Pricing Methodology 2012-2013

Pursuant to Part 4, Section 14, Provisions 4 of the Electricity Distribution (Information Disclosure) Requirements 2008
and
Electricity Authority Distribution Pricing Principles and Information Disclosure Guidelines

March 2012

1 INTRODUCTION

This document describes the methodology that Network Waitaki Limited ("NWL") has used in determining its Distribution and Transmission charges from 1 April 2012 until the next review.

1.1 Legislative Compliance

This document has been compiled to comply with Provision 4 in Section 14 of the Part 4 - Transitional Provisions of the Electricity Distribution (Information Disclosure) Requirements 2008 ("2008 IDR"), which carry over Provisions 22 and 23 of the original Electricity Distribution Information Disclosure Requirements issued 31 March 2004 ("Original Requirements").

Provision 4 states:

Requirements 22 and 23 of the Original requirements, which relate to disclosure of pricing methodologies, continue to apply in respect of Distribution businesses after the 2006/2007 financial year as if references in those requirements to a disclosing entity were references to a Distribution business.

Requirements 22 and 23 of the Original Requirements require the disclosure of:

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

In addition, in February 2010 the Electricity Commission published its Distribution Pricing Principles and Information Disclosure Guidelines, which the Electricity Authority has now taken over ("EA Principles and Guidelines"). These being a set of pricing principles that the pricing methodologies of Electricity Distribution Businesses ("EDBs") should follow and a set of guidelines on how EDBs' pricing methodologies should disclose pricing information. The EA Principles and Guidelines are similar to the 2008 IDR requirements and are detailed in Appendix 4 of this document, alongside NWL's compliance with them. Compliance with the EA Principles and Guidelines is voluntary; however, the Commerce Commission's Draft Information Disclosure

Determination[1] has indicated that compliance will be mandatory for reporting on prices that apply from 1 April 2013**.**

NWL considers that this pricing methodology is compliant with all of these regulatory requirements.

There have been no material changes to NWL's pricing methodology from the previous edition; however, sections of this document have been rewritten to comply with the EA Principles and Guidelines.

2 PRICING OBJECTIVES

2.1 Revenue

NWL must obtain sufficient revenue to:

1. meet its contractual obligations for connection to the Transpower grid;
2. meet its contractual obligations for the delivery of energy over the distribution network;
3. comply with statutory requirements on public safety, environmental protection, and quality of supply;
4. provide for new investment; and
5. provide a rate of return on funds that is acceptable to the owners.

To meet the revenue requirement, NWL uses the following principles:

- to provide pricing which is simple to understand and administer and which complies with regulations;
- to maintain the stability of historic pricing regimes in order to lessen price shocks to consumers;
- to provide pricing which will not differentiate between urban and rural consumers;
- to provide pricing which allows the network to be operated safely, reliably, and efficiently; and
- to provide pricing which allows for an adequate level of return to the shareholders.

Discount

NWL has a policy of paying discounts to qualifying consumers at the end of each financial year. Except when noted otherwise all revenues stated in this pricing methodology are before the payment of any discount. NWL's discount to consumers is comprised of a non-discretionary component and a discretionary component. The non-discretionary component is a guaranteed amount that will be discounted to consumers in NWL's various load groups. The amount of the discretionary component is determined by trading conditions during the year.

For both discretionary and non-discretionary discounts, the discount offered on each tariff is an equal proportion of the fixed charge component of each tariff. Domestic Low User regulations require tariffs to be equal for the standard residential consumer at 9,000 kWhr before and after discounts. By setting the discount as an equal proportion

[1] Draft Commerce Act (Electricity Distribution Services Information Disclosure) Determination 2012, 16 January 2012

of the fixed charge component of each tariff, consumers are rewarded equally through the application of the discount without any regard for their consumption mix across tariffs. This distribution arrangement is an equitable means of distributing the benefit to consumers of their ownership in NWL.

2.2 Efficiency

For Standard Contracts

A move to lower fixed rates and higher variable rates to support NWL's user pay's philosophy. To continue to monitor power factors and maintain the loss factor. To encourage off peak usage and maintain load control to minimise transmission charges.

For Individually Assessed Contracts

To continue improving the efficiency of electricity delivery by promoting efficient investment in and operation of the network and by clearly signalling the fixed and variable costs of delivery.

2.3 Fairness

As a supplier of essential services NWL has endeavoured to set fair and reasonable tariffs for each consumer group, however, given the wide variations in usage within each consumer group, achieving a fair tariff is a difficult objective. What one customer perceives as fair may be perceived by another customer as unfair based solely on their usage patterns.

Customers are placed in load groups based on the capacity of supply they require. The charges applied to each group reflect the value of the assets that they use, based on both group capacity and demand.

Individually Assessed Contact customers are subject to individual charges that reflect their use of network assets together with the associated transmission costs.

The simple tariff structure lowers the financial costs of new retailers entering the market in NWL's area. It avoids the cost of duplicating ICP billing software and data management.

