Eastland Network Limited

Pricing Methodology Disclosure



Pursuant to:

Requirements 22 and 23 of the Electricity
Information Disclosure Requirements 2004

For Line Charges introduced on 01 April 2012

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1 Introduction

This document sets out Eastland Network Ltd's (Eastland's) pricing methodology for the line charges in effect as at 1 April 2012.

Eastland's pricing methodology has been prepared to comply with requirements 22 and 23 of the Electricity Information Disclosure Requirements 2004. The disclosure requirements require electricity lines businesses to annually disclose:

- The methodology used to calculate the prices charged.
- The key components of the revenue required to cover the costs and profits of the disclosing entity's line business activities, including cost of capital and transmission charges.
- The consumer groups used to calculate prices charged, including:
 - o The rationale for the consumer grouping.
 - o The method of determining which group consumers are in.
 - o For each consumer group the statistics relating to that group.
- The method and rationale by which components of the revenue were allocated to consumer groups, and the numerical values of the different components.
- The method used to determine the proportion of charges which are fixed and the proportion which are variable, and the rationale for determining the proportions in this manner.

2 Pricing Principles

2.1 Regulation

Electricity lines businesses are controlled by the requirements set out by the Commerce Commission in the Electricity Distribution Services Default Price-Quality Path Determination 2010. This means that Eastland must comply with the default price-quality regulatory standards:

- A price path standard, representing the allowed annual change in lines business average prices; and
- A quality standard, comprising a reliability criterion.

The price path standard limits the annual change in average line charges to a maximum of CPI.

For this reason, although Eastland's pricing methodology is designed to reflect the cost of supply, an adjustment to the final tariffs must be made to ensure that Eastland will comply with the regulations and not breach the default price path (DPP).

2.2 Revenue

Line charges should generate sufficient revenue for Eastland to meet the following requirements, while also ensuring that Eastland does not breach the DPP:

- Meet its contractual obligations for connection to the Transpower Grid;
- Meet its contractual obligations for the delivery of energy over its network to endconsumers;
- Comply with statutory requirements on public safety, environmental protection and quality of supply;
- · Provide for new investment;
- Provide a commercially appropriate return on investment.

2.3 Efficiency

Pricing should be economically efficient in the investment signals it creates. This is achieved by matching the price structure to the cost structure as closely as practical.

2.4 Even-handedness

Pricing must be even-handed across different consumer groups. Specifically:

- The charges to various load groups using the network should vary according to their relative use of different assets;
- Where consumer groups receive different levels of service, services above average should be charged specifically to the groups demanding the higher levels of service;
- Where new investment is required those consumers who obtain benefit should be required to contribute towards the cost.

Pricing must also be even-handed in its treatment of retailers and provide for equal access as a matter of statutory requirement.

2.5 Simplicity

Pricing must be kept as simple and as administratively efficient as practical. Specifically;

- Transmission charges should be separated from distribution charges.
- Eastland should endeavour to ensure distribution costs are relatively stable over time.

2.6 Load management

The pricing methodology should provide signals to encourage demand-side participation in load management.

3 Derivation of Revenue Requirement

The first step in developing network prices is to determine network costs and the targeted revenue requirement with respect to the Price Path Threshold and the maximum permitted increases of prior year prices. The network cost structure for Eastland for the 2012/13 period is summarised in the following table and is comprised of two main components; distribution costs and transmission costs.

Eastland classes Electricity Commission levies, Commerce Act levies and local body rates as distribution costs and passes them through in full to consumers.

Distribution Costs	Distribution Revenue Requirement 2012/13
Network Operations and Maintenance	4,656,782
Indirect Costs	3,186,100
Pass Through Costs (Non-Transmission)	248,303
Network Depreciation	4,280,985
Taxation	659,252
Target Return on Investment	8,229,973
Total	21,261,395

Transmission Costs	Transmission Revenue Requirement 2012/13
Transpower	7,884,768
Avoided Transmission	2,830,916
Loss Rental Rebates	-55,000
Total	10,660,684

Table 1 - Revenue Requirement by component

3.1 Distribution revenue requirement

The distribution revenue requirement is made up of the following components:

- Network Operation and Maintenance Costs
- Indirect Costs
- Pass Through Costs (Non-Transmission)
- Network Deprecation
- Taxation
- Target Return on Investment.

3.1.1 Network operation and maintenance costs, indirect costs, pass through costs (non- transmission), network depreciation and taxation

The revenue requirement components including, network operation and maintenance, indirect, pass through (non transmission), network depreciation and taxation are based on budgeted costs for the 2012/13 period.

3.1.2 Return on investment

Return on investment revenue provides a return on investment to network owners and is determined as a product of asset value and the weighted average cost of capital. The target return on investment is determined using a weighted average cost of capital of 8.75%, however, the price path threshold creates a cap on this return and the actual return on investment may ultimately be less than this for the 2013 financial year.

3.2 Transmission revenue requirement

Power supply on the East Coast is capacity constrained primarily by the Transpower owned connection assets i.e. the spur assets dedicated to the regions use. Traditional solutions to upgrading capacity and security standards do not represent the least cost solution. The cost of Transpower provided solutions have been determined via the New Investment Agreement Methodology that Transpower applies to such upgrades.

Eastland has determined that better load management, optimising the configuration of its sub-transmission system and the introduction of distributed generation present a lower risk and more economic solution. Consequently transmission recovery is intended to recognise the transmission benefit and avoidance of Transpower charges in order to fund these alternatives whether provided by Eastland or another party.

