



Use-of-System Pricing Methodology

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April 2011

1 INTRODUCTION

This document explains the methodology that has been developed by Westpower to charge for its electricity delivery services. Included is all of the information required by Requirement 14(4) of the Electricity Distribution (Information Disclosure) Requirements 2008 along with requirements 22 and 23 of the Electricity Information Disclosure Requirements issued 31 March 2004 (Original Requirements), which continue to apply.

Requirement 22 of the Original Requirements requires electricity distribution businesses (distributors) to publicly disclose the methodology used as at the beginning of each financial year to determine the line charges payable or to be payable by consumers connected to the distribution network.

The tariff is based upon charges applied at each Installation Control Point (ICP) as measured by the electricity meters installed there.

For small and medium sized customers, transmission charges are bundled with the distribution charges and included in the appropriate tariff component. On the other hand, it has been possible to pass transmission charges through to Bulk and Large Bulk customers in a direct and transparent fashion, which provides an economically efficient pricing signal that these customers can choose to respond to.

For the first time, Westpower's disclosure has also been prepared in accordance with the Distribution Pricing Principles and Information Disclosure Guidelines published by the Electricity Commission in February 2010.

Comments and suggestions for improvement are welcome at any time. The transmission charges to recover Transpower's connection costs are identified separately in the price structure.

2 PRICING OBJECTIVES

Following consultation with the industry, in February 2010 the Electricity Commission released the final Pricing Principles and Information Disclosure (Guidelines), which are intended to assist distributors to compile their disclosures. According to the Guidelines, distributors are required to prepare a statement of their pricing alignment with the principles, and disclose this by 31 March 2011. The Authority will then review these disclosures with a view to informing further work in this area.

2.1 Regulatory Issues

While Westpower is currently exempt from price regulation under Part 4 of the Commerce Act, it continues to apply the general principle that Transpower's transmission charges and levies paid by Westpower to fund the Commission and the Authority are passed through as directly as possible.

Furthermore, Westpower is required to provide particular tariff options to low use consumers, which effectively provides a subsidy to such consumers. In addition, Westpower is also required to keep changes in rural charges consistent with those paid by urban consumers, reflecting a subsidy between urban and rural consumers. In part this is offset by the lower service level provided to rural consumers, as it takes longer to restore faults to remote locations, and such consumers do not benefit from the meshed network that is available in an urban environment.

2.2 Pricing Approach

As noted in the Introduction section, Westpower has prepared this disclosure in context with the Guidelines published by the Electricity Commission in February 2010. The Guidelines set out a number of principles that distributors are expected to formally demonstrate they adhere to. Westpower considers that many of the principles are “commonsense” and have underpinned the development of its prices over time.

The Authority’s principles are as follows:

- (a) Prices are to signal the economic costs of service provision by:
 - (i) being subsidy free (equal to or greater than incremental costs, and less than or equal to standalone costs), except where subsidies arise from compliance with legislation and/or other regulations;
 - (ii) having regard, to the extent practicable, to the level of available service capacity; and
 - (iii) signalling, to the extent practicable, the impact of additional usage on future investment costs.
- (b) Where prices based on ‘efficient’ incremental costs would under-recover allowed revenues, the shortfall should be made up by setting prices in a manner that has regard to consumers’ demand responsiveness, to the extent practicable.
- (c) Provided that prices satisfy (a) above, prices should be responsive to the requirements and circumstances of stakeholders in order to:
 - (i) discourage uneconomic bypass;
 - (ii) allow for negotiation to better reflect the economic value of services and enable stakeholders to make price/quality trade-offs or non-standard arrangements for services; and
 - (iii) where network economics warrant, encourage investment in transmission and distribution alternatives (e.g. distributed generation or demand response) and technology innovation.
- (d) Development of prices should be transparent, promote price stability and certainty for stakeholders, and changes to prices should have regard to the impact on stakeholders.
- (e) Development of prices should have regard to the impact of transaction costs on retailers and should be economically equivalent across retailers.

In section 8 is an explanation of how Westpower’s pricing approach complies with these principles.

3 DISTRIBUTION COST STRUCTURE

Prices have been derived from:

Forecast revenue requirements to provide agreed returns and to meet the Company's objective to, where possible, fund capital expenditure from current earnings.

