17		Asset Beta (Ba)	0.47	0.54			
18		<b>Corporate Tax Rate (T)</b>	<b>30%</b>	30%	30%	30%	30%
19		<b>Franking Credit (g)</b>	<b>60%</b>	<b>30%</b>			
20		Imputation Adj (G)	79.5%	88.6%			
21		<b>Debt</b>					
22		Nominal Cost of Debt (DPn)	7.04%	7.24%			
23		Real Cost of Debt (DPr)	3.82%	4.01%			
24		<b>Equity</b>					
25		Nominal Pre Tax Cost of Equity (EPn)	11.15%	14.95%			
26		Real Pre Tax Cost of Equity (EPr)	7.81%	11.49%			
27		Nominal After Tax Cost of Equity (EAn)	9.81%	11.81%			
28		Real After Tax Cost of Equity (EAR)	6.51%	8.45%			
29		<b>WACC; Pre-tax Officer (Market Practise or Forward Transformation)</b>					
30		Nominal Pre Tax WACC (WPn)	8.68%	10.32%	8.84%	10.16%	10.07%
31		<b>Real Pre Tax WACC (WPr)</b>	<b>5.41%</b>	<b>7.01%</b>	<b>5.57%</b>	<b>6.85%</b>	<b>6.76%</b>
32		<b>WACC; After-tax Officer</b>					
33		Nominal After Tax WACC (WAn)	6.08%	7.22%	6.19%	7.11%	7.05%
34		Real After Tax WACC (WAr)	2.89%	4.00%	3.00%	3.89%	3.83%

**Western Power Amended Access Arrangement Real Pre-tax Model [Updated 24 April 2009]**

Ref	2	3	4	5	6	7	8	9	10	11	12	13	14	
Year ending 30 June								2004	2005	2006	2007	2008	2009	2010
Project Year								-2	-1	0	1	2	3	4
5	<b>WPC's Inflation</b>													
6	June CPI							144.8	148.4	152.7	157.0	161.1	165.2	169.3
7	Annual Inflation								2.49%	2.90%	2.80%	2.60%	2.60%	2.47%
8	Inflation Factor									1.000	1.028	1.055	1.082	1.109

**ICB**

Year ending 30 June

Project Year

ICB [m\$ 30/06/2006]		Life as at 30 June 2006 [Years]						
14	Distribution							
15	Wooden Pole Lines	14.500			472.594			
16	Underground Cables	36.900			535.208			
17	Transformers	16.900			203.762			
18	Switchgear	13.500			108.608			
19	Street lighting	1.200			5.256			
20	Meters and Services	9.200			168.206			
21	IT&T	9.800			15.415			
22	SCADA & Communications	10.200			12.825			
23	Other Distribution Non-Network	11.300			51.221			
24	Distribution Land & Easements				21.419			
25	Total Distribution				1,594.515			

**Capex**

Year ending 30 June

Project Year

WPC's Capex [m\$ OD]		Life as at 30 June 2006 [Years]						
31	Distribution							
32	Wooden Pole Lines	41.000			54.603	76.367	88.805	
33	Underground Cables	60.000			104.641	124.841	127.582	
34	Transformers	35.000			28.697	36.677	40.561	
35	Switchgear	35.000			22.424	34.475	41.710	
36	Street lighting	20.000			11.563	13.768	14.964	
37	Meters and Services	25.000			4.540	9.085	10.178	
38	IT&T	10.160			19.244	17.000	15.400	
39	SCADA & Communications	10.160			2.180	1.800	1.900	
40	Other Distribution Non-Network	10.160			12.636	14.909	9.016	
41	Distribution Land & Easements	-			-	-	-	
42	Total Distribution				260.528	328.923	350.117	-

**Modelled Capex [m\$ 30/06/06]**

Life as at 30 June 2006 [Years]

44	Distribution							
45	Wooden Pole Lines	41.000			53.1	72.4	82.1	82.1
46	Underground Cables	60.000			101.8	118.4	117.9	117.9
47	Transformers	35.000			27.9	34.8	37.5	37.5
48	Switchgear	35.000			21.8	32.7	38.5	38.5
49	Street lighting	20.000			11.2	13.1	13.8	13.8
50	Meters and Services	25.000			4.4	8.6	9.4	9.4
51	IT&T	10.160			18.7	16.1	14.2	14.2
52	SCADA & Communications	10.160			2.1	1.7	1.8	1.8
53	Other Distribution Non-Network	10.160			12.3	14.1	8.3	8.3
54	Distribution Land & Easements	-			-	-	-	-
55	Total Distribution				253.4	311.9	323.5	323.5

**Capex Contribution**

Year ending 30 June

Project Year

WPC's Capital Contribution [m\$ OD]		Life as at 30 June 2006 [Years]												
61	Distribution													
62	<b>DEMAND RELATED</b>													
63	Distribution Capacity													
64	Customer Driven							65.440	80.440	95.560				
65	Customer Driven - Vested Assets							15.930	19.950	23.930				
66	<b>NON DEMAND RELATED</b>													
67	Asset Replacement													
68	Reliability Driven													
69	Safety, Environmental & Statutory													
70	<b>OTHER</b>													
71	SCADA & Communications													
72	IT (inc. Market Reform)													
73	Metering													
74	State Undergrounding Power Program (SUPP)							12.819	12.218	12.824				
75	Rural Power Improvement Program (RPIP)													
76	Support													
77	Total Distribution				94.189	112.608	132.314	-						

**Modelled Capital Contribution [m\$ 30/06/06]**

79	Distribution												
80	<b>DEMAND RELATED</b>												
81	Distribution Capacity												
82	Customer Driven							63.658	76.266	88.306			88.306
83	Customer Driven - Vested Assets							15.496	18.915	22.113			22.113
84	<b>NON DEMAND RELATED</b>												
85	Asset Replacement												
86	Reliability Driven												
87	Safety, Environmental & Statutory												
88	<b>OTHER</b>												
89	SCADA & Communications												
90	IT (inc. Market Reform)												
91	Metering												
92	State Undergrounding Power Program (SUPP)							12.470	11.584	11.850			11.850
93	Rural Power Improvement Program (RPIP)												
94	Support												
95	Total Distribution				91.624	106.765	122.269	122.269					