The transmission revenue requirement is made up of the following components:

- Transpower Charges
- Avoided Transmission Charges
- Loss Rental Rebates.

3.2.1 Transpower

Transpower charges are comprised of two charges, connection charges and interconnection charges. Connection charges are a fixed annual amount and interconnection charges are a fixed rate per unit of regional co-incident peak demand.

3.2.2 Avoided 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 deprival basis with value calculated per Transpower's transmission pricing methodology. The connection of generators to the Eastland network, and the charge/rebates applicable are subject to Eastland review on a case-by case basis.

Investment that increases capacity will be recognised via calculation of the connection charge, assuming Transpower upgrade. The benefit to consumers over the Transpower solution is that capacity can be delivered on a more capital-efficient basis. Investment that has the potential to reduce the regional co-incident peak demand at a GXP will be

recognised via pass through of reductions in Tanspower's interconnection charge. Avoided transmission charges are based on the assessed impact of these alternatives will have on GXP load profiles both in terms of demand and kWhs.

The maximum potential for reduction in Transpower charges is dependent on operating assets in co-ordination with Eastland's load management and any other party's capability. The level of risk sharing between providers will be subject to contracted terms between parties.

It should be noted that the investor can equally be Eastland, any retailer, any generator or independent party. However, the capacity requirement is capped at the Eastland determined targets. Where there is a choice of alternative investments, preference will be given to the least cost solution to Eastland on offer at the time of commitment. As with Transpower new investment agreements, the commitment will be locked in for an agreed period and not subject to optimisation.

Based on the regulations set out in the Electricity Distribution Services Default Price-Quality Path Determination 2010, a distribution company can pass through the costs of avoided transmission to its consumers and/or electricity retailers via line charges. Eastland calculates the cost of avoided transmission as the sum of the following factors:

- Cost of Capital
- Depreciation Cost
- Direct Operating Costs
- Maintenance Costs
- Indirect Costs

3.2.3 Loss rental rebates

Transpower loss rental rebates are excluded from the revenue requirement as these rebates are passed on transparently via a separate rebate mechanism, to Eastland's consumers and/or electricity retailers. A \$55,000 administration fee is charged in relation to the determination of pass through amount payable to each retailer.

4 Consumer Groups

4.1 End-consumer grouping

From 31 March 2010 Eastland changed consumer group classification from a high, medium, low density to a more simple high, low density classification. Consumers which previously belonged to the medium density classification have been migrated to either the high or low density groups dependent on their location on the Eastland network.

Areas of the network which exhibit high consumer density have been identified in Eastland's geographic information system (GIS) and the remainder of the network has been deemed low density. Separating the network and consumers into these new classifications allows Eastland to better examine the costs associated with supplying consumers in these two distinct areas and reflect the higher level of service offered to high density consumers. The high-low density segmentation exercise involved isolating areas of the network in Eastland's GIS and extracting the corresponding network asset and consumer usage data.

Consumers within each density classification are classed as either domestic or non-domestic consumers. Domestic consumers are grouped together because they share a similar network usage profile. Domestic consumer's peak usage occurs between the hours of 7:30am and 9:30am in the morning and 5:30pm and 9:00pm in the evening which corresponds with network peak demand. In contrast non-domestic consumers do not typically share a similar peak usage profile due to the diverse nature of their operations and as such are not able to be grouped in a similar manner. Eastland therefore groups non-domestic consumers based on their assessed capacity requirements using their installed fuse rating or transformer capacities where transformers are dedicated to supply of an individual consumer. This approach recognises that as consumer capacity requirement increase the value of assets employed to supply consumers' increases.

An installation only qualifies for domestic tariffs if it satisfies the following:

- It is the consumer's primary and permanent place of residence, i.e. excludes holiday homes, Shearers quarters, garages, pumps, trust owned properties etc.
- Only one installation control point (ICP) on a consumers account can be classed as domestic whether on Eastland Network Ltd or elsewhere.
- The installation is used as a residence and not for business purposes.
- Does not exceed the following current limits:

1 Phase	2 Phase	3 Phase
Up to 62 amps	Up 42 amps per phase	Up to 32 amps per
		phase

 All consumers wishing to change classification to the Domestic definition will be required to make a declaration, and supporting documentation such as appearing on the local electoral roll. On 1 April 2010, Eastland introduced a new non-domestic Time of Use Tariff group. This tariff is available to non-domestic consumers who have an assessed demand of between 201kVA and 300kVA. This tariff was introduced following consumer requests and will give consumers, who are still relatively low energy consumers by non-domestic levels, the ability to manage their loads more effectively and take advantage of a time of use tariff. The feedback from retailers during consultation was positive with regards to introducing a new TOU tariff. The Eastland Cost of Supply model was also updated to reflect the introduction of this tariff.

Accordingly, Eastland employs the following consumer group classifications:

High Density Domestic Low Capacity (0 to 3kVA) Demand (0 to 30kVA) Demand (31 to 100kVA) Demand (101 to 300kVA) TOU - Demand (201-300kVA) (New tariff group) TOU - Demand (301-500kVA) TOU - Demand (501-1000kVA) TOU - Demand (1001-4500kVA) TOU - Demand (4501-6500kVA) **Low Density** Domestic Low Capacity (0 to 3kVA) Demand (0 to 30kVA) Demand (101 to 300kVA) TOU - Demand (201-300kVA) (New tariff group) TOU - Demand (301-500kVA) TOU - Demand (501-1000kVA) TOU - Demand (1001-4500kVA) TOU - Demand (4501-6500kVA)

Table 2 - Consumer Groups

5 Cost Allocation to Consumer Groups

5.1 Transition of cost of supply into consumer group tariffs

In developing the new high-low density classification Eastland completed a cost allocation exercise to determine the revenue requirement by consumer group that would be necessary to meet an efficient cost allocation. The cost allocation methodology set out in this document is based on that work and is included to demonstrate that Eastland have used this methodology to inform the price changes required and demonstrate that a sound methodology underpins Eastland's pricing decisions.