2.4 Simplicity

NWL has been working towards simplifying its tariff structure by rationalising the range of controlled rates it provides. However, it has retained the same number of consumer groups to signal the cost of usage patterns more accurately within each group.

2.5 Transparency

Tariffs should reflect costs and signals contained in the tariff and should be in a form that will allow the consumer to respond in a positive manner.

3 COST STRUCTURE

The pricing methodology is based on cost recovery. Consequently, the pricing structure closely relates to the corresponding cost structure. The following cost categories are involved:

3.1 Distribution Costs

Distribution costs are comprised of four main cost pools, discounts are not included as a cost to be recovered:

1. Operation and Maintenance
   I. Maintenance costs are based on NWL Asset Management Plan, with the allocation of costs between asset categories being determined by the 2012-2013 maintenance budget.
   II. Operating costs include all other network direct and indirect expenses excluding administration costs. The total figure is equivalent to the NWL 2012-2013 budget, and is allocated across network components on the basis of Optimised Replacement Cost ("ORC").
2. Depreciation

   Depreciation for each asset is calculated by dividing the financial carrying value of network property, plant and equipment by the ODV Standard Life for that asset, which results in a very long depreciation period with a correspondingly low depreciation requirement.
3. Return on Asset

   A provision for future investment in the network based on the 2012-2013 budget. This provision aims to:
   - provide for growth;
   - deliver appropriate service standards where network usage has changed; and
   - replace assets that have reached the end of their economic life with modern solutions.
4. Administration

   A provision for support services related to distribution costs, based on the 2012-13 budget.

3.2 Recoverable and Pass-Through Costs

Recoverable costs cover transmission charges, avoided transmission costs, and new investment contracts. Pass-through costs cover local authority rates, Electricity Authority, Commerce Commission and Electricity and Gas Complaints Commission Levies.[2] What these comprise of is largely self-explanatory, however, transmission charges are determined by Transpower NZ Limited ("Transpower") according to the EA's Transmission Pricing Methodology currently in effect, and comprises the following price components:

1. Interconnection Charge

   This charge is based on the average of the 100 highest half-hour coincident regional peak demands. The charges for the 2012/2013 financial year are based on the demands recorded between 1 September 2010 and 31 August 2011. All of the NWL GXPs are located in the Lower South Island region.
2. Connection Charge

[2] Recoverable and Pass-through costs are defined by the Commerce Commission in Decision 710, its Input methodologies determination applicable to electricity distribution services pursuant to Part 4 of the Commerce Act 1986.

This charge represents the fixed costs associated with the dedicated assets at each GXP. Shared assets are still allocated on the basis of each off-take customer's share of the 12 highest half-hour demand peaks measured at the GXP.

Further, avoided transmission costs are associated with transmission assets that have been provided by the distributor rather than by Transpower. In many instances, distributors can provide certain classes of transmission assets at a lower cost to consumers than assets provided by Transpower.

3.3 Capital Costs

NWL is currently in a period of major capital growth that is mainly being driven by irrigation. In addition, a number of major assets are becoming capacity-constrained requiring new assets or the upgrading of existing assets. Capital expenditure will therefore continue to exceed the norm as capacity is increased. Additional information concerning the assumptions governing NWL capital investment can be found in NWL's Asset Management Plan.

3.4 Grid Exit Points

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

- Oamaru;
- Waitaki;
- Twizel.
- Black Point[3]

The Oamaru Grid Exit Point accounts for approximately 91% of the total network demand and 86% of the total Transpower charges and supplies 86% of the total customer base. Transmission charges have therefore been averaged out over the whole consumer base.

[3] The Black Point GXP was built for the exclusive connection of one particular major customer. NWL passes the transmission charges for Black Point to that customer.

3.5 Active Load Group Characteristics

Group Code	Capacity Range kVA	Group Connections	After Diversity Demand MW	Group Capacity MVA
15C, 15U & DLU	0-15	10,266	17.8	70.3
30C & 30U	16-30	617	1.6	9.2
50C & 50U	31-50	762	4.6	26.1
100	51-100	255	3.8	20.4
200	101-200	74	2.8	13.6
300	201-300	44	2.7	13.2
500	301-500	17	1.7	8.5
750	501-750	3	1.6	2.3
Individual	N/A	29	13.7	26.7
Total		12,067	50.3	190.2

3.6 Annual Revenue Requirement

The revenue required to cover the costs and profits of NWL's line business activities for 2012-13 are given in the table below. The amount of the non-discretionary discount to consumers is also noted in the table for information purposes, but is not part of NWL's revenue requirement.