<b>Redundant Assets</b>							
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010
Project Year	-2	-1	0	1	2	3	4
<b>Redundant Assets [m\$ OD]</b>							
101	<b>Distribution</b>						
102				2.936	2.936	2.936	
103				-	-	-	
104				0.783	0.783	0.783	
105				0.196	0.196	0.196	
106							
107							
108							
109							
110							
111							
112							
				3.915	3.915	3.915	-
<b>Modelled Redundant Assets [m\$ 30/06/06]</b>							
114	<b>Distribution</b>						
115				2.856	2.784	2.713	2.713
116				-	-	-	-
117				0.762	0.742	0.724	0.724
118				0.191	0.186	0.181	0.181
119				-	-	-	-
120				-	-	-	-
121				-	-	-	-
122				-	-	-	-
123				-	-	-	-
124				-	-	-	-
125				3.808	3.712	3.618	3.618
126							
<b>Opex</b>							
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010
Project Year	-2	-1	0	1	2	3	4
<b>WPC's Opex [m\$ OD]</b>							
131	<b>Distribution</b>						
132				6.271	7.068	7.147	
133				22.972	23.310	22.767	
134				30.281	31.294	32.130	
135				12.401	11.636	11.389	
136				27.371	25.890	25.431	
137				3.100	3.100	3.100	
138				0.900	0.900	0.900	
139				2.000	2.000	2.100	
140				8.800	9.300	9.700	
141				13.300	14.900	18.800	
142				14.400	14.400	15.900	
143				6.600	6.900	7.200	
144				45.800	50.100	53.500	
145				1.400	1.400	1.400	
146							
				195.596	202.198	211.464	-
<b>Modelled Opex [m\$ 30/06/06]</b>							
148	<b>Distribution</b>						
149				6.100	6.701	6.604	6.604
150				22.346	22.100	21.039	21.039
151				29.456	29.670	29.691	29.691
152				12.063	11.032	10.524	10.524
153				26.625	24.547	23.500	23.500
154				3.016	2.939	2.865	2.865
155				0.875	0.853	0.832	0.832
156				1.946	1.896	1.941	1.941
157				8.560	8.817	8.964	8.964
158				12.938	14.127	17.373	17.373
159				14.008	13.653	14.693	14.693
160				6.420	6.542	6.653	6.653
161				44.553	47.500	49.439	49.439
162				1.362	1.327	1.294	1.294
163							
164				190.268	191.706	195.411	195.411
<b>Other Inputs</b>							
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010
Project Year	-2	-1	0	1	2	3	4
<b>Tariff Equalisation</b>							
169				69.700	71.600	72.000	116.758
170				67.802	67.885	66.534	104.135
171							
<b>Non Reference Service Revenue</b>							
173				15.138	15.531	15.935	12.333
174				14.725	14.725	14.725	11.122
175							
<b>Working Capital</b>							
<b>Days</b>							
177						45.0	
178						-	
179						-	
180						-20.0	
<b>Recovered Covered Service Revenue</b>							
<b>Days</b>							
182				337.738			
183				328.539			

**Western Power Amended Access Arrangement Real Pre-tax Model [Updated 24 April 2009]**

Ref	2	3	4	5	8	9	10	11	12	13	14
<b>Distribution, Real Calculations [m\$ 30/06/06]</b>											
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010				
Project Year	-2	-1	0	1	2	3	4				
<b>Asset Value [m\$ 30/06/06]</b>											
7	<b>Asset Value</b>										
8	Opening Asset Value			1,594.515	1,746.912	1,953.196	2,162.613				
9	Capex			253.432	311.855	323.538	323.538				
10	Redundant Assets			-3.808	-3.712	-3.618	-3.618				
11	Depreciation			-97.226	-101.860	-110.504	-119.799				
12	Closing Asset Value			1,594.515	1,746.912	1,953.196	2,162.613	2,362.735			
13	<b>Check OK</b>										
14	<b>Asset &amp; Working Capital Value</b>										
15	Opening Asset Value			1,594.515	1,746.912	1,953.196	2,162.613				
16	Opening Working Capital			21.954	18.773	19.133	26.587				
17	Regulatory Opening Asset Value			1,616.468	1,765.685	1,972.329	2,189.200				
18											
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010				
Project Year	-2	-1	0	1	2	3	4				
<b>Asset Account [m\$ 30/06/06]</b>											
22	<b>Opening Value</b>										
23	Wooden Pole Lines			472.594	490.261	526.205	570.336				
24	Underground Cables			535.208	622.494	724.656	824.379				
25	Transformers			203.762	218.859	240.084	263.093				
26	Switchgear			108.608	122.185	146.033	174.825				
27	Street lighting			5.256	12.124	23.739	36.352				
28	Meters and Services			168.206	154.340	144.494	135.095				
29	IT&T			15.415	32.562	45.264	54.493				
30	SCADA & Communications			12.825	13.688	13.929	14.051				
31	Other Distribution Non-Network			51.221	58.980	67.373	68.570				
32	Distribution Land & Easements			21.419	21.419	21.419	21.419				
33	Total Distribution Capex			1,594.515	1,746.912	1,953.196	2,162.613				
34	<b>Capex</b>										
35	Wooden Pole Lines			53.116	72.405	82.064	82.064				
36	Underground Cables			101.791	118.363	117.896	117.896				
37	Transformers			27.915	34.774	37.482	37.482				
38	Switchgear			21.814	32.686	38.544	38.544				
39	Street lighting			11.248	13.053	13.828	13.828				
40	Meters and Services			4.417	8.614	9.405	9.405				
41	IT&T			18.720	16.118	14.231	14.231				
42	SCADA & Communications			2.121	1.707	1.756	1.756				
43	Other Distribution Non-Network			12.292	14.135	8.332	8.332				
44	Distribution Land & Easements			-	-	-	-				
45	Total Distribution Capex			253.432	311.855	323.538	323.538				
46	<b>Redundant Assets</b>										
47	Wooden Pole Lines			-2.856	-2.784	-2.713	-2.713				
48	Underground Cables			-	-	-	-				
49	Transformers			-0.762	-0.742	-0.724	-0.724				
50	Switchgear			-0.191	-0.186	-0.181	-0.181				
51	Street lighting			-	-	-	-				
52	Meters and Services			-	-	-	-				
53	IT&T			-	-	-	-				
54	SCADA & Communications			-	-	-	-				
55	Other Distribution Non-Network			-	-	-	-				
56	Distribution Land & Easements			-	-	-	-				
57	Total Distribution Capex			-3.808	-3.712	-3.618	-3.618				
58	<b>Depreciation</b>										
59	Wooden Pole Lines			-32.593	-33.677	-35.220	-36.986				
60	Underground Cables			-14.504	-16.201	-18.174	-20.138				
61	Transformers			-12.057	-12.807	-13.750	-14.769				
62	Switchgear			-8.045	-8.653	-9.571	-10.655				
63	Street lighting			-4.380	-1.438	-1.215	-1.906				
64	Meters and Services			-18.283	-18.460	-18.805	-19.181				
65	IT&T			-1.573	-3.415	-5.002	-6.403				
66	SCADA & Communications			-1.257	-1.466	-1.634	-1.807				
67	Other Distribution Non-Network			-4.533	-5.743	-7.134	-7.954				
68	Distribution Land & Easements			-	-	-	-				
69	Total Distribution Capex			-97.226	-101.860	-110.504	-119.799				
70	<b>Closing Value</b>										
71	Wooden Pole Lines			472.594	490.261	526.205	570.336	612.701			
72	Underground Cables			535.208	622.494	724.656	824.379	922.137			
73	Transformers			203.762	218.859	240.084	263.093	285.082			
74	Switchgear			108.608	122.185	146.033	174.825	202.533			
75	Street lighting			5.256	12.124	23.739	36.352	48.274			
76	Meters and Services			168.206	154.340	144.494	135.095	125.320			
77	IT&T			15.415	32.562	45.264	54.493	62.322			
78	SCADA & Communications			12.825	13.688	13.929	14.051	14.000			
79	Other Distribution Non-Network			51.221	58.980	67.373	68.570	68.948			
80	Distribution Land & Easements			21.419	21.419	21.419	21.419	21.419			
81	Total Distribution Capex			1,594.515	1,746.912	1,953.196	2,162.613	2,362.735			
82											