As Eastland are mindful of price shocks to consumers, the intention is to move prices towards those based on the revised cost allocation methodology over a period of 3-5 years. In doing so some load groups will face continual increases over this period while others will experience little or no change. It should be noted that future price movements may also be subject to changes in the regulations under which Eastland operates.

5.2 Allocators

Eastland's cost of supply model (COSM) contains the following input assumptions and statistics for the purpose of cost allocation. Allocators are split into two groups, those that are load independent, and those that are load dependent.

Load Independent

Connections - ICPs

Load Dependent

- Demand Anytime Maximum Demand
- Demand Co-incident Peak Demand
- Consumption kWh
- Asset Replacement Cost

Capacity and security upgrades result in reconfiguration of network feeders. These can result in changes to the criteria used to allocate asset value, load and ICPs. It has therefore been necessary to assume a static model of network configuration in order to create some stability in pricing.

5.3 Allocation of revenue requirement among consumer groups

Following the determination of the allocators, the revenue requirement, comprised of distribution and transmission requirements, is allocated between consumer groups.

5.3.1 Allocation of distribution revenue requirement

The total revenue requirement (as depicted in table 1 section 3) has been allocated to consumer groups using the allocation methodology set out in the paragraphs which follow. A summary of the final allocation is shown in Appendix 1 and the statistics used are shown in Appendix 2.

General management, overheads and administration, depreciation on non-system fixed assets and non transmission pass through costs including Electricity Commission levies and Commerce Act levies have been allocated to consumer groups using each group's share of total connections. These costs do not vary with consumer asset usage and have been allocated on a fixed basis accordingly.

Target return on investment, deprecation, operations and maintenance, taxation and local body rates costs have been allocated to consumer groups based on each group's use of network assets measured in terms of asset value employed and split by demand share. For each density class Eastland has extracted network asset data from the GIS and the associated values of these assets from the asset register. Where assets are shared by high and low density consumers, consumer group demand has been used to apportion the asset values between the two density classes. Following the determination of the asset values for high and low density consumers the asset values are broken down further into the individual consumer groups using each group's share of total assessed demand for the corresponding density class.

Eastland have employed a network use cost allocation method for load dependent costs. This is consistent with the assumption that investment in network assets is driven by use. In general, peak demand drives the need for network augmentation and is created predominantly by domestic consumers. However in Eastland's case there has been little growth in peak demand so an equal split of peak (co-incident) and anytime maximum demand has been used in assessing consumer group demand. This also ensures that non-domestic consumers contribute to network costs as the majority of planned future investment relates to asset renewal and improved reliability, as opposed to network augmentation, through which all consumers benefit not just those consuming during peak periods.

5.3.2 Allocation of transmission revenue requirement

Eastland have allocated transmission costs to consumer groups using a close approximation to the methodology set out in Transpower's transmission pricing methodology. That is connection costs, where connection points are shared by more than one Transpower customer, are allocated based on each consumers share of anytime maximum demand at that connection point. In Eastland's case connection charges are allocated to consumer group's based on their share of total anytime maximum demand. Interconnection charges are allocated to consumers based on their share of total coincident peak demand on Eastland's network.

Avoided transmission charges are allocated on the same basis as Transpower transmission charges.

6 Price Structure

Eastland uses ICP billing for charging end consumers. However Eastland does not charge all consumers their true cost of supply due to a number of factors including:

- Low user regulations which restrict the level of domestic fixed charges;
- The complexity, and potential arbitrary results in determining individual costs of supply;
- The desire to make the tariff schedule administratively simple;
- The desire to manage rate shock;
- There must be a smooth price transition between non-domestic consumer groups;
- · Recognition of high levels of reliability in high density areas

The implication is that for some consumer groups the target return on investment component of the revenue requirement is not fully recovered.

6.1 Domestic charges

The low user fixed charge regulations cap fixed charges to domestic consumers at 15 cents+GST per day. Eastland have set domestic fixed charges at 15 cents+GST per day which is less than that determined by the cost allocation described earlier. As such the remainder of the fixed cost allocated to domestic consumers is recovered through variable charges.

All domestic consumers receive the benefit of the 15 cents+GST per day government policy intended to reward low consumption behaviour. As this is the only domestic fixed charge and is not optional, compliance with the 8,000 kWh per annum break-even requirement is automatic.

Three variable rates are offered to domestic consumers which reflect the metering options available on the Eastland network. These are uncontrolled, controlled and night rates and are priced at progressively lower rates to encourage consumption/the shift of consumption to periods outside of peak demand.

Electricity delivered to consumers via controlled metering allows Eastland to switch off load via ripple control to appliances connected to the controlled meter during periods of peak electricity demand. The price reduction is achieved through the reduction in peak period demand which drives transmission interconnection charges.

The Night Rate Tariff, which excludes street lighting, is a time controlled night rate which has been introduced to encourage the connection of larger more efficient fixed wire storage capacity appliances. This tariff is applicable for those devices only and to the time period, half hour ending, 23:30 to 07:00. This tariff has seen no real growth in terms of connections or consumption and therefore this tariff has been closed to all new connections and no existing connections will be permitted to connect to it. Eventually, this tariff will be phased out entirely.

