Disclosure of Pricing Methodology as at 1st April 2016

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1. INTRODUCTION

This document sets out the methodology used to determine charges to connected consumers—via capacity based load groups—for access to, and use of, the Buller Electricity Limited (BEL) distribution network. Line charges recover costs associated with the use of Transpower's National Grid and the costs of operating and maintaining BEL's network together with a provision to provide a rate of return on the investment in the distribution network (i.e. the cost of ownership). For most electricity consumers, these lines charges are a part of their retail tariff, and represent the price for conveying electricity from the generating stations to the consumers' installations. In practice:

- BEL's line charges are paid by electricity retailers operating in the Buller network region, using*, inter alia*, the load group aggregate metering information supplied by these retailers for each consumer Installation Control Point (ICP); and
- In deriving their retail tariff, retailers may repackage BEL's lines charges together with their own retail energy charges, or separately disclose line charges.

Pricing Methodologies are a requirement of the Electricity Distribution Information Disclosure Determination 2012[1] determined pursuant to Part 4 of the Commerce Act 1986. Additional regulatory guidance for BEL in preparing its pricing methodology comes from Distribution Pricing Principles and Information Disclosure Guidelines[2], and the Electricity (Low Fixed Charge Tariff option for Domestic Consumers) Regulations 2004.

In the Determination (Clauses 2.4.1 to 2.4.5), BEL must disclose its pricing methodology, including:

- Target revenue information (where applicable);
- Discussion of the extent of consistency of the pricing methodology with the pricing principles;
- Pricing strategies;
- Approach to pricing for non-standard contracts and distributed generation; and
- Disclosure of consumer consultation on price and quality.

The Commerce Commission notes that pricing disclosures help interested persons to understand how prices are set, and to compare prices for different consumer load groups. Pricing and related disclosures help interested persons consider whether the

[1] Commerce Commission Decision No. NZCC 22

[2] Prepared by the Electricity Commission (now Electricity Authority) in February 2010

prices set by suppliers (such as BEL) promote efficiency, and whether suppliers are sharing the benefits of efficiency gains with consumers. Given this, the information herein, describes BEL's:

- Line Pricing Methodology used to determine prices charged as at 1st April 2016 for the supply of line function services;
- Approach to the allocation of costs, revenues and assets from 1st April 2016; and
- Costs and revenues attributable to load groups and the methodology used to allocate indirect costs between load groups from 1st April 2016.

Appropriate details and any departure from the methodology published in the guidelines are set out below.

The information in this document was prepared by Buller Electricity Limited after making all reasonable enquiries, and to the best knowledge of the company it complies with the 2012 Determination.

All charges shown in the Electricity Price Schedule are exclusive of goods and services tax.

Eamon Ginley
Chief Executive Officer
Buller Electricity

1. OVERVIEW OF THE PRICING METHODOLGY

Buller Electricity Limited (BEL) has not made any significant changes to its Pricing Methodology for the 2016-17 financial year. The prices set for the pricing year from 1 April 2016 to 31 March 2017 are cost reflective in terms of Load Group recoveries of BEL's Target Revenue Requirement. The percentage of revenue collected from fixed charges has been increased in line with previous Disclosures.

A necessary preliminary step before the pricing process can be completed is developing knowledge of the Line Charge Revenue Requirement. This is obtained using a building blocks approach using the budgets and Asset Management Plan as shown in Figure 1. The budget takes into consideration costs associated with network maintenance and operation, asset base depreciation, transmission costs, and tax.

