Pricing Methodology 2007-2008

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1.0 Introduction

The purpose of this document is to describe Top Energy Limited's (TEL) pricing methodology for the line charges effective from 1 April 2007.

This document has been prepared to comply with Requirements 22 and 23 of the Electricity Information Disclosure Requirements 2004. Accordingly this document discloses:

- The methodology used to calculate the prices charged;
- The key components of revenue required to cover costs and profits of lines business activities;
- The consumer groups used to calculate the prices being charged, including;
    - The rational for consumer grouping;
    - The method of determining which groups consumers are in;
    - The statistics relating to each consumer group.
- The method and rationale by which components of the revenue are allocated to consumer groups, and the numerical values of the different components;
- The rationale and method used to determine the proportions of charges which are fixed and the proportions which are variable.

The tariff charged is based on each individual installation control point (ICP) and on kWh data provided by the respective retailers operating on TEL's network.

For mass market customers and small to medium businesses, transmission charges are bundled with the disclosed distribution tariffs. For TEL's three large industrial customers it has been possible to pass transmission charges in a direct and transparent fashion which provides the appropriate pricing signals for these customers.

2.0 Pricing Objectives

2.1 Revenue Requirements

Top Energy must generate sufficient revenue to:

1. Meet the Company's objective to fund:
    - Operating costs of the Lines business
        - Transmission Costs
        - Maintenance Costs
        - Overheads and Taxation Costs
    - Cost of Capital expenditure to provide for new investment
        - Renewals Capital
        - Augmentation and Capacity Capital

2. Comply with the statutory requirements on public safety, regulatory disclosure, environmental protection and quality of supply

To achieve the above Top Energy has the following five guiding principles when pricing:

1. Provide pricing which is transparent and simple to understand, implement, administer and accommodates the different socio-economic needs of our customers.

2. Maintain the stability of historic price regimes to minimise customer disruption and to provide long term stability.

3. To not differentiate between its urban and rural customers

4. Where practical to give customers the opportunity to significantly reduce their electricity costs, if they reduce their usage at times when Top Energy's costs are high

5. Within the restrictions of the Government's price control regime try to provide an adequate return to the shareholder

2.2 Efficiency

In order to create efficient investment signals for its customers, Top Energy employs a very simple pricing structure that signals the fixed and variable costs of energy delivery.

For commercial customers this is reflected in our tariffs whereby we charge higher prices during periods of high electricity demand and lower prices during low demand periods.

For domestic customers there are a range of pricing options that reflect the nature of the load connected and whether we are able to use the load to alleviate Transmission peak charges.

For large industrial customers, the tariff is based directly on coincident peak charges and this provides clear incentives for users to manage their electricity usage.

2.3 Fairness

In order to ensure that the prices set are fair and reasonable, Top Energy groups their customers into different load groups and sets their prices to reflect the share of the assets used during the pricing period.

2.4 Simplicity

Top Energy uses a very simple pricing structure that is easy to understand and administer whilst providing commercial signals that allow consumers to make efficient investment decisions. As a result of keeping things simple, Top Energy has bundled its Transmission and Distribution charges for all but the large industrials.

2.5 Load Management

The pricing methodology employed by Top Energy provides the correct signals to encourage demand side management. Effectively customers see the benefits from avoided Transmissions costs in their tariffs.

2.6 Legislative Compliance

Electricity Lines businesses are controlled by the requirements set out by the Commerce Commission under the Commerce Act (Electricity Distribution Threshold) Notice 2004. The regime is based around CPI-X formula in which CPI is the Consumer Price Index and the X value is determined by the Commission. The current value of X for Top Energy is 0%.

For this reason, although pricing is designed to reflect the cost of supply, an adjustment has to be made to the final pricing to ensure that Top Energy complies with the price threshold.

3.0 Revenue Requirement

The first step in developing pricing methodology is to establish the annual costs and revenue requirements.

