

WESTERN POWER NETWORKS

**TARIFF SCHEDULE C1**

**2006/07**

---

Reference Tariffs for  
the South West Interconnected System

Issue date: 24 August 2005

Application date: 1 July 2006

# TABLE OF CONTENTS

1	INTRODUCTION.....	1
2	NETWORK REFERENCE TARIFFS .....	2
2.1	Anytime Energy and Time of Use Energy Tariffs (RT1 – RT4) .....	2
2.1.1	Eligibility .....	2
2.1.2	Use of System Prices.....	2
2.1.3	Metering Charges.....	3
2.1.4	Administration Charges.....	3
2.1.5	Distribution Loss Factor .....	3
2.1.6	Transmission Loss Factor.....	3
2.2	High Voltage Metered Demand Tariff (RT5) .....	3
2.2.1	Eligibility .....	3
2.2.2	Demand Prices.....	3
2.2.3	Demand Length Prices .....	4
2.2.4	Discount Factor .....	4
2.2.5	Metering Charges.....	5
2.2.6	Administration Charges.....	5
2.2.7	Distribution Loss Factor .....	5
2.2.8	Transmission Loss Factor.....	5
2.3	Low Voltage Metered Demand Tariff (RT6).....	5
2.3.1	Eligibility: .....	5
2.3.2	Demand Prices.....	5
2.3.3	Demand Length Prices .....	5
2.3.4	Discount Factor .....	6
2.3.5	Metering Charges.....	6
2.3.6	Administration Charges.....	6
2.3.7	Distribution Loss Factor .....	6
2.3.8	Transmission Loss Factor.....	6
2.4	High Voltage Contract Maximum Demand Tariff (RT7).....	6
2.4.1	Eligibility .....	6
2.4.2	Demand Prices.....	7
2.4.3	Demand Length Prices .....	9
2.4.4	Metering Charges.....	9
2.4.5	Administration Charges.....	9
2.4.6	Distribution Loss Factor .....	9
2.4.7	Transmission Loss Factor.....	9
2.4.8	Excess Network Usage Charges .....	10
2.4.9	Standby Discount.....	10

2.5	Low Voltage Contract Maximum Demand Tariff (RT8).....	10
2.5.1	Eligibility .....	10
2.5.2	Demand Prices.....	11
2.5.3	Demand Length Prices .....	11
2.5.4	Low Voltage Charges.....	11
2.5.5	Metering Charges.....	11
2.5.6	Administration Charges.....	11
2.5.7	Distribution Loss Factor .....	11
2.5.8	Transmission Loss Factor.....	11
2.5.9	Excess Network Usage Charges .....	11
2.5.10	Standby Discount.....	12
2.6	Street Lighting Tariff (RT9) .....	12
2.6.1	Eligibility .....	12
2.6.2	Network Use of System Prices .....	12
2.6.3	Asset Charge .....	12
2.6.4	Metering Charges.....	12
2.6.5	Administration Charges.....	12
2.7	Unmetered Supplies Tariff (RT10).....	13
2.7.1	Eligibility .....	13
2.7.2	Network Use of System Charges.....	13
2.7.3	Metering Charges.....	13
2.7.4	Administration Charges.....	13
2.8	Distribution Entry Point Tariff (RT11).....	13
2.8.1	Eligibility .....	13
2.8.2	Demand Length Prices .....	14
2.8.3	Transmission Entry Point Charges .....	14
2.8.4	Metering Charges.....	14
2.8.5	Administration Charges.....	14
2.8.6	Distribution Loss Factor .....	14
2.8.7	Transmission Loss Factor.....	14
2.8.8	Excess Network Usage Charges .....	15
3	TRANSMISSION REFERENCE TARIFFS .....	16
3.1	Transmission Exit Points Tariff (TRT1).....	16
3.1.1	Eligibility .....	16
3.1.2	Use of System Prices.....	16
3.1.3	Metering Charges.....	18
3.1.4	Administration Charges.....	19
3.1.5	Transmission Loss Factor.....	19
3.1.6	Excess Network Usage Charges .....	19
3.1.7	Control System Service Charges.....	19
3.1.8	Standby Discount.....	19
3.2	Transmission Entry Points Tariff (TRT2) .....	20

3.2.1	Eligibility .....	20
3.2.2	Use of System Charge .....	20
3.2.3	Metering Charges.....	21
3.2.4	Administration Charges.....	21
3.2.5	Transmission Loss Factor.....	21
3.2.6	Excess Network Usage Charges .....	21
3.2.7	Control System Service Charges.....	21
4	NON REFERENCE NETWORK TARIFFS .....	22
4.1	Access Services Charges .....	22
5	LOSS FACTORS .....	23
5.1	Distribution Loss Factors .....	23
5.1.1	Load Connections .....	23
5.1.2	Generator Connections.....	23
5.2	Transmission Loss Factors .....	23

# 1 INTRODUCTION

This document details reference tariffs and network loss factors for the 2006/07 financial year for the South-West Interconnected Transmission and Distribution networks.

Sections 2 and 3 detail the tariffs for the reference services provided by Western Power as stated in the company's access arrangement.

Each reference tariff is made up of a number of components with each component listed separately for the tariff. The total charge payable by users under each reference tariff represents the sum of the amounts payable for each component within the relevant reference tariff.

Included in section 4 are charges for non-reference services provided by Western Power that are ancillary to the reference services detailed in sections 2 and 3. The list of non-reference tariffs included in section 4 do not include charges for all non-reference services provided by Western Power.

Loss factors are included in this document for completeness, but it is noted that loss factors are not a reference service or a reference tariff.

For the purpose of section 5.1(f) of the Code this document forms part of Western Power's access arrangement, and sets out Western Power's price list for the pricing year commencing on 1 July 2006 and ending on 30 June 2007.

In applying the tariffs set out in this price list, Western Power will be guided by the rules, procedures and other matters set out in the document titled "Price Application Policy". That document also forms part of Western Power's access arrangement.

All listed tariffs are GST inclusive.