Company annual revenue requirements for 2011/12 are determined as:

Transmission	\$4,275,000
Maintenance, Depreciation and Overheads	\$12,199,851
Cost of Capital	\$2,630,716
Total Expenditure	\$19,105,567

4 REVENUE FACTORS

4.1 Asset Valuation

Westpower's distribution assets were revalued to current depreciated replacement cost as at 1 April 2010.

4.2 Maintenance of Existing Assets

The maintenance program is driven by safety requirements, the need to provide consumers with acceptable levels of reliability and repairs to equipment following faults. The safety and reliability requirements set the planned programme for maintenance and are based upon experience in equipment operation and on industry standards.

The amounts budgeted for maintenance are determined according to the 10-year Asset Management Plan and include the following activities

- Inspection, Service and Testing
- Faults
- Repairs

These costs are further subdivided into the following asset categories

- Subtransmission (33 kV and 66 kV)
- Distribution (11 kV)
- Reticulation (400 V)
- Services
- Zone Substations
- MV Switchgear
- SCADA, Communications and Protection
- Distribution Transformers
- Ripple Control

Use of the assets by each load groups is one means used in determining the relativities between load groups in terms of cost recovery. For instance 11 kV bulk consumers should not be required to fund the costs involved in maintaining 400 V reticulation.

5 PRICING STRUCTURE

Westpower has an economically efficient delivery pricing structure with three components:

- Fixed
- Variable
- Peak

Economically efficient means a pricing basis that signals network costs.

To minimise the costs of charging, Westpower applies the prices to quantities that are readily available and meaningful. For the mass of general connections prices are applied to kWh quantities metered at each ICP, as recorded or reconciled per retailer. For the relatively small number of major customer connections, Westpower's prices are applied to Time of Use quantities, also measured at the individual connections.

5.1 Distribution Charge Components

5.1.1 Consumer Groupings

Historical consumer groupings have been retained to provide customers with a degree of stability. Consumers are allocated to groups on the basis of their expected load pattern.

Category 1	Consumers with load less than 15 kVA
Category 2	Greater than 15 kVA capacity and not Industrial, tariff based on demand on network.
Category 2 TOU	Greater than 100 kVA and less than 200 kVA
Streetlighting	Public utility lighting
Bulk	Greater than 200 kVA capacity, (On a daily basis) tariff based on demand on network and coincident demand at the source Grid Exit Point
Large Bulk	Greater than 2500 kVA capacity, tariff based on demand on network and coincident demand at the source Grid Exit Point
Tranzrail Otira	As Otira constitutes of an isolated GXP that is not interconnected with the rest of Westpower's network, and is dedicated almost solely to the supply of Toll Rail infrastructure, this area has been ring-fenced in terms of costs (both fixed and variable) that can rightly be attributed to the major consumer. The small number of domestic customers in this area have been included in the normal Category 1 group in the interests of equity.

Statistics for these customer groups are shown in Schedule 3 attached.

The total distribution revenue required from each group is generally based on their pro rata contribution toward the overall net system demand, but with discount factors applied to customers other than Category 1 in recognition of reduced equipment costs related to supplying these customers because of factors such as economies of scale, load factor and energy density.

The apparent distribution discount factors that are applied to each group are contained within the table, but it is of little benefit to try and derive a direct empirical relationship between the drivers discussed above and the numerical value of the discount as Westpower has maintained the same tariff structure for several years and made adjustments by across the board percentage changes to all categories. Usage patterns have changed in the intervening period, but the tariff structure has remained constant in the interests of price stability.

5.1.2 Fixed charge

This charge partially recovers costs that are incurred on a connection basis. Full recovery is not possible as fixed charges would exceed customers' and the Government's expectations. In particular the tariff has been set to ensure that the distribution component of the fixed charge for domestic customers does not exceed 15 c per day in accordance with the guidelines provided by the Minister of Energy.

Westpower has chosen to apply this low fixed charge to all Category 1 Domestic consumers for the sake of simplicity as well as to ensure risk and revenue neutrality across the whole customer group. Low-use customers would otherwise constitute a somewhat indeterminate and constantly varying proportion of the overall Category 1 customer group leading to revenue variability.

Fixed charges for other customer groups are based on maintaining linkages with historical fixed vs variable ratios to avoid unnecessary price volatility between customers within a group.