Annual Revenue Requirement for 2012-2013		
Distribution requirements		
Operation and Maintenance	$	2,626,860
Depreciation	$	2,724,208
Administration	$	718,065
Return on Assets	$	4,848,312
Total Distribution Revenue Requirement	**$**	**10,917,444**
Transmission Requirement		
Transmission Charge	$	3,750,419
Avoided Transmission Charge	$	481,018
Total Transmission Requirements	**$**	**4,231,437**
Total Revenue Requirements	**$**	**15,148,881**
Non-Discretionary Discount	**$**	**1,029,312**

4 REVENUE FACTORS

4.1 Asset Valuation

For the purposes of revenue calculations, the Distribution assets are valued at the August 2004 ODV. Each load group utilises some or all of these assets to a greater or lesser degree, and the cost recovery from each load group is based on its utilisation of these assets. Allocation of the assets utilised by each group is based on the capacity (kVA) requirements of each load group, and the after-diversity maximum demand (kW) that they place on the network.

4.2 Maintenance of Existing Assets

The annual maintenance programme is driven by safety requirements, security of supply objectives, and fault response and repair. The NWL Asset Management Plan contains details of the planned maintenance programme set out under the following asset categories:

- Subtransmission (33kV lines and cables);
- Zone Transformers (33kV – 11kV);
- 11kV lines, cables and associated switchgear;
- Distribution Substations (33/11kV-400/230V transformers and sites);
- Low Voltage Distribution (400/230V lines, cables and associated switchgear).

These costs are allocated across the load groups based on their share of the ODV asset value of the assets they utilise.

4.3 Depreciation

Depreciation is calculated on a straight-line basis in accordance with NWL's accounting policies. The depreciation is allocated against the asset groups listed above, and is recovered from load groups based on their share of the ODV asset value of the assets they utilise.

4.4 Administration

Administration costs cover the costs of operating the business for billing etc. These costs are not asset-related and are recovered as a fixed per-connection charge.

4.5 Return on Assets

A return on assets is required to fund the capital development and replacement programme and provide a return to the owners. NWL is consumer-trust owned, and this return currently takes the form of an annual discount to consumers. The rate of return is recovered from load groups based on their share of the ODV asset value of the assets they utilise.

5 PRICING STRUCTURE

NWL pricing structure is split into two main headings Standard Contracts and Individually Assessed Contracts.

Standard Contracts recover network costs by means of a fixed annual charge based on the consumer load group, and a variable kW charge as shown in the schedule of charges. This contract applies to the majority of consumers.

Individually Assessed Contracts recover network costs by means of a fixed annual charge based on the individual customer's asset usage, capacity requirements, and contribution towards the system peak demand.

5.1 Standard Contract Consumer Load Groups

Load groups are based on the standard distribution transformer capacities used on the network, with no distinction being made between a single-phase and three-phase connection. The minimum connection capacity for a single-phase supply is 15kVA, while the minimum connection capacity for a three-phase supply is 30kVA. Consumers are allocated into the various load groups based on their contracted connection capacity, with no distinction being made between domestic and non-domestic connections with the exception of the Domestic Low User ("DLU") category which is available only to primary domestic supplies, and applies irrespective of the connection capacity.

The load groups are:

Load Group	Description	Maximum Fuse Rating
DLU	Domestic Low User	Dependant connection capacity
15C	0 - 15kVA controlled	1 x 63A fuse
15U	0 - 15kVA Uncontrolled	1 x 63A fuse
30C	16 - 30kVA Controlled	1 x 100A fuse or 3 x 40A fuses
30U	16 - 30kVA Uncontrolled	1 x 100A fuse or 3 x 40A fuses
50C	31 - 50kVA Controlled	3 x 80A fuses
50U	31 - 50kVA Uncontrolled	3 x 80A fuses
100	51 - 100kVA	3 x 160A fuses
200	101 – 200kVA	3 x 315A fuses
300	201 – 300kVA	3 x 400A fuses
500	301 – 500kVA	NA
750	501 – 750kVA	NA
IND	Individually Assessed	NA

Street lighting is a specialist load group, which utilises dedicated LV assets, and is covered by an individually assessed network contract.

5.2 Standard Contract Annual Fixed Charges

Although the majority of network costs are fixed, passing these costs through to consumers as a predominantly fixed cost would not provide consumers with the pricing signals necessary to encourage them to use the resources efficiently.

To this end, NWL, consistent with previous years, largely held constant the fixed portion of its charges for all load groups (with the exception of the Individually Assessed Contract consumers) and increased its variable charges. By over-time increasing the proportion of variable to fixed charges, NWL is encouraging more effective use of network resources.

0 – 50kVA Load Groups

Consumers in the 15, 30, and 50kVA groupings are typically domestic or small commercial installations which have water-heating or other loads that can be controlled. NWL has developed a number of control options for those consumers that foster economic use of the network assets and enable load to be moved to off-peak periods. In recognition of this, the fixed charges for installations that provide year-round access to controllable load are lower than for installations with no controlled load. In addition controlled installations can utilise two-rate, night/day metering, which enables consumers to benefit from the cheaper night rate charges that apply between 11pm and 7am.

The total costs associated with each load group are allocated on the portion of the assets that they utilise. The load group share of the assets is determined by comparing the group capacity with the total network capacity and the group-after-diversity maximum demand with the network maximum demand. Costs are allocated 50% on group after diversity maximum demand ("GADMD"), and 50% on the group capacity. The fixed component of the revenue from these groups is set at a nominal 24% post non-discretionary discount.