## 2 NETWORK REFERENCE TARIFFS

Ten bundled network reference tariffs are available to customers with loads connected to the distribution network, and one reference tariff is available to generators (distribution entry points) connected to the distribution network ("Bundled" tariffs are inclusive of both transmission and distribution charges, however all components are individually published within this schedule).

### 2.1 Anytime Energy and Time of Use Energy Tariffs (RT1 – RT4)

#### 2.1.1 Eligibility

- RT1 – Anytime Energy Tariff (Residential) is available to residential customers with energy only metering.
- RT2 – Anytime Energy Tariff (Business) is available to business customers with energy only metering.
- RT3 – 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.
- RT4 – 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 and a maximum annual energy demand of less than 1,500 kVA.

#### 2.1.2 Use of System Prices

	Fixed Price \$/year	Energy Rates c/kWh	On Peak c/kWh	Off Peak c/kWh	Distribution Loss Factor	Transmission HV Loss Factor
<b>RT1 - Anytime Energy Tariff (Residential)</b>					1.0835	1.0559
Transmission	0	1.731	-	-		
Distribution	82.50	3.360	-	-		
Bundled Tariff	82.50	5.091	-	-		
<b>RT2 - Anytime Energy Tariff (Business)</b>					1.0463	See below *
Transmission	0	2.058	-	-		
Distribution	82.50	4.406	-	-		
Bundled Tariff	82.50	6.464	-	-		
<b>RT3 - Time of Use Energy Tariff (Small)</b>					1.0835	1.0559
Transmission	0	-	3.163	0.728		
Distribution	82.50	-	5.103	2.179		
Bundled Tariff	82.50	-	8.266	2.907		
<b>RT4 - Time of Use Energy Tariff (Large)</b>					1.0463	See below *
Transmission	0	-	2.536	0.660		
Distribution	110.00	-	3.807	1.510		
Bundled Tariff	110.00	-	6.342	2.170		

### 2.1.3 Metering Charges

Inclusive in above charges

### 2.1.4 Administration Charges

Inclusive in above charges

### 2.1.5 Distribution Loss Factor

See above table

### 2.1.6 Transmission Loss Factor

\* Refer to section 5.2, Transmission Loss Factors.

## 2.2 High Voltage Metered Demand Tariff (RT5)

### 2.2.1 Eligibility

This tariff is available to customers with maximum demands of less than 1,500 kVA 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 1,000 kVA there is also a demand-length charge based on the rolling 12-month maximum half-hourly demand.

### 2.2.2 Demand Prices

Demand (kVA) (Lower to upper threshold)	Transmission		Distribution		Bundled Tariff	
	Fixed \$/annum	Demand (in excess of lower threshold) \$/kVA/annum	Fixed \$/annum	Demand (in excess of lower threshold) \$/kVA/annum	Fixed \$/annum	Demand (in excess of lower threshold) \$/kVA/annum
0 to 300	0	70.40	165.00	66.00	165.00	136.40
300 to 1000	21,120.00	55.00	19,965.00	49.50	41,085.00	104.50
1000 to 1500	59,620.00	30.80	54,615.00	15.95	114,235.00	46.75

### 2.2.3 Demand Length Prices

Applicable only where maximum demand is greater than 1,000 kVA

#### **High Voltage Distribution Network Charge - Maximum Demand 1000 to 1500 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	2.076	1.453
Mining	0.455	0.318
Mixed	0.978	0.684
Rural	0.682	0.477

### 2.2.4 Discount Factor

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

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:

$$\text{For MD} < 1,000 \text{ kVA} \quad (E_{\text{Off Peak}}/E_{\text{Total}}) * \text{DF}$$

$$\text{For } 1,000 < \text{MD} < 1,500 \text{ kVA} \quad ((1500 - \text{MD})/500) * (E_{\text{Off Peak}}/E_{\text{Total}}) * \text{DF}$$

Where:

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.)



### 2.2.5 Metering Charges

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

\$/metering unit/annum		
<b>Existing</b>	High Voltage	\$3,047.77
	Low voltage	\$549.13
<b>Capital fully funded by customer</b>	High Voltage	\$934.26
	Low Voltage	\$168.34

### 2.2.6 Administration Charges

Inclusive in above charges

### 2.2.7 Distribution Loss Factor

The distribution loss factor for this tariff is 1.0211.

### 2.2.8 Transmission Loss Factor

\* Refer to section 5.2, Transmission Loss Factors.

## 2.3 Low Voltage Metered Demand Tariff (RT6)

### 2.3.1 Eligibility:

This tariff is available to customers with maximum demands of less than 1500 kVA connected to the distribution network at low voltage (415 volts).

#### Notes:

This tariff is similar to the HV Metered Demand tariff (RT5) but for customers connected at low voltage. The higher tariff rates reflect the additional cost of using the low voltage network.

### 2.3.2 Demand Prices

Demand (kVA) (Lower to upper threshold)	Transmission		Distribution		Bundled Tariff	
	Fixed \$/annum	Demand (in excess of lower threshold) \$/kVA/annum	Fixed \$/annum	Demand (in excess of lower threshold) \$/kVA/annum	Fixed \$/annum	Demand (in excess of lower threshold) \$/kVA/annum
0 to 300	0	70.40	1,265.00	74.25	1,265.00	144.65
300 to 1000	21,120.00	55.00	23,540.00	57.75	44,660.00	112.75
1000 to 1500	59,620.00	30.80	63,965.00	24.20	123,585.00	55.00

### 2.3.3 Demand Length Prices

Applicable only where maximum demand is greater than 1,000 kVA.

Identical to the High Voltage Metered Demand Tariff (RT5) above.

#### 2.3.4 Discount Factor

Identical to the High Voltage Metered Demand Tariff (RT5) above.

#### 2.3.5 Metering Charges

Identical to the High Voltage Metered Demand Tariff (RT5) above.

#### 2.3.6 Administration Charges

Inclusive in above charges

#### 2.3.7 Distribution Loss Factor

The distribution loss factor for this tariff is 1.0333.

#### 2.3.8 Transmission Loss Factor

\* Refer to section 5.2, Transmission Loss Factors.

### 2.4 High Voltage Contract Maximum Demand Tariff (RT7)

#### 2.4.1 Eligibility

This tariff is available to customers with maximum demands of greater than 1,000 kVA connected to the distribution network at high voltage (6.6 kV or higher).