Year ending 30 June		2004	2005	2006	2007	2008	2009	2010
Project Year		-2	-1	0	1	2	3	4
<b>ICB [m\$ 30/06/06]</b>		<b>Life as at 30 June 2006 [Years]</b>						
86	<b>Opening Value</b>							
87	Wooden Pole Lines				472.594	437.145	401.980	367.109
88	Underground Cables				535.208	520.704	506.199	491.695
89	Transformers				203.762	190.944	178.192	165.510
90	Switchgear				108.608	100.372	92.156	83.962
91	Street lighting				5.256	0.876	-	-
92	Meters and Services				168.206	149.923	131.640	113.357
93	IT&T				15.415	13.842	12.269	10.696
94	SCADA & Communications				12.825	11.568	10.310	9.053
95	Other Distribution Non-Network				51.221	46.688	42.155	37.623
96	Distribution Land & Easements				21.419	21.419	21.419	21.419
97	Total Distribution Capex				1,594.515	1,493.481	1,396.322	1,300.422
98	<b>Redundant Assets</b>							
99	Wooden Pole Lines				-2.856	-2.784	-2.713	-2.713
100	Underground Cables				-	-	-	-
101	Transformers				-0.762	-0.742	-0.724	-0.724
102	Switchgear				-0.191	-0.186	-0.181	-0.181
103	Street lighting				-	-	-	-
104	Meters and Services				-	-	-	-
105	IT&T				-	-	-	-
106	SCADA & Communications				-	-	-	-
107	Other Distribution Non-Network				-	-	-	-
108	Distribution Land & Easements				-	-	-	-
109	Total Distribution Capex				-3.808	-3.712	-3.618	-3.618
110	<b>Depreciation</b>	<b>Total</b>	<b>Check</b>	<b>Life</b>				
111	Wooden Pole Lines	-97.132	OK	14.500	-32.593	-32.381	-32.158	-31.923
112	Underground Cables	-43.513	OK	36.900	-14.504	-14.504	-14.504	-14.504
113	Transformers	-36.025	OK	16.900	-12.057	-12.009	-11.959	-11.907
114	Switchgear	-24.088	OK	13.500	-8.045	-8.030	-8.014	-7.996
115	Street lighting	-5.256	OK	1.200	-4.380	-0.876	-	-
116	Meters and Services	-54.850	OK	9.200	-18.283	-18.283	-18.283	-18.283
117	IT&T	-4.719	OK	9.800	-1.573	-1.573	-1.573	-1.573
118	SCADA & Communications	-3.772	OK	10.200	-1.257	-1.257	-1.257	-1.257
119	Other Distribution Non-Network	-13.599	OK	11.300	-4.533	-4.533	-4.533	-4.533
120	Distribution Land & Easements	-	OK	-	-	-	-	-
121	Total Distribution Capex	-282.955	OK	-	-97.226	-93.447	-92.282	-91.977
122	<b>Closing Value</b>							
123	Wooden Pole Lines			472.594	437.145	401.980	367.109	332.473
124	Underground Cables			535.208	520.704	506.199	491.695	477.191
125	Transformers			203.762	190.944	178.192	165.510	152.879
126	Switchgear			108.608	100.372	92.156	83.962	75.784
127	Street lighting			5.256	0.876	-	-	-
128	Meters and Services			168.206	149.923	131.640	113.357	95.073
129	IT&T			15.415	13.842	12.269	10.696	9.123
130	SCADA & Communications			12.825	11.568	10.310	9.053	7.796
131	Other Distribution Non-Network			51.221	46.688	42.155	37.623	33.090
132	Distribution Land & Easements			21.419	21.419	21.419	21.419	21.419
133	Total Distribution Capex			1,594.515	1,493.481	1,396.322	1,300.422	1,204.828
134								
<b>Year ending 30 June</b>		<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Project Year</b>		<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>CAPEX [m\$ 30/06/06]</b>								
138	<b>Opening Value</b>							
139	Wooden Pole Lines				-	53.116	124.225	203.227
140	Underground Cables				-	101.791	218.457	332.684
141	Transformers				-	27.915	61.892	97.583
142	Switchgear				-	21.814	53.877	90.864
143	Street lighting				-	11.248	23.739	36.352
144	Meters and Services				-	4.417	12.854	21.738
145	IT&T				-	18.720	32.995	43.797
146	SCADA & Communications				-	2.121	3.619	4.998
147	Other Distribution Non-Network				-	12.292	25.217	30.948
148	Distribution Land & Easements				-	-	-	-
149	Total Distribution Capex				-	253.432	556.874	862.191
150	<b>Capex</b>							
151	Wooden Pole Lines				53.116	72.405	82.064	82.064
152	Underground Cables				101.791	118.363	117.896	117.896
153	Transformers				27.915	34.774	37.482	37.482
154	Switchgear				21.814	32.686	38.544	38.544
155	Street lighting				11.248	13.053	13.828	13.828
156	Meters and Services				4.417	8.614	9.405	9.405
157	IT&T				18.720	16.118	14.231	14.231
158	SCADA & Communications				2.121	1.707	1.756	1.756
159	Other Distribution Non-Network				12.292	14.135	8.332	8.332
160	Distribution Land & Easements				-	-	-	-
161	Total Distribution Capex				253.432	311.855	323.538	323.538
162	<b>Depreciation</b>	<b>Total</b>	<b>Check</b>	<b>Life</b>				
163	Wooden Pole Lines	-4.357	OK	41.000	-	-1.296	-3.061	-5.063
164	Underground Cables	-5.366	OK	60.000	-	-1.697	-3.669	-5.634
165	Transformers	-2.589	OK	35.000	-	-0.798	-1.791	-2.862
166	Switchgear	-2.180	OK	35.000	-	-0.623	-1.557	-2.658
167	Street lighting	-1.777	OK	20.000	-	-0.562	-1.215	-1.906
168	Meters and Services	-0.698	OK	25.000	-	-0.177	-0.521	-0.897
169	IT&T	-5.271	OK	10.160	-	-1.843	-3.429	-4.830
170	SCADA & Communications	-0.585	OK	10.160	-	-0.209	-0.377	-0.550
171	Other Distribution Non-Network	-3.811	OK	10.160	-	-1.210	-2.601	-3.421
172	Distribution Land & Easements	-	OK	-	-	-	-	-
173	Total Distribution Capex	-26.635	OK	-	-	-8.413	-18.222	-27.822
174	<b>Closing Value</b>							
175	Wooden Pole Lines			-	53.116	124.225	203.227	280.228
176	Underground Cables			-	101.791	218.457	332.684	444.946
177	Transformers			-	27.915	61.892	97.583	132.203
178	Switchgear			-	21.814	53.877	90.864	126.749
179	Street lighting			-	11.248	23.739	36.352	48.274
180	Meters and Services			-	4.417	12.854	21.738	30.246
181	IT&T			-	18.720	32.995	43.797	53.199
182	SCADA & Communications			-	2.121	3.619	4.998	6.204
183	Other Distribution Non-Network			-	12.292	25.217	30.948	35.858
184	Distribution Land & Easements			-	-	-	-	-
185	Total Distribution Capex			-	253.432	556.874	862.191	1,157.907

