

Western Power Networks  
**Price Schedule C1**

**Standard Network Tariffs & Prices  
for the  
South West Interconnected System  
2004/2005**

Date of Issue: 26 July 2004  
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**Important Note:**

Customers using more than 8,760 MWh per year prior to July 2001 may be eligible for special network tariffs. These are contained in the separate publication:

“Price Schedule C2  
Transition Network Tariffs & Prices  
for the South West Interconnected System  
2004/2005”

# WESTERN POWER NETWORKS PRICING PUBLICATIONS

- PART A NETWORK REVENUE AND AVERAGE PRICE PATH
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FOR THE SOUTH WEST INTERCONNECTED NETWORK  
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FOR THE SOUTH WEST INTERCONNECTED SYSTEM  
2004/2005  
(Standby generation, spinning reserve and balancing energy services)

## **PURPOSE OF THIS DOCUMENT**

This document provides *network access prices*, *ancillary service prices* and *network loss factors* for the 2004/2005 financial year for the south-west interconnected Transmission and Distribution networks.

All listed prices are **GST exclusive**.

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## NETWORK TARIFFS

### Anytime Energy and Time of Use Energy Tariffs

#### Eligibility:

1. **Anytime Energy Tariff (Residential)** is available to residential customers with energy only metering.
2. **Anytime Energy Tariff (Business)** is available to business customers with energy only metering.
3. **Time of Use Energy Tariff (Small)** is available to customers with time of use energy metering and total annual electricity usage of less than 50,000 kWh.
4. **Time of Use Energy Tariff (Large)** is available to customers with time of use energy metering and total annual electricity usage of at least 50,000 kWh.

#### Prices:

	Fixed Price	Energy Rates			Distribution Loss Factor	Transmission HV Loss Factor
		\$/year	c/kWh	On Peak c/kWh		
1. <b>Anytime Energy Tariff (Residential)</b>	76.50	3.78	-	-	1.0835	1.0647
2. <b>Anytime Energy Tariff (Business)</b>	76.50	5.12	-	-	1.0463	See below *
3. <b>Time of Use Energy Tariff (Small)</b>	78.00	-	6.09	1.93	1.0835	1.0647
4. <b>Time of Use Energy Tariff (Large)</b>	102.00	-	5.21	1.24	1.0463	See below *

#### Metering Charges

Inclusive in above prices

#### Administration Charges

Inclusive in above prices

#### Distribution Loss Factor

See above table

#### Transmission Loss Factor

\* Refer to section 23, Transmission Loss Factors.

## 5. High Voltage Metered Demand Tariff

### Eligibility:

This tariff is available to customers with maximum demands of less than 1.5MVA connected to the distribution network at high voltage (6.6 kV or higher).

### Notes:

1. The metered demand (MD) is a rolling 12-month maximum half-hourly demand. There is a discount (described below) applied to the demand charge based on the proportion of off peak energy used.
2. For customers with maximum demands greater than 1MVA there is also a demand-length charge based on the rolling 12 month maximum half-hourly demand.

### Demand Prices:

Demand (kVA) (Lower to upper threshold)	Fixed \$/annum	Demand (in excess of lower threshold) \$/kVA/annum	Distribution Loss Factor	Transmission HV Loss Factor
0 to 300	153	114.24	1.0211	See below *
300 to 1000	34,425	86.70		
1000 to 1500	95,115	40.80		

**Demand Length Prices:** (apply only where maximum demand is greater than 1 MVA)

The applicable prices are as listed in the Demand Length Prices table in section 7 High Voltage Contract Maximum Demand Tariff.

### Discount Factor:

A discount, based on the percentage of off peak energy consumption (as a proportion of the total energy consumption), applies to the Metered Demand Tariffs.

The total demand charge (metered demand charge minus discount) is calculated by determining the charge based on the demand prices and then discounting that charge according to the following formula.

$$\text{Charge} = (1 - \text{Discount}) * (\text{Metered Demand Charge})$$

Where the Discount is defined as:

$$(E_{\text{Off Peak}}/E_{\text{Total}}) * \text{DF} \quad \text{for MD} < 1000\text{kVA and};$$

$$((1500 - \text{MD})/500) * (E_{\text{Off Peak}}/E_{\text{Total}}) * \text{DF} \quad \text{for } 1000 < \text{MD} < 1500\text{kVA}$$

DF is the discount factor, which set at 50%

$E_{\text{Off Peak}}$  is the total off peak energy for the billing period; and

$E_{\text{Total}}$  is the total energy (both on and off peak) for the billing period

(Note: This discount does not apply to the demand-length portion of the charge.)