#### Notes:

1. There is a different demand charge for each zone substation to which the load is connected to reflect Transmission nodal and Distribution zonal cost reflective charges.
2. Where the contracted maximum demand (CMD) is less than 7,000 kVA, 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 7,000 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 Prices table.
5. An additional excess network usage charge applies where actual peak demand exceeds the nominated CMD.
6. A discount applies to the transmission component of the fixed (if applicable) and demand charges for customers with a standby supply.

## 2.4.2 Demand Prices

Zone Substation	Pricing Zone	Transmission			Distribution			Bundled		
		Fixed charge for first 1000 kVA (\$ per annum)	Demand charge for 1000<kVA<7000 (\$/kVA/annum)	Demand Charge for kVA > 7000 (\$/kVA/annum)	Fixed charge for first 1000 kVA (\$ per annum)	Demand charge for 1000<kVA<7000 (\$/kVA/annum)	Demand Charge for kVA > 7000 (\$/kVA/annum)	Fixed charge for first 1000 kVA (\$ per annum)	Demand charge for 1000<kVA<7000 (\$/kVA/annum)	Demand Charge for kVA > 7000 (\$/kVA/annum)
Cook Street	CBD	48,500.90	46.46	46.75	40,777.00	12.49	16.53	89,277.90	58.95	63.28
Forrest Avenue	CBD	48,500.90	46.46	46.75	40,777.00	12.49	16.53	89,277.90	58.95	63.28
Hay Street	CBD	48,500.90	46.46	46.75	40,777.00	12.49	16.53	89,277.90	58.95	63.28
Milligan Street	CBD	48,500.90	46.46	46.75	40,777.00	12.49	16.53	89,277.90	58.95	63.28
Wellington Street	CBD	48,500.90	46.46	46.75	40,777.00	12.49	16.53	89,277.90	58.95	63.28
Black Flag	Goldfields Mining	48,500.90	97.71	90.68	40,777.00	6.13	11.08	89,277.90	103.84	101.76
Boulder	Goldfields Mining	48,500.90	93.38	86.97	40,777.00	6.13	11.08	89,277.90	99.51	98.04
Bounty	Goldfields Mining	48,500.90	147.96	133.75	40,777.00	6.13	11.08	89,277.90	154.09	144.83
West Kalgoorlie	Goldfields Mining	48,500.90	83.98	78.91	40,777.00	6.13	11.08	89,277.90	90.11	89.99
Albany	Mixed	48,500.90	85.93	80.59	40,777.00	13.97	17.80	89,277.90	99.90	98.38
Boddington	Mixed	48,500.90	44.96	45.46	40,777.00	13.97	17.80	89,277.90	58.93	63.26
Bunbury Harbour	Mixed	48,500.90	44.94	45.45	40,777.00	13.97	17.80	89,277.90	58.91	63.25
Busselton	Mixed	48,500.90	75.20	71.39	40,777.00	13.97	17.80	89,277.90	89.17	89.19
Byford	Mixed	48,500.90	46.02	46.38	40,777.00	13.97	17.80	89,277.90	59.99	64.17
Capel	Mixed	48,500.90	60.24	58.56	40,777.00	13.97	17.80	89,277.90	74.21	76.36
Chapman	Mixed	48,500.90	83.01	78.08	40,777.00	13.97	17.80	89,277.90	96.98	95.88
Darlington	Mixed	48,500.90	50.85	50.51	40,777.00	13.97	17.80	89,277.90	64.82	68.31
Eneabba	Mixed	48,500.90	68.52	65.66	40,777.00	13.97	17.80	89,277.90	82.49	83.46
Geraldton	Mixed	48,500.90	75.72	71.83	40,777.00	13.97	17.80	89,277.90	89.69	89.63
Marriott Road	Mixed	48,500.90	45.03	45.53	40,777.00	13.97	17.80	89,277.90	59.00	63.33
Muchea	Mixed	48,500.90	49.40	49.27	40,777.00	13.97	17.80	89,277.90	63.37	67.07
Northam	Mixed	48,500.90	65.99	63.49	40,777.00	13.97	17.80	89,277.90	79.96	81.29
Picton	Mixed	48,500.90	48.63	48.61	40,777.00	13.97	17.80	89,277.90	62.60	66.41
Sawyers Valley	Mixed	48,500.90	74.11	70.46	40,777.00	13.97	17.80	89,277.90	88.08	88.25
Southern Cross	Mixed	48,500.90	112.96	103.75	40,777.00	13.97	17.80	89,277.90	126.93	121.55
Yanchep	Mixed	48,500.90	46.86	47.09	40,777.00	13.97	17.80	89,277.90	60.83	64.89
Yilgarn	Mixed	48,500.90	82.74	77.85	40,777.00	13.97	17.80	89,277.90	96.71	95.65
Baandee	Rural	48,500.90	92.11	85.88	40,777.00	6.60	11.48	89,277.90	98.71	97.36
Beenup	Rural	48,500.90	92.79	86.46	40,777.00	6.60	11.48	89,277.90	99.39	97.94
Bridgetown	Rural	48,500.90	58.64	57.19	40,777.00	6.60	11.48	89,277.90	65.24	68.67
Carrabin	Rural	48,500.90	104.95	96.89	40,777.00	6.60	11.48	89,277.90	111.55	108.37
Collie	Rural	48,500.90	85.75	80.43	40,777.00	6.60	11.48	89,277.90	92.35	91.92
Coolup	Rural	48,500.90	89.66	83.78	40,777.00	6.60	11.48	89,277.90	96.26	95.26
Cunderdin	Rural	48,500.90	84.74	79.56	40,777.00	6.60	11.48	89,277.90	91.34	91.05
Katanning	Rural	48,500.90	89.72	83.83	40,777.00	6.60	11.48	89,277.90	96.32	95.32
Kellerberrin	Rural	48,500.90	89.67	83.79	40,777.00	6.60	11.48	89,277.90	96.27	95.27
Kojonup	Rural	48,500.90	51.18	50.80	40,777.00	6.60	11.48	89,277.90	57.78	62.28
Kondinin	Rural	48,500.90	56.60	55.44	40,777.00	6.60	11.48	89,277.90	63.20	66.92
Manjimup	Rural	48,500.90	63.08	61.00	40,777.00	6.60	11.48	89,277.90	69.68	72.48
Margaret River	Rural	48,500.90	101.10	93.59	40,777.00	6.60	11.48	89,277.90	107.70	105.07
Merredin	Rural	48,500.90	81.26	76.58	40,777.00	6.60	11.48	89,277.90	87.86	88.07
Moora	Rural	48,500.90	62.33	60.36	40,777.00	6.60	11.48	89,277.90	68.93	71.84
Mount Barker	Rural	48,500.90	80.94	76.31	40,777.00	6.60	11.48	89,277.90	87.54	87.79
Narrogin	Rural	48,500.90	106.03	97.81	40,777.00	6.60	11.48	89,277.90	112.63	109.30
Pinjarra	Rural	48,500.90	47.91	47.99	40,777.00	6.60	11.48	89,277.90	54.51	59.48
Regans	Rural	48,500.90	62.14	60.19	40,777.00	6.60	11.48	89,277.90	68.74	71.68
Three Springs	Rural	48,500.90	63.00	60.93	40,777.00	6.60	11.48	89,277.90	69.60	72.41
Wagerup	Rural	48,500.90	43.96	44.61	40,777.00	6.60	11.48	89,277.90	50.56	56.09
Wagin	Rural	48,500.90	68.35	65.52	40,777.00	6.60	11.48	89,277.90	74.95	77.00
Wundowie	Rural	48,500.90	70.20	67.10	40,777.00	6.60	11.48	89,277.90	76.80	78.58
Yerbillon	Rural	48,500.90	102.19	94.52	40,777.00	6.60	11.48	89,277.90	108.79	106.01
Amherst	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Arkana	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24