## Western Power Amended Access Arrangement Real Pre-tax Model [Updated 24 April 2009]

Ref	2	3	8	9	10	11	12	13	14
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010		
Project Year	-2	-1	0	1	2	3	4		
5	<b>Modelled Inflation</b>								
6	June CPI	144.8	148.4	153.0	157.7	162.6	167.7	172.9	
7	Annual Inflation		2.49%	3.10%	3.10%	3.10%	3.10%	3.10%	
8	Inflation Factor			1.000	1.031	1.063	1.096	1.130	
9	<b>Pre-tax WACC</b>								
10	Real			6.76%	6.76%	6.76%	6.76%	6.76%	
11	Nominal			10.07%	10.07%	10.07%	10.07%	10.07%	
12									
<b>Distribution, Real Calculations [m\$ 30/06/06]</b>									
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010		
Project Year	-2	-1	0	1	2	3	4		
<b>Asset Value [m\$ 30/06/06]</b>									
17	<b>Asset Value</b>								
18	Opening Asset Value			1,594.515	1,746.912	1,953.196	2,162.613		
19	Adjusted Opening Asset Value								
20	Capex			253.432	311.855	323.538	323.538		
21	Redundant Assets (Accelerated Depreciation)			-3.808	-3.712	-3.618	-3.618		
22	Depreciation			-97.226	-101.860	-110.504	-119.799		
23	Closing Asset Value			1,594.515	1,746.912	1,953.196	2,162.613	2,362.735	
24									
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010		
Project Year	-2	-1	0	1	2	3	4		
Days				365	366	365	366		
<b>Working Capital [m\$ 30/06/06]</b>									
29	<b>Gross Cost of Service (excluding Working Capital)</b>								
		PV							
30	Opex	507.010			190.268	191.706	195.411	195.411	
31	Depreciation	271.252			97.226	101.860	110.504	119.799	
32	Redundant Assets (Accelerated Depreciation)	9.797			3.808	3.712	3.618	3.618	
33	Return on Assets	313.083			107.789	118.091	132.036	146.193	
34	Cost of Service	1,101.142			399.092	415.369	441.569	465.020	
35	<b>Net Covered Service Revenue</b>								
		PV							
36	Gross CoS	1,101.142			399.092	415.369	441.569	465.020	
37	Tariff Equalisation	177.747			67.802	67.885	66.534	104.135	
38	Capital Contribution	-279.977			-91.624	-106.765	-122.269	-122.269	
39	Net Covered Service Revenue	998.912			375.270	376.489	385.833	446.886	
40	<b>Expenses</b>								
		PV							
41	Opex	507.010			190.268	191.706	195.411	195.411	
42	Capex	776.886			253.432	311.855	323.538	323.538	
43	Total Expenses	1,283.896			443.700	503.562	518.949	518.949	
44	<b>Working Capital</b>								
		Days	Base for Calculation						
45	Receivables	45.0	Net Covered Service Revenue	46.266	46.290	47.568	54.945		
46	Inventory	-	Total Expenses	-	-	-	-		
47	Prepayments	-	Total Expenses	-	-	-	-		
48	Creditors	-20.0	Total Expenses	-24.312	-27.517	-28.436	-28.358		
49	Working Capital			21.954	18.773	19.133	26.587		
50	<b>Asset &amp; Working Capital Value</b>								
51	Opening Asset Value			1,594.515	1,746.912	1,953.196	2,162.613		
52	Opening Working Capital			21.954	18.773	19.133	26.587		
53	Regulatory Opening Asset Value			1,616.468	1,765.685	1,972.329	2,189.200		
54									
<b>Cost of Service [m\$ 30/06/06]</b>									
56	<b>Gross Cost of Service</b>								
		PV							
57	Opex	507.010			190.268	191.706	195.411	195.411	
58	Depreciation	271.252			97.226	101.860	110.504	119.799	
59	Redundant Assets (Accelerated Depreciation)	9.797			3.808	3.712	3.618	3.618	
60	Return on Assets	313.083			107.789	118.091	132.036	146.193	
61	Return on Working Capital	3.566			1.484	1.269	1.293	1.797	
62	Cost of Service	1,104.708			400.576	416.638	442.862	466.817	
63	<b>Gross Regulatory Revenue</b>								
		PV							
64	Opex	507.010			190.268	191.706	195.411	195.411	
65	Capex	776.886			253.432	311.855	323.538	323.538	
66	Asset Opening Value	1,594.515		1,594.515	-	-	-	-	
67	Asset Residual Value	-1,777.269			-	-	-2,162.613	-2,362.735	
68	Working Capital Variation	3.566		21.954	-3.181	0.360	-19.133	-26.587	
69	Gross Regulatory Revenue	1,104.708		1,616.468	440.519	503.922	-1,662.796	-1,870.373	
70	<b>Check</b>								
		OK							
71	<b>Net Reference Service Revenue</b>								
		PV							
72	Gross CoS	1,104.708			400.576	416.638	442.862	466.817	
73	Non Reference Service Revenue	-38.814			-14.725	-14.725	-14.725	-11.122	
74	Tariff Equalisation	177.747			67.802	67.885	66.534	104.135	
75	Capital Contribution	-279.977			-91.624	-106.765	-122.269	-122.269	
76	Net Reference Service Revenue	963.664			362.028	363.032	372.401	437.561	
77									