Component	Revenue Requirement 2007-2008
Transmission	$6,161,000
Maintenance, Overheads & Tax	$9,696,000
Replacement Capital Expenditure	$6,545,000
Cost of Capital	$1,413,000
Annual Revenue requirement	**$ 23,815,000**

4.0 How We Price

Top Energy's approach to pricing is that all customers who are connected to the network should pay their fair share. The tariffs are structured so that those who use the network during peak times should pay a premium and those that don't are able to enjoy a lesser rate. Top Energy does not segregate its domestic and small business customers to avoid complication. Furthermore Top Energy has adopted a policy of maintaining uniform geographic pricing for all its customers except for large industrial customers.

4.1 Domestic and Commercial Customers

Historical groupings of customers have been retained to provide customers with a degree of stability. Top Energy's pricing structure for the domestic market has a fixed and variable component.

The fixed charge is set at 15 cents per day for ALL domestic customers to comply with the government's requirement. This fixed charge basically contributes a portion of the revenue required and is not sufficient to reflect the cost of supply. Fixed charges for commercial customers have been set to maintain historical linkages and to reflect the proportion of asset used.

The variable component of the revenue required is generally based on their pro rata contribution towards the total demand.

A description of the different tariff categories and valid combinations of tariffs is provided in Appendix 1.

4.2 Large Industrial Customers

Top Energy has a fixed annual tariff for its large industrial customers. The tariff for large industrial customers comprises off:

- Transpowers Connection charges
- Transpowers Interconnection Charges
- Avoided transmission charges payable to embedded generators
- Top Energy's connection and interconnection charges for its sub-transmission assets
- Top Energy's operations and maintenance charges

To meet customers requirements the charges are wholly fixed and are divided into twelve equal payments. There are no variable charges allocated to large industrial customers.

4.3 Transmission Charges

Top Energy is connected to Transpower's grid exit points at Kaikohe and Kaitaia.

In accordance with the regulatory regime and its own pricing principles, Top Energy passes through all the Transmission charges without any mark-up. The transmission charge is equitably distributed across all customers connected to Top Energy's network.

For large industrial customers, Transpowers interconnection charge is allocated based on the customer's exact contribution to the interconnection charge. As all these customers have ToU metering, Top Energy is able to determine this contribution by using the twelve highest peaks that are coincident with Transpower's. Customers are aware of Top Energy's demand curve and as such are able to schedule consumption accordingly.

For the remaining customers on Top Energy's network, Transmission charges are allocated based on demand and to maintain historical relativities and avoid price volatility.

5.0 Allocation Method

Sections 4.1-4.3 above describe the revenue allocation methodology used by Top Energy. In summary revenue is allocated based on the demand for each group. A true allocation of costs to each consumer grouping based on reflecting the true cost of supply would result in significant increases that would distort historical pricing and introduce pricing volatilities.

6.0 Embedded Generators

Where any embedded generator is connected to Top Energy Network as an alternative to Transmission, Top Energy will pass through the benefits of any avoided Transmission charges resulting from such an investment. The basis of any payment will depend on the generator's ability to influence Top Energy's peak charges payable to Transpower.

7.0 Loss Factor

Losses can be defined as the difference between the sum of electricity entering the network less what is delivered to the end consumers. In the absence of specific loss calculations for each customer on the network, Top Energy has calculated a General Low Voltage loss factor that is applicable during the pricing period to reconcile loses. Top Energy's loss factors are provided in Appendix 2.

Appendix 1 – Available Tariffs 2007-2008

DISCLOSURE OF ELECTRIC LINE CHARGES
Effective from1 April 2007
All prices are GST exclusive