Zone Substation	Pricing Zone	Transmission			Distribution			Bundled		
		Fixed charge for first 1000 kVA (\$ per annum)	Demand charge for 1000<kVA<7000 (\$/kVA/annum)	Demand Charge for kVA > 7000 (\$/kVA/annum)	Fixed charge for first 1000 kVA (\$ per annum)	Demand charge for 1000<kVA<7000 (\$/kVA/annum)	Demand Charge for kVA > 7000 (\$/kVA/annum)	Fixed charge for first 1000 kVA (\$ per annum)	Demand charge for 1000<kVA<7000 (\$/kVA/annum)	Demand Charge for kVA > 7000 (\$/kVA/annum)
Australian Paper Mills	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Beechboro	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Belmont	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
British Petroleum	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Canning Vale	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Clarence Street	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Clarkson	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Cockburn Cement	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Collier	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Cottesloe	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Edmund Street	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Forrestfield	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Gosnells	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Hadfields	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Herdsmen Parade	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Joel Terrace	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Kalamunda	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Kambalda	Urban	48,500.90	93.38	86.97	40,777.00	1.98	7.52	89,277.90	95.36	94.49
Landsdale	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Malaga	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Mandurah	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Manning Street	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Mason Road	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Meadow Springs	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Medical Centre	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Medina	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Midland Junction	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Morley	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Mullaloo	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Mundaring Weir	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Murdoch	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Myaree	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Nedlands	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
North Beach	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
North Fremantle	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
North Perth	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
O'Connor	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Osborne Park	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Padbury	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Piccadilly	Urban	48,500.90	86.43	81.02	40,777.00	1.98	7.52	89,277.90	88.41	88.54
Riverton	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Rivervale	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Rockingham	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Shenton Park	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Sth Ffile Power Station	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Tate Street	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
University	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Victoria Park	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Wanneroo	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Welshpool	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Wembley Downs	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24
Yokine	Urban	48,500.90	48.76	48.72	40,777.00	1.98	7.52	89,277.90	50.74	56.24

### 2.4.3 Demand Length Prices

Applicable only where the nominated CMD is greater than 1,000 kVA

#### **High Voltage Distribution Network Charge - CMD 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	2.076	1.453
Mining	0.455	0.318
Mixed	0.978	0.684
Rural	0.682	0.477

#### **High Voltage Distribution Network Charge - CMD > 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	1.780	1.245
Mining	0.391	0.273
Mixed	0.838	0.586
Rural	0.585	0.409

### 2.4.4 Metering Charges

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

\$/metering unit/annum		
Existing	High Voltage	\$3,047.77
	Low voltage	\$549.13
Capital fully funded by customer	High Voltage	\$934.26
	Low Voltage	\$168.34

### 2.4.5 Administration Charges

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

Peak Demand	Price (\$/day)
>7,000 kVA	28.72
<7,000 kVA	16.50

### 2.4.6 Distribution Loss Factor

Refer to section 5.1, Distribution Loss Factors.

### 2.4.7 Transmission Loss Factor

Refer to section 5.2, Transmission Loss Factors.

## 2.4.8 Excess Network Usage Charges

An additional charge applies to this tariff where the peak half-hourly demand exceeds the nominated CMD during the billing period of the load.

The excess network usage charge (ENUC) is calculated by applying a factor to the excess usage as follows:

$$\text{ENUC} = \text{ENUC}_{\text{Transmission}} + \text{ENUC}_{\text{Distribution}}$$

Where

$$\text{ENUC}_{\text{Transmission}} = \text{ENUM} * (\text{PD} - \text{CMD}) * \text{DC}_{\text{Transmission}} / \text{CMD}$$

$$\text{ENUC}_{\text{Distribution}} = \text{ENUM} * (\text{PD} - \text{CMD}) * (\text{DC}_{\text{Distribution}} + \text{DLC}) / \text{CMD}$$

ENUM is the Excess Energy Multiplier factor, which is set at 2

PD is the peak half-hourly demand during the billing period of the load.

CMD is the nominated CMD for the billing period of the load.

DC<sub>Transmission</sub> are the applicable transmission fixed (if applicable) and demand charges for the billing period for the nominated CMD.

DC<sub>Distribution</sub> are the applicable distribution fixed (if applicable) and demand charges for the billing period for the nominated CMD.

