

Western Power Networks  
**Price Schedule C2**

**Transition Network Tariffs & Prices  
for the  
South West Interconnected System  
2002/2003**

**Important Note:**

Only those Customers using more than 8,760 MWh per year prior to July 2001 are eligible for these “special” network tariffs.

Standard tariffs are contained in the separate publication:

“Price Schedule C1

Standard Network Tariffs & Prices

for the South West Interconnected System

2002/2003”

# WESTERN POWER NETWORKS PRICING PUBLICATIONS

- PART A NETWORK REVENUE AND AVERAGE PRICE PATH
- PART B NETWORK PRICING STRUCTURE
- PART C PRICE SCHEDULES
  - C1 STANDARD NETWORK TARIFFS AND PRICES  
FOR THE SOUTH WEST INTERCONNECTED NETWORK  
2002/2003
  - C2 TRANSITION NETWORK TARIFFS AND PRICES  
FOR THE SOUTH WEST INTERCONNECTED NETWORK  
2002/2003**
  - C3 STANDARD NETWORK TARIFFS AND PRICES  
FOR THE NORTH WEST INTERCONNECTED NETWORK  
2002/2003
  - C4 TRANSITION NETWORK TARIFFS AND PRICES  
FOR THE NORTH WEST INTERCONNECTED NETWORK  
2002/2003
  - C5 NETWORK TARIFFS AND PRICES  
FOR REGIONAL NETWORKS  
2002/2003
  - C6 MISCELLANEOUS NETWORK PRICES  
2002/2003
- PART D NETWORK PRICE APPLICATION GUIDE
- PART E SUPPORT SERVICES PRICES  
FOR THE SOUTH WEST INTERCONNECTED SYSTEM  
2002/2003  
(Standby generation, spinning reserve and balancing energy services)

## **PURPOSE OF THIS DOCUMENT**

This document provides *“transition” network access prices, ancillary service prices* and *network loss factors* for the 2002/2003 financial year for the south-west interconnected Transmission and Distribution networks.

### ***Eligibility for Transition Network Prices***

**“Transition” network prices are special prices available only to those customers using more than 8,760 MWh per year prior to July 2001. These customers may choose between these transition prices and the standard network access prices (published separately).**

All listed prices are GST exclusive.

## **CONTENTS**

### **Transition Distribution Network Prices**

1. Transition Distribution Network Prices

Note: Distribution entry point charges for generators are determined individually by Western Power Networks.

### **Transition Transmission Nodal Prices**

2. Exit Points
3. Entry Points

### **Other Network Prices**

4. Transition Metering Prices
5. Energy Balancing Service Charge
6. Transmission Excess Network Usage Factor
7. Distribution Excess Network Usage Factor

### **Ancillary Service Prices**

8. Spinning Reserve Prices
9. Control System Service Price
10. Energy Balancing Prices
11. Standby Generation Capacity Price
12. Excess Standby Generation Capacity Price

### **Loss Factors**

13. Distribution Loss Factors
14. Transmission Loss Factors

# TRANSITION DISTRIBUTION NETWORK PRICES

## 1. Transition Distribution Network Prices

### Eligibility:

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

### Note:

An additional excess network usage charge applies where actual peak demand exceeds the nominated CMD.

### Demand Prices:

#### *High Voltage Network Charge - Maximum Demand 1000 to 7000 kVA*

	Demand Charge	
Pricing Zone	Fixed Charge for first 1000 kVA (\$ per annum)	For kVA >1000 (\$/kVA/annum)
CBD	38,321	3.16
Urban	38,321	1.38
Mining	38,321	9.74
Mixed	38,321	7.94
Rural	38,321	10.33

#### *High Voltage Network Charge - Maximum Demand > 7000 kVA*

	Demand Charge	
Pricing Zone	Fixed Charge for first 7000 kVA (\$ per annum)	For kVA >7000 (\$/kVA/annum)
CBD	57,281	0.51
Urban	46,601	0.42
Mining	96,761	0.86
Mixed	85,961	0.77
Rural	100,301	0.90

#### *Low Voltage Network Charge*

(where applicable, in addition to the High Voltage network Charge)