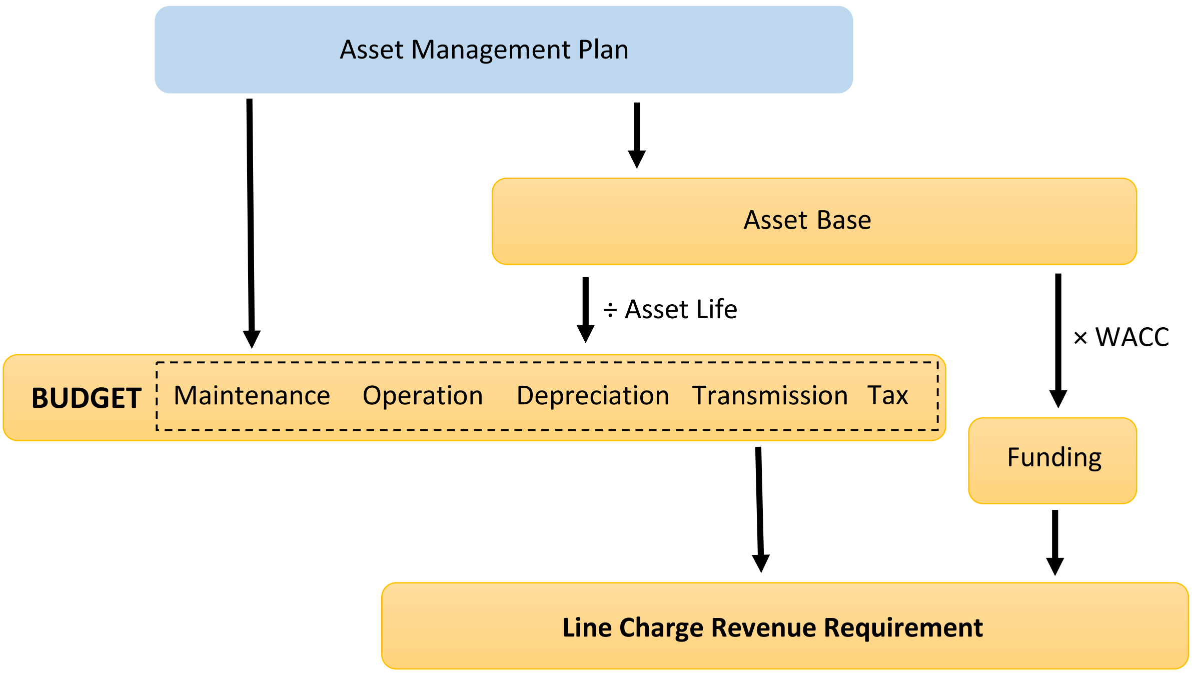

Figure 1 Process for determining the Line Charge Revenue Requirement

The Pricing Methodology used by Buller Electricity is shown in Figure 2 and the three main steps are described as follows:

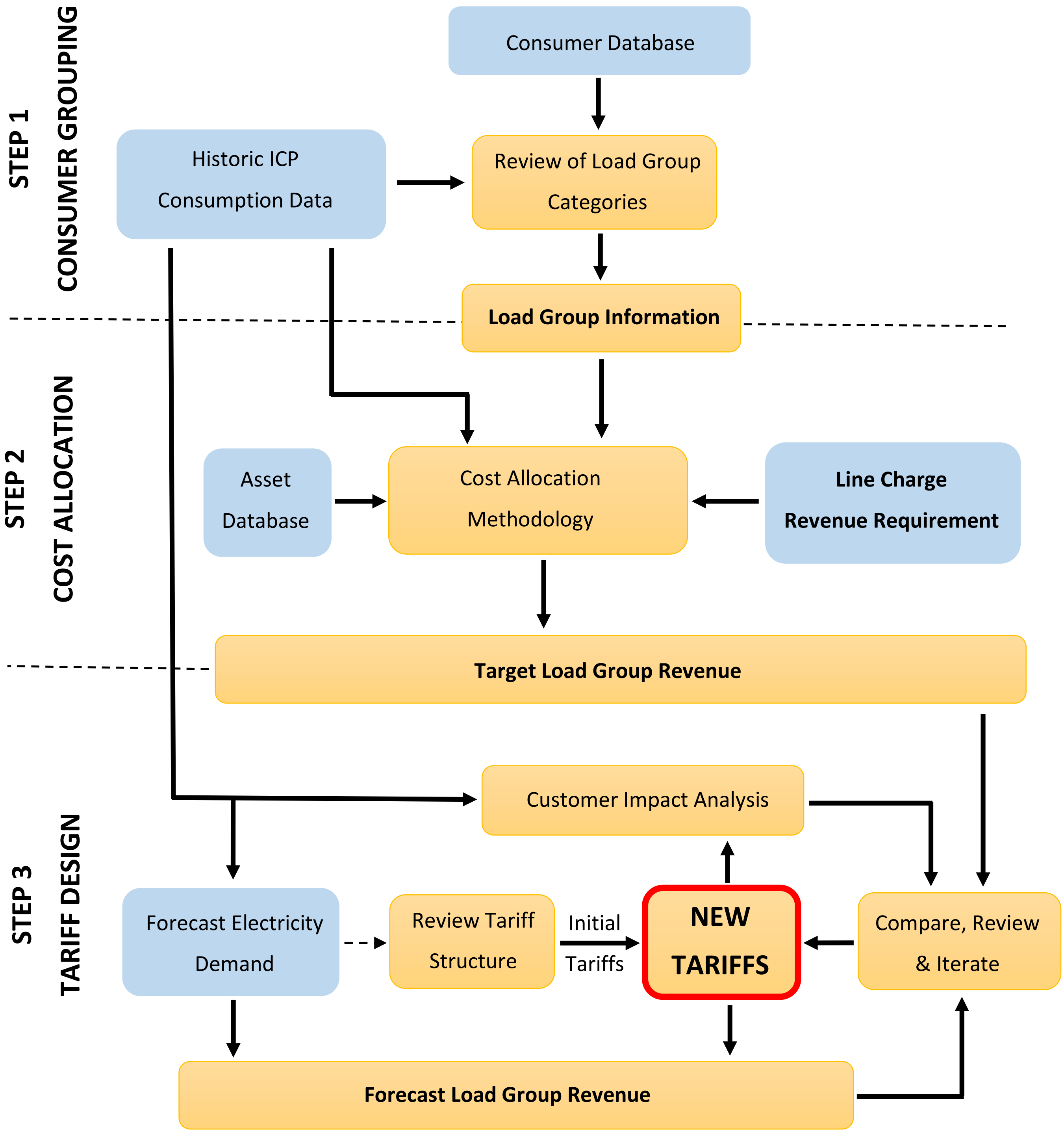

Figure 2 Pricing Methodology: Steps and Process

Step 1 Consumer Groupings

Consumers having similar demand characteristics are grouped together in order to simplify the pricing process. The groupings are called Load Groups. Load Group categories are reviewed periodically using information from the company's Consumer Database and historic ICP Consumption Data from retailer billing.

Sep 2 Cost Allocation

The Line Charge Revenue Requirement is allocated to the Load Groups using the Cost Allocation Methodology. This methodology identifies the costs associated with supplying electricity to each Load Group and makes use of information from the Asset Database and historic ICP Consumption Data. The end result of this step is the Target Load Group Revenue and the associated percentage allocations between the Load Groups.

Step 3 Tariff Design

After a review of the tariff structure is completed an initial set of tariffs is determined. Combining this information with a forecast of the expected electricity consumption allows the Forecast Load Group Revenue to be calculated. The initial set of tariffs will generally not meet all requirements for recovering costs. An iterative process is then undertaken to determine the most appropriate manner in which to obtain the required line charge revenue from each Load Group.

2. CONSUMERS & LOAD GROUPS

BEL categorises consumers into Load Groups (Electricity Registry price category codes) for the purpose of simplifying the process of:

- Implementing an effective and efficient Pricing Methodology
- Recovering revenue
- Facilitating network administration
- Meeting regulatory requirements

The three key cost drivers for the supply of electricity to a consumer are identified as being the capacity, usage characteristic, and location. For the time being BEL does not use consumer location to determine line charges and as a result location variation is averaged across the BEL's distribution region. The 6 Load Groups that applied through to the end of the 2014/15 pricing year are set out in Table 1.

Load Group	Description	ICP Numbers
LG1	Domestic consumers up to 15kVA capacity	1,727
LG1L	Domestic low user consumers up to 15kVA capacity	2,249
LG2	Non-domestic consumers up to 15kVA	539
LG3	Non-domestic consumers over 15kVA capacity	79
LG4	Non-domestic consumers over 100kVA capacity	14
LG7	Non-domestic consumers over 1000kVA capacity	1
	Total Consumers	4,609

Table 1 Consumer Load Groups and ICP Numbers as at 1st November 2015

At this time, capacity is the primary characteristic BEL uses to allocate consumers into Load Groups. Capacity provides a pragmatic method for grouping ICP's which are expected to have similar network costs and for which a common line charge tariff structure is appropriate.

In general terms the Capacity is derived from one or a combination of the following:

- Fused kVA rating of the service.
- Installed kVA capacity of the dedicated supply transformer (if one exists).

- Maximum demand (kW) on a metered half-hourly basis (typical for LG4 and LG7 consumers).

In addition to Capacity further distinction is made between ICP consumer groups as follows:

- Domestic low user (LG1L) is required for regulatory purposes.
- Domestic and non-domestic consumers are separated for the purposes of reporting and identifying the different usage characteristics and potential risk profiles.

Non-domestic consumers are separated into Load Groups according to their Capacity. Industrial consumers with a Capacity greater than 100kVA typically have a dedicated 11kV/400V supply transformer. The purpose of having these Load Groups is to allow costs for the use of different network assets to be appropriately allocated.