In addition a DLU option is available in accordance with the Electricity Low Fixed Charge Tariff Option for Domestic Consumers. This option is revenue-neutral for a consumer using 9,000 kWhr per annum after a non-discretionary discount has been applied.

51 – 750kVA Load Groups

Installations in the 100 – 750kVA load groups are predominantly commercial, light industrial, or farming, and do not normally have loads that can be controlled externally. Load control is not generally available for these load groups, although limited access to night-rate tariffs are available for irrigation supplies and for installations with Time Of Use ("TOU") metering. These installations are normally supplied from a dedicated transformer and therefore do not utilise the same range of network assets as small low-voltage connections. Energy use within these load groups is much higher than the <50kVA groups resulting in the costs being predominantly governed by energy use rather than fixed charges. This provides consumers within these load groups with clear pricing signals that relate directly to consumption.

The total costs associated with each load group are allocated on the portion of the assets that they utilise. The load group share of the assets is determined by comparing the group capacity with the total network capacity and the group after diversity maximum demand with the network maximum demand. Costs are allocated 50% on group after diversity maximum demand, and 50% on the group capacity.

5.3 Standard Contracts Variable Charges

Standard Contracts Variable charges are based on GXP totals adjusted to account for losses and individual contract customer-usage. Day rates apply to all units transported over the network between 7am and 11pm and night rates to all units transported over the network between 11pm and 7am. Night rates are lower than day rates to encourage retailers to develop tariffs that reward customers for off-peak usage.

5.4 Individually Assessed Contracts

Individually Assessed Contract customers are assessed on their contribution to network system demand and the contracted capacity they require. The assets required to supply each customer installation are assessed and valued at ODV, and the contribution that the installation makes towards network system demand is determined from TOU metering data. The costs associated with the network assets are then recovered as a fixed charge based 50% on demand and 50% on contract capacity. Customers in this group can reduce their costs by improving their utilisation of assets and controlling their peak demands.

5.5 Transmission Charges

The following methodology has been used as the basis for the recovery of transmission charges in a way that is equitable to all groups and reflects Transpower's pricing structure.

Transpower Connection Charges and NWL Avoided Transmission Costs are fixed asset-based charges, and are allocated between load groups based on the group capacity requirements. These costs are recovered as a fixed charge.

Transpower Interconnection Charges are determined by the average of the 100 highest half-hour coincident regional peak demands recorded between 1 September and 31 August each year.

These costs are recovered from Standard Contract consumers as a variable (kWhr) charge plus a small fixed charge, while for Individually Assessed Contract consumers these costs are recovered as a fixed charge.

5.6 Standard Contracts - Transmission Charges

Transpower Connection Charges are recovered by means of a fixed charge and a variable charge. The fixed charge is based on the assessed capacity (kVA) requirements of each load group.

Transpower Interconnection Charges are recovered by means of a variable (kW) charge based on group demand and consumption.

The fixed portions of the charges for Standard Contract consumers are kept at a low level so that consumers with lower consumption levels are not subsiding consumers with higher consumption level. The variable charges are based on GXP totals adjusted to account for losses and Individually Assessed Contract consumer usage. Day rates apply to all units transported over the network between 7am and 11pm, and night rates to all units transported over the network between 11pm and 7am.

5.7 Individually Assessed Contracts - Transmission Charges

Transpower Connection Charges are recovered by means of a fixed charge based on the capacity (kVA) requirements of each consumer.

Transpower Interconnection Charges are recovered by a fixed charge based on the average of the 100 highest half-hour demands (kW) recorded by each consumer in the previous 12 months.

5.8 Transmission Charges Relating Loss and Constraint Rebates

Loss and Constraint Rebates are credits rebated by Transpower, resulting from over-recovery of costs and are included in transmission charges.

6 LOSSES

6.1 General

Losses represent the percentage of electricity entering the network that is either consumed in the delivery process or lost, and can be categorised as either technical losses or non-technical losses.

Technical losses comprise:

(a) standing losses arising from zone and distribution transformers; and

(b) variable losses arising from resistive losses in conductors. Resistive losses are proportional to the square of the current passing through the conductor.

Non-technical losses comprise:

(a) losses arising from metering faults or errors; and

(b) losses arising from electricity theft etc.

The energy measured at customers' installations is therefore after losses, and must be multiplied by the overall "loss factor" to determine each retailer's purchase quantities at each GXP.

6.2 LV and HV Connection

The majority of customers take supply and are metered at 400/230V and the loss factor applied to these sites must account for distribution transformer and low voltage reticulation losses. A small group of customers take supply and are metered at 11,000V and the loss factor applied to these customers does not include distribution and LV reticulation losses.

6.3 Loss Factor Allocation

The average loss factor for the network is calculated from data supplied by the National Reconciliation Manager. This information is compared with the GXP data to determine the long run overall loss factor.

