WEL Networks – Public Disclosure of Pricing Methodology – April 2009

This document relates to WEL Networks Limited's (WEL's) obligations under the Electricity (Information Disclosure) Regulations to disclose the methodology used to determine line charges by WEL.

1. General Approach

WEL's pricing philosophy is based on the following pricing principles:

- Long-term stability and price reductions in real terms;
- Aim to manage price adjustments to manage underperforming tariffs through targeted rebalancing.;
- Keep the charges in line with industry norms so that charges are not out of alignment with industry averages; and
- Ensure that increased costs are fairly allocated across all customers.

This was undertaken through:

a) The development of a Cost Allocation Model that is designed to determine the returns from individual tariffs. This model allocates costs to those tariffs that are driving investment, maintenance and Transpower costs.

b) A review of the proposed tariffs against industry tariffs is undertaken to ensure that the proposed changes will not take WEL out of alignment with standard industry charges.

c) The use of discounts to reduce prices in order to meet our owner's strategic directive to reduce electricity prices. Our discount is a visible sign of our price reduction, which otherwise would be absorbed into the electricity retailers overall charges.

2. Consumer Groups Used

Four load groups are defined in the methodology. These groups relate to consumers taking supply at:

- 33kV
- 11kV
- 400/230V with demand metering
- 400/230V without demand metering (mass market)

The rationale for these consumer groups is:

- The network is designed around a 33kV sub-transmission and 11kV distribution system that steps down to a low voltage (400V) distribution system. Customers who connect to the 33kV sub-transmission system do not utilise the low voltage network components and so are not charged for this infrastructure. These customers tend to be large industrial sites with significantly different load profiles to WEL's 11kV customers;
- 11kV customers do not use the low voltage network and so are only charged for the high voltage network;
- Customers on the 400V (low voltage network) are charged for the low and high voltage networks.
- Customers with half-hourly metering are charged on a basis that more truly represents the cost they impose on the network.
- Customers without half-hourly metering are generally small business and residential customers.

3. Methodology of WEL's Cost Allocation Model

A cost model was developed to ensure the required returns were obtained from each tariff group. This was accomplished by allocating costs to tariffs by way of cost drivers.

a) Cost Drivers

Cost drivers are defined as the underlying factors that result in WEL incurring costs. These costs can be related to additional assets or operation costs. These underlying costs were determined after internal discussions and analysis, discussions with other lines companies, analysis of Transpower costs, and a review of industry best practice. These cost drivers have been used to determine the allocations in section 6.

b) Network Costs

Only those network costs and assets relating to the regulated line business were considered in the cost allocation model. These costs included administration, maintenance, return on capital, Transpower charges and depreciation. Costs shared between the regulated line business and other businesses are allocated in accordance with WEL's regulatory disclosure accounts.

c) Allocation of Costs to Tariffs

All the costs were broken down by type and then allocated to one or more cost drivers. Allocation of the cost drivers was based upon the nature and or service that a particular cost provided. Costs are then allocated to tariffs based on each customer group's proportion of the cost driver.

4. WEL Discount

WEL paid out $20.3M of discount for 2008/09 and is forecasting to pay out a lesser discount of $15.0M this 2009/10 year. This discount is forecast to be a $5.6M increase on the $9.4M discount that WEL has posted and as presented in the attached tariff schedule.

The discount consists of two parts, a proportion comprising 100% of fixed charges plus a proportion of the variable charge.

5. The Statistics Related to the Consumer Groups

Tariff Group	MWh	kW	Customers
33kV	42,582	4,948	4
11kV	284,620	44,612	187
400V	86,093	14,668	211
Demand	33,157	6,349	170
Std TOU	3,604	618	32
Streetlight	12,000	2,200	22
Mass Market	682,094	176,723	80,524
Totals	1,144,150	250,118	81,150

6. Allocation of Key Revenue Components

a) Allocation of Asset Related Costs

The asset related costs include:

- Total value of assets
- Network maintenance
- Depreciation on assets

These costs are allocated as laid out in the table below.

Asset Group	Allocated to Customer Groups Based on the following allocation of costs		
	kWh	kVA	Other
33kVA Sub-transmission Network	50%	50%	
Zone Substations	40%	60%	
11kV Distribution Network	30%	70%	
Low Voltage Distribution Network	0%	100%	
SCADA and Communications	100%	0%	
Customer connection assets			100% allocated to customers numbers
Street Light Equipment			100% allocated to street light customers
Other Non-network Assets Plant And Equipment	100%		

Note: this table represents a summary page of an allocation of 35 asset groups.

The principle in allocating the asset related costs to the customer groups is that High Voltage customers do not pay for the low voltage network.

b) Allocation of Transpower Costs

Transpower costs are split and allocated as follows:

- Connection costs are allocated on the basis of kWh. The connection costs are allocated by kWh as the Transpower Points of Supply are fixed cost and this method ensures a fair recovery of the costs over all customers.
- Peak demand charges are allocated on the basis of the customer groups contribution to WEL's 12-month rolling average peaks.

c) Allocation of Administration and Operational Costs

Administration and operational costs are allocated based upon each load groups distributed volumes (kWh) across WEL's traditional network.

d) Return on Capital

Return on capital relates to the return required by WEL having regard to past investment and future capital expenditure requirements.