5.1.3 Variable Charge

Ideally, the variable component signals the incremental cost to provide capacity when the distribution network is operating at peak loading. The rationale for this component is that the investment in networks is primarily determined by the maximum loading on the network. This is generally applicable to both distribution and transmission networks.

As the fixed charge for domestic customers is basically driven by Government policy, it follows that their variable charge must then be set to recover the remaining revenue requirement from the domestic consumer group, resulting in a significantly higher variable charge than would otherwise be expected from the application of normal economic marginal pricing principles.

For general connections in Categories 1 and 2 the variable price is applied to each retailer's monthly kWh consumption. For Bulk and Large Bulk consumers the variable charge is based on peak demand metered quantities at the installation.

5.1.4 Fixed Annual Capacity Charge (Category 2 consumers only)

This charge partially recovers costs for Category 2 customers that are incurred on a connection basis, including costs for distribution substations and low voltage reticulation. As the cost is determined to a large extent by the capacity of

equipment required to supply the consumer, this charge is based on the assessed capacity required for the coming year and remains fixed throughout the year.

5.2 Transmission Charge Components

Westpower has connections to the Transpower network at the following Grid Exit Points:

- ❖ Atarau
- ❖ Dobson
- ❖ Greymouth
- ❖ Kumara
- ❖ Hokitika
- ❖ Reefton
- ❖ Otira

The following methodology is used as the basis for recovery of Transpower's transmission charges. It is allocated equitably across all customer groups, except that the cost of supply to On Track at Otira substation has been ring-fenced as they are the only significant customer at this Grid Exit Point. The tariff clearly reflects the transmission cost drivers that Transpower has developed through its pricing structure.

In accordance with the objective of providing a transparent tariff, Westpower has attempted to pass through transmission charges without markup. Where possible, because of the availability of TOU metering in the customer's installation, the transmission component of the tariff is charged on the same basis as that used by Transpower, with fixed charges converted to a demand basis for allocation.

For Category 1 and 2 customers, the transmission component of the tariff has been converted to a kWh rate as this is the only metering quantity available.

5.2.1 Fixed charge or Fixed Annual Capacity Charge

This charge recovers all transmission and avoided transmission costs (including System Operator Charges) with the exception of Transpower's Interconnection Charge. The Transpower charges are passed through without markup and are allocated based on demand data.

As Westpower is liable to pay Transpower for Connection Charges for the full year, this is an annual amount payable monthly. Therefore, if a bulk consumer no longer takes supply, they are still liable to pay the monthly Fixed Annual Capacity Charge until the end of that current financial year.

Likely avoided cost of transmission charges payable to embedded generators are calculated at the beginning of each year and allocated amongst customer groups in a similar manner to the Transpower charges. As any change in avoided transmission cost by generators is directly offset by a corresponding and opposite change in transmission costs payable to Transpower, the overall economic effect of say a dry year is revenue neutral.

5.2.2 Variable Charge

For Category 1 and Category 2 consumers, Transpower's Interconnection Charge is recovered directly in the variable charge. For the purposes of charging, this is converted to a kWh charge and bundled with the Westpower Variable Distribution component to give the Total Variable Line Charge. The charge is allocated across

customer groups based on an assessment of their impact on Transpower's peak demand.

5.2.3 Coincident Peak Charge

For Bulk and Large Bulk customer groups, the Transpower Interconnection Charge is recovered in a Coincident Peak Charge. Because these customers all have half-hour Time of Use (TOU) metering, it is possible to calculate the exact contribution to the Transpower Charge each customer makes. That is, the coincident peak kW demand for each customer at the time of the twelve highest GXP demands over the last twelve months is known and the contribution towards Westpower's Interconnection Charge charged at cost.

By providing appropriate signals to bulk customers when peak demand periods are approaching, they are in a position to avoid contributing to the peak through demand side management. As the tariff is effectively a pass-through of the Transpower Interconnection Charges incurred, the customer can receive the benefit of any load control through a reduced Coincident Peak Charge.

As for the Fixed Annual Capacity Charge, this is an annual charge payable monthly with the customer liable for ongoing payment until the end of the applicable financial year.

5.3 Allocation Method

As discussed in 5.1 and 5.2 above, the allocation of the distribution charge amongst customer groups is based generally on the net demand of that group as modified by a discount factor. These discount factors are historical, based on the prevailing load patterns and collective experience at that time, and have not been empirically derived.