Appendix 1

Allocation of ODRC

Load Group	ODRC Total	LV	Trans.	11kV	33kV
Standard Contract					
DLU	$ 6,737,254	$ 1,113,770	$ 1,317,642	$ 3,486,368	$ 819,474
15U	$ 3,277,152	$ 542,045	$ 640,865	$ 1,695,673	$ 398,569
15C	$ 11,138,344	$ 1,841,335	$ 2,178,388	$ 5,763,828	$ 1,354,793
30U	$ 1,760,726	$ 291,390	$ 344,281	$ 910,938	$ 214,117
30C	$ 545,934	$ 90,476	$ 106,719	$ 282,368	$ 66,371
50U	$ 5,724,133	$ 947,645	$ 1,119,182	$ 2,961,259	$ 696,047
50C	$ 849,880	$ 140,694	$ 166,170	$ 439,671	$ 103,345
100	$ 4,402,464	$ -	$ 1,031,544	$ 2,729,377	$ 641,543
200	$ 3,044,044	$ -	$ 713,252	$ 1,887,203	$ 443,589
300	$ 2,989,677	$ -	$ 700,513	$ 1,853,498	$ 435,666
500	$ 1,887,683	$ -	$ 442,304	$ 1,170,299	$ 275,080
750	$ 1,088,429	$ -	$ 255,030	$ 674,789	$ 158,610
Sub Total	$ 43,445,720	$ 4,967,355	$ 9,015,890	$ 23,855,271	$ 5,607,204
Individual Contract	$ 2,670,279	$ 255,057	$ 252,120	$ 1,222,156	$ 940,946
Totals	**$ 46,115,999**	**$ 5,222,412**	**$ 9,268,010**	**$ 25,077,427**	**$ 6,548,150**

Appendix 2

Allocation of Network and Transmission Costs (non-discretionary discount is allocated on an equal proportion of the fixed component of each tariff)

Load Group	Connections	ADMD kW	Capacity kVA	Operation & Maintenance	Depreciation	Administration	Return on Assets	Total Network Revenue	Transmission Revenue	Non-Discretionary Discount
Standard Contract										
DLU	3304	5,733	22,127	$374,346	$388,626	$191,499	$702,426	$1,656,897	$501,503	$98,294
15U	1500	2,603	11,591	$182,090	$189,036	$86,940	$341,676	$799,742	$239,321	$137,010
15C	5462	9,479	36,579	$618,886	$642,495	$316,576	$1,161,284	$2,739,242	$829,121	$435,595
30U	434	1,291	6,707	$97,832	$101,564	$25,155	$183,573	$408,124	$125,902	$43,369
30C	183	317	2,451	$30,334	$31,491	$10,607	$56,919	$129,351	$36,964	$16,715
50U	642	3,979	22,783	$318,053	$330,186	$37,210	$596,798	$1,282,248	$403,850	$84,066
50C	120	595	3,366	$47,222	$49,024	$6,955	$88,609	$191,810	$60,056	$15,407
100	255	3,794	20,434	$244,617	$253,948	$14,780	$459,001	$972,346	$375,359	$42,179
200	74	2,751	13,554	$169,138	$175,590	$4,289	$317,372	$666,389	$262,726	$23,715
300	44	2,727	13,200	$166,117	$172,454	$2,550	$311,704	$652,825	$258,655	$18,801
500	17	1,685	8,500	$104,886	$108,887	$985	$196,810	$411,569	$162,397	$9,725
750	3	1,564	2,250	$60,477	$62,784	$174	$113,480	$236,915	$108,336	$2,533
Sub Total	12038	36,518	163,542	$2,414,000	$2,506,086	$697,719	$4,529,653	$10,147,458	$3,364,191	$927,409
Individual Contract	29	13,748	26,685	$212,859	$218,123	$20,346	$318,660	$769,987	$867,246	$101,903
Totals	**12,067**	**50,266**	**190,227**	**$2,626,859**	**$2,724,209**	**$718,065**	**$4,848,313**	**$10,917,445**	**$4,231,437**	**$1,029,312**

Appendix 3

Schedule of Charges- from 1 April 2012:

Distribution Charges (excl GST)								
Fixed Charges				**From 1 April 2012**				**No of**
Code	**Load Group Description**	**Current**	**Changes**	**New ($)**		**Non-Discretionary Discount**		**Consumers**
				Per Annum	**Per Day**	**Per Annum**	**Per Day**	
DLU	Domestic Low User	34.75	-	34.75	0.09521	29.75	0.08151	3304
15U	0 - 15kVA	96.34	-	96.34	0.26395	91.34	0.25025	1500
15C	0 - 15kVA Controlled	88.93	(4.18)	84.75	0.23219	79.75	0.21849	5462
30U	16 - 30kVA	107.45	-	107.45	0.29438	99.93	0.27378	434
30C	16 - 30kVA Controlled	96.34	-	96.34	0.26395	91.34	0.25025	183
50U	31 - 50kVA	140.80	-	140.80	0.38575	130.94	0.35875	642
50C	31 - 50kVA Controlled	133.39	-	133.39	0.36545	128.39	0.35175	120
100	51 - 100kVA	177.86	-	177.86	0.48729	165.41	0.45318	255
200	101 - 200kVA	344.60	-	344.60	0.94411	320.48	0.87802	74
300	201 - 300kVA	459.46	-	459.46	1.25879	427.30	1.17068	44
500	301 - 500kVA	615.09	-	615.09	1.68518	572.03	1.56722	17
750	501 - 750kVA	907.81	-	907.81	2.48715	844.26	2.31305	3
IND	Individually Assessed							
Variable Charges								
Note: The variable charges shown will apply to customers in all of the load groups listed above with the exception of IND.								
	Variable day charge 7am - 11pm	5.81200	0.54700	6.35900	cents per kWhr			
	Variable Night Charge 11pm - 7am	0.59900	0.05600	0.65500	cents per kWhr			