### **Metering Charges**

Separate Metering charges apply in conjunction with this tariff – refer to section 13, Metering Charges.

### **Administration Charges**

Inclusive in above prices

### **Distribution Loss Factor**

See above table

### **Transmission Loss Factor**

\* Refer to section 23, Transmission Loss Factors.

## **6. Low Voltage Metered Demand Tariff**

### **Eligibility:**

This tariff is available to customers with maximum demands of less than 1.5MVA connected to the distribution network at low voltage (415 volts).

### **Notes:**

Similar to the HV Metered Demand tariff but for customers connected at low voltage. The higher tariff rates reflect the additional cost of using the low voltage network.

### **Demand Prices:**

<b>Demand (kVA) (Lower to upper threshold)</b>	<b>Fixed \$/annum</b>	<b>Demand (in excess of lower threshold) \$/kVA/annum</b>	<b>Distribution Loss Factor</b>	<b>Transmission HV Loss Factor</b>
0 to 300	204	122.40	1.0333	See below *
300 to 1000	36,924	94.86		
1000 to 1500	103,326	48.96		

**Demand Length Prices:** (apply only where maximum demand is greater than 1 MVA)

The applicable prices are as listed in the Demand Length Prices table in section 7 High Voltage Contract Maximum Demand Tariff.

**Discount Factor:**

Refer to section 5, High Voltage Metered Demand Tariff.

**Metering Charges**

Separate Metering charges apply in conjunction with this tariff – refer to section 13, Metering Charges.

**Administration Charges**

Inclusive in above prices

**Distribution Loss Factor**

See above table

**Transmission Loss Factor**

\* Refer to section 23, Transmission Loss Factors.

## **7. High Voltage Contract Maximum Demand Tariff**

**Eligibility:**

This tariff is available to customers with maximum demands of greater than 1.0MVA connected to the distribution network at high voltage (6.6 kV or higher).

**Notes:**

1. There is a different demand price for each zone substation to which the load is connected to reflect Transmission nodal and Distribution zonal cost reflective prices.
2. Where the CMD is less than 7000kVA, the total "Demand Charge" is calculated by multiplying the demand rate by the (CMD minus 1000 kVA) and then adding the "Fixed charge for first 1000 kVA".
3. If the CMD is greater than 7000 kVA, the "Demand Charge" is calculated by multiplying the demand rate by the total CMD.
4. There is also a demand-length component in the distribution charge based on the distance from the zone substation. These prices are listed below the following Demand Price table.
5. An additional excess network usage charge applies where actual peak demand exceeds the nominated CMD.

### Demand Prices:

Zone Substation	Pricing Zone	Fixed charge for first 1000 kVA (\$ per annum)	Demand charge for 1000<kVA< 7000 (\$/kVA/ annum)	Demand Charge for kVA > 7000 (\$/kVA/ annum)
Cook St	CBD	74,284	52.71	55.79
Forrest Ave	CBD	74,284	52.71	55.79
Hay St	CBD	74,284	52.71	55.79
Milligan St	CBD	74,284	52.71	55.79
Wellington St	CBD	74,284	52.71	55.79
Black Flag	Mining	74,284	91.89	89.39
Boulder	Mining	74,284	88.07	86.11
Bounty	Mining	74,284	144.07	134.11
West Kalgoorlie	Mining	74,284	84.82	83.33
Albany	Mixed	74,284	90.97	88.58
Boddington	Mixed	74,284	48.60	52.27
Bunbury Harbour	Mixed	74,284	50.14	53.59
Busselton	Mixed	74,284	76.32	76.03
Byford	Mixed	74,284	50.72	54.08
Capel	Mixed	74,284	66.29	67.43
Chapman	Mixed	74,284	79.43	78.69
Darlington	Mixed	74,284	57.40	59.81
Eneabba	Mixed	74,284	71.84	72.19
Geraldton	Mixed	74,284	79.44	78.70
Marriott Road	Mixed	74,284	50.94	54.27
Muchea	Mixed	74,284	52.05	55.22
Northam	Mixed	74,284	70.21	70.79
Picton	Mixed	74,284	55.10	57.84
Sawyers Valley	Mixed	74,284	70.61	71.13
Southern Cross	Mixed	74,284	120.35	113.77
Yanchep	Mixed	74,284	50.47	53.87
Yilgarn	Mixed	74,284	89.65	87.45
Baandee	Rural	74,284	78.51	77.91
Beenup	Rural	74,284	80.60	79.70
Bridgetown	Rural	74,284	52.68	55.77
Carrabin	Rural	74,284	88.66	86.61
Collie	Rural	74,284	74.45	74.43
Coolup	Rural	74,284	81.65	80.60
Cunderdin	Rural	74,284	78.72	78.09
Katanning	Rural	74,284	89.34	87.19
Kellerberrin	Rural	74,284	81.23	80.24
Kojonup	Rural	74,284	53.93	56.84
Kondinin	Rural	74,284	59.38	61.51
Manjimup	Rural	74,284	55.82	58.46
Margaret River	Rural	74,284	90.27	87.99
Merredin	Rural	74,284	73.66	73.75
Moora	Rural	74,284	64.47	65.87
Mt Barker	Rural	74,284	86.35	84.63
Narrogin	Rural	74,284	100.03	96.35
Pinjarra	Rural	74,284	50.65	54.03
Quinninup	Rural	74,284	151.31	140.31
Regans	Rural	74,284	60.71	62.65
Three Springs	Rural	74,284	65.45	66.71
Wagerup	Rural	74,284	45.22	49.37
Wagin	Rural	74,284	69.03	69.78
Wundowie	Rural	74,284	69.88	70.51
Yerbillon	Rural	74,284	93.26	90.55