DLC are the applicable distribution demand length charges for the billing period for the nominated CMD.

(Note: the charge does not include the metering or administration components of the tariff)

## 2.4.9 Standby Discount

A discount applies to the transmission component of the fixed (if applicable) and demand charges for customers with a standby supply.

The discounted transmission component for a standby supply is calculated as follows:

$$\text{DDC}_{\text{Transmission}} = (1 - \text{SD}) * \text{DC}_{\text{Transmission}}$$

Where:

DDC<sub>Transmission</sub> is the discounted transmission component of the fixed (if applicable) and demand charges.

SD is the standby discount, set at 25%.

DC<sub>Transmission</sub> is the undiscounted transmission fixed (if applicable) and demand charge as outlined above.

## 2.5 Low Voltage Contract Maximum Demand Tariff (RT8)

### 2.5.1 Eligibility

This tariff is available to customers with maximum demands of greater than 1,000 kVA connected to the distribution network at low voltage (415 volts).

**Note:**

This tariff is identical to the High Voltage Contract Maximum Demand Tariff (RT7) above, with an additional low voltage charge to cover the use of transformers and LV circuits.

**2.5.2 Demand Prices**

Identical to the High Voltage Contract Maximum Demand Tariff (RT7) above.

**2.5.3 Demand Length Prices**

Identical to the High Voltage Contract Maximum Demand Tariff (RT7) above.

**2.5.4 Low Voltage Charges**

Category	Price (\$/annum)
Fixed	1,100.00
Demand	10.05/kVA

**2.5.5 Metering Charges**

Identical to the High Voltage Contract Maximum Demand Tariff (RT7) above.

**2.5.6 Administration Charges**

Identical to the High Voltage Contract Maximum Demand Tariff (RT7) above.

**2.5.7 Distribution Loss Factor**

Refer section 5.1, Distribution Loss Factors.

**2.5.8 Transmission Loss Factor**

Refer section 5.2, Transmission Loss Factors.

**2.5.9 Excess Network Usage Charges**

An additional charge applies to this tariff where the peak half-hourly demand exceeds the nominated CMD during the billing period of the load.

The excess network usage charge (ENUC) is calculated by applying a factor to the excess usage as follows:

$$\text{ENUC} = \text{ENUC}_{\text{Transmission}} + \text{ENUC}_{\text{Distribution}}$$

Where

$$\text{ENUC}_{\text{Transmission}} = \text{ENUM} * (\text{PD} - \text{CMD}) * \text{DC}_{\text{Transmission}} / \text{CMD}$$

$$\text{ENUC}_{\text{Distribution}} = \text{ENUM} * (\text{PD} - \text{CMD}) * (\text{DC}_{\text{Distribution}} + \text{DLC} + \text{LVC}) / \text{CMD}$$

ENUM is the Excess Energy Multiplier factor, which is set at 2

PD is the peak half-hourly demand during the billing period of the load.

CMD is the nominated CMD for the billing period of the load.

DC<sub>Transmission</sub> are the applicable transmission fixed (if applicable) and demand charges for the billing period for the nominated CMD.

- $DC_{\text{Distribution}}$  are the applicable distribution fixed (if applicable) and demand charges for the billing period for the nominated CMD.
- DLC are the applicable distribution demand length charges for the billing period for the nominated CMD.
- LVC are the applicable additional fixed and additional demand (low voltage) charges for the billing period for the nominated CMD.

(Note: the charge does not include the metering or administration components of the tariff)

#### 2.5.10 Standby Discount

Identical to the High Voltage Contract Maximum Demand Tariff (RT7) above.

### 2.6 Street Lighting Tariff (RT9)

#### 2.6.1 Eligibility

This tariff applies to Western Power streetlights.

#### 2.6.2 Network Use of System Prices

	Fixed \$/annum	Anytime Energy c/kWh	Distribution Loss Factor	Transmission HV Loss Factor
Transmission	0	1.263	1.08151	1.0559
Distribution	6.71	2.174		
Bundled Tariff	6.71	3.437		

#### 2.6.3 Asset Charge

Light Specification	Annual Charge \$/annum
50W MV	\$35.76
70W HPS	\$49.41
80W MV	\$48.11
125W MV	\$59.81
150W HPS	\$65.01
250W HPS	\$65.01
250W MV	\$78.01
400W MV	\$81.92

#### 2.6.4 Metering Charges

No metering charge applies.

#### 2.6.5 Administration Charges

No administration charge applies.



## 2.7 Unmetered Supplies Tariff (RT10)

### 2.7.1 Eligibility

This tariff applies to unmetered supplies.

### 2.7.2 Network Use of System Charges

	Fixed \$/annum	Anytime Energy c/kWh	Distribution Loss Factor	Transmission HV Loss Factor
Transmission	0	0.760	1.08151	1.0559
Distribution	45.95	2.760		
Bundled Tariff	45.95	3.520		

### 2.7.3 Metering Charges

No metering charge applies.

### 2.7.4 Administration Charges

No administration charge applies.

## 2.8 Distribution Entry Point Tariff (RT11)

### 2.8.1 Eligibility

This tariff is available to generators connected to the distribution network and with maximum demands of greater than 1,000 kVA.

#### Notes:

1. Generators with DSOC < 1,000 kVA do not pay any distribution access charges.
2. Generators connected at low voltage (415 V) pay the demand/length charge based on the electrical distance from the zone substation to the relevant HV network connection point.
3. In addition, transmission entry point charges apply, based on the location of the electrically closest major generator (refer to section 3.2).

## 2.8.2 Demand Length Prices

The demand/length charge is applied to the declared sent-out capacity (DSOC).

### ***High Voltage Distribution Network Charge - DSOC 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	2.076	1.453
Mining	0.455	0.318
Mixed	0.978	0.684
Rural	0.682	0.477

### ***High Voltage Distribution Network Charge - DSOC > 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	0
Urban	1.780	1.245
Mining	0.391	0.273
Mixed	0.838	0.586
Rural	0.585	0.409

## 2.8.3 Transmission Entry Point Charges

Identical to the Use of System Charge in the Transmission Entry Points Tariff (TRT2) in section 3.2.