Transmission costs which have been allocated to domestic consumers are recovered predominantly through variable charges with a small portion recovered through fixed daily charges. Transmission charges have been structured in the same manner as distribution charges.

6.2 Non-domestic charges

In contrast to domestic charges there are no additional regulatory constraints that apply to the determination of non-domestic charges. It is however vital to set prices in such a manner that price stability and certainty is achieved. Non-domestic consumers have often made long term investment decisions based on cost inputs (including electricity) and this must be factored into price determination. Eastland are therefore limited in the rate shock that can be imposed on non-domestic consumers and as such are bound by legacy pricing in this regard. In order to move toward more cost reflective pricing a transition period as discussed in section 5.1 has been used. The cost of supply allocation previously examined has provided the direction in which non-domestic charges should move.

In addition, a smooth price transition between consumer groups as capacity requirements increase is required. This is to ensure that artificial incentives are not created for consumers to move from one capacity group to another to take advantage of lower prices available to consumer groups with different capacity requirements. This distorts a true cost of supply allocation but eliminates the price instability which flows from a cost of supply allocation where consumers move from one consumer group to another from year to year to exploit prices which relate to different capacity requirements.

Currently there is no location differential in the fixed charges to high and low density non-domestic consumers. However the cost allocation methodology used shows that the total value of assets used to supply low density consumers is significantly greater than that used to supply high density consumers. To reflect this finding an increase in the fixed charges to low density non-domestic consumers will be phased in over the transition period.

Variable charges to non-domestic consumers reflect the time of use pricing signals mentioned previously for domestic consumers. The process has been through a number of iterative cycles to smooth the transition from non time of use to time of use options.

As discussed in 4.1 above, a new Time of Use (TOU) tariff has been introduced. To qualify for TOU charges consumers are required to have a capacity requirement greater than or equal to 200kVA and TOU metering. These connections tend to have high load factors and have less opportunity to vary load during production hours. As such TOU consumers prefer a higher level of fixed charging which consequently results in reduced peak demand signalling. This reduces the sensitivity of total charges to variation in consumption, which is predominantly outside of peak times, and reflects the decision to recover the majority of non-domestic costs through fixed charges. Some peak signalling is retained in the variable charges to encourage demand side management. It follows that, non-domestic consumer group variable prices decrease as the capacity of the consumer group increases.

7 Losses

The allocation of losses is not a contracted line function service and Eastland does not charge specific recoveries for losses.

However in the absence of agreed individual estimated loss calculations the following defaults can be applied to reconcile the difference between ICP and GXP meter readings. These are applicable to all time periods, at all GXPs and network locations. Loss factors applicable to Eastland

- 400V connected supplies1.0705
- 11kV connected supplies 1.0475

8 Uneconomic Bypass

Eastland do not consider there is any risk of uneconomic by pass.