Zone Substation	Pricing Zone	Fixed charge for first 1000 kVA (\$ per annum)	Demand charge for 1000<kVA< 7000 (\$/kVA/ annum)	Demand Charge for kVA > 7000 (\$/kVA/ annum)
Yornup	Rural	74,284	109.27	104.27
Amherst	Urban	74,284	43.37	47.79
Arkana	Urban	74,284	43.37	47.79
Aust Paper Mills	Urban	74,284	43.37	47.79
Beechboro	Urban	74,284	43.37	47.79
Belmont	Urban	74,284	43.37	47.79
British Petroleum	Urban	74,284	43.37	47.79
Canning Vale	Urban	74,284	43.19	47.64
Clarence St	Urban	74,284	43.37	47.79
Cockburn Cement	Urban	74,284	40.23	45.10
Collier	Urban	74,284	43.37	47.79
Cottesloe	Urban	74,284	43.37	47.79
Edmund St	Urban	74,284	43.37	47.79
Forrestfield	Urban	74,284	43.37	47.79
Gosnells	Urban	74,284	43.37	47.79
Hadfields	Urban	74,284	43.37	47.79
Herdsman Parade	Urban	74,284	43.37	47.79
Joel Terrace	Urban	74,284	43.37	47.79
Kalamunda	Urban	74,284	43.37	47.79
Kambalda	Urban	74,284	84.39	82.95
Landsdale	Urban	74,284	43.37	47.79
Malaga	Urban	74,284	43.37	47.79
Mandurah	Urban	74,284	43.37	47.79
Manning	Urban	74,284	43.37	47.79
Mason Road	Urban	74,284	36.10	41.56
Medical Centre	Urban	74,284	43.37	47.79
Medina	Urban	74,284	37.58	42.83
Midland Junction	Urban	74,284	43.37	47.79
Morley	Urban	74,284	43.37	47.79
Mullaloo	Urban	74,284	43.37	47.79
Mundaring Weir	Urban	74,284	43.37	47.79
Myaree	Urban	74,284	43.37	47.79
Nedlands	Urban	74,284	43.37	47.79
North Beach	Urban	74,284	43.37	47.79
North Fremantle	Urban	74,284	43.37	47.79
North Perth	Urban	74,284	43.37	47.79
O'Connor	Urban	74,284	43.37	47.79
Osborne Park	Urban	74,284	43.37	47.79
Piccadilly	Urban	74,284	78.27	77.71
Riverton	Urban	74,284	43.37	47.79
Rivervale	Urban	74,284	43.37	47.79
Rockingham	Urban	74,284	43.37	47.79
Shenton Park	Urban	74,284	43.37	47.79
South Fremantle	Urban	74,284	43.37	47.79
Tate St	Urban	74,284	43.37	47.79
University	Urban	74,284	43.37	47.79
Victoria Park	Urban	74,284	43.37	47.79
Wanneroo	Urban	74,284	43.37	47.79
Welshpool	Urban	74,284	43.37	47.79
Wembley Downs	Urban	74,284	43.37	47.79
Yokine	Urban	74,284	43.37	47.79

## Demand Length Prices:

### *Maximum Demand 1000 to 7000 kVA*

	Demand-Length Charge	
Pricing Zone	For kVA >1000 and first 10 km length (\$/kVA.km/annum)	For kVA >1000 and length in excess of 10 km (\$/kVA.km/annum)
CBD	0	0
Urban	1.845	1.292
Mining	0.405	0.284
Mixed	0.869	0.609
Rural	0.607	0.425

### *Maximum Demand > 7000 kVA*

	Demand-Length Charge	
Pricing Zone	For first 10 km length (\$/kVA.km/annum)	For length in excess of 10 km (\$/kVA.km/annum)
CBD	0	0
Urban	1.581	1.107
Mining	0.347	0.243
Mixed	0.745	0.522
Rural	0.521	0.364

## Metering Charges

Separate Metering charges apply in conjunction with this tariff – refer to section 13, Metering Charges.