## 2.8.4 Metering Charges

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

\$/metering unit/annum		
Existing	High Voltage	\$3,047.77
	Low voltage	\$549.13
Capital fully funded by customer	High Voltage	\$934.26
	Low Voltage	\$168.34

## 2.8.5 Administration Charges

No administration charge applies.

## 2.8.6 Distribution Loss Factor

Refer section 5.1, Distribution Loss Factors.

## 2.8.7 Transmission Loss Factor

Refer section 5.2, Transmission Loss Factors.

### 2.8.8 Excess Network Usage Charges

An additional charge applies to this tariff where the peak half-hourly demand exceeds the nominated DSOC during the billing period.

The excess network usage charge (ENUC) is calculated by applying a factor to the excess usage as follows:

$$\text{ENUC} = \text{ENUC}_{\text{Transmission}} + \text{ENUC}_{\text{Distribution}}$$

Where

$$\text{ENUC}_{\text{Transmission}} = \text{ENUM} * (\text{PD} - \text{DSOC}) * \text{TEPC} / \text{DSOC}$$

$$\text{ENUC}_{\text{Distribution}} = \text{ENUM} * (\text{PD} - \text{DSOC}) * (\text{DLC}) / \text{DSOC}$$

ENUM is the Excess Energy Multiplier factor, which is set at 2

PD is the peak half-hourly demand during the billing period.

DSOC is the nominated DSOC for the billing period.

TEPC is the applicable transmission entry point charge for the billing period for the nominated DSOC.

DLC are the applicable distribution demand length charges for the billing period for the nominated DSOC.

(Note: the charge does not include the metering or administration components of the tariff)

## 3 TRANSMISSION REFERENCE TARIFFS

### 3.1 Transmission Exit Points Tariff (TRT1)

#### 3.1.1 Eligibility

This tariff applies to:

1. Loads connected directly to the transmission network at 66 kV or above; and
2. 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 66 kV 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 66 kV or to the distribution network; and
  - does not include the Control System Services charge.
3. Denotes the actual charge is to be determined subject to the specific connection arrangements
4. A discount applies to the common service charge for customers with a standby supply.

#### 3.1.2 Use of System 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 5.2)
Albany	18.45	49.03	17.55	85.03	1.0380	1.0380
Alcoa Pinjarra	*	22.72	17.55	*	1.0155	1.0155
Amherst	18.45	11.35	17.55	47.35	1.0448	1.0507
Arkana	18.45	15.22	17.55	51.22	1.0534	1.0507
Australian Fused Materials	18.45	7.57	17.55	43.57	1.0359	1.0507
Australian Paper Mills	18.45	15.40	17.55	51.40	1.0483	1.0507
Baandee (WC)	18.45	55.17	17.55	91.17	1.0857	1.0857
Beechboro	18.45	13.96	17.55	49.96	1.0531	1.0507
Beenup	18.45	55.82	17.55	91.82	1.0413	1.0413
Belmont	18.45	13.41	17.55	49.41	1.0504	1.0507
Black Flag	18.45	58.60	17.55	94.60	1.1364	1.1364
Boddington (Local)	18.45	10.78	17.55	46.78	1.0169	1.0169
Boddington Reynolds	18.45	11.39	17.55	47.39	1.0160	1.0160
Boulder	18.45	54.61	17.55	90.61	1.1159	1.1159

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 5.2)
Bounty	18.45	104.82	17.55	140.82	1.0891	1.0891
Bridgetown	18.45	23.81	17.55	59.81	1.0236	1.0236
British Petroleum	18.45	21.64	17.55	57.64	1.0335	1.0507
Broken Hill Kwinana	*	18.74	17.55	*	1.0331	1.0507
Bunbury Harbour	18.45	10.77	17.55	46.77	1.0212	1.0212
Burswood Island Casino	*	36.40	17.55	*	1.0514	1.0507
Busseton	18.45	39.02	17.55	75.02	1.0579	1.0579
Byford	18.45	11.77	17.55	47.77	1.0459	1.0507
Canning Vale	18.45	11.89	17.55	47.89	1.0426	1.0507
Capel	18.45	25.05	17.55	61.05	1.0477	1.0477
Carrabin	18.45	67.22	17.55	103.22	1.0965	1.0965
Cataby Kerr McGee	*	27.10	17.55	*	1.0919	1.0919
Chapman	18.45	46.29	17.55	82.29	1.1608	1.1608
Clarence Street	18.45	25.18	17.55	61.18	1.0569	1.0507
Cockburn Cement	18.45	7.80	17.55	43.80	1.0400	1.0507
Cockburn Cement Ltd	*	8.03	17.55	*	1.0396	1.0507
Collie	18.45	49.22	17.55	85.22	1.0169	1.0169
Collier	18.45	24.01	17.55	60.01	1.0565	1.0507
Cook Street	18.45	18.94	17.55	54.94	1.0578	1.0507
Coolup	18.45	52.88	17.55	88.88	1.0574	1.0574
Cottesloe	18.45	18.34	17.55	54.34	1.0613	1.0507
Cunderdin	18.45	48.27	17.55	84.27	1.0965	1.0965
Darlington	18.45	16.28	17.55	52.28	1.0528	1.0507
Edgewater	*	15.26	17.55	*	1.0647	1.0507
Edmund Street	18.45	15.45	17.55	51.45	1.0462	1.0507
Eneabba	18.45	32.77	17.55	68.77	1.0959	1.0959
Forrest Ave	18.45	20.77	17.55	56.77	1.0588	1.0507
Forrestfield	18.45	15.60	17.55	51.60	1.0434	1.0507
Geraldton	18.45	39.49	17.55	75.49	1.1294	1.1294
Golden Grove	*	102.43	17.55	*	1.1517	1.1517
Gosnells	18.45	12.86	17.55	48.86	1.0453	1.0507
Hadfields	18.45	15.83	17.55	51.83	1.0538	1.0507
Hay Street	18.45	20.77	17.55	56.77	1.0570	1.0507
Herdsmen Parade	18.45	24.69	17.55	60.69	1.0601	1.0507
Joel Terrace	18.45	21.67	17.55	57.67	1.0576	1.0507
Kalamunda	18.45	15.39	17.55	51.39	1.0503	1.0507
Katanning	18.45	52.94	17.55	88.94	1.0490	1.0490
Kellerberrin	18.45	52.89	17.55	88.89	1.0912	1.0912
Kojonup	18.45	16.82	17.55	52.82	1.0248	1.0248
Kondinin	18.45	21.90	17.55	57.90	1.0575	1.0575
Kwinana Alcoa	*	2.99	17.55	*	1.0302	1.0507
Landsdale	18.45	14.59	17.55	50.59	1.0569	1.0507
Malaga	18.45	13.88	17.55	49.88	1.0514	1.0507
Mandurah	18.45	15.41	17.55	51.41	1.0428	1.0507
Manjimup	18.45	27.97	17.55	63.97	1.0329	1.0329
Manning Street	18.45	16.00	17.55	52.00	1.0560	1.0507
Margaret River	18.45	63.61	17.55	99.61	1.0872	1.0872
Marriott Road Barrack Silicon Smelter	*	11.88	17.55	*	1.0218	1.0218
Marriott Road (Local)	18.45	10.85	17.55	46.85	1.0205	1.0205
Mason Road	18.45	4.76	17.55	40.76	1.0322	1.0507
Mason Road CSBP	*	8.50	17.55	*	1.0340	1.0507
Mason Road Hismelt	*	23.25	17.55	*	1.0363	1.0507
Mason Road Kerr McGee	*	4.76	17.55	*	1.0319	1.0507
Medical Centre	18.45	20.89	17.55	56.89	1.0591	1.0507
Medina	18.45	6.83	17.55	42.83	1.0411	1.0507
Merredin 66kV	18.45	45.01	17.55	81.01	1.0810	1.0810
Midland Junction	18.45	18.92	17.55	54.92	1.0554	1.0507
Milligan Street	18.45	20.77	17.55	56.77	1.0561	1.0507
Moora	18.45	27.27	17.55	63.27	1.0980	1.0980