For the purposes of clarity, however, apparent distribution discount factors have been calculated based on the proportion of revenue actually received from each customer group. This discount factor is therefore a reflection of what has taken place, rather than being a driver for future changes in allocation.

Discount factors as such have not been applied to the Transmission Charges, with the intent being to pass these charges directly through to customers on an equitable and transparent basis, depending on the contribution of groups to the overall GXP demands. For the reasons discussed above, however, changing usage patterns over time mean that some distortion has necessarily occurred, but this is not sufficient to warrant a rebalancing exercise in view of the price shocks that would result to certain groups.

Finally, subdivision of the revenue requirement into individual revenue components was not carried out in determining the allocation of charges amongst the various categories. The cost components discussed in 4.2 are only used to determine the overall revenue requirement.

6 AVOIDED COST OF TRANSMISSION

Where an investor provides assets as an alternative to Transpower providing transmission services, such as distributed generation, the benefit of avoided transmission charges will be passed through to the investor on a transparent basis with values calculated in accordance with Transpower's pricing methodology. The connection of generators to the Westpower network, and the charge/rebates applicable are subject to Westpower review on a case-by case basis.

Investment that has the potential to reduce the Peak Demand at a GXP will be recognised via pass-through of any reductions in Transpower's Interconnection Charge. This will be carried out based on actual recorded half-hourly metering data, and allocated in an equitable manner amongst individual investors.

The maximum potential for reduction in Transpower charges is dependent on operating assets in co-ordination with Westpower's load management and any other party's capability as well as ensuring that the assets are available at times of peak system loadings. The level of risk and sharing of benefits between providers will be subject to contracted terms between parties.

It should be noted that the investor can equally be Westpower, any retailer, any generator or independent party and all parties will be treated in the same manner. Where there is a choice of alternative investments, preference will be given to the least cost solution to Westpower Limited on offer at the time of commitment.

Westpower carries the risk of managing transmission cost. This risk is recovered via transmission charges which include an avoided transmission component.

7 LOSSES

7.1 General

Losses represent the percentage of electricity entering the network that is consumed during the delivery to consumers' installations. The quantity of electricity metered at consumer installations is thus after losses and in order to determine each retailer's purchase responsibilities the electricity measured at the consumer's meter has to be multiplied by a "loss factor". There are two main components to the loss:

- (a) Fixed component due to the standing losses of the zone substation and distribution transformers.
- (b) Variable components arising from the heating effects of the resistive losses in the delivery conductors. The resistive losses are proportional to the square of the load current and occur in the 66 kV, 33 kV, 11 kV and LV network conductors, the zone substations and distribution transformers.

7.2 HV and LV Metered Installations

Most consumer installations are metered at LV, however a few consumers' installations are metered at HV and thus these installations should not incur any LV network losses or the fixed and variable losses in the distribution transformer. Thus two values of loss factors apply.

7.3 Methodology

Westpower has adopted the following methodology in determining the loss factors to be applied by retailers.

The average loss percentage for the distribution network is calculated for Information Disclosure purposes from data supplied by the National Reconciliation Manager. This

percentage value is then applied to the total kWh consumed to give the kWh lost for any particular year.

The declared loss factors are listed in Schedule 2.

8 ELECTRICITY AUTHORITY PRICING PRINCIPLES COMPARISON

In this section Westpower sets out how it considers it meets the Authority's pricing principles. Each principle is stated, followed by Westpower's commentary.

Signal economic costs

(a) Prices are to signal the economic costs of service provision, by:

- i. being subsidy free (equal to or greater than incremental costs, and less than or equal to standalone costs), except where subsidies arise from compliance with legislation and/or other regulation;*

Westpower interprets the requirement for subsidy-free prices as requiring that for each particular consumer group, the revenues obtained from that consumer group should not be below the cost of connecting that consumer group to the network (incremental costs), or exceed the costs of serving that consumer group, as if they were the only consumer group (stand-alone costs). These bounds are extremely wide as there are extensive shared assets on Westpower's network. As a result, if Westpower were to cease supplies to any particular consumer-group, there would be a limited reduction in costs and assets as different consumer groups are inter-mingled on the network.