## Administration Charges

Separate Administration charges apply in conjunction with this tariff as follows:

Peak Demand	Price (\$/day)
>7MVA	25.50
<7MVA	15.30

## Distribution Loss Factor

Refer to section 22, Distribution Loss Factors.

## Transmission Loss Factor

Refer to section 23, Transmission Loss Factors.

### **Excess Network Usage Charges**

An additional charge applies in conjunction with this tariff where peak demand exceeds the nominated CMD – refer to sections 15 and 16, Transmission and Distribution Excess Network Usage Factors.

## **8. Low Voltage Contract Maximum Demand Tariff**

### **Eligibility:**

This tariff is available to customers with maximum demands of greater than 1.0MVA connected to the distribution network at low voltage (415 volts).

### **Notes:**

This tariff is identical to the High Voltage Contract Maximum Demand Tariff above, with an additional low voltage charge to cover the use of transformers and LV circuits.

### **Demand Prices:**

Identical to the High Voltage Contract Maximum Demand Tariff above.

### **Demand Length Prices:**

Identical to the High Voltage Contract Maximum Demand Tariff above.

### **Low Voltage Price**

<b>Category</b>	<b>Price (\$/annum)</b>
Fixed	956.76
Demand	7.73/kVA

### **Metering Charges**

Separate Metering charges apply in conjunction with this tariff – refer to section 13, Metering Charges.

### **Administration Charges**

Identical to the High Voltage Contract Maximum Demand Tariff above.

### **Distribution Loss Factor**

Refer section 22, Distribution Loss Factors.

### **Transmission Loss Factor**

Refer section 23, Transmission Loss Factors.

### **Excess Network Usage Charges**

An additional charge applies in conjunction with this tariff where peak demand exceeds the nominated CMD – refer to sections 15 and 16, Transmission and Distribution Excess Network Usage Factors.

## 9. Street Lighting

### Eligibility:

These prices apply to Western Power streetlights.

### Network Use of System Prices:

	Fixed \$/annum	Anytime Energy c/kWh	Distribution Loss Factor	Transmission HV Loss Factor
<b>Bundled Tariff</b>	6.63	2.74	1.08151	1.0647

### Asset Prices:

Light Specification	Annual Charge \$/annum
50W MV	\$28.05
70W HPS	\$38.76
80W MV	\$37.74
125W MV	\$46.92
150W HPS	\$51.00
250W HPS	\$51.00
250W MV	\$61.20
400W MV	\$64.26

## 10. Unmetered Supplies

These prices apply to unmetered supplies.

### Network Use of System Prices:

	Fixed \$/annum	Anytime Energy c/kWh	Distribution Loss Factor	Transmission HV Loss Factor
<b>Bundled Tariff</b>	40.80	2.87	1.08151	1.0647

## TRANSMISSION NODAL PRICES

### 11. Exit Points

#### Eligibility:

These prices apply to:

- Loads connected directly to the transmission network at 66kV or above; and
- On-site loads associated with generators connected to either the transmission or distribution networks.

#### Notes:

1. Connection charges for loads connected directly to the transmission network at 66kV or above are not published but are determined subject to the specific connection arrangements.
2. The Connection Price shown in the following table:
  - applies only to on-site loads associated with generators connected either directly to the transmission network at less than 66kV or to the distribution network; and
  - does not include the Control System Services charge (refer to section 17, Control System Services Prices).
3. \* Denotes the actual charge is to be determined subject to the specific connection arrangements