Year ending 30 June	2004	2005	2006	2007	2008	2009	2010
Project Year	-2	-1	0	1	2	3	4
<b>Smoothed Cost of Service [m\$ 30/06/06]</b>							
81 <b>Net Covered Service Revenue Requirements</b>	PV						
82 Net Covered Service Revenue	1,002.478	X Factor		376.754	377.758	387.127	448.683
83 Smoothed Covered Service Revenue	1,002.478	-5.20%		328.539	398.837	419.577	448.683
84 Delta PV	-			48.215	-21.079	-32.450	-
85 <b>Net Revenue Requirements</b>	PV						
86 Smoothed Covered Service Revenue	1,002.478			328.539	398.837	419.577	448.683
87 Non Reference Service Revenue	-38.814			-14.725	-14.725	-14.725	-11.122
88 Smoothed Reference Service Revenue	963.664			313.813	384.112	404.851	437.561
89 <b>Net Cash Flow</b>	PV						
90 Smoothed Reference Service Revenue	963.664			313.813	384.112	404.851	437.561
91 Opex	-507.010			-190.268	-191.706	-195.411	-195.411
92 Capex	-776.886			-253.432	-311.855	-323.538	-323.538
93 Non Reference Service Revenue	38.814			14.725	14.725	14.725	11.122
94 Tariff Equalisation	-177.747			-67.802	-67.885	-66.534	-104.135
95 Capital Contribution	279.977			91.624	106.765	122.269	122.269
96 Asset Opening Value	-1,594.515		-1,594.515	-	-	-	-
97 Asset Residual Value	1,777.269			-	-	2,162.613	2,362.735
98 Working Capital Variation	-3.566		-21.954	3.181	-0.380	19.133	26.587
99 Net Cash Flow	-		-1,616.468	-88.159	-66.205	2,138.109	2,337.190
100 <b>Check</b>	OK						
101 <b>Internal Rate of Return</b>							
102 IRR		6.76%					
103 <b>Check</b>	OK						
104 <b>Nominal from Real</b>	PV						
105 Net Cash Flow	-		-1,616.468	-90.890	-70.371	2,343.079	2,640.605
106 <b>Check</b>	OK						
107 <b>Internal Rate of Return</b>							
108 IRR		10.07%					
109 <b>Check</b>	OK						
110							
<b>Revenue Cap [m\$ 30/06/06]</b>							
112 <b>Declared Revenue Cap</b>	PV						
113 Smoothed Reference Service Revenue	963.664			313.813	384.112	404.851	437.561
114 Non Reference Service Revenue	38.814			14.725	14.725	14.725	11.122
115 Tariff Equalisation	-177.747			-67.802	-67.885	-66.534	-104.135
116 Capital Contribution	279.977			91.624	106.765	122.269	122.269
117 Revenue Cap	1,104.708			352.361	437.717	475.312	466.817
118 <b>Check</b>	OK						
119 Revenue Cap (Including TEC)				420.162	505.602	541.846	570.952

**Western Power Amended Access Arrangement Real Pre-tax Model [Updated 24 April 2009]**

Ref	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Year ending 30 June</b>							<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Project Year</b>							<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
5	<b>WPC's Inflation</b>												
6	June CPI						144.8	148.4	152.7	157.0	161.1	165.2	169.3
7	Annual Inflation							2.49%	2.90%	2.80%	2.60%	2.60%	2.47%
8	Inflation Factor								1.000	1.028	1.055	1.082	1.109
9													

<b>ICB</b>													
<b>Year ending 30 June</b>													
<b>Project Year</b>													
<b>ICB [m\$ 30/06/2006] Life as at 30 June 2006 [Years]</b>													
14	<b>Transmission</b>												
15	Transmission cables						38.100		12.087				
16	Transmission steel towers						41.300		365.188				
17	Transmission wood poles						20.900		172.741				
18	Transmission Metering						26.100		2.127				
19	Transmission transformers						25.500		154.910				
20	Transmission reactors						27.000		3.933				
21	Transmission capacitors						23.100		76.258				
22	Transmission circuit breakers						28.200		455.265				
23	SCADA and Communications						11.400		33.891				
24	IT&T						4.200		2.680				
25	Other Non-Network Assets						12.000		24.499				
26	Land & Easements								82.986				
27	Total Transmission								1,386.564				
28													

<b>Capex</b>													
<b>Year ending 30 June</b>													
<b>Project Year</b>													
<b>WPC's Capex [m\$ OD] Life as at 30 June 2006 [Years]</b>													
33	<b>Transmission</b>												
34	Transmission cables						55.000			4.939	6.853	0.460	
35	Transmission steel towers						60.000		81.174	82.569	50.087		
36	Transmission wood poles						45.000		4.885	6.227	24.326		
37	Transmission Metering						40.000						
38	Transmission transformers						50.000		36.953	35.766	30.587		
39	Transmission reactors						50.000		1.001	1.030	1.713		
40	Transmission capacitors						40.000		4.882	15.146	10.056		
41	Transmission circuit breakers						50.000		39.344	41.587	45.085		
42	SCADA and Communications						34.150		5.722	1.500	3.401		
43	IT&T						16.850		2.200	3.000	2.700		
44	Other Non-Network Assets						16.850		14.280	17.343	10.610		
45	Land & Easements						-		20.454	31.113	8.861		
46	Total Transmission								215.835	242.133	187.886		

<b>Modelled Capex [m\$ 30/06/06] Life as at 30 June 2006 [Years]</b>													
48	<b>Transmission</b>												
49	Transmission cables						55.000		4.804	6.497	0.425	0.425	
50	Transmission steel towers						60.000		78.963	78.285	46.285	46.285	
51	Transmission wood poles						45.000		4.752	5.904	22.479	22.479	
52	Transmission Metering						40.000		-	-	-	-	
53	Transmission transformers						50.000		35.947	33.910	28.265	28.265	
54	Transmission reactors						50.000		0.974	0.976	1.583	1.583	
55	Transmission capacitors						40.000		4.749	14.360	9.293	9.293	
56	Transmission circuit breakers						50.000		38.273	39.429	41.662	41.662	
57	SCADA and Communications						34.150		5.566	1.422	3.143	3.143	
58	IT&T						16.850		2.140	2.844	2.495	2.495	
59	Other Non-Network Assets						16.850		13.891	16.443	9.804	9.804	
60	Land & Easements						-		19.897	29.498	8.188	8.188	
61	Total Transmission								209.956	229.569	173.623	173.623	
62													

<b>Capex Contribution</b>													
<b>Year ending 30 June</b>													
<b>Project Year</b>													
<b>WPC's Capital Contribution [m\$ OD]</b>													
67	<b>Transmission</b>												
68	<b>DEMAND RELATED</b>												
69	System Capacity												
70	Customer Driven - Bulk Loads												
71	Customer Driven - Generation								16.546	28.900	14.450		
72	<b>NON DEMAND RELATED</b>												
73	Asset Replacement												
74	Safety, Environmental & Statutory												
75	Reliability Driven												
76	<b>OTHER</b>												
77	SCADA & Communications												
78	IT (inc. Market Reform)												
79	Support												
80	Total Transmission								16.546	28.900	14.450		

<b>Modelled Capital Contribution [m\$ 30/06/06]</b>													
82	<b>Transmission</b>												
83	<b>DEMAND RELATED</b>												
84	System Capacity												
85	Customer Driven - Bulk Loads												
86	Customer Driven - Generation								16.095	27.400	13.353	13.353	
87	<b>NON DEMAND RELATED</b>												
88	Asset Replacement												
89	Safety, Environmental & Statutory												
90	Reliability Driven												
91	<b>OTHER</b>												
92	SCADA & Communications												
93	IT (inc. Market Reform)												
94	Support												
95	Total Transmission								16.095	27.400	13.353	13.353	
96													