								Previous Rate				
Tariff	**Description**	**Number of Customers**	**Date Effective**	**Fixed, $/Day**	**Variable, cents/kWh**			**Fixed, $/Day**	**Variable, cents/kWh**			
			1 April 2007	**UCF**	**UCV**			**UCF**	**UCV**			
UC Uncontrolled Load	Excluding Planned and Unplanned Outages. Energy supply is expected to occur 24 hrs each day without restriction. The total charges for this plan include a fixed rate for each day of connection (UCF) and a variable rate for each kWh of energy consumed (UCV).	**6866**		**0.15**	**10.0**			0.15	10.0			
			1 April 2007	**UCFCF**	**UCV**	**FCV**		**UCFCF**	**UCV**	**FCV**		
UCFC Uncontrolled Load plus Fully Controllable Load	This plan is for a two meter configuration. Excluding Planned and Unplanned Outages. Energy supply for the load connected to the first meter is expected to occur 24 hrs each day without restriction (UCV) . All load connected to the second meter is a fully controllable load (FCV)[1]. The total charges for this plan include a fixed rate for each day of connection (UCFCF), a variable rate for each kWh of energy consumed through the first meter (UCV) and a variable rate for each kWh of energy consumed through the second meter (FCV).	**408**		**0.15**	**10.0**	**3.6**		0.15	10.0	3.6		
			1 April 2007	**UCPCF**	**UCV**	**PCV**		**UCPCF**	**UCV**	**PCV**		
UCPC Uncontrolled Load plus Partially Controllable Load	This plan is for a two meter configuration. Excluding Planned and Unplanned Outages. Energy supply for the load connected to the first meter is expected to occur 24 hrs each day without restriction (UCV). Energy supply for the load connected to the second meter is expected to occur 24 hrs each day without restriction, excluding the controllable load offered to Top Energy (PCV)[2] .The total charges for this plan include a fixed rate for each day of connection (UCPCF), a variable rate for each kWh of energy consumed through the first meter (UCV) and a variable rate for each kWh of energy consumed through the second meter (PCV).			**0.15**	**10.0**	**7.0**		-	-	-		
			1 April 2007	**UCPCFCF**	**UCV**	**PCV**	**FCV**	**UCPCFCF**	**UCV**	**PCV**	**FCV**	
UCPCFC Uncontrolled Load, Partially Controllable Load plus Fully Controllable Load	This plan is for a three meter configuration. Excluding Planned and Unplanned Outages. Energy supply for the load connected to the first meter is expected to occur 24 hrs each day without restriction (UCV). Energy supply for the load connected to the second meter is expected to occur 24 hrs each day without restriction, excluding the controllable load offered to Top Energy (PCV)[2]. All load connected to the third meter is a fully controllable load (FCV)[1].The total charges for this plan include a fixed rate for each day of connection (UCPCFCF), a variable rate for each kWh of energy consumed through the first meter (UCV), a variable rate for each kWh of energy consumed through the second meter (PCV) and and a variable rate for each kWh of energy consumed through the third meter (FCV).			**0.15**	**10.0**	**7.0**	**3.6**	-	-	-	-	
			1 April 2007	**PCF**	**PCV**			**PCF**	**PCV**			
PC Partially Controllable Load	Excluding Planned and Unplanned Outages. Energy supply is expected to occur 24 hrs each day without restriction, excluding the controllable load offered to Top Energy[2]. The total charges for this plan include a fixed rate for each day of connection (PCF) and a variable rate for each kWh of energy consumed (PCV).	**19675**		**0.15**	**7.0**			0.15	7.2			