#### Prices:

Substation	Connection Price \$/kW/annum	Use of System Price \$/kW/annum	Common Service Price \$/kW/annum	Total \$/kW/annum	Transmission HV Loss Factor for Connections with Generation and HV Transmission Connected Loads	Transmission HV Loss Factor for Other Load Connections >1000 kVA (See section 23)
Albany	14.17	41.62	14.93	70.71	1.0747	1.0747
Amherst	14.17	10.57	14.93	39.66	1.0569	1.0542
Arkana	14.17	12.92	14.93	42.02	1.0564	1.0542
Australian Fused Materials	*	6.43	14.93	*	1.0430	1.0542
Australian Paper Mills	14.17	13.93	14.93	43.03	1.0561	1.0542
Baandee (WC)	14.17	46.83	14.93	75.92	1.0888	1.0888
Beechboro	14.17	12.42	14.93	41.51	1.0544	1.0542
Beenup	14.17	47.38	14.93	76.47	1.0412	1.0412
Belmont	14.17	12.49	14.93	41.59	1.0523	1.0542
Black Flag	14.17	54.54	14.93	83.63	1.1569	1.1569
Boddington (Local)	14.17	9.16	14.93	38.26	1.0200	1.0200
Boddington Reynolds	14.17	9.67	14.93	38.77	1.0200	1.0200
Boulder	14.17	50.83	14.93	79.92	1.1402	1.1402
Bounty	14.17	93.06	14.93	122.15	1.0891	1.0891
Bridgetown	14.17	20.21	14.93	49.30	1.0193	1.0193
British Petroleum	14.17	18.37	14.93	47.47	1.0441	1.0542
Broken Hill Kwinana	*	15.91	14.93	*	1.0435	1.0542
Bunbury Harbour	14.17	10.02	14.93	39.12	1.0200	1.0200
Burswood Island Casino	*	31.03	14.93	*	1.0527	1.0542
Busselton	14.17	33.12	14.93	62.21	1.0905	1.0905

<b>Substation</b>	<b>Connection Price \$/kW/annum</b>	<b>Use of System Price \$/kW/annum</b>	<b>Common Service Price \$/kW/annum</b>	<b>Total \$/kW/annum</b>	<b>Transmission HV Loss Factor for Connections with Generation and HV Transmission Connected Loads</b>	<b>Transmission HV Loss Factor for Other Load Connections &gt;1000 kVA (See section 23)</b>
Byford	14.17	10.96	14.93	40.05	1.0491	1.0542
Canning Vale	14.17	11.07	14.93	40.16	1.0475	1.0542
Capel	14.17	21.26	14.93	50.35	1.0584	1.0584
Carrabin	14.17	57.06	14.93	86.15	1.1001	1.1001
Cataby Kerr McGee	*	23.00	14.93	*	1.1283	1.1283
Chapman	14.17	39.29	14.93	68.39	1.2099	1.2099
Clarence Street	14.17	23.43	14.93	52.53	1.0580	1.0542
Cockburn Cement	14.17	7.26	14.93	36.36	1.0451	1.0542
Cockburn Cement Ltd	*	6.84	14.93	*	1.0433	1.0542
Collie	14.17	41.78	14.93	70.88	1.0141	1.0141
Collier	14.17	20.39	14.93	49.49	1.0581	1.0542
Cook Street	14.17	17.63	14.93	46.73	1.0657	1.0542
Coolup	14.17	46.43	14.93	75.53	1.0574	1.0574
Cottesloe	14.17	15.57	14.93	44.66	1.0632	1.0542
Cunderdin	14.17	40.97	14.93	70.07	1.1025	1.1025
Darlington	14.17	15.15	14.93	44.24	1.0550	1.0542
Edgewater	*	12.95	14.93	*	1.0647	1.0542
Edmund Street	14.17	13.12	14.93	42.22	1.0537	1.0542
Eneabba	14.17	27.82	14.93	56.91	1.1678	1.1678
Forrest Ave	14.17	17.63	14.93	46.73	1.0587	1.0542
Forrestfield	14.17	14.53	14.93	43.62	1.0444	1.0542
Geraldton	14.17	33.52	14.93	62.62	1.2144	1.2144
Golden Grove	*	86.94	14.93	*	1.2104	1.2104
Gosnells	14.17	11.97	14.93	41.07	1.0491	1.0542
Hadfields	14.17	13.44	14.93	42.54	1.0560	1.0542
Hay Street	14.17	17.63	14.93	46.73	1.0571	1.0542
Herdsmen Parade	14.17	20.96	14.93	50.06	1.0646	1.0542
Joel Terrace	14.17	18.39	14.93	47.48	1.0574	1.0542
Kalamunda	14.17	14.33	14.93	43.42	1.0524	1.0542
Katanning	14.17	44.94	14.93	74.04	1.0519	1.0519
Kellerberrin	14.17	44.90	14.93	74.00	1.0965	1.0965
Kojonup	14.17	14.28	14.93	43.37	1.0275	1.0275
Kondinin	14.17	18.59	14.93	47.69	1.0586	1.0586
Kwinana Alcoa	*	2.54	14.93	*	1.0413	1.0542
Kwinana Power Partnership	*	4.05	14.93	*	1.0412	1.0542
Landsdale	14.17	13.11	14.93	42.20	1.0415	1.0542
Malaga	14.17	12.92	14.93	42.02	1.0503	1.0542
Mandurah	14.17	14.34	14.93	43.43	1.0522	1.0542
Manjimup	14.17	26.03	14.93	55.12	1.0299	1.0299
Manning Street	14.17	13.59	14.93	42.68	1.0577	1.0542
Margaret River	14.17	53.99	14.93	83.09	1.1127	1.1127
Marriott Road Barrack Silicon Smelter	*	11.06	14.93	*	1.0218	1.0218
Marriott Road (Local)	14.17	10.10	14.93	39.19	1.0206	1.0206
Mason Road (Local)	14.17	4.05	14.93	33.15	1.0412	1.0542
Mason Road CSBP	*	7.22	14.93	*	1.0417	1.0542
Mason Road Hismelt	*	21.65	14.93	*	1.0413	1.0542
Mason Road Kerr McGee	*	4.05	14.93	*	1.0410	1.0542
Medical Centre	14.17	17.74	14.93	46.84	1.0622	1.0542
Medina	14.17	5.81	14.93	34.91	1.0446	1.0542