Appendix 1 - Consumer Group Cost Allocation

Demand (2012-300k/A) 35,289 1,658,474 82,314 20,457 1,223,576 -15,682 7,86,114 1,578,816 Demand (2012-300k/A) 200,239 21,648 8,304 61,668 3,044,77 1,447,384 95,818 1,578,818 1,578,818 1,578,918 <th>Tariff Group</th> <th>dn</th> <th>Network Operations and Maintenance</th> <th>Indirect Costs</th> <th>Pass Through Costs (Non- Transmission)</th> <th>Network Depreciation</th> <th>Taxation</th> <th>Transpower</th> <th>Avoided Transmission</th> <th>Loss Rental Rebates</th> <th>Direct Cost Recovery</th> <th>Effective Return on Investment</th> <th>Rounding Adjustment</th> <th>Total Revenue</th>	Tariff Group	dn	Network Operations and Maintenance	Indirect Costs	Pass Through Costs (Non- Transmission)	Network Depreciation	Taxation	Transpower	Avoided Transmission	Loss Rental Rebates	Direct Cost Recovery	Effective Return on Investment	Rounding Adjustment	Total Revenue
Low Capacity (to 3k/k) 3,315 11,444 469 3,047 669 3,607 10,668 3,607 10,668 3,607 10,908 20,0239 21,348 13,492 11,444 469 13,042 12,847 6,61779 11,556 4,227 1,064,498 31,010 Dermand (101 to 300k/k) 161,305 6,842 2,115 5,5310 6,517 321,535 1,064,498 31,101 Dermand (101 to 300k/k) 60,165 6,842 2,115 5,5310 6,517 321,535 1,064,498 31,101 TOU - Dermand (201 to 300k/k) 28,422 2,563 2,414 4,027 1,256 6,514 7,718 TOU - Dermand (301 to 100k/k) 38,941 1,22 36,412 1,557 1,566 6,514 7,718 TOU - Dermand (301 to 100k/k) 7,549 2,414 1,415,364 2,414 1,415,364 2,518 4,706 1,446 TOU - Dermand (301 to 100k/k) 1,560,595 1,415,364 1,415,364 2,518 2,528,66 2,518 4		Domestic	895,289	1,698,474	82,317	823,040	126,744	3,014,577	1,232,576	-16,882	7,856,134	1,578,816		9,434,949
Demand (10 to 300kA) 212,838 13,092 186,739 28,347 622/79 185,543 4,523 1,447,394 35,951 Demand (10 to 300kA) 16,136 21,581 6,1345 13,136 21,391 1,61,366 24,37 1,61,498 31,108 Demand (13 to 100kAA) 60,165 6,842 2,115 6,146 1,61,60 0		Low Capacity (0 to 3kVA)	3,315	11,444	469	3,047	469	10,668	3,607	-100	32,919	20,550		53,470
Demand (131 to 100k/k) 161,305 32,591 6,124 148,287 22,836 519,136 175,506 -4,287 1,061,498 31,108 Demand (201-300k/k) 6,165 6,642 2,115 5,116 8,517 31,535 108,702 2,344 560,843 31,01 TOU - Demand (201-300k/k) 2,8442 2,363 972 2,6147 4,027 152,002 51,388 -1,666 263,676 43,70 TOU - Demand (201-300k/k) 2,8442 2,363 972 2,6446 6,644 7,024 10,688 403,349 136,406 6,647 7,024 10,048 43,77 10,044 7,049 10,688 403,332 126,461 6,643 43,77 10,044 10,044 7,049 10,048 40,372 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,703 15,146 15,703 15,703 15,703		Demand (0 to 30kVA)	200,239	212,838	13,092	184,079	28,347	627,779	185,543	-4,523	1,447,394	959,813		2,407,207
Demand (101 to 300k/k) 66,165 6,842 2,115 55,310 8,517 321,535 108,702 -2,344 560,643 31,01 TOU- Demand (201-500k/k) 2,66		Demand (31 to 100kVA)	161,305	32,591	6,124	148,287	22,836	519,136	175,506	-4,287	1,061,498	311,082	***************************************	1,372,580
TOU - Demand (201-300kVA) 28,442 2,535 972 26,147 4,027 155,002 51,388 -1,666 26,5676 43,700 TOU - Demand (301-300kVA) 28,442 2,363 972 26,147 4,027 155,002 51,388 -1,666 26,3676 43,700 TOU - Demand (301-300kVA) 75,493 2,456 69,406 10,688 10,791 7,658 -761 264,295 -157,09 TOU - Demand (301-300kVA) 76,416 1,232 35,798 5,513 175,791 7,658 -761 264,295 -157,09 TOU - Demand (1001-4500kVA) 1,690,449 1,241,305 1,041,305 1,241,305 2,446 687,100 -144,61 TOU - Demand (100 - 200kVA) 1,600,449 1,655,291 2,548,305 1,360,590 1,302,942 2,120,34 Demand (10 to 30kVA) 560,449 424,805 32,746 56,435 1,461,22 -3,506 2,232,982 3,161,24 Demand (10 to 30kVA) 46,436 1,655,291 1,562,291 1,362 1,461	1	Demand (101 to 300kVA)	60,165	6,842	2,115	55,310	8,517	321,535	108,702	-2,344	560,843	31,012		591,854
TOU - Demend (301-500k/A) 28,442 2,363 972 26,147 4,027 152,002 51,388 -1,666 26,3676 43,708 TOU - Demend (301-500k/A) 75,499 2,363 10,688 403,480 15,519 -5,184 655,114 77,08 TOU - Demend (501-15000k/A) 76,416 124 2,414 70,249 10,818 403,379 1,56,406 -5,184 657,161 77,03 TOU - Demend (501-15000k/A) 76,416 124 2,414 70,249 10,818 403,279 1,56,50 -4,41 66,116 1,44,52 1,44,52 10,818 403,279 1,56,50 -4,41 70,44 70,	Density	TOU - Demand (201-300kVA)	0	0	0	0	0	0	0	0	0	0		0
TOU - Demand (1001-4500kVA) 75,499 2,363 2,456 69,406 10,688 403,480 136,406 -5,184 695,114 77,00 TOU - Demand (1001-4500kVA) 38,494 12,4 70,249 1,57,91 7,658 -761 264,167 157,09 TOU - Demand (1001-4500kVA) 7,84,94 1,24 70,249 1,0,618 403,332 2,029,634 -461,207 1,270,93 2,170,34 TOL Demand (4501-6500kVA) 1,800,597 7,68,008 81,236 1,415,364 217,960 5,628,288 2,029,634 -40,207 1,2,609 2,720,34 Domestic 1,800,597 768,008 81,236 1,555,291 1,306,590 5,638,288 2,029,634 -40,207 1,44,502 3,182,108 1,711 1,306,590 5,532,289 2,720,38 2,720,38 2,720,38 2,720,38 2,720,38 2,720,38 2,720,38 2,720,38 2,720,38 3,181,28 3,181,28 3,181,28 3,181,28 3,181,28 3,181,28 3,181,28 3,181,28 3,181,28 3,181,28		TOU - Demand (301-500kVA)	28,442	2,363	972	26,147	4,027	152,002	51,388	-1,666	263,676	43,707		307,383