7. Components of Revenue Required to Cover Costs and Profits and Allocation of Costs to Consumer Groups

	33kV	11kV	400V TOU	Mass Market	Total
Capital	$5.7M	$43.67M	$34.49M	$282.07M	**$365.94M**
Components of WEL's Revenue Requirement					
Depreciation	$0.26M	$1.97M	$1.44M	$11.47M	**$15.14M**
Maintenance	$0.11M	$0.85M	$0.56M	$5.32M	**$6.84M**
Transpower Charges	$0.5M	$4.15M	$1.89M	$14.89M	**$21.44M**
Administration and Operations	$0.39M	$2.63M	$1.1M	$6.45M	**$10.57M**
Return on Capital	$0.07M	$2.56M	$2.59M	$16.02M	**$21.24M**
Total	$1.34M	$12.15M	$7.59M	$54.14M	$75.23M

Note: The revenue shown above has been adjusted for the discount published in the tariff schedule. These figures do not include any additional (non-posted) discount that may be provided to customers.

If allowance were to be made for a target discount of $15.0m, the overall return on assets is 3.0% post tax.

8. Variable to Fixed Split

WEL's discount covers 100% of all fixed charges so that all WEL customers effectively pay no fixed costs. The WEL discount will be paid back to all customers connected to the WEL network on 31 March 2010.

For load groups with demand meters, approximately half the variable revenue is recovered over the maximum monthly demand in peak time hours and half over energy delivered.

For low voltage consumers not paying on a demand option, customers are charged a variable rate and a fixed rate. The fixed charges to this customer group are effectively zero when the network discount is applied.

9. WEL External Embedded Networks

WEL external embedded networks are priced using the same methodology but are priced separately from WEL's traditional network, as they are subject to different cost drivers and risks. Future tariffs on these networks are likely to be adjusted to reflect the incumbent line company transmission charges and the return on the WEL capital investment of each embedded network. The external embedded networks represent less than1.0% of WEL's total line revenue.

10. Miscellaneous

A charge for reactive energy where power factors are below 0.95 is levied to encourage power factor correction investment.

A rebate reflecting the average cost of investment avoided is given where consumers own the transformers on their premises.

1 April 2009 Tariffs for WEL's Traditional Network

1. Under 0.25 GWh/Year

Code	STANDARD LINE CHARGES	1 April 2009 Charges	Transmission Component	Distribution Component
Standard Line Services				
501	Fixed Charge - Standard (c/day)	15.00	0.00	15.00
	PLUS Consumption Based Charge			
502	Continous Supply (c/kWh)	10.02	2.73	7.29
503	Controlled Supply (c/kWh)	2.65	0.90	1.75
Demand Line Services				
504	Fixed Charge - Demand ($/mth)	54.46	0.00	54.46
	PLUS Consumption Based Charge			
505	Summer Peaktime Demand Weekday ($/KW/mth)	8.47	2.69	5.78
605	Winter Peaktime Demand Weekday ($/KW/mth)	11.81	3.88	7.93
506	Continuous Supply (c/kWh)	3.16	0.40	2.76

2. Over 0.25 GWh/Year

Code	STANDARD LINE CHARGES	1 April 2009 Charges	Transmission Component	Distribution Component
Over 0.25 GWh/year				
517	Fixed Charge - Major customers ($/mth)	54.46	0.00	54.46
	PLUS			
509	33 kV Summer Peaktime Demand Weekday ($/KW/mth)	5.89	2.77	3.12
609	33 kV Winter Peaktime Demand Weekday ($/KW/mth)	9.11	4.40	4.71
512	11 kV Summer Peaktime Demand Weekday ($/KW/mth)	7.25	3.15	4.10
612	11 kV Winter Peaktime Demand Weekday ($/KW/mth)	10.28	4.61	5.67
514	400 V Summer Peaktime Demand Weekday ($/KW/mth)	8.86	2.95	5.91
614	400 V Winter Peaktime Demand Weekday $/KW/mth	12.37	4.27	8.10
	PLUS			
510	33 kV Continuous Supply (c/kWh)	1.51	0.40	1.11
513	11 kV Continuous Supply (c/kWh)	1.91	0.40	1.51
515	400 V Continuous Supply (c/kWh)	2.68	0.40	2.28

3. Other Tariffs

Code	STANDARD LINE CHARGES	1 April 2009 Charges	Transmission Component	Distribution Component
520	Street Lights - Continuous Supply (c/kWh)	8.66	1.59	7.07
529	Telecoms, Public Security Lights, Unmetered Sewage Pumps	10.02	2.73	7.29
507	Reactive Energy Charge (cents/kVARh)	2.39	0.00	2.39
518	Transformer Rebate ($/kW)	0.22	0.00	0.22

4. WEL Annual Discount Terms

Code	STANDARD LINE CHARGES	1 April 2009 Charges	Transmission Component	Distribution Component
Consumption Based Charge				
Standard Line Services				
501D	Annual Fixed Discount (c/day) - applies to Code 501	-13.50	0.00	-13.50
502D	Annual Discount Continuous Supply (c/kWh) - applies to Code 502	-0.95	0.00	-0.95
503D	Annual Discount Controlled Supply (c/kWh) - applies to Code 503	-0.25	0.00	-0.25
Demand Line Services				
504D	Annual Fixed Discount ($/mth) - applies to Code 504	-49.01	0.00	-49.01
Over 0.25 GWh/year				
517D	Annual Fixed Discount ($/mth) - applies to Code 517	-49.01	0.00	-49.01