<b>Substation</b>	<b>Connection Price \$/kW/annum</b>	<b>Use of System Price \$/kW/annum</b>	<b>Common Service Price \$/kW/annum</b>	<b>Total \$/kW/annum</b>	<b>Transmission HV Loss Factor for Connections with Generation and HV Transmission Connected Loads</b>	<b>Transmission HV Loss Factor for Other Load Connections &gt;1000 kVA (See section 23)</b>
Merredin 66kV	14.17	38.21	14.93	67.31	1.0832	1.0832
Midland Junction	14.17	17.61	14.93	46.71	1.0576	1.0542
Milligan Street	14.17	17.63	14.93	46.73	1.0565	1.0542
Moorra	14.17	23.15	14.93	52.24	1.1208	1.1208
Morley	14.17	13.62	14.93	42.72	1.0553	1.0542
Mt Barker	*	41.62	14.93	*	1.0502	1.0502
Muchea Kerr McGee	*	18.36	14.93	*	1.0588	1.0542
Muchea (Local)	14.17	12.67	14.93	41.76	1.0591	1.0542
Mullaloo	14.17	13.11	14.93	42.20	1.0599	1.0542
Mundaring Weir	14.17	27.67	14.93	56.77	1.0627	1.0542
Myaree	14.17	16.88	14.93	45.97	1.0618	1.0542
Narrogin	14.17	63.49	14.93	92.58	1.0316	1.0316
Nedlands	14.17	15.52	14.93	44.62	1.0630	1.0542
North Beach	14.17	13.42	14.93	42.52	1.0592	1.0542
North Fremantle	14.17	15.19	14.93	44.29	1.0537	1.0542
North Perth	14.17	11.52	14.93	40.61	1.0564	1.0542
Northam	14.17	27.39	14.93	56.48	1.0753	1.0753
O'Connor	14.17	14.85	14.93	43.95	1.0594	1.0542
Osborne Park	14.17	14.52	14.93	43.61	1.0585	1.0542
Piccadilly	14.17	48.74	14.93	77.84	1.1455	1.1455
Picton 66kv	14.17	13.16	14.93	42.26	1.0232	1.0232
Pinjarra	14.17	12.81	14.93	41.91	1.0442	1.0542
Pinjarra ALCOA	*	21.15	14.93	*	1.0435	1.0542
Quinninup	14.17	105.32	14.93	134.41	1.0354	1.0354
Regans	14.17	23.00	14.93	52.10	1.0997	1.0997
Riverton	14.17	10.01	14.93	39.11	1.0463	1.0542
Rivervale	14.17	24.99	14.93	54.09	1.0547	1.0542
Rockingham	14.17	7.82	14.93	36.92	1.0463	1.0542
Sawyers Valley	14.17	32.25	14.93	61.34	1.0686	1.0542
Shenton Park	14.17	15.61	14.93	44.71	1.0616	1.0542
South Fremantle 66kV	14.17	10.57	14.93	39.66	1.0497	1.0542
Southern Cross	14.17	65.92	14.93	95.02	1.1227#	1.1227
Summer St	*	24.44	14.93	*	1.0568	1.0542
Tate Street	14.17	20.28	14.93	49.37	1.0535	1.0542
Three Springs	14.17	23.69	14.93	52.78	1.1757	1.1757
Tomlinson Street	*	24.47	14.93	*	1.0528	1.0542
University	14.17	18.39	14.93	47.49	1.0627	1.0542
Victoria Park	14.17	19.68	14.93	48.77	1.0540	1.0542
Wagerup	14.17	9.36	14.93	38.45	1.0049	1.0049
Wagin	14.17	27.93	14.93	57.03	1.0580	1.0580
Wanneroo	14.17	11.77	14.93	40.87	1.0599	1.0542
WEB Grating	*	99.24	14.93	*	1.0607	1.0542
Wellington Street	14.17	17.63	14.93	46.73	1.0590	1.0542
Welshpool	14.17	12.63	14.93	41.72	1.0501	1.0542
Wembley Downs	14.17	16.40	14.93	45.50	1.0631	1.0542
West Kalgoorlie	14.17	42.79	14.93	71.88	1.1413	1.1413
Western Collieries	*	4.75	14.93	*	0.9935	0.9935
Western Mining	*	5.06	14.93	*	1.0426	1.0542
Westralian Sands	*	19.19	14.93	*	1.0504	1.0504
Worsley	*	7.04	14.93	*	0.9901	0.9901