Westpower considers that, by definition, its prices are subsidy-free as it applies a cost allocation model to allocate costs across the consumer base to determine the revenue requirement, which is then used as a basis for establishing prices for each consumer group. Because the cost allocation model allocates the total cost of supplying all Westpower's consumers in proportion to percentage use of particular assets, which (by definition) adds up to 100%, no consumer group pays more than their stand-alone costs.

- ii. having regard, to the extent practicable, to the level of available service capacity; and*
- iii. Signalling, to the extent practicable, the impact of additional usage on future investment costs.*

Westpower's tariff structure is based on capacity-usage. Westpower relies on differentials between controlled and uncontrolled usage (residential), and its TOU charges to signal the value of consuming outside of peak periods (when capacity is less constrained). The impact of such price signals lessens the need to invest in additional network capacity.

As consumers increase in their use of network capacity, where practicable they pay increased line charges:

- For small capacity consumers (e.g., with no TOU metering), it is assumed that as volumes increase their use of network capacity increases. Additionally, because Westpower offers different tariff rates for controlled and uncontrolled use, there are incentives for consumers to have controllable loads (e.g., water heating, which makes up a material proportion of consumers consumption, normally around 40% of their usage). In future, as smart meters become ubiquitous, Westpower will enhance its tariff structures to further encourage consumers to shift discretionary loads outside of peak periods;
- For consumers in the commercial group, Westpower signals the costs of additional capacity usage through increasing fixed charges as consumers increase their nominated capacity. For those consumers that have TOU metering, charges are based on on-peak demands, providing a direct price signal to reduce demands in peak periods;
- For large industrial consumers, where they require increases in capacity to serve their needs or additional equipment to meet their security of supply objectives, Westpower prices such requests individually. Therefore consumers face the costs of their additional requirements directly.

(b) Where prices on 'efficient' incremental costs would under-recover allowed revenues, the shortfall should be made up by setting prices in a manner that has regard to consumers' demand responsiveness, to the extent practicable.

Westpower interprets this principle as the requirement to implement some form of "multi-part" pricing¹, with Ramsey²-based considerations applied to the mark-up of variable tariffs above incremental costs. However, it is not practicable to assess consumers demand responsiveness and set charges accordingly. Westpower, like all distributors, is forced to use tariff structures which use high proportions of variable charges to recover predominantly fixed charges as the only practical means of differentiating different consumers' elasticity or willingness to pay.

¹ Multi-part pricing refers to a pricing approach where a consumer pays a combination of fixed and variable charges.

² Ramsey-based pricing is an approach where those consumers with inelastic demand face higher charges

(c) Provided that prices satisfy (a) above, prices should be responsive to the requirements and circumstances of stakeholders in order to:

- i. discourage uneconomic bypass;*
- ii. allow for negotiation to better reflect the economic value of services and enable stakeholders to make price/quality trade-offs or non standard arrangement for services; and*
- iii. where network economics warrant, and to the extent practicable, encourage investment in transmission and distribution alternatives (e.g. distributed generation or demand response) and technology innovation.*

Westpower's compliance under these guidelines is achieved as follows:

1. Uneconomic bypass is achieved through Westpower's cost allocation approach to setting tariffs, whereby (by the use of a proportional cost allocation approach) pricing is set below stand-alone costs.
2. Westpower sets specific charges for large industrial consumers to ensure that charges reflect the economic costs of service provision (thereby discouraging uneconomic bypass and allowing such consumers to negotiate their specific needs). In the most recent year, Westpower installed a new zone sub-station at short-notice for a large industrial consumer, providing an enhanced security of supply for that consumer at an increased charge.
3. Westpower pays out avoided transmission charge benefits to embedded generators to encourage such generators to reliably generate during transmission peak periods. Westpower also allows smaller generators to connect to Westpower's network and utilise the distribution network for delivering their generation to other connections without incurring network charges. Connection costs are applicable, as per Westpower's distributed generation policy. For further details on connection of distributed generation and charges please refer to Westpower's public website.
4. Because of Westpower's peak/control-period prices, consumers have a clear value against which to assess network alternatives or behaviour changes. Many consumers, particularly major consumers, turn on generators, reduce demand, or both in response to our pricing. The majority of Westpower's residential consumers heat their hot water through controlled meters in response to Westpower's very low controlled pricing rate.

Stability and transparency

(d) Development of prices should be transparent, promote price stability and certainty for stakeholders, and changes to prices should have regard to the impact on stakeholders.