Transmission Charges (excl GST)						
Fixed Charges				**From 1 April 2012**		
Code	**Load Group Description**	**Current**	**Changes**	**New ($)**		**Consumers**
				Per Annum	**Per Day**	
DLU	Domestic Low User	20.00	-	20.00	0.05479	3304
15U	0 - 15kVA	67.45	-	67.45	0.18479	1500
15C	0 - 15kVA Controlled	20.00	-	20.00	0.05479	5462
30U	16 - 30kVA	76.34	-	76.34	0.20915	434
30C	16 - 30kVA Controlled	28.89	-	28.89	0.07915	183
50U	31 - 50kVA	96.34	-	96.34	0.26394	642
50C	31 - 50kVA Controlled	48.89	-	48.89	0.13394	120
100	51 - 100kVA	143.13	-	143.13	0.39214	255
200	101 - 200kVA	286.26	-	286.26	0.78429	74
300	201 - 300kVA	382.60	-	382.60	1.04823	44
500	301 - 500kVA	597.30	-	597.30	1.63644	17
750	501 - 750kVA	897.33	-	897.33	2.45843	3
IND	Individually Assessed					
Variable Charges						
Note: The variable charges shown will apply to customers in all of the load groups listed above with the exception of IND.						
	Variable day charge 7am - 11pm	1.66696	0.61807	2.28503	cents per kWhr	
	Variable Night Charge 11pm - 7am	0.17173	0.06368	0.23541	cents per kWhr	

Notes

1. NWL determines the allocation of each site to a load group as described in the Use of System Agreement. The DLU group is available for a consumer's primary domestic residence only.
2. Variable charges are based on metering and reconciliation at the Grid Exit Point reduced by the declared network loss rate. The additional variable charges for sites in the "Domestic Low User" load group are based on site metering information reported by electricity retailers.
3. Distribution *and* Transmission charges are charged in respect of each site. Charges are invoiced to electricity retailers monthly in arrears. Fixed charges accrue on a daily basis at the rate of 1/365th of the annual amount due. From time to time, the charges above may be subject to discounts.
4. NWL's annual discount to consumers is comprised of a non-discretionary and a discretionary component. The non-discretionary component is a guaranteed amount that will be discounted to consumers in the various load groups listed and will be payable in March 2013. The balance of the targeted discount shown in the Statement of Corporate Intent is the discretionary component, and the magnitude of this component will be determined by trading conditions during the year.
5. Discounts will be payable in March 2013 based on the number of days that the installation has been connected within a specific load group during the preceding 12 months and will be payable to the connected consumer at that installation on the day that the discretionary discount is declared.
6. Full terms and conditions detailed in the Use of System Agreement take precedence over the above summary. A standard Use of System Agreement is available at www.networkwaitaki.co.nz. This schedule is provided pursuant to Regulation 27 of the Electricity Information Disclosure Requirements 2004.
7. Consumer counts are as of 27 February 2012 and differ from counts in the initially publicised schedule of charge variations notice.

Appendix 4

Electricity Authority Pricing Principles and Information Disclosure Guidelines ("EA Principles and Guidelines")

A4.1 In February 2010, the Electricity Commission ("EC") published a set of pricing principles and information disclosure guidelines for EDBs. These principles and guidelines are now administered by the EC's successor, the Electricity Authority ("EA"). At present compliance with these is voluntary, however, the Commerce Commission has indicated that compliance is likely to be compulsory next year for EDB pricing that will take effect from 1 April 2013.

NWL considers that the principles-based approach to distribution pricing that is outlined by the EA's Principles encourages EDBs to conduct their pricing in a similar way, while the EA's disclosure guidelines allow stakeholders and other interested parties to determine the extent to which the principles are being followed by each EDB. The following table demonstrates how NWL's pricing methodology has considered the EA Principles and Guidelines.