<b>Redundant Assets</b>							
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010
Project Year	-2	-1	0	1	2	3	4
<b>Redundant Assets [m\$ OD]</b>							
101	<b>Transmission</b>						
102	Transmission cables			-	-	-	-
103	Transmission steel towers			-	-	-	-
104	Transmission wood poles			-	-	-	-
105	Transmission Metering			-	-	-	-
106	Transmission transformers			-	-	-	-
107	Transmission reactors			-	-	-	-
108	Transmission capacitors			-	-	-	-
109	Transmission circuit breakers (and Site)			-	-	-	-
110	SCADA and Communications			-	-	-	-
111	IT&T			-	-	-	-
112	Other Non-Network Assets			-	-	-	-
113	Land & Easements			-	-	-	-
114	Total Transmission			-	-	-	-
<b>Modelled Redundant Assets [m\$ 30/06/06]</b>							
116	<b>Transmission</b>						
117	Transmission cables			-	-	-	-
118	Transmission steel towers			-	-	-	-
119	Transmission wood poles			-	-	-	-
120	Transmission Metering			-	-	-	-
121	Transmission transformers			-	-	-	-
122	Transmission reactors			-	-	-	-
123	Transmission capacitors			-	-	-	-
124	Transmission circuit breakers (and Site)			-	-	-	-
125	SCADA and Communications			-	-	-	-
126	IT&T			-	-	-	-
127	Other Non-Network Assets			-	-	-	-
128	Land & Easements			-	-	-	-
129	Total Transmission			-	-	-	-
130							
<b>Opex</b>							
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010
Project Year	-2	-1	0	1	2	3	4
<b>WPC's Opex [m\$ OD]</b>							
135	<b>Transmission</b>						
136	Maintenance Strategy			4.205	4.110	4.233	
137	Preventative Condition			7.139	7.273	7.439	
138	Preventative Routine			8.443	9.472	10.135	
139	Corrective Deferred			4.633	3.970	4.432	
140	Corrective Emergency			1.018	0.940	0.918	
141	SCADA & Communications			5.400	5.600	5.700	
142	Misc Network Services			4.310	4.517	4.647	
143	Network Operations			10.000	11.000	10.900	
144	IT&T			7.517	8.227	8.767	
145	Network Support			13.625	15.170	15.483	
146	Energy Safety Levy			2.830	2.904	2.979	
147	Total Transmission			69.120	73.183	75.634	-
<b>Modelled Opex [m\$ 30/06/06]</b>							
149	<b>Transmission</b>						
150	Maintenance Strategy			4.090	3.897	3.912	3.912
151	Preventative Condition			6.945	6.896	6.874	6.874
152	Preventative Routine			8.213	8.981	9.366	9.366
153	Corrective Deferred			4.507	3.764	4.096	4.096
154	Corrective Emergency			0.990	0.891	0.848	0.848
155	SCADA & Communications			5.253	5.309	5.267	5.267
156	Misc Network Services			4.192	4.283	4.295	4.295
157	Network Operations			9.728	10.429	10.073	10.073
158	IT&T			7.312	7.800	8.101	8.101
159	Network Support			13.254	14.383	14.308	14.308
160	Energy Safety Levy			2.753	2.753	2.753	2.753
161	Total Transmission			67.237	69.386	69.892	69.892
162							
<b>Other Inputs</b>							
Year ending 30 June	2004	2005	2006	2007	2008	2009	2010
Project Year	-2	-1	0	1	2	3	4
<b>Tariff Equalisation</b>							
167	Nominal Value [m\$ OD]			-	-	-	-
168	Modelled Real [m\$ 30/06/2005]			-	-	-	-
169							
<b>Non Reference Service Revenue</b>							
171	Nominal Value [m\$ OD]			18.902	19.393	19.897	7.375
172	Modelled Real [m\$ 30/06/2005]			18.387	18.387	18.387	6.651
173							
<b>Working Capital</b>							
<b>Days</b>							
175	Receivables			45.0			
176	Inventory			-			
177	Prepayments			-			
178	Creditors			-30.0			
<b>Recovered Covered Service Revenue</b>							
<b>Days</b>							
180	Nominal Value [m\$ OD]			213.196			
181	Real Value [m\$ 30/06/06]			207.389			

## Western Power Amended Access Arrangement Real Pre-tax Model [Updated 24 April 2009]

Ref	2	3	4	5	8	9	10	11	12	13	14
<b>Transmission, Real Calculations [m\$ 30/06/06]</b>											
<b>Year ending 30 June</b>											
Project Year		2004	2005	2006	2007	2008	2009	2010			
Asset Value [m\$ 30/06/06]		-2	-1	0	1	2	3	4			
7 <b>Asset Value</b>											
8 Opening Asset Value					1,386.564	1,547.695	1,724.194	1,840.160			
9 Capex					209.956	229.569	173.623	173.623			
10 Redundant Assets											
11 Depreciation					-48.825	-53.071	-57.656	-61.419			
12 Closing Asset Value					1,386.564	1,547.695	1,724.194	1,840.160	1,952.364		
13 <b>Check</b>											OK
14 <b>Asset &amp; Working Capital Value</b>											
15 Opening Asset Value					1,386.564	1,547.695	1,724.194	1,840.160			
16 Opening Working Capital					8.692	8.214	15.105	16.491			
17 Regulatory Opening Asset Value					1,395.256	1,555.910	1,739.299	1,856.651			
18											
<b>Year ending 30 June</b>											
Project Year		2004	2005	2006	2007	2008	2009	2010			
Asset Account [m\$ 30/06/06]		-2	-1	0	1	2	3	4			
22 <b>Opening Value</b>											
23 Transmission cables					12.087	16.574	22.666	22.568			
24 Transmission steel towers					365.188	435.308	503.435	538.257			
25 Transmission wood poles					172.741	169.228	166.761	180.739			
26 Transmission Metering					2.127	2.045	1.964	1.882			
27 Transmission transformers					154.910	184.782	211.898	232.691			
28 Transmission reactors					3.933	4.761	5.572	6.971			
29 Transmission capacitors					76.258	77.706	88.646	94.160			
30 Transmission circuit breakers					455.265	477.394	499.913	523.877			
31 SCADA and Communications					33.891	36.484	34.770	34.736			
32 IT&T					2.680	4.182	6.261	7.822			
33 Other Non-Network Assets					24.499	36.349	49.926	55.889			
34 Land & Easements					82.986	102.883	132.381	140.569			
35 Total Distribution Capex					1,386.564	1,547.695	1,724.194	1,840.160			
36 <b>Capex</b>											
37 Transmission cables					4.804	6.497	0.425	0.425			
38 Transmission steel towers					78.963	78.285	46.285	46.285			
39 Transmission wood poles					4.752	5.904	22.479	22.479			
40 Transmission Metering											
41 Transmission transformers					35.947	33.910	28.265	28.265			
42 Transmission reactors					0.874	0.976	1.593	1.583			
43 Transmission capacitors					4.749	14.360	9.293	9.293			
44 Transmission circuit breakers					38.273	39.429	41.662	41.662			
45 SCADA and Communications					5.566	1.422	3.143	3.143			
46 IT&T					2.140	2.844	2.495	2.495			
47 Other Non-Network Assets					13.891	16.443	9.804	9.804			
48 Land & Easements					19.897	29.498	8.188	8.188			
49 Total Distribution Capex					209.956	229.569	173.623	173.623			
50 <b>Redundant Assets</b>											
51 Transmission cables					-	-	-	-			
52 Transmission steel towers					-	-	-	-			
53 Transmission wood poles					-	-	-	-			
54 Transmission Metering					-	-	-	-			
55 Transmission transformers					-	-	-	-			
56 Transmission reactors					-	-	-	-			
57 Transmission capacitors					-	-	-	-			
58 Transmission circuit breakers					-	-	-	-			
59 SCADA and Communications					-	-	-	-			
60 IT&T					-	-	-	-			
61 Other Non-Network Assets					-	-	-	-			
62 Land & Easements					-	-	-	-			
63 Total Distribution Capex					-	-	-	-			
64 <b>Depreciation</b>											
65 Transmission cables					-0.317	-0.405	-0.523	-0.530			
66 Transmission steel towers					-8.842	-10.158	-11.463	-12.235			
67 Transmission wood poles					-8.265	-8.371	-8.502	-9.001			
68 Transmission Metering					-0.081	-0.081	-0.081	-0.081			
69 Transmission transformers					-6.075	-6.794	-7.472	-8.037			
70 Transmission reactors					-0.146	-0.165	-0.185	-0.216			
71 Transmission capacitors					-3.301	-3.420	-3.779	-4.011			
72 Transmission circuit breakers					-16.144	-16.910	-17.698	-18.531			
73 SCADA and Communications					-2.979	-3.136	-3.177	-3.270			
74 IT&T					-0.638	-0.765	-0.934	-1.082			
75 Other Non-Network Assets					-2.042	-2.866	-3.842	-4.424			
76 Land & Easements					-	-	-	-			
77 Total Distribution Capex					-48.825	-53.071	-57.656	-61.419			
78 <b>Closing Value</b>											
79 Transmission cables					12.087	16.574	22.666	22.568	22.463		
80 Transmission steel towers					365.188	435.308	503.435	538.257	572.307		
81 Transmission wood poles					172.741	169.228	166.761	180.739	194.217		
82 Transmission Metering					2.127	2.045	1.964	1.882	1.801		
83 Transmission transformers					154.910	184.782	211.898	232.691	252.918		
84 Transmission reactors					3.933	4.761	5.572	6.971	8.338		
85 Transmission capacitors					76.258	77.706	88.646	94.160	99.442		
86 Transmission circuit breakers					455.265	477.394	499.913	523.877	547.008		
87 SCADA and Communications					33.891	36.484	34.770	34.736	34.609		
88 IT&T					2.680	4.182	6.261	7.822	9.235		
89 Other Non-Network Assets					24.499	36.349	49.926	55.889	61.269		
90 Land & Easements					82.986	102.883	132.381	140.569	148.757		
91 Total Distribution Capex					1,386.564	1,547.695	1,724.194	1,840.160	1,952.364		
92											