Westpower's development of prices:

1. Is transparent:
 - (i) through this disclosure statement, Westpower provides information on the costs it allocates to different consumer groups;
 - (ii) In addition to this disclosure Westpower publishes a pricing policy which details the different charges between tariffs and price categories. Consumers can review charges and weigh up costs for changing capacity requirements or load profile and the resulting benefits. Every other year there is formal consultation between retailers and Westpower on pricing strategy, price category and tariff development.
2. Promotes price stability: Westpower updates its cost of service model annually. To ensure price stability to consumers, any price changes made, limit price shocks to any particular consumer group to less than 10%. As distribution charges make up around 40% of a typical consumer's bill, this ensures no consumer would face significant price increase due to changes in distribution charges.
3. Promotes certainty: Westpower endeavours to maintain its tariff structures and differentials between tariffs, so that consumers who make investments (for example in controllable loads) due to the savings between controlled and uncontrolled rates are able to realise the savings expected when the original investment was made. With the introduction of smart meters, Westpower intends to take a circumspect approach to developing and implementing TOU tariffs. This is so that consumers are not unduly disadvantaged by the introduction of smart meters. Consumers will have time to consider behavioural changes and investments to avoid adverse bill impacts.

Complexity

(e) Development of prices should have regard to the impact of transaction costs on retailers, consumers and other stakeholders and should be economically equivalent across retailers.

Westpower recognises the need to minimise undue complexity for retailers, subject to its legitimate business needs to signal costs to consumers and ensure equity between consumers. All retailers are subject to the same tariff schedules from Westpower. Therefore, Westpower considers that its prices are economically equivalent across all retailers.

WESTPOWER LIMITED

SCHEDULE 1
DISTRIBUTION AND TRANSMISSION CHARGES

APPLICABLE 01 APRIL 2011

ALL CHARGES ARE EXCLUSIVE OF GST

CATEGORY 1 DOMESTIC

FIXED CHARGES:

DISTRIBUTION CHARGE- per 12 month period

UNIT CHARGES (VARIABLE):

Tariff Name

Domestic 24hr

Controlled 17hr

Economy, day

Economy, night

Night only

CATEGORY 1 NON-DOMESTIC (For loads less than 15 kVA)

DISTRIBUTION CHARGE - per 12 month period

UNIT CHARGES (VARIABLE):

Tariff Name

24 HR

Controlled 17hr

Economy, day

Economy, night

Night only

STREET LIGHTING:

FIXED CHARGES:

DISTRIBUTION CHARGE per 12 month period per light

UNIT CHARGES (VARIABLE):

Tariff Name

Public Lighting

Under Verandah Lighting

CATEGORY 2

FOR LOAD GREATER THAN 15 KVA and UP TO 200 KVA

FIXED CHARGES:

DISTRIBUTION CHARGE - per 12 month period per Notional Unit of Demand

UNIT CHARGES (VARIABLE):

Tariff Name

Non Domestic 24hr

Non Domestic Controlled

Non Domestic Economy, day

Non Domestic Economy, night

Non Domestic Night

CATEGORY 2 (TIME OF USE METERING)

FOR LOAD GREATER THAN 100 KVA and UP TO 200 KVA

Fixed Annual Capacity Charge. (per kW per year)

Peak charge. (per kW per year)

CATEGORY 3

BULK (loads over 200kVA)

Fixed Annual Capacity Charge. (per kVA per year)

Peak charge. (per kW per year)

Transpower Coincident peak demand per kW per year

CATEGORY 4

Large Bulk (loads over 2500kVA)

Fixed Annual Capacity Charge:

Peak charge. (per kW per year)