Pricing Principle	**How compliance has been shown**
(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;	For its Standard Contract consumers, NWL places these consumers in load groups according to actual transformer capacity used by each consumer. Capacity requirements are also taken into account when the charges of Individually Assessed Contract ("IND") consumers are set. Dividing consumers into different groups according to capacity utilisation is reflective of the underlying cost drivers of incrementally supplying each load group and IND consumer. According to this Principle, being subsidy free means that for each consumer group or IND consumer, the revenues from that group or IND consumer should not be below the cost of connecting that consumer group or IND consumer to the distribution network (incremental cost) and this is indeed the case given NWL's capacity utilisation reflective prices. Further, this Principle means that revenues from each consumer group or IND consumer should not exceed the costs of supplying that group or IND consumer as a standalone. It is difficult to accurately determine the

	standalone costs for most customers supplied by a common service via a meshed distribution network, however, it can be concluded, given the efficiencies of a well-run distribution network such as NWL's, that standalone costs must be significantly higher than the average costs to supply different consumer load groups or IND consumers. Thus, with the exception of subsidies provided in compliance with the *Electricity (Low Fixed Charge Tariff for Domestic Consumers) Regulations 2004* ("DLU Regulations"), NWL's prices are free of subsidies. And this is particularly the case for NWL, as no distinction is made between domestic and non-domestic consumers aside from the noted exception of DLU consumers.
ii. having regard, to the extent practicable, to the level of available service capacity; and	By dividing consumers into load groups according to transformer capacity NWL has particular regard for this principle.
iii. signalling, to the extent practicable, the impact of additional usage on future investment costs.	NWL is following a policy of increasing the proportion of variable line charges in comparison to its fixed line charges to consumers. By continuing to increase variable charges over time whilst holding fixed charges constant, NWL is sending a clear signal to consumers that additional usage will impact on investment costs. In addition, for NWL's variable Day and Night charges, there is a higher charge in the congested Day period which signals that additional usage will impact on future investment costs. As a further signal, NWL offers discounted charges for consumers who opt for Controlled tariffs. Both distribution and transmission fixed charges are lower for controlled tariffs compared to the equivalent uncontrolled tariffs to signal the benefits of load control. The transmission fixed charge component of each controlled tariff is significantly lower to signal the clear and direct impact that load control has on reducing transmission charges. As well as directly impacting on transmission charges; across the whole electricity sector,

	load control systems are effective in reducing demand at peak times by deferring non-time critical electricity usage. The benefits of controlled load include greater predictability of the magnitude of peak demands, less need to build peak generation plants and potential to defer transmission and distribution capacity upgrades. Going forward, NWL is a member of the SmartCo group of EDBs and plans to deploy smart meters (Advanced Meter Infrastructure ("AMI")) across its network. When it deploys AMI, NWL plans to offer a range of smart meter enabled controlled tariffs that will improve the controlled load signals that are sent to consumers.
(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.	NWL considers this principle matches the economic principle known as Ramsey Pricing, which is a form of price discrimination where if differential prices are appropriate, then the highest prices should be borne by consumers with the most inelastic demand. In practice, however, Ramsey Pricing is only ever used to provide guidance in pricing development as it is not practical to accurately observe the price elasticity of different consumers. Further, Ramsey pricing also requires an ability to segment consumers by their respective characteristics, e.g. cinemas can easily differentiate between adults, children, students and senior citizen viewing audience by the time of day and day of the week of movie screenings, with prices set accordingly to reflect the differences in willingness to pay between these different groups. However, it is much more difficult for an EDB to differentiate between consumer groups, and particularly so for an EDB like NWL which uses interposed arrangements with retailers. With the exception of DLU customers, NWL does not differentiate between customers on Standard Contracts – the cost to do so would be prohibitively expensive. NWL contends, however, that by weighting its charges towards variable charges, it is to some extent discriminating between differences in end

	consumers' willingness to pay when it is unknown what elasticity each consumer group has. For Individually Assessed Contract customers, however, where the transaction costs of developing non-standard arrangements are small in relation to the value of the network service, customers' charges are calculated as an annually recalculated fixed charged based 50% on contracted capacity and 50% on the contribution the customer's installation makes to system demand. The contribution an installation makes to system demand is less subject to demand response than other measures, and is thus reflective of this principle.
(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;	This principle considers that it is not economically efficient to replicate sunk assets and therefore requires that prices should not be at a level so high that it becomes economic for a competitor to supply a consumer from an alternative network supply. For Standard Contract customers NWL follows this principle by ensuring that at a load group level, prices faced by consumers reflect the true economic cost of their service provision. Each load group utilises some or all of NWL's network assets to a greater or lesser degree, and the cost recovery from each load group is based on its utilisation of these assets. Allocation of the assets utilised by each group is based on the capacity (kVA) requirements of each load group, and the after-diversity maximum demand (kW) that they place on the network. Further, for Individually Assessed Contract customers, NWL discourages uneconomic bypass by analysing on a case-by-case basis the specific needs of the customer, tailoring pricing to reflect the cost to supply and unique needs of the customer.