Category	(\$/annum)
Fixed Price	960
Demand Price	7.75/kVA

## Demand Length Prices:

### *Maximum Demand 1000 to 7000 kVA*

	Demand-Length Charge	
Pricing Zone	For first 10 km length (\$/kVA.km/annum)	For length in excess of 10 km (\$/kVAkm/annum)
CBD	0.00	0.00
Urban	1.80	1.26
Mining	0.78	0.55
Mixed	0.96	0.66
Rural	0.84	0.59

### *Maximum Demand > 7000 kVA*

	Demand-Length Charge	
Pricing Zone	For first 10 km length (\$/kVA.km/annum)	For length in excess of 10 km (\$/kVAkm/annum)
CBD	0.00	0.00
Urban	1.53	1.07
Mining	0.66	0.46
Mixed	0.82	0.58
Rural	0.71	0.50

## Metering Price

Separate Metering charges apply – refer to section 4, Transition Metering Charges.

## Common Services Price

A separate Administration charge applies as follows:

	\$/annum
Average Load Greater than 5 MW	9,341
Average Load Greater than 1 MW and Less than 5 MW	5,605

## Distribution Loss Factor

Refer to section 13, Distribution Loss Factors.

## Excess Network Usage Charges

An additional charge applies where peak demand exceeds the nominated CMD – refer to section 7, Distribution Excess Network Usage Factor.

## TRANSITION TRANSMISSION NODAL PRICES

### 2. Exit Points

#### Eligibility:

These prices apply to loads connected to either the transmission or distribution network.

#### Notes:

1. Connection prices 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 loads and generators connected either directly to the transmission network at less than 66kV or to the distribution network; and
  - includes the Control System Services charge (refer to section 9, Control System Services Prices).
3. \* Denotes the actual charge is to be determined subject to the specific connection arrangements

#### Prices:

Substation	Connection Price \$/kW (See Notes 1 & 2)	Exit Use of System Price \$/kW	Common Service Price \$/kW	Total Price \$/kW	Transmission Loss Factor for Connections with Generation and HV Transmission Connected Loads	Transmission Loss Factor for other Load Connections >1000 kVA (See section 23)
Albany	12.86	51.58	14.68	79.12	1.0747	1.0747
Amherst	17.61	8.41	14.68	40.70	1.0569	1.0542
Arkana	7.68	15.18	14.68	37.54	1.0564	1.0542
Australian Fused Materials	*	9.19	14.68	*	1.0430	1.0542
Australian Paper Mills	12.08	16.63	14.68	43.39	1.0561	1.0542
Baandee	123.41	118.44	14.68	256.53	1.0888	1.0888
Beechboro	6.38	13.81	14.68	34.87	1.0544	1.0542
Beenup	8.08	201.22	14.68	223.98	1.0412	1.0412
Belmont	8.79	12.01	14.68	35.48	1.0523	1.0542
Black Flag	10.43	47.02	14.68	72.13	1.1569	1.1569
Boddington ALCOA	146.50	6.34	14.68	167.52	1.0200	1.0200
Boddington Reynolds	21.43	13.13	14.68	49.24	1.0200	1.0200
Boulder	13.49	40.26	14.68	68.43	1.1402	1.1402
Bounty	26.53	63.69	14.68	104.90	1.0891	1.0891
Bridgetown	20.41	24.01	14.68	59.10	1.0193	1.0193
British Petroleum	17.02	23.74	14.68	55.44	1.0441	1.0542
Broken Hill Kwinana	*	27.64	14.68	*	1.0435	1.0542
Bunbury Harbour	13.28	9.12	14.68	37.08	1.0200	1.0200
Burswood Island Casino	*	29.27	14.68	*	1.0527	1.0542