<b>Substation</b>	<b>Connection Price</b> \$/kW/annum	<b>Use of System Price</b> \$/kW/annum	<b>Common Service Price</b> \$/kW/annum	<b>Total</b> \$/kW/annum	<b>Transmission HV Loss Factor for Connections with Generation and HV Transmission Connected Loads</b>	<b>Transmission HV Loss Factor for Other Load Connections &gt;1000 kVA (See section 23)</b>
Wundowie	14.17	29.41	14.93	58.50	1.0871	1.0871
Yanchep	14.17	10.66	14.93	39.76	1.0580	1.0542
Yerbillon	14.17	54.86	14.93	83.96	1.1015	1.1015
Yilgarn	14.17	42.85	14.93	71.94	1.1054	1.1054
Yokine	14.17	13.15	14.93	42.24	1.0554	1.0542
Yornup	14.17	76.87	14.93	105.97	1.0436	1.0436

Note: # Applies to the Southern Cross 33kV busbar

### **Metering Charges**

Separate Metering charges apply in conjunction with this tariff – refer to section 13, Metering Charges.

### **Transmission Loss Factor**

See above table.

### **Excess Network Usage Charges**

An additional charge applies in conjunction with this tariff where peak demand exceeds the nominated CMD – refer to section 15, Transmission Excess Network Usage Factor.

## 12. Entry Points

### Eligibility

These prices apply to all generators, connected to either the transmission network or distribution network.

### Notes:

1. The Total Connection Charge shown in the following table:
  - is used to calculate the connection charge for generators connected to the transmission network at 66kV or greater; and
  - includes the Control System Services Charge (refer to section 18, Control System Services Prices).
2. The Connection Price shown in the following table:
  - applies to generators connected either directly to the transmission network at less than 66kV or to the distribution network; and
  - does not include the Control System Services Charge (refer to section 17, Control System Services Prices).
3. \* Denotes the charge is not published but is determined subject to the specific connection arrangements.

### Prices:

Substation	Total Connection Charge \$k (Refer Note 1)	Connection Price \$/kW (Refer Note 2)	Use of System \$/kW	Transmission HV Loss Factor
Albany	*	14.17	8.40	1.0747
Boulder	*	14.17	5.46	1.1402
Cockburn	317.40	14.17	5.23	1.0371
Collie	597.38	14.17	8.76	1.0141
Geraldton	*	14.17	1.51	1.2144
Kwinana Alcoa	*	14.17	5.23	1.0371
Kwinana Power Partnership	*	14.17	4.94	1.0412
Kwinana	1,195.04	14.17	5.23	1.0371
Muja	1,737.88	14.17	8.40	1.0000
Mungarra	352.02	14.17	8.22	1.1407
Pinjar	904.65	14.17	4.29	1.0507
Pinjarra Alcoa	*	14.17	9.18	1.0435
Tiwest	*	14.17	4.53	1.0410
Wagerup Alcoa	*	14.17	5.96	1.0049
West Kalgoorlie	*	14.17	5.36	1.1413
Worsley	*	14.17	6.64	0.9901

**Metering Charges**

Separate Metering charges apply in conjunction with this tariff – refer to section 13, Metering Charges.

**Transmission Loss Factor**

See above table.

**Excess Network Usage Charges**

An additional charge applies in conjunction with this tariff where peak demand exceeds the nominated CMD – refer to section 15, Transmission Excess Network Usage Factor.

## OTHER NETWORK CHARGES

### 13. Metering Charges

Metering charges apply to the following tariffs:

- HV CMD
- LV CMD
- HV Metered Demand
- LV Metered Demand.