Transpower Coincident peak demand per kW per year

CONSUMERS	CODES	TARIFF APRIL 2011		
	WP1D	\$54.72		
	Tariff code	Westpower Distribution (cents per unit)	Trans Power Transmission (cents per unit)	Total Variable Line Charges (cents per unit)
		8.837	1.546	10.383
		5.260	0.920	6.180
		10.309	1.804	12.113
		0.483	0.000	0.483
		2.504	0.000	2.504
	WP1N	\$230.09		
		Westpower Distribution (cents per unit)	Trans Power Transmission (cents per unit)	Total Variable Line Charges (cents per unit)
		8.791	1.546	10.337
		5.232	0.920	6.153
		10.256	1.804	12.059
		0.481	0.000	0.481
		2.491	0.000	2.491
	WPSL	\$19.78		
		Westpower Distribution (cents per unit)	Trans Power Transmission (cents per unit)	Total Variable Line Charges (cents per unit)
		4.888	0.401	5.289
		4.888	0.401	5.289
	WP2N	\$25.95		
		Westpower Distribution (cents per unit)	Trans Power Transmission (cents per unit)	Total Variable Line Charges (cents per unit)
		7.560	1.368	8.927
		2.535	0.459	2.993
		8.210	1.486	9.696
		0.214	0.000	0.214
		0.953	0.000	0.953
	22	C2F	\$25.96	
		C2P	\$185.90	\$76.14
				\$262.04
	18	C3F	\$42.89	\$21.96
		C3P	\$42.89	\$64.85
		C3CP		\$76.14
	3	C4F	\$32.17	\$21.96
		C4P	\$32.17	\$54.13
		C4CP		\$76.14

CATEGORY 5**Tranzrail Otira**

Fixed Annual Capacity Charge:

Peak charge, per kW per year:

Transpower Coincident peak demand per kW per year

Power Factor Charge

Annual charge per kVAr of assessed correction required to bring PF up to 0.95

1	C5F	\$228.38	\$210.00	\$438.38
	C5P	\$42.89		
	C5CP		\$76.14	\$76.14
	C2PF			
		\$103.83		\$103.83

Transpower Rental Adjustment

Adjustment based on actual Transpower Losses and Constraints rebates

(Applicable to category 3 , 4 & 5 only)

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Note:

All charges are exclusive of GST.

Capacity Charge is assessed on the basis of the measured demand, mains size, LV fuses or transformer capacity.

An additional **\$103.83** per kVAr per annum of equivalent corrective capacitance applies if the installation power factor is required to be improved to 0.95.

Fixed annual capacity charges and coincident peak demand charges for categories 3 , 4 , and 5 are set annually in advance and payable by monthly installments throughout the year

Total Line Charges include the following:

Distribution Charge

Distribution Unit Charges (Westpower)

Transmission Unit Charges (Transpower)

1 A unit is a kilowatt hour (kWh).

2 All fixed charges are attributable to Westpower only.

3 The Notional Unit of Demand (NUD) is an assessment of the system. capacity provided for the customer and is based on factors such as measured loads or transformer capacity. In general 1 NUD = 1 kVA.

4 The Large Bulk tariff is only available to existing loads as at 1 March 2002.

5 Standard Peak charges are charged and reset monthly

SCHEDULE 2
LOSS FACTORS

The following loss factors are to be used by Retailers to multiply the kWh recorded on the half-hour meter at each Connected Customer's Installation in order to determine the Electricity Retailer's responsibility for the purchase of kWh within the Distribution Network.

	CODE
Supply at 11 kV (1.05)	LF05
Supply at 400 V (1.08)	LF08

SCHEDULE 3

REVENUE ALLOCATION DISCLOSURE TABLE

Category	1	2	2 TOU	3	4	5	Total
No. of Customers	12,027	808	19	18	3	1	12,876
Net Demand (kW)	13,147	8,296	2,369	11,766.00	18,994	584	55,156
Consumption (kWh)	82,397,198	50,520,363	1,109,840	72,908,978	78,710,967	1,537,345	287,184,691
Load Factor	0.72	0.70	0.05	0.71	0.47	0.30	0.59
Av Demand per Customer (kW)	1.09	10.27	124.68	653.67	6331.33	584.00	4.28
Revenue - Distribution	\$ 7,456,692	\$ 4,136,925	\$ 567,151	\$ 1,842,082	\$ 669,404	\$ 158,314	\$ 14,830,567
Revenue - Transmission	\$ 1,189,561	\$ 635,942	\$ 196,497	\$ 1,360,307	\$ 734,501	\$ 158,191	\$ 4,275,000
Total revenue	\$ 8,646,253	\$ 4,772,867	\$ 763,648	\$ 3,202,389	\$ 1,403,905	\$ 316,505	\$ 19,105,567
Distribution Revenue per kW	\$ 567.16	\$ 498.69	\$ 239.41	\$ 156.56	\$ 35.24	\$ 271.08	
Apparent Discount Factor	100%	88%	42%	28%	6%	48%	