<b>Substation</b>	<b>Connection Price \$/kW (See Notes 1 &amp; 2)</b>	<b>Exit Use of System Price \$/kW</b>	<b>Common Service Price \$/kW</b>	<b>Total Price \$/kW</b>	<b>Transmission Loss Factor for Connections with HV Transmission Connected Loads</b>	<b>Transmission Loss Factor for other Load Connections &gt;1000 kVA (See section 23)</b>
Busselton	15.69	27.61	14.68	57.98	1.0905	1.0905
Byford	13.10	11.93	14.68	39.71	1.0491	1.0542
Canning Vale	9.11	11.10	14.68	34.89	1.0475	1.0542
Capel	30.95	21.94	14.68	67.57	1.0584	1.0584
Carrabin	20.29	161.76	14.68	196.73	1.1001	1.1001
Cataby Kerr McGee	*	6.32	14.68	*	1.1283	1.1283
Chapman	21.58	14.99	14.68	51.25	1.2099	1.2099
Clarence Street	14.74	19.86	14.68	49.28	1.0580	1.0542
Cockburn Cement	13.00	7.44	14.68	35.12	1.0451	1.0542
Cockburn Cement Ltd	*	7.44	14.68	*	1.0433	1.0542
Collie	33.09	31.05	14.68	78.82	1.0141	1.0141
Collier	9.00	21.69	14.68	45.37	1.0581	1.0542
Cook Street	9.98	17.11	14.68	41.77	1.0657	1.0542
Coolup	44.19	44.35	14.68	103.22	1.0574	1.0574
Cottesloe	19.28	16.31	14.68	50.27	1.0632	1.0542
Cunderdin	35.15	44.30	14.68	94.13	1.1025	1.1025
Darlington	27.80	7.83	14.68	50.31	1.0550	1.0542
Edgewater	*	20.98	14.68	*	1.0647	1.0542
Edmund Street	14.47	15.19	14.68	44.34	1.0537	1.0542
Eneabba	22.49	37.03	14.68	74.20	1.1678	1.1678
Forrest Ave	12.92	22.19	14.68	49.79	1.0587	1.0542
Forrestfield	26.48	19.22	14.68	60.38	1.0444	1.0542
Geraldton	6.61	50.05	14.68	71.34	1.2144	1.2144
Golden Grove	*	81.02	14.68	*	1.2104	1.2104
Gosnells	8.97	12.31	14.68	35.96	1.0491	1.0542
Hadfields	10.62	16.68	14.68	41.98	1.0560	1.0542
Hay Street	13.48	16.10	14.68	44.26	1.0571	1.0542
Herdsmen Parade	28.32	20.73	14.68	63.73	1.0646	1.0542
Joel Terrace	13.35	19.49	14.68	47.52	1.0574	1.0542
Kalamunda	13.16	12.92	14.68	40.76	1.0524	1.0542
Katanning	45.29	30.25	14.68	90.22	1.0519	1.0519
Kellerberrin	87.66	101.44	14.68	203.78	1.0965	1.0965
Kojonup	175.15	37.80	14.68	227.63	1.0275	1.0275
Kondinin Local	58.23	10.75	14.68	83.66	1.0586	1.0586
Kwinana Alcoa	*	8.47	14.68	*	1.0413	1.0542
Kwinana Power Partnership	*	10.07	14.68	*	1.0412	1.0542
Landsdale	17.61	13.75	14.68	46.04	1.0415	1.0542
Malaga	17.61	15.18	14.68	47.47	1.0503	1.0542
Mandurah	17.24	9.85	14.68	41.77	1.0522	1.0542
Manjimup	27.48	47.76	14.68	89.92	1.0299	1.0299
Manning Street	17.55	13.96	14.68	46.19	1.0577	1.0542