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 5.2)
Morley	18.45	16.04	17.55	52.04	1.0552	1.0507
Mt Barker	*	44.71	17.55	*	1.0464	1.0464
Muchea Kerr McGee	*	21.63	17.55	*	1.0588	1.0507
Muchea (Local)	18.45	14.92	17.55	50.92	1.0602	1.0507
Mullaloo	18.45	15.44	17.55	51.44	1.0601	1.0507
Mundaring Weir	18.45	29.83	17.55	65.83	1.0681	1.0507
Myaree	18.45	19.88	17.55	55.88	1.0513	1.0507
Narrogin	18.45	68.22	17.55	104.22	1.0329	1.0329
Nedlands	18.45	18.28	17.55	54.28	1.0599	1.0507
North Beach	18.45	15.81	17.55	51.81	1.0573	1.0507
North Fremantle	18.45	17.89	17.55	53.89	1.0463	1.0507
North Perth	18.45	13.57	17.55	49.57	1.0556	1.0507
Northam	18.45	30.41	17.55	66.41	1.0693	1.0693
O'Connor	18.45	17.49	17.55	53.49	1.0499	1.0507
Osborne Park	18.45	17.10	17.55	53.10	1.0566	1.0507
Piccadilly	18.45	52.37	17.55	88.37	1.1226	1.1226
Picton 66kv	18.45	14.21	17.55	50.21	1.0226	1.0226
Pinjarra	18.45	13.76	17.55	49.76	1.0308	1.0308
Regans	18.45	27.10	17.55	63.10	1.0744	1.0744
Riverton	18.45	10.76	17.55	46.76	1.0408	1.0507
Rivervale	18.45	27.76	17.55	63.76	1.0530	1.0507
Rockingham	18.45	9.20	17.55	45.20	1.0394	1.0507
Sawyers Valley	18.45	37.99	17.55	73.99	1.0741	1.0507
Shenton Park	18.45	18.39	17.55	54.39	1.0580	1.0507
South Fremantle 66kV	18.45	12.24	17.55	48.24	1.0417	1.0507
Summer St	*	27.56	17.55	*	1.0565	1.0507
Tate Street	18.45	21.79	17.55	57.79	1.0514	1.0507
Three Springs	18.45	27.90	17.55	63.90	1.1241	1.1241
Tomlinson Street	*	28.82	17.55	*	1.0502	1.0507
University	18.45	21.67	17.55	57.67	1.0597	1.0507
Victoria Park	18.45	21.81	17.55	57.81	1.0512	1.0507
Wagerup	18.45	10.05	17.55	46.05	1.0021	1.0021
Wagin	18.45	32.91	17.55	68.91	1.0540	1.0540
Wanneroo	18.45	13.86	17.55	49.86	1.0617	1.0507
WEB Grating	*	111.78	17.55	*	1.0607	1.0507
Wellington Street	18.45	20.77	17.55	56.77	1.0586	1.0507
Welshpool	18.45	13.57	17.55	49.57	1.0456	1.0507
Wembley Downs	18.45	19.32	17.55	55.32	1.0596	1.0507
West Kalgoorlie	18.45	45.97	17.55	81.97	1.0797	1.0797
Western Collieries	*	5.30	17.55	*	0.9950	0.9950
Western Mining	*	5.96	17.55	*	1.0349	1.0507
Westralian Sands	*	22.61	17.55	*	1.0440	1.0440
Worsley	*	7.56	17.55	*	0.9911	0.9911
Wundowie	18.45	34.64	17.55	70.64	1.0245	1.0245
Yanchep	18.45	12.55	17.55	48.55	1.0598	1.0507
Yerbillon	18.45	64.63	17.55	100.63	1.0971	1.0971
Yilgarn	18.45	46.04	17.55	82.04	1.0969	1.0969
Yokine	18.45	15.49	17.55	51.49	1.0546	1.0507

### 3.1.3 Metering Charges

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

	\$/metering unit/annum
Meter with tariff metering CT/VT @ 66kV and above	\$11,401.41
Meter with tariff metering CT/VT @ <66kV	\$2,297.86

### 3.1.4 Administration Charges

No administration charge applies.

### 3.1.5 Transmission Loss Factor

See above table.