TOUL Demand (1001-4500kVA) 38,941 124 1,232 35,738 5,513 175,791 7,658 -761 264,295 -157,09 TOUL Demand (4501-6500kVA) 38,941 124 2,414 10,249 10,818 403,322 128,269 -4,461 687,160 -144,62 TOUL Demand (4501-6500kVA) 1,539,609 1,967,165 1,415,364 217,966 2,528,298 2,029,654 -40,207 1,286,033 2,720,44 Domesticy (10 2 3kVA) 1,800,597 769 8,835 1,361 6,437 1,410 1,710 1,361 6,373 1,510 2,720,44 3,161,74 Domesticy (10 2 3kVA) 9,611 14,305 759 8,835 1,361 6,446 6,393,047 3,161,74 Demand (10 to 30kVA) 164,323 32,746 560,268 86,279 40,81,76 2,323,982 3,161,74 Demand (10 to 30kVA) 48,476 1,568 1,572 44,568 7,886 44,986 1,532 1,513 1,4,29 TOU - Demand (301-500kVA) <td></td> <td>TOU - Demand (501-1000kVA)</td> <td>75,499</td> <td>2,363</td> <td>2,456</td> <td>69,406</td> <td>10,688</td> <td>403,480</td> <td>136,406</td> <td>-5,184</td> <td>695,114</td> <td>77,089</td> <td></td> <td>772,203</td>		TOU - Demand (501-1000kVA)	75,499	2,363	2,456	69,406	10,688	403,480	136,406	-5,184	695,114	77,089		772,203
TOUL Demand (4501-5500kVA) 76,416 124 2,414 70,249 10,818 403,332 128,269 -4,461 687,160 -14,65 Total High Density 1,539,609 1,567,165 111,191 1,415,364 217,960 5,628,298 2,029,654 -40,207 12,869,033 2,720,34 Domestic 1,800,597 768,008 81,236 1,552,91 1,361,59 554,228 -7,809 6,333,047 3,182,084 2,720,34 Low Capacity (1 to 30kVA) 66,9449 42,4805 32,746 56,0268 8,637 1,415,752 2,523 3,547 3,181,22 3,141,23 3,151,22 3,151,22 3,151,22 3,151,22 3,151,22 3,151,22 3,151,22 3,151,22 3,151,22 4,451,28 3,151,22 3,15		TOU - Demand (1001-4500kVA)	38,941	124	1,232	35,798	5,513	175,791	7,658	-761	264,295	-157,096		107,199
Total High Density 1,539,609 1,967,165 111,191 1,415,364 217,960 5,628,298 2,029,654 -40,207 12,869,033 2,720,34 Domestic 1,800,597 768,008 81,236 1,655,291 254,907 1,306,590 534,228 -7,809 6,393,047 3,182,08 Low Capacity (0 to 3k/A) 9,611 14,305 758,008 88,835 1,361,38 2,306 2,222,982 3,161,30 Demand (0 to 3k/A) 609,449 424,805 32,746 560,268 86,279 408,190 114,752 -5,566 2,222,982 3,161,4 Demand (3 to 100k/A) 48,476 1,560,28 86,279 408,190 114,752 -5,366 2,222,982 3,161,4 TOU- Demand (3 to 100k/A) 48,476 1,585 7,986 44,986 12,647 -2,26 17,738 -14,29 TOU- Demand (301-500k/A) 44,328 1,12 51,859 7,886 44,986 12,647 1,138,73 -114,29 TOU- Demand (1001-4500k/A) 383,977 1,218,936		TOU - Demand (4501-6500kVA)	76,416	124	2,414	70,249	10,818	403,332	128,269	-4,461	687,160	-144,623		542,537
Domestic 1,800,597 768,008 81,236 1,555,291 1,306,590 534,228 -7,809 6,393,047 3,182,08 Low Capacity (0 to 30k/A) 9,611 14,305 759 8,835 1,361 6,437 1,810 -51 42,067 17,11 Low Capacity (0 to 30k/A) 609,449 424,805 32,746 560,268 86,279 408,190 11,810 -3,506 2,232,982 3,161,24 Demand (0 to 30k/A) 164,323 9,827 5,495 151,062 23,263 110,058 30,940 -836 494,132 70,97 Demand (3 to 100k/A) 48,476 1,368 1,572 44,564 6,863 38,657 10,868 -32,232,982 3,161,24 Demand (31 to 100k/A) 48,476 1,368 1,572 44,564 6,863 38,657 10,868 -32,76 1,232,982 3,161,24 TOU - Demand (301-500k/A) 44,328 1,41 1,41 1,41 1,41,292 1,44,986 1,44,986 1,14 1,133,032 1,136,03		Total High Density	1,539,609	1,967,165	111,191	1,415,364	217,960	5,628,298	2,029,654	-40,207	12,869,033	2,720,349	0	15,5
Low Capacity (0 to 30k/A) 9,611 14,305 8,835 1,361 6,437 1,810 -51 42,067 17,112 Demand (0 to 30k/A) 609,449 424,805 32,746 560,268 86,279 408,190 114,752 -3,506 2,232,982 3,161,24 Demand (3 to 100k/A) 164,323 9,827 5,495 151,062 23,263 110,058 30,940 -836 494,132 70,97 Demand (31 to 100k/A) 164,323 9,827 5,495 1,51062 23,263 110,058 30,940 -836 494,132 70,97 Demand (31 to 100k/A) 48,476 1,368 1,572 44,564 6,863 38,657 10,868 -23 15,136 -14,29 TOU - Demand (301-500k/A) 56,412 1,24 5,866 44,986 12,647 -23 11,572 -83,34 TOU - Demand (301-500k/A) 383,977 12,11 352,990 13,11 2,865,621 441,292 306,203 80,204 -1,969 1,193,877 -1,193 <td< td=""><td></td><td>Domestic</td><td>1,800,597</td><td>768,008</td><td>81,236</td><td>1,655,291</td><td>254,907</td><td>1,306,590</td><td>534,228</td><td>-7,809</td><td>6,393,047</td><td>3,182,088</td><td></td><td>9,575,136</td></td<>		Domestic	1,800,597	768,008	81,236	1,655,291	254,907	1,306,590	534,228	-7,809	6,393,047	3,182,088		9,575,136