<b>Substation</b>	<b>Connection Price \$/kW (See Notes 1 &amp; 2)</b>	<b>Exit Use of System Price \$/kW</b>	<b>Common Service Price \$/kW</b>	<b>Total Price \$/kW</b>	<b>Transmission Loss Factor for Connections with HV Transmission Connected Loads</b>	<b>Transmission Loss Factor for other Load Connections &gt;1000 kVA (See section 23)</b>
Margaret River	29.83	26.44	14.68	70.95	1.1127	1.1127
Marriott Road Barrack Silicon	*	10.26	14.68	*	1.0218	1.0218
Marriott Road Local	14.56	10.63	14.68	39.87	1.0206	1.0206
Mason Road (local)	17.61	14.29	14.68	46.58	1.0412	1.0542
Mason Road CSBP	*	10.93	14.68	*	1.0417	1.0542
Mason Road Hismelt	*	3.37	14.68	*	1.0413	1.0542
Mason Road Kerr McGee	*	14.29	14.68	*	1.0410	1.0542
Medical Centre	18.87	21.14	14.68	54.69	1.0622	1.0542
Medina	20.04	10.56	14.68	45.28	1.0446	1.0542
Merredin 66kV	30.82	118.44	14.68	163.94	1.0832	1.0832
Midland Junction	9.56	18.66	14.68	42.90	1.0576	1.0542
Milligan Street	14.80	23.21	14.68	52.69	1.0565	1.0542
Moora	43.92	35.30	14.68	93.90	1.1208	1.1208
Morley	15.82	17.92	14.68	48.42	1.0553	1.0542
Mt Barker	17.61	51.58	14.68	83.87	1.0502	1.0502
Muchea Kerr McGee	*	18.22	14.68	*	1.0588	1.0542
Muchea Local	27.84	4.33	14.68	46.85	1.0591	1.0542
Mullaloo	9.22	13.75	14.68	37.65	1.0599	1.0542
Mundaring Weir	67.82	21.31	14.68	103.81	1.0627	1.0542
Myaree	10.34	19.12	14.68	44.14	1.0618	1.0542
Narrogin	39.60	6.90	14.68	61.18	1.0316	1.0316
Nedlands	19.98	18.87	14.68	53.53	1.0630	1.0542
North Beach	9.37	13.93	14.68	37.98	1.0592	1.0542
North Fremantle	20.85	18.33	14.68	53.86	1.0537	1.0542
North Perth	9.63	20.36	14.68	44.67	1.0564	1.0542
Northam 66kV	14.78	47.25	14.68	76.71	1.0753	1.0753
O'Connor	8.47	13.83	14.68	36.98	1.0594	1.0542
Osborne Park	10.40	18.55	14.68	43.63	1.0585	1.0542
Piccadilly	20.18	29.89	14.68	64.75	1.1455	1.1455
Picton 66	9.31	11.98	14.68	35.97	1.0232	1.0232
Pinjarra	25.86	4.03	14.68	44.57	1.0442	1.0542
Pinjarra ALCOA	*	4.01	14.68	*	1.0435	1.0542
Quinninup	232.63	40.36	14.68	287.67	1.0354	1.0354
Regans	17.61	6.32	14.68	38.61	1.0997	1.0997
Riverton	7.37	10.15	14.68	32.20	1.0463	1.0542
Rivervale	29.73	25.87	14.68	70.28	1.0547	1.0542
Rockingham	8.15	13.04	14.68	35.87	1.0463	1.0542
Sawyers Valley	38.69	26.37	14.68	79.74	1.0686	1.0542
Shenton Park	17.51	17.95	14.68	50.14	1.0616	1.0542
South Fremantle 66kV	33.92	8.41	14.68	57.01	1.0497	1.0542
Southern Cross	58.93	32.93	14.68	106.54	1.1227 <sup>#</sup>	1.1227

Substation	Connection Price \$/kW (See Notes 1 & 2)	Exit Use of System Price \$/kW	Common Service Price \$/kW	Total Price \$/kW	Transmission Loss Factor for Connections with HV Transmission Connected Loads	Transmission Loss Factor for other Load Connections >1000 kVA (See section 23)
Summer St	*	27.47	14.68	*	1.0568	1.0542
Tate Street	9.02	19.90	14.68	43.60	1.0535	1.0542
Three Springs	59.60	24.79	14.68	99.07	1.1757	1.1757
Tomlinson Street	*	37.39	14.68	*	1.0528	1.0542
University	22.14	21.09	14.68	57.91	1.0627	1.0542
Victoria Park	161.74	20.25	14.68	196.67	1.0540	1.0542
Wagerup	20.19	5.39	14.68	40.26	1.0049	1.0049
Wagin	119.41	89.65	14.68	223.74	1.0580	1.0580
Wanneroo	3.62	13.75	14.68	32.05	1.0599	1.0542
WEB Grating	*	20.86	14.68	*	1.0607	1.0542
Wellington Street	19.06	27.77	14.68	61.51	1.0590	1.0542
Welshpool	7.16	12.07	14.68	33.91	1.0501	1.0542
Wembley Downs	14.50	12.91	14.68	42.09	1.0631	1.0542
West Kalgoorlie	12.97	12.22	14.68	39.87	1.1413	1.1413
Western Collieries	*	5.79	14.68	*	0.9935	0.9935
Western Mining	*	6.72	14.68	*	1.0426	1.0542
Westralian Sands	*	21.90	14.68	*	1.0504	1.0504
Worsley	*	6.92	14.68	*	0.9901	0.9901
Wundowie	32.61	24.90	14.68	72.19	1.0871	1.0871
Yanchep	16.52	9.23	14.68	40.43	1.0580	1.0542
Yerbillon	2,028.42	224.67	14.68	2267.77	1.1015	1.1015
Yilgarn	35.90	25.23	14.68	75.81	1.1054	1.1054
Yokine	13.15	16.01	14.68	43.84	1.0554	1.0542
Yornup	133.06	28.94	14.68	176.68	1.0436	1.0436