### 3.1.6 Excess Network Usage Charges

An additional charge applies to this tariff where the peak half-hourly demand exceeds the nominated CMD during the billing period of the load.

The excess network usage charge (ENUC) is calculated by applying a factor to the excess usage as follows:

$$\text{ENUC} = \text{ENUM} * (\text{PD} - \text{CMD}) * (\text{UOS} + \text{CON} + \text{CS} + \text{CSS}) / \text{CMD}$$

Where

ENUM	is the Excess Energy Multiplier factor, which is set at 2
PD	is the peak half-hourly demand during the billing period of the load.
CMD	is the nominated CMD for the billing period of the load.
UOS	is the applicable use of system charge for the billing period for the nominated CMD.
CON	is the applicable connection charge for the billing period for the nominated CMD.
CS	is the applicable common service charge for the billing period for the nominated CMD.
CSS	is the applicable control system service charge for the billing period for the nominated CMD.

(Note: the charge does not include the metering or administration components of the tariff)

### 3.1.7 Control System Service Charges

The Control System Service charge is \$2.73/kW for loads.

Load CMD is used to calculate the Control System Service charge. For a connection with 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.

### 3.1.8 Standby Discount

A discount applies to the common service charge for a standby supply.

The discounted common service charge is calculated as follows:

$$\text{DCSC} = (1 - \text{SD}) * \text{CSC}$$

Where:

- DCSC is the discounted common service charge for the standby supply.
- SD is the standby discount, set at 75%.
- CSC is the undiscounted common service charge for the standby CMD.

## 3.2 Transmission Entry Points Tariff (TRT2)

### 3.2.1 Eligibility

This tariff applies to all generators, connected to either the transmission network or distribution network.

#### Notes:

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

### 3.2.2 Use of System Charge

Substation	Total Connection Charge \$k (Refer Note 1)	Connection Price \$/kW (Refer Note 2)	Use of System \$/kW	Transmission HV Loss Factor
Albany	*	18.45	9.025	1.0380
Boulder	*	18.45	5.866	1.1159
Cockburn	380.00	18.45	5.614	1.0302
Collie	*	18.45	9.590	0.9990
Geraldton	*	18.45	1.616	1.1294
Kwinana Alcoa	*	18.45	5.614	1.0000
Mason Road	*	18.45	5.299	1.0320
Kwinana	1,509.38	18.45	5.614	1.0321
Muja	2,087.38	18.45	9.895	0.9971
Mungarra	517.85	18.45	9.023	1.1162
Pinjar	1,225.99	18.45	4.841	1.0488
Pinjarra Alcoa	*	18.45	9.864	1.0155
Tiwest	*	18.45	4.859	1.0322
Wagerup Alcoa	*	18.45	6.401	1.0021
West Kalgoorlie	*	18.45	6.305	1.0797
Worsley	*	18.45	7.813	0.9911



### 3.2.3 Metering Charges

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

	\$/metering unit/annum
Meter with tariff metering CT/VT @ 66kV and above	\$11,401.41
Meter with tariff metering CT/VT @ <66kV	\$2,297.86

### 3.2.4 Administration Charges

No administration charge applies.

### 3.2.5 Transmission Loss Factor

See above table.

### 3.2.6 Excess Network Usage Charges

An additional charge applies to this tariff where the peak half-hourly demand exceeds the nominated DSOC during the billing period.

The excess network usage charge (ENUC) is calculated by applying a factor to the excess usage as follows:

$$\text{ENUC} = \text{ENUM} * (\text{PD} - \text{DSOC}) * (\text{UOS} + \text{CON} + \text{CSS}) / \text{DSOC}$$

Where

ENUM	is the Excess Energy Multiplier factor, which is set at 2
PD	is the peak half-hourly demand during the billing period.
DSOC	is the nominated DSOC for the billing period.
UOS	is the applicable use of system charge for the billing period for the nominated DSOC.
CON	is the applicable connection charge for the billing period for the nominated DSOC.
CSS	is the applicable control system service charge for the billing period for the nominated DSOC.

(Note: the charge does not include the metering or administration components of the tariff)

### 3.2.7 Control System Service Charges

The Control System Service charge is \$0.39/kW for generators.

Generator unit maximum output is used to calculate the Control System Service charge. For a connection with 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.

## 4 NON REFERENCE NETWORK TARIFFS

### 4.1 Access Services Charges

Account set-up fee	\$2,470.19
Account modification fee (per modification)	\$493.36
Linked account modification fee [1]	\$246.68
Billing fee	\$367.20/month
System maintenance fee [2]	\$91.23/MW/month

**Notes:**

- [1] Linked accounts occur where there is an arrangement to share out-of-balance energies, generating plant or load. The total fee payable where there are linked accounts is \$493.36 for the prime account and \$246.68 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.
- [3] These charges will be reviewed with the introduction of the Wholesale Electricity Market and the transfer of energy settlement from Western Power to the Independent Market Operator.

## 5 LOSS FACTORS

### 5.1 Distribution Loss Factors

#### 5.1.1 Load Connections

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

- Any time Energy tariffs (RT1 & RT2)
- Time of Use Energy tariffs (RT3 & RT4)
- Metered Demand tariffs (RT5 & RT6)

For the High Voltage and Low Voltage Contract Maximum Demand tariffs (RT7 & RT8), the applicable distribution loss factors are:

- For customers with CMDs greater than 7,000 kVA:
  - Specific individually calculated loss factor.
- For customers with CMDs between 1,000 kVA and 7,000 kVA and located greater than 10 km from the transmission substation:
  - Specific individually calculated loss factor
- Customers with CMDs between 1,000 kVA and 7,000 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 2.2.7 and 2.3.7 High Voltage and Low Voltage Metered Demand Tariffs (respectively for HV or LV connection).

#### 5.1.2 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.*

### 5.2 Transmission Loss Factors

Transmission HV Loss Factors are location specific for:

- all generator connections, and
- all load connections greater than 1,000 kVA peak

as listed in the tables in sections 3.1 and 3.2 Transmission Nodal Charges – 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 1,000 kVA peak, a system-wide average HV transmission loss factor of 1.0559 applies.