Dermand (0 to 30k/A) 669,449 424,865 32,746 560,268 86,279 408,190 114,752 -3,506 2,232,982 3,161,24 Demand (31 to 100k/A) 164,323 9,827 5,495 151,062 23,263 110,058 30,940 -836 494,132 70,97 Demand (31 to 100k/A) 48,476 1,368 1,572 44,564 6,863 38,657 10,868 -232 15,136 70,97 Demand (101 to 300k/A) 48,476 1,368 1,572 44,564 6,863 38,657 10,868 -232 152,136 71,979 TOU - Demand (201-500k/A) 56,412 1,271 51,859 7,986 44,986 12,647 -276 175,78 -83,34 TOU - Demand (301-500k/A) 383,977 12,11 352,390 54,359 306,203 86,081 -1,959 1,193,877 -772,56 TOU - Demand (301-500k/A) 3,117,173 1,218,936 137,112 2,865,621 441,292 2,256,470 801,262 -14,793 10,883,972		Low Capacity (0 to 3kVA)	9,611	14,305	759	8,835	1,361	6,437	1,810	-51	43,067	17,119		60,186
Demand (31 to 100kVA) 164,323 9,827 5,495 151,062 23,263 110,058 30,940 -836 494,132 70,97 Demand (101 to 300kVA) 48,476 1,368 1,572 44,564 6,863 38,657 10,868 -232 152,136 -14,29 TOU - Demand (201-300kVA) 56,412 373 1,791 51,859 7,986 44,986 12,647 -232 157,136 -14,29 TOU - Demand (301-500kVA) 56,412 373 1,791 51,859 7,986 44,986 12,647 -236 115,778 -83,34 TOU - Demand (301-500kVA) 44,328 1,402 40,751 6,275 35,349 9,938 -114 138,053 -96,27 TOU - Demand (501-6500kVA) 383,977 1,218,936 137,112 3,85,5621 441,292 80,264 1,193,877 -772,26 TOU - Demand (4501-6500kVA) 3,117,173 1,218,936 137,112 2,865,621 441,292 2,256,470 801,262 14,793 10,833,073 10,833,073		Demand (0 to 30kVA)	609,449	424,805	32,746	560,268	86,279	408,190	114,752	-3,506	2,232,982	3,161,244		5,394,226
Demand (101 to 300k/A) 48,476 1,368 1,572 44,564 6,863 38,657 10,868 -232 152,136 -14,28 TOU - Demand (201-300k/A) 56,412 373 1,791 51,859 7,986 44,986 12,647 -276 175,778 -83,34 TOU - Demand (301-500k/A) 56,412 373 1,791 51,859 7,986 44,986 12,647 -276 175,778 -83,34 TOU - Demand (301-500k/A) 44,228 12,112 352,990 54,359 306,203 86,081 -1,969 1,193,877 -772,26 TOU - Demand (301-4500k/A) 3,117,173 1,218,936 137,112 2,865,621 441,292 2,256,470 801,262 14,793 10,823,073 5,510,24 Rounding Adjustment 4,656,782 3,186,100 248,303 4,280,985 659,252 7,884,768 2,830,916 -55,000 8,20,505 8,20,505 14,793 10,823,073 8,20,505 12,20,505 12,20,505 12,20,505 12,20,505 12,20,505 12,20,505		Demand (31 to 100kVA)	164,323	9,827	5,495	151,062	23,263	110,058	30,940	-836	494,132	70,979		565,111
TOU - Demand (201-300k/A) 56,412 373 1,791 51,859 7,986 44,986 12,647 -276 175,778 -83,34 TOU - Demand (301-500k/A) 56,412 373 1,791 51,859 7,986 44,986 12,647 -276 175,778 -83,34 TOU - Demand (301-500k/A) 44,328 124 1,402 40,751 6,275 35,349 9,938 -114 138,053 -96,27 TOU - Demand (301-4500k/A) 383,377 124 12,112 352,990 54,359 306,203 86,081 -1,969 1,193,877 -772,26 TOU - Demand (4501-6500k/A) 3,117,173 1,218,936 137,112 2,865,621 441,292 2,256,470 801,262 -14,793 10,823,073 5,510,24 Rounding Adjustment 4,656,782 3,186,100 248,303 4,280,985 659,252 7,884,768 2,830,916 -55,000 23,692,106 8,230,59		Demand (101 to 300kVA)	48,476	1,368	1,572	44,564	6,863	38,657	10,868	-232	152,136	-14,299	***************************************	137,837
TOU - Demand (301-500k/A) 56,412 373 1,791 51,859 7,986 44,986 12,647 -276 175,778 -83,34 TOU - Demand (501-1000k/A) 44,328 124 1,402 40,751 6,275 35,349 9,938 -114 138,053 -96,27 TOU - Demand (501-1000k/A) 383,977 124 12,112 352,990 54,359 306,203 86,081 -1,969 1,193,877 -772,26 TOU - Demand (401-4500k/A) 3,117,173 1,218,936 137,112 2,865,621 441,292 2,256,470 801,262 14,793 10,823,073 5,510,24 Rounding Adjustment 4,656,782 3,186,100 248,303 4,280,985 659,252 7,884,768 2,830,916 23,692,106 8,330,59	Density	TOU - Demand (201-300kVA)	0	0	0	0	0	0	0	0	0	0		0
44,228 124 1,402 40,751 6,275 35,349 9,938 -114 138,053 -96,27 383,977 124 12,112 352,990 54,359 306,203 86,081 -1,969 1,193,877 -727,26 0 0 0 0 0 0 0 0 0 0 3,117,173 1,218,936 137,112 2,865,621 441,292 2,256,470 801,262 -14,793 10,823,073 5,510,24 4,656,782 3,186,100 248,303 4,280,985 659,252 7,884,768 2,830,916 -55,000 23,692,106 8,230,59	Ì	TOU - Demand (301-500kVA)	56,412	373	1,791	51,859	7,986	44,986	12,647	-276	175,778	-83,342	***************************************	92,436
383,977 124 12,112 352,990 54,359 306,203 86,081 -1,969 1,193,877 -727,36 0		TOU - Demand (501-1000kVA)	44,328	124	1,402	40,751	6,275	35,349	9,938	-114	138,053	-96,276		41,777
0 0		TOU - Demand (1001-4500kVA)	383,977	124	12,112	352,990	54,359	306,203	86,081	-1,969	1,193,877	-727,266		466,611
3,117,173 1,218,936 137,112 2,865,621 441,292 2,256,470 801,262 -14,793 10,823,073 4,656,782 3,186,100 248,303 4,280,985 659,252 7,884,768 2,830,916 -55,000 23,692,106		TOU - Demand (4501-6500kVA)	0	0	0	0	0	0	0	0	0	0		0
4,656,782 3,186,100 248,303 4,280,985 659,252 7,884,768 2,830,916 -55,000 23,692,106		Total Low Density	3,117,173	1,218,936	137,112	2,865,621	441,292	2,256,470	801,262	-14,793	10,823,073	5,510,247	0	16,333,320
4,656,782 3,186,100 248,303 4,280,985 659,252 7,884,768 2,830,916 -55,000 23,692,106		Rounding Adjustment												-623
		Total Network	4,656,782	3,186,100	248,303	4,280,985	659,252	7,884,768	2,830,916	-55,000	23,692,106	8,230,596	-623	31,922,079