			1 April 2007	PCFCF	PCV	FCV		PCFCF	PCV	FCV	
PCFC Partially Controllable Load plus Fully Controllable Load	This plan is for a two meter configuration. Excluding Planned and Unplanned Outages. Energy supply for the load connected to the first meter (PC) is expected to occur 24 hrs each day without restriction, excluding the controllable load offered to Top Energy[2]. All load connected to the second meter is a fully controllable load (FCV)[1] The total charges for this plan include a fixed rate for each day of connection (PCFCF), a variable rate for each kWh of energy consumed through the first meter (PCV) and a variable rate for each kWh of energy consumed through the second meter (FCV).	**787**		**0.15**	**7.0**	**3.6**		0.15	7.0	3.6	
			1 April 2007	**DAYF**	**DAYV**	**NGTV**		**DAYF**	**DAYV**	**NGTV**	
DAYNGT Day/Night	The plan for customers who consume a large proportion of their total energy at night and wish to take advantage of lower distribution and energy demands during this time. The day rate (DAYV) applies from 7 a.m to 11 p.m the same day, then switches to the night rate (NGTV) from 11 p.m to 7 a.m the following morning[3]. The total charges for this plan include a fixed rate for each day of connection (DAYF), a variable rate for each kWh of energy consumed during the day period (DAYV) and a variable rate for each kWh of energy consumed during the night period (NGTV).	**927**		**0.15**	**7.7**	**1.6**		0.15	7.9	1.6	
			1 April 2007	**CAP150F**	**CAP150V**			**CAP150F**	**CAP150V**		
CAP150 Capacity requirement greater than 100 Amperes per phase	The plan for customers who have a large capacity requirement, i.e. greater than 100 Amperes per phase. Excluding Planned and Unplanned Outages. Energy supply is expected to occur 24 hrs each day without restriction, excluding the controllable load offered to Top Energy. Top Energy can control Controllable load for up to 6 hours per day and load iffered must be at least 3kW. The total charges for this plan include a fixed rate for each day of connection (CAP150F) and a variable rate for each kWh of energy consumed (CAP150V).	**120**		**4.50**	**7.3**			5.00	7.4		
			1 April 2007	**CAP150FCF**	**CAP150V**	**FCV**		**CAP150FCF**	**CAP150V**	**FCV**	
CAP150FC CAP150 plus Fully Controllable Load. Capacity requirement greater than 100 Amperes per phase	This plan is for a two meter configuration and for customers who have a large capacity requirement, i.e. greater than 100 Amperes per phase. Excluding Planned and Unplanned Outages. Energy supply for the load connected to the first meter is expected to occur 24 hrs each day without restriction, excluding the controllable load offered to Top Energy. All load connected to the second meter is Fully Controllable Load (FCV)[1]. The total charges for this plan include a fixed rate for each day of connection (CAP150FCF), a variable rate for each kWh of energy consumed through the first meter (CAP150V) and a variable rate for each kWh of energy consumed throught the second meter (FCV).	**2**		**4.50**	**7.3**	**3.6**		5.00	7.4	3.6	
			1 April 2007	**SPECIALF**				**SPECIALF**			
SPECIAL SPECIAL	The plan for all customers with a capacity requirement not greater than 100 Amperes per phase that do not conform to one of the above plans. The total charges for this plan include a fixed rate for each day of connection (SPECIALF) and a combination of relevant variable rates for each kWh of energy consumed (UCV, PCV, FCV, DAYV, NGTV). The same rules regarding minimum controllable load and hours of control apply. **Existing ICPs only - no new ICPs allowed.**	**552**		**0.15**	**As per ICP's metering configuration**			-	-		