Year ending 30 June	2004	2005	2006	2007	2008	2009	2010
Project Year	-2	-1	0	1	2	3	4
<b>ICB [m\$ 30/06/06]</b>							
Life as at 30 June 2006 (Years)							
96	<b>Opening Value</b>						
97				12.087	11.769	11.452	11.135
98				365.188	356.346	347.503	338.661
99				172.741	164.476	156.211	147.945
100				2.127	2.045	1.964	1.882
101				154.910	148.835	142.760	136.685
102				3.933	3.787	3.642	3.496
103				76.258	72.957	69.656	66.355
104				455.265	439.121	422.977	406.833
105				33.891	30.918	27.945	24.972
106				2.680	2.042	1.404	0.766
107				24.499	22.458	20.416	18.375
108				82.986	82.986	82.986	82.986
109				1,386.564	1,337.739	1,288.915	1,240.090
110	<b>Redundant Assets</b>						
111				-	-	-	-
112				-	-	-	-
113				-	-	-	-
114				-	-	-	-
115				-	-	-	-
116				-	-	-	-
117				-	-	-	-
118				-	-	-	-
119				-	-	-	-
120				-	-	-	-
121				-	-	-	-
122				-	-	-	-
123				-	-	-	-
124	<b>Depreciation</b>						
125							
126							
127							
128							
129							
130							
131							
132							
133							
134							
135							
136							
137							
138	<b>Closing Value</b>						
139				12.087	11.769	11.452	11.135
140				365.188	356.346	347.503	338.661
141				172.741	164.476	156.211	147.945
142				2.127	2.045	1.964	1.882
143				154.910	148.835	142.760	136.685
144				3.933	3.787	3.642	3.496
145				76.258	72.957	69.656	66.355
146				455.265	439.121	422.977	406.833
147				33.891	30.918	27.945	24.972
148				2.680	2.042	1.404	0.766
149				24.499	22.458	20.416	18.375
150				82.986	82.986	82.986	82.986
151				1,386.564	1,337.739	1,288.915	1,240.090
152							
153							
154							
155							
156	<b>CAPEX [m\$ 30/06/06]</b>						
157	<b>Opening Value</b>						
158					4.804	11.214	11.433
159					78.963	155.932	199.596
160					4.752	10.551	32.793
161							
162					35.947	69.138	96.005
163					0.974	1.931	3.475
164					4.749	18.990	27.805
165					38.273	76.936	117.045
166					5.566	6.825	9.764
167					2.140	4.857	7.057
168					13.891	29.510	37.514
169					19.897	49.395	57.583
170					209.956	435.279	600.070
171	<b>Capex</b>						
172				4.804	6.497	0.425	0.425
173				78.963	78.285	46.285	46.285
174				4.752	5.904	22.479	22.479
175							
176				35.947	33.910	28.265	28.265
177				0.974	0.976	1.583	1.583
178				4.749	14.360	9.293	9.293
179				38.273	39.429	41.662	41.662
180				5.566	1.422	3.143	3.143
181				2.140	2.844	2.495	2.495
182				13.891	16.443	9.804	9.804
183				19.897	29.498	8.188	8.188
184				209.956	229.569	173.623	173.623
185	<b>Depreciation</b>						
186							
187							
188							
189							
190							
191							
192							
193							
194							
195							
196							
197							
198	<b>Closing Value</b>						
199				4.804	11.214	11.433	11.645
200				78.963	155.932	199.596	242.489
201				4.752	10.551	32.793	54.536
202							
203				35.947	69.138	96.005	122.308
204				0.974	1.931	3.475	4.988
205				4.749	18.990	27.805	36.388
206				38.273	76.936	117.045	156.320
207				5.566	6.825	9.764	12.610
208				2.140	4.857	7.057	9.108
209				13.891	29.510	37.514	44.936
210				19.897	49.395	57.583	65.772
211				209.956	435.279	600.070	761.098

## Western Power Amended Access Arrangement Real Pre-tax Model [Updated 24 April 2009]

Ref	2	3	8	9	10	11	12	13	14
Year ending 30 June			2004	2005	2006	2007	2008	2009	2010
Project Year			-2	-1	0	1	2	3	4
5 Modelled Inflation									
6 June CPI			144.8	148.4	153.0	157.7	162.6	167.7	172.9
7 Annual Inflation				2.49%	3.10%	3.10%	3.10%	3.10%	3.10%
8 Inflation Factor					1.000	1.031	1.063	1.096	1.130
9 Pre-tax WACC									
10 Real					6.76%	6.76%	6.76%	6.76%	6.76%
11 Nominal					10.07%	10.07%	10.07%	10.07%	10.07%
12									
<b>Transmission, Real Calculations [m\$ 30/06/06]</b>									
Year ending 30 June			2004	2005	2006	2007	2008	2009	2010
Project Year			-2	-1	0	1	2	3	4
<b>Asset Value [m\$ 30/06/06]</b>									
17 Asset Value									
18 Opening Asset Value						1,386.564	1,547.695	1,724.194	1,840.160
19 Adjusted Opening Asset Value									
20 Capex						209.956	229.569	173.623	173.623
21 Redundant Assets (Accelerated Depreciation)									
22 Depreciation						-48.825	-53.071	-57.656	-61.419
23 Closing Asset Value					1,386.564	1,547.695	1,724.194	1,840.160	1,952.364
24									
Year ending 30 June			2004	2005	2006	2007	2008	2009	2010
Project Year			-2	-1	0	1	2	3	4
Days						365	366	365	366
<b>Working Capital [m\$ 30/06/06]</b>									
29 Gross Cost of Service (excluding Working Capital)			PV						
30 Opex			181.295			67.237	69.386	69.892	69.892
31 Depreciation			139.678			48.825	53.071	57.656	61.419
32 Redundant Assets (Accelerated Depreciation)			-			-	-	-	-
33 Return on Assets			275.378			93.732	104.624	116.556	124.395
34 Cost of Service			596.351			209.793	227.080	244.104	255.706
35 Net Covered Service Revenue			PV						
36 Gross CoS			596.351			209.793	227.080	244.104	255.706
37 Tariff Equalisation			-			-	-	-	-
38 Capital Contribution			-50.090			-16.095	-27.400	-13.353	-13.353
39 Net Covered Service Revenue			546.261			193.698	199.680	230.751	242.353
40 Expenses			PV						
41 Opex			181.295			67.237	69.386	69.892	69.892
42 Capex			540.765			209.956	229.569	173.623	173.623
43 Total Expenses			722.059			277.193	298.955	243.515	243.515
44 Working Capital			Days	Base for Calculation					
45 Receivables			45.0	Net Covered Service Revenue		23.881	24.551	28.449	29.798
46 Inventory			-	Total Expenses		-	-	-	-
47 Prepayments			-	Total Expenses		-	-	-	-
48 Creditors			-20.0	Total Expenses		-15.189	-16.336	-13.343	-13.307
49 Working Capital						8.692	8.214	15.105	16.491
50 Asset & Working Capital Value									
51 Opening Asset Value						1,386.564	1,547.695	1,724.194	1,840.160
52 Opening Working Capital						8.692	8.214	15.105	16.491
53 Regulatory Opening Asset Value						1,395.256	1,555.910	1,739.299	1,856.651
54									
<b>Cost of Service [m\$ 30/06/06]</b>									
56 Gross Cost of Service			PV						
57 Opex			181.295			67.237	69.386	69.892	69.892
58 Depreciation			139.678			48.825	53.071	57.656	61.419
59 Redundant Assets (Accelerated Depreciation)			-			-	-	-	-
60 Return on Assets			275.378			93.732	104.624	116.556	124.395
61 Return on Working Capital			1.877			0.588	0.555	1.021	1.115
62 Cost of Service			598.228			210.381	227.636	245.125	256.821
63 Gross Regulatory Revenue			PV						
64 Opex			181.295			67.237	69.386	69.892	69.892
65 Capex			540.765			209.956	229.569	173.623	173.623
66 Asset Opening Value			1,386.564		1,386.564	-	-	-	-
67 Asset Residual Value			-1,512.272			-	-	-1,840.160	-1,952.364
68 Working Capital Variation			1.877			8.692	6.891	-15.105	-16.491
69 Gross Regulatory Revenue			598.228		1,395.256	276.716	305.846	-1,611.751	-1,725.340
70 Check			OK						
71 Net Reference Service Revenue			PV						
72 Gross CoS			598.228			210.381	227.636	245.125	256.821
73 Non Reference Service Revenue			-48.465			-18.387	-18.387	-18.387	-6.651
74 Tariff Equalisation			-			-	-	-	-
75 Capital Contribution			-50.090			-16.095	-27.400	-13.353	-13.353
76 Net Reference Service Revenue			499.672			175.899	181.848	213.385	236.817
77									

Year ending 30 June	2004	2005	2006	2007	2008	2009	2010
Project Year	-2	-1	0	1	2	3	4
<b>Smoothed Cost of Service [m\$ 30/06/06]</b>							
81 <b>Net Revenue Requirements</b>	PV						
82 Net Covered Service Revenue	548.137	X Factor		194.285	200.235	231.772	243.468
83 Smoothed Covered Service Revenue	548.137	-5.20%		207.389	203.155	213.719	243.468
84 Delta PV	-			-13.103	-2.920	18.052	-
85 <b>Net Revenue Requirements</b>	PV						
86 Smoothed Covered Service Revenue	548.137			207.389	203.155	213.719	243.468
87 Non Reference Service Revenue	-48.465			-18.387	-18.387	-18.387	-6.651
88 Smoothed Reference Service Revenue	499.672			189.002	184.769	195.333	236.817
89 <b>Net Cash Flow</b>	PV						
90 Smoothed Reference Service Revenue	499.672			189.002	184.769	195.333	236.817
91 Opex	-181.295			-67.237	-69.386	-69.892	-69.892
92 Capex	-540.765			-209.956	-229.569	-173.623	-173.623
93 Non Reference Service Revenue	48.465			18.387	18.387	18.387	6.651
94 Tariff Equalisation	-			-	-	-	-
95 Capital Contribution	50.090			16.095	27.400	13.353	13.353
96 Asset Opening Value	-1,386.564		-1,386.564	-	-	-	-
97 Asset Residual Value	1,512.272		-	0.477	-6.891	1,840.160	1,952.364
98 Working Capital Variation	-1.877		-8.692	0.477	-6.891	15.105	16.491
99 Net Cash Flow	-		-1,395.256	-53.232	-75.290	1,838.824	1,982.161
100 <b>Check</b>	OK						
101 <b>Internal Rate of Return</b>							
102 IRR	6.76%						
103 <b>Check</b>	OK						
104 <b>Nominal from Real</b>	PV						
105 Net Cash Flow	-		-1,395.256	-54.881	-80.028	2,015.103	2,239.486
106 <b>Check</b>	OK						
107 <b>Internal Rate of Return</b>							
108 IRR	10.07%						
109 <b>Check</b>	OK						
110							
<b>Revenue Cap [m\$ 30/06/06]</b>							
112 <b>Declared Revenue Cap</b>	PV						
113 Smoothed Reference Service Revenue	499.672			189.002	184.769	195.333	236.817
114 Non Reference Service Revenue	48.465			18.387	18.387	18.387	6.651
115 Tariff Equalisation	-			-	-	-	-
116 Capital Contribution	50.090			16.095	27.400	13.353	13.353
117 Revenue Cap	598.23			223.484	230.556	227.072	256.821
118 <b>Check</b>	OK						