Appendix 2 - Consumer Group Statistics

Consumer Group		Number of ICPs	
	High Density	Low Density	Total
Domestic	13,654	6,174	19,828
Low Capacity (0 to 3kVA)	92	115	207
Demand (0 to 30kVA)	1,711	3,415	5,126
Demand (31 to 100kVA)	262	79	341
Demand (101 to 300kVA)	55	11	66
TOU - Demand (201-300kVA)	- 1	_	-
TOU - Demand (301-500kVA)	19	3	22
TOU - Demand (501-1000kVA)	19	1	20
TOU - Demand (1001-4500kVA)	1	1	2
TOU - Demand (4501-6500kVA)	1	-	1
Total	15,814	9,799	25,613

Consumer Group	Consumption	Consumption (kWh) for each Consumer Group		
	High Density	Low Density	Total	
Domestic	87,173,222	40,325,230	127,498,452	
Low Capacity (0 to 3kVA)	514,090	262,996	777,086	
Demand (0 to 30kVA)	23,354,897	18,102,158	41,457,055	
Demand (31 to 100kVA)	22,136,372	4,317,970	26,454,342	
Demand (101 to 300kVA)	12,104,628	1,199,114	13,303,742	
TOU - Demand (201-300kVA)	-	- · · · · · · · · · · · · · · · · · · ·	-	
TOU - Demand (301-500kVA)	8,601,774	1,424,339	10,026,113	
TOU - Demand (501-1000kVA)	26,767,495	588,188	27,355,683	
TOU - Demand (1001-4500kVA)	3,927,285	10,164,798	14,092,083	
TOU - Demand (4501-6500kVA)	23,035,444	· -	23,035,444	
Total	207,615,207	76,384,793	284,000,000	

Consumer Group AMD (kW) for each Consum		er Group	
	High Density	Low Density	Total
Domestic	25,794	11,180	36,973
Low Capacity (0 to 3kVA)	116	81	197
Demand (0 to 30kVA)	7,655	5,167	12,822
Demand (31 to 100kVA)	5,622	1,393	7,015
Demand (101 to 300kVA)	3,482	489	3,971
TOU - Demand (201-300kVA)	- 1	-	-
TOU - Demand (301-500kVA)	1,646	569	2,215
TOU - Demand (501-1000kVA)	4,369	447	4,817
TOU - Demand (1001-4500kVA)	3,566	3,876	7,441
TOU - Demand (4501-6500kVA)	4,627	-	4,627
Total	56,876	23,202	80,079

Consumer Group	CPD (k)	CPD (kW) for each Consumer Group		
	High Density	Low Density	Total	
Domestic	25,794	11,180	36,973	
Low Capacity (0 to 3kVA)	75	38	113	
Demand (0 to 30kVA)	3,883	2,401	6,284	
Demand (31 to 100kVA)	3,673	647	4,320	
Demand (101 to 300kVA)	2,275	227	2,502	
TOU - Demand (201-300kVA)	- 1	-	-	
TOU - Demand (301-500kVA)	1,075	265	1,340	
TOU - Demand (501-1000kVA)	2,855	208	3,062	
TOU - Demand (1001-4500kVA)	160	1,801	1,962	
TOU - Demand (4501-6500kVA)	2,684	-	2,684	
Total	42,474	16,768	59,241	

STATUTORY DECLARATION IN RESPECT OF STATEMENTS AND INFORMATION SUPPLIED TO COMMERCE COMMISSION

I, William John Clarke, of Gisborne, being a director of Eastland Network Limited, solemnly and sincerely declare that having made all reasonable enquiry, to the best of my knowledge, the information attached to this declaration is a true copy of information made available to the public by Eastland Network Limited under the Commerce Commission's Electricity Information Disclosure Requirements 2004.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the Oaths and Declarations Act 1957.

	2-	
Declared at this day of 🛂	701H	April 2012.

William John Clarke

JUSTICE OF THE PEACE FOR NEW ZEALAND

4044

SIGNED Jak

Justice of the Peace

Solicitor

Other person authorised to take a statutory declaration

(delete that which is inapplicable)