			1 April 2007	TOUF	TOUV	TOUF	TOUV
ToU Time of Use	The default tariff for all customers connecting to the Top Energy network with an annual consumption exceeding 200 000 kWh. The meter at these connections records the average half hourly consumption. The total tariff for this plan includes a: tariff for each day of connection (CAP150FCF), a tariff for each kWh of energy consumed (CAP150V) and a tariff for each kWh of energy consumed through the second meter (FCV).	**55**		**14.00**		15.00	
ToU1V	00:00 - 04:00				**0.10**		0.10
ToU2V	04:00 - 08:00				**0.10**		0.10
ToU3V	08:00 - 12:00				**5.20**		5.20
ToU4V	12:00 - 16:00				**6.70**		6.70
ToU5V	16:00 - 20:00				**10.00**		10.00
ToU6V	20:00 - 00:00				**3.20**		3.40
			1 April 2007	**IND1**		**IND1**	
IND1 Industrial Customer Number 1	Individual fixed annual contracts for Industrial Customer 1. ANZSIC Code = C23, Capacity = 7.22MVA, Voltage = 11kV	**1**		**3,086.94**		3,287.67	
			1 April 2007	**IND2**		**IND2**	
IND2 Industrial Customer Number 2	Individual fixed annual contracts for Industrial Customer 2. ANZSIC Code = A02, Capacity = 1.43MVA, Voltage = 11kV	**1**		**884.36**		1,184.05	
			1 April 2007	**IND3**		**IND3**	
IND3 Industrial Customer Number 3	Individual fixed annual contracts for Industrial Customer 3. ANZSIC Code = B14, Capacity = 0.95MVA, Voltage = 11kV	**1**		**656.96**		660.14	
			1 April 2007	**UMLSH**			
UMLSH Unmetered Light Single Head	Unmetered supply consisting of Pedestrian Crossing, Streetlights, Bollards, Unmetered Lights			**0.28**			
			1 April 2007	**UMLDHF**			
UMLDH Unmetered Light Double Head	Unmetered supply consisting of one Streetlight pole with 2 lamps			**0.56**			
			1 April 2007	**UMLTHF**			
UMLTH Unmetered Light Triple Head	Unmetered supply consisting of one Streetlight pole with 3 lamps			**0.85**			
			1 April 2007	**UMLSHLPMCF**			
UMLSHLPMC Unmetered Light Single Head and Lamp Pole Mounting Charge	Unmetered supply consisting of Pedestrian Crossing, Streetlights, Bollards, Unmetered Lights mounted on a Top Energy pole			**0.35**			
			1 April 2007	**UMLDHLPMCF**			
UMLDHPMC Unmetered Light Double Head and Lamp Pole Mounting Charge	Unmetered supply consisting of Pedestrian Crossing, Streetlights, Bollards, Unmetered Lights mounted on a Top Energy pole			**0.63**			
			1 April 2007	**UMLTHLPMCF**			
UMLTHLPMC Unmetered Light Triple Head and Lamp Pole Mounting Charge	Unmetered supply consisting of one Streetlight pole with 3 lamps			**0.91**			
			1 April 2007	**UMDECLF**			
UMDECL Unmetered Decorative Lights	Unmetered supply consisting of String lighting of Incandescent light bulbs			**0.28**			
			1 April 2007	**UMGLF**			
UMGL Unmetered Group Lighting	Unmetered supply consisting of Community Lighting, Convenience Lighting, Jetty Lights, Under Verandah Lighting			**0.09**			
			1 April 2007	**UMGLLPMCF**			
UMGLLPMC Unmetered Group Lighting and Lamp Post Mounting Charge	Unmetered supply consisting of Community Lighting, Convenience Lighting, Jetty Lights, Under Verandah Lighting mounted on a Top Energy pole			**0.16**			

			1 April 2007	UMCON500F			
UMCON500 Unmetered Continuous, Less Than 500 Watts	Unmetered supply consisting of Battery Chargers, Electric Fences, Infrared, Irrigation, PCM Cabinets, Phone Booths, Radio Repeaters, TV Boosters			0.27			
			1 April 2007	UMINTF			
UMINT Unmetered Intermittent	Unmetered supply consisting of Fire Sirens, Railway Crossing Lights, Traffic Counters			0.15			

1. Top Energy can control the Fully Controllable Load for up to 4 hrs per day and the load offered must be at least 10 kW
2. Top Energy can control the Partially Controllable Load for up to 6 hrs per day and the load offered must be at least 3 kW (e.g. a hot water cylinder).
3. To qualify for this plan customers must offer at least 3 kW of load controllable by Top Energy for up to 6 hrs per day.

Appendix 2 – Loss Factors 2007-2008

Registry Population Code	Description	Loss Factor
GLV	Flat loss factor applies to all except those with IND	1.103
IND1	ICP 0000984000TE210	1.073
IND2	ICP 0000984200TE817	1.043
IND3	ICP 0000984310TEBBE	1.013
IND4	ICP 0000980130TE465	1.013

Appendix 3 – Revenue Allocation 2007-2008

Load Group	Assets @ RC $m	Revenue $000	Transmission Cost	Cost of Capital	Maintenance, Overheads & Tax Cost	Replacement Capital Expenditure
Industrials	$17.3m	$ 1,689	$ 1,071	$ 200	$ 130	$ 250
Time of Use	$12.5m	$ 1,585	$ 391	$ 93	$ 735	$ 484
Others	$157.7m	$ 20,541	$ 4,699	$ 1,120	$ 8,831	$ 5,811
Total	**$187.5m**	**$ 23,815**	**$ 6,161**	**$ 1,413**	**$ 9,696**	**$ 6,545**