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	NWL is 100% owned by the Waitaki Power Trust ("Trust"). Trustees of the Trust represent the interests of consumers and engage with NWL to ensure that NWL makes appropriate price/quality trade-offs. In addition, for Individually Assessed Contract customers, through a process of one-to-one consultation, NWL negotiates a service tailored to the requirements of the individual consumer, making a price-quality trade-off appropriate for that customer.
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.	NWL is always keen to work with consumers and to advise them of distribution alternatives such as distributed generation from wind or solar, which the company has some expertise in. NWL further incentivises consumer investment in distributed generation by way of its high variable to fixed charge apportionment – consumers who invest in distributed generation can decrease their usage and thus the variable cost of their line charges. Moreover, with its involvement in SmartCo, NWL plans to develop AMI enabled smart tariffs which will further encourage investment in distributed generation.
(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.	For transparency and as mandated by the Commerce Commission's 2008 IDR, NWL's prices are available in a wide number of locations for customers to view: • two advertisements run each year in the Otago Daily Times and Oamaru Mail newspapers; • pricing schedules are sent to all retailers with whom NWL has a use of system agreement; • NWL's website; and • in hard copy at NWL's offices in central Oamaru. Further, through its ownership by the Waitaki Power Trust, and the regular engagement with Trustees of the Trust (who represent the interests of consumers), NWL ensures that its prices are transparent to the Trust and have full regard to the impact they have on consumers.

	When NWL changes the structure of its tariffs, it consults with retailers on its network and takes on-board any feedback from them on the proposed new tariff structures. As a 100% Consumer Trust owned company, NWL is exempt from following the Default Pricing-Quality Path ("DPP")[4] that most EDBs are obliged to follow, however, to the extent it is practicable in order to ensure price stability, NWL follows the DPP when it reviews its prices each year, and keeps price increases net of Recoverable and Pass-Through Costs at a rated limited to CPI – X. The magnitude of the X rate of change term is determined by the NWL Board. When it decides on what the X should be, the Board is mindful of the extent to which price increases will impact on consumers and balances this against the requirements inherent in providing a reliable and secure electricity supply and the need for future invest in asset replacement and network development.
(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.	NWL's tariffs do not favour one retailer over another. NWL's pricing methodology and applicable prices are identical across all retailers, with no discrimination in regards to available tariff options, applicable charges, calculation methodology, or discount. NWL's prices are therefore economically equivalent across retailers. Further, through its engagement with Trustees of the Waitaki Power Trust and its consultation with retailers from time-to-time, NWL gives regard to the impact of transaction costs on consumers and other stakeholders.

Summary of Compliance with Information Disclosure Guidelines

Information Disclosure Guideline	**How compliance has been shown**
(a) Prices should be based on a well-defined, clearly explained and published	NWL makes all of its communications clear and easy to understand.

[4] See Consolidated Version of Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010 at: http://www.comcom.govt.nz/assets/Electricity/2010-2015-Default-Price-Quality-Path/Default-Price-Quality-Path-Determination/Commerce-Act-Electricity-Distribution-Default-Price-Quality-Path-Determination-2010-Consolidated-7-April-2011.pdf

methodology, with any material revisions to the methodology notified and clearly marked.	This Pricing Methodology is published on NWL's website at: www.networkwaitaki.co.nz from 1 April 2012. No material revisions have been made to the methodology. Revisions have been made to this document in order to comply with the EA Principles and Guidelines, but these revisions are not material so have not been marked-up.
(b) The pricing methodology should demonstrate:	
(i) how the methodology links to the pricing principles and any non-compliance;	The tables in Appendix 4 demonstrate how the methodology links to the pricing principles. NWL considers that there are no areas of non-compliance.
(ii) the rationale for the consumer groupings and the method for determining the allocation of consumers to the consumer groupings	Paragraphs 5.1 to 5.4 show the rationale for consumer groupings and the method for determining the allocation of consumers to those consumer groupings.
(iii) quantification of key components of costs and revenues;	The tables at paragraph 3.6 and in Appendices 1 and 2 show the quantification of key components of costs and revenues.
(iv) an explanation of the cost allocation methodology and the rationale for the allocation to each consumer grouping;	Paragraphs 5.1 to 5.8 explain NWL's cost allocation methodology and the rationale for the allocation to each consumer group.
(v) an explanation of the derivation of the tariffs to be charged to each consumer group and the rationale for the tariff design; and	Paragraphs 5.2 to 5.7 provide an explanation of the derivation of the tariffs to be charged to each consumer group. Paragraphs 2.1 to 3.4 provide a rationale for tariff design.
(vi) pricing arrangements that will be used to share the value of any deferral of investment in distribution and transmission assets, with the investors in alternatives such as distributed generation or load management, where alternatives are practicable and where network economics warrant.	NWL does not have any such arrangements in place at this time. NWL will negotiate this on a case-by-case basis with prospective investors as opportunities arise.
(c) The pricing methodology should:	
(i) employ industry standard terminology, where possible; and	Through on-going consultation with retailers NWL from time-to-time reviews it terms and definitions to better align to industry standards.

(ii) where a change to the previous pricing methodology is implemented, describe the impact on consumer classes and the transition arrangements implemented to introduce the new methodology.	There have been no material changes to the previous pricing methodology, so this guideline does not currently apply.