The typical allocation of line charge revenue between the Load Groups is indicated in the Figure 3 below.

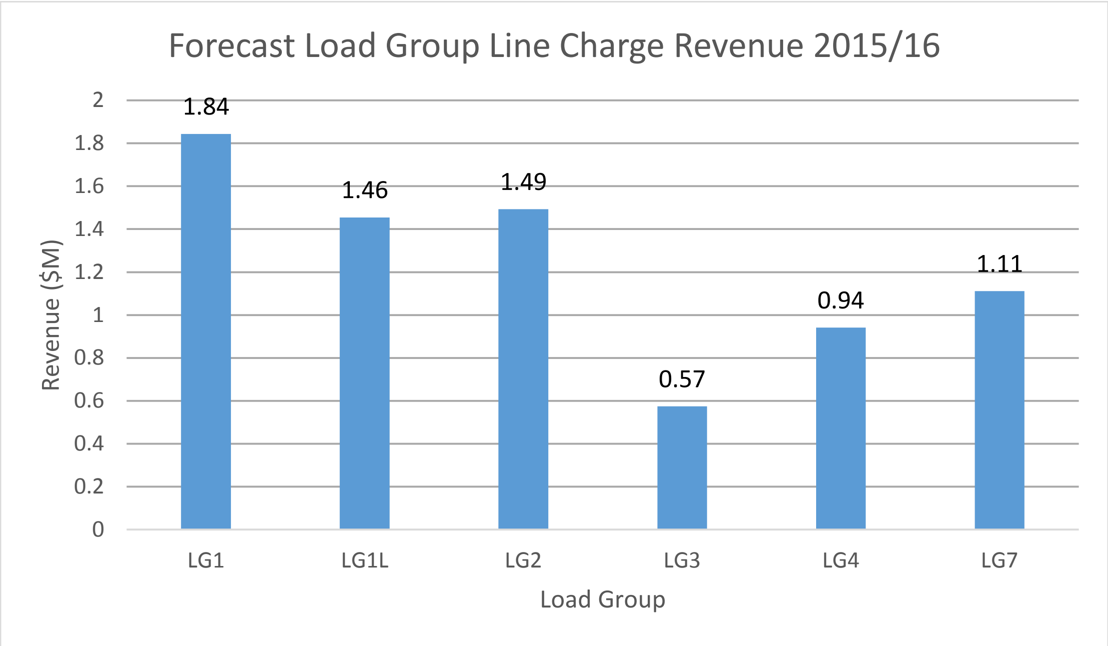

Figure 3 Typical load group line charge revenue

3. RECOVERY OF COSTS – COST REFLECTIVE PRICES

As a consumer-owned EDB, BEL is exempt from the price/quality regime administered by the Commerce Commission. However, BEL has determined that it is in its interests, the interests of its consumer-owners, and the interests of consumers connected to the BEL network, to align its pricing methodology to that of its non-exempt peers.

It is therefore integral to BEL's pricing methodology that a 'building blocks' approach is used to determine the appropriate level of costs[3] to be recovered – this being the target Revenue Requirement for the year. Tariffs are then determined to generate this revenue requirement based on:

- Strategic considerations (e.g. for maximising the efficient utilisation of the network, and managing revenue volatility risks) as to the mix of fixed and variable tariff components; and

- Estimates of the number of consumers and their demand for/consumption of electricity for the period.

Whether actual revenue will be close to target revenue for the year is a function of prices, the actual number of consumers, actual demand, and actual volumes of electricity delivered over the distribution system.

3.1. Revenue Requirements

The revenue requirement for BEL's line business is based on the recovery of the following costs:

- Operations and Maintenance;
- Business Support;
- Pass-through and Recoverable Costs (e.g. Transmission);
- Depreciation of Network Assets;
- Cost of Capital (Return on Investment); and
- Taxation.

Note: BEL has used the Commerce Commission's estimation of the Vanilla WACC (at the 67th percentile of the WACC range) which the Commission currently uses for *Default Price Path* (DPP) purposes with non-exempt EDBs. As such, the corporate

[3] In order for prices to be cost reflective, these are costs that will necessarily be incurred in providing the distribution service.

tax shield provided by debt capital has been ignored. BEL needs to determine its revenue requirement through a cash flow allowance for levered tax liabilities[4].

3.2. Cost Estimation

The total Line Charge Revenue Requirement for the 2016-17 financial year was determined to be $6,787k and consists of the major cost elements shown in Figure 4.