# Applies to the Southern Cross 33kV busbar

### Metering Charges

Separate Metering charges apply – refer to section 4, Transition Metering Charges.

### Transmission Loss Factor

See above table.

### Excess Network Usage Charges

An additional charge applies where peak demand exceeds the nominated CMD – refer to section 6, Transmission Excess Network Usage Factor.

## 3. 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 9, Control System Services Prices).
2. The connection charge for generators connected to either the transmission low voltage network (at less than 66kV) or distribution network uses the Connection Price as shown in section 2, Exit Points.
3. \* Denotes the charge is not published but is determined subject to the specific connection arrangements.

**Prices:**

<b>Substation</b>	<b>Total Connection Charge \$K (Refer Notes 1 &amp; 2)</b>	<b>Entry Use of System Price \$/kW</b>	<b>Transmission Loss Factor</b>
Boulder	*	2.19	1.1402
Collie	*	9.42	1.0141
Geraldton	92.41	7.52	1.2144
Kwinana Power Partnership	*	6.24	1.0412
Kwinana	906.84	6.24	1.0371
Muja	1,752.77	7.52	1.0000
Mungarra	294.18	9.42	1.1407
Pinjar	988.79	5.63	1.0507
Pinjarra Alcoa	*	6.24	1.0435
Tiwest	*	6.24	1.0410
Wagerup	*	9.42	1.0049
West Kalgoorlie	227.91	2.19	1.1413
Worsley	*	9.42	0.9901

**Metering Charges**

Separate Metering charges apply – refer to section 4, Transition Metering Charges.

**Transmission Loss Factor**

See above table.

**Excess Network Usage Charges**

An additional charge applies where peak demand exceeds the nominated CMD – refer to section 6, Transmission Excess Network Usage Factor.

## OTHER NETWORK CHARGES

### 4. Transition Metering Prices

Metering charges for distribution connections:

		\$/metering unit/annum
Existing	High Voltage	4,902
	Low voltage	799
New (Capital fully funded by customer)	High Voltage	3,407
	Low Voltage	384

Metering charge for transmission connections is \$4,902 /metering unit /annum

### 5. Energy Balancing Service Charges

Account set-up fee	\$2,150
Account modification fee (per modification)	\$530
Linked account modification fee [1]	\$265
Billing fee	\$390/month
System maintenance fee [2]	\$90/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 \$530 for the prime account and \$265 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.

### 6. Transmission Excess Network Usage Factor

(refer to Electricity Transmission Regulations clause 24)

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

### 7. Distribution Excess Network Usage Factor

(refer Electricity Distribution Regulations clause 26)

The excess network usage factor is 1.5.

## ANCILLARY SERVICE PRICES

### 8. Spinning Reserve Prices

(Note: These prices apply from 1 January 2003.)

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.

### 9. Control System Service Prices

The Control System Service charge is included in the Transmission Exit Point Connection Price and Entry Point Total Connection Charge – refer sections 2 and 3. A separate Control System Service price does not apply.

### 10. Energy Balancing 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)

### 11. Standby Generation Capacity Price

The Standby Generation Capacity Price is \$16.45/kW

### 12. Excess Standby Generation Capacity Price

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

# LOSS FACTORS

## 13. Distribution Loss Factors

### Load Connections

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 of:

Connection	Loss Factor
High Voltage	1.0211
Low Voltage	1.0333

### Generator Connections

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

## 14. Transmission Loss Factors

Transmission loss factors are location specific for:

- All generator connections
- All load connections greater than 1000 kVA peak

as listed in the tables in sections 2 and 3, Transition Transmission Nodal Prices – Exit Points and Entry Points.

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