		\$/metering unit/annum
Existing	High Voltage	\$2,040
	Low voltage	\$383
New (Capital fully funded by customer)	High Voltage	\$265
	Low Voltage	\$51

Metering charge for transmission connections:

	\$/metering unit/annum
Meter with tariff metering CT/VT @ 66kV and above	\$10,122
Meter with tariff metering CT/VT @ <66kV	\$2,040

### 14. Energy Balancing Service Charges

Account set-up fee	\$2,193
Account modification fee (per modification)	\$438
Linked account modification fee [1]	\$219
Billing fee	\$326/month
System maintenance fee [2]	\$81/MW/month

Notes:

- [1] Linked accounts occur where there is an arrangement to share out-of-balance energies. The total fee payable where there are linked accounts is \$438 for the prime account and \$219 for each “linked” account. The fees are independent of the number of meters.
- [2] The monthly System Maintenance fee is based on the total of the highest monthly DSOC at each entry point for the month.

## **15. Transmission Excess Network Usage Factor**

(refer to Electricity Transmission Regulations clause 24)

The excess network usage factor is 0.125 (=1.5/12)

This applies only to the following tariffs:

- High Voltage Contract Maximum Demand
- Low Voltage Contract Maximum Demand
- Transmission Nodal Prices

## **16. Distribution Excess Network Usage Factor**

(refer Electricity Distribution Regulations clause 26)

The excess network usage factor is 1.5.

This applies only to the following tariffs:

- High Voltage Contract Maximum Demand
- Low Voltage Contract Maximum Demand

## **17. Control System Service Prices**

Control System Service prices apply only in conjunction with Transmission Exit Point and Entry Point prices.

The Control System Service price is \$3.73/kW for loads and \$0.53/kW for generators.

Load CMD and generator unit maximum output are used to calculate the Control System Service charge. For a connection with both on-site loads and embedded generators, the Control System Service charge will be the higher of the one based on CMD and the one based on generator unit maximum output.

Note: The Control System Service charge is included in the Total Connection Charge for entry points.

## ANCILLARY SERVICE PRICES

\* All Ancillary Service Prices are currently under consideration in conjunction with the Electricity Reform Implementation Unit (ERIU). Revised prices are expected to be published during the 2004/05 financial year.

### 18. Spinning Reserve Prices \*

GENERATOR UNIT MAXIMUM NET OUTPUT (MW)	PRICE (\$/h)
<10	NIL
10-45	8.42
46-65	19.30
66-125	106.99
126-250	190.28
>250	325.50

The purchase price for interruptible load is \$78,197/MW per annum.

### 19. Energy Balancing and Top Up and Spill (TUAS) Prices

For the current prices refer to the web page:

[http://www.westernpower.com.au/html/networks/network\\_access/balancing\\_prices](http://www.westernpower.com.au/html/networks/network_access/balancing_prices)

[http://www.westernpower.com.au/html/networks/network\\_access/spill\\_prices](http://www.westernpower.com.au/html/networks/network_access/spill_prices)

### 20. Standby Generation Capacity Price \*

The Standby Generation Capacity Price is \$16.46/kW

### 21. Excess Standby Generation Capacity Price \*

The Excess Standby Generation Capacity price is \$20.00/kW/excess demand period.

## LOSS FACTORS

### 22. Distribution Loss Factors

#### Load Connections

Distribution loss factors are assigned to network tariffs as shown in the relevant tables above for:

- Any time Energy tariffs
- Time of Use Energy tariffs
- Metered Demand tariffs

For the High Voltage and Low Voltage Contract Maximum Demand tariffs, the applicable distribution loss factors are:

- For customers with CMDs greater than 7000 kVA:
  - Specific individually calculated loss factor.
- For customers with CMDs between 1000 kVA and 7000 kVA and located greater than 10 km from the transmission substation:
  - Specific individually calculated loss factor
- Customers with CMDs between 1000 kVA and 7000 kVA and located less than 10 km from the transmission substation can choose either:
  - Specific individually calculated loss factor; or
  - Standard loss factor as per sections 5 and 6 High Voltage and Low Voltage Metered Demand Tariffs (respectively for HV or LV connection).

#### Generator Connections

Specific individual loss factors are calculated for all distribution connected generators.

*Note: All specific individually calculated loss factors (both load and generator connections) include zone substation loss factor of 1.0055.*

### 23. Transmission Loss Factors

Transmission HV Loss Factors are location specific for:

- all generator connections, and
- all load connections greater than 1000 kVA peak

as listed in the tables in sections 11 and 12 Transmission Nodal Prices – Exit Points and Entry Points. *Note: In these tables, Transmission HV Loss Factors for Other Load Connections (eg. a load connected to zone substation LV busbar) do not include the zone substation loss factor.*

For all loads less than 1000 kVA peak, a system-wide average Transmission HV Loss Factor of 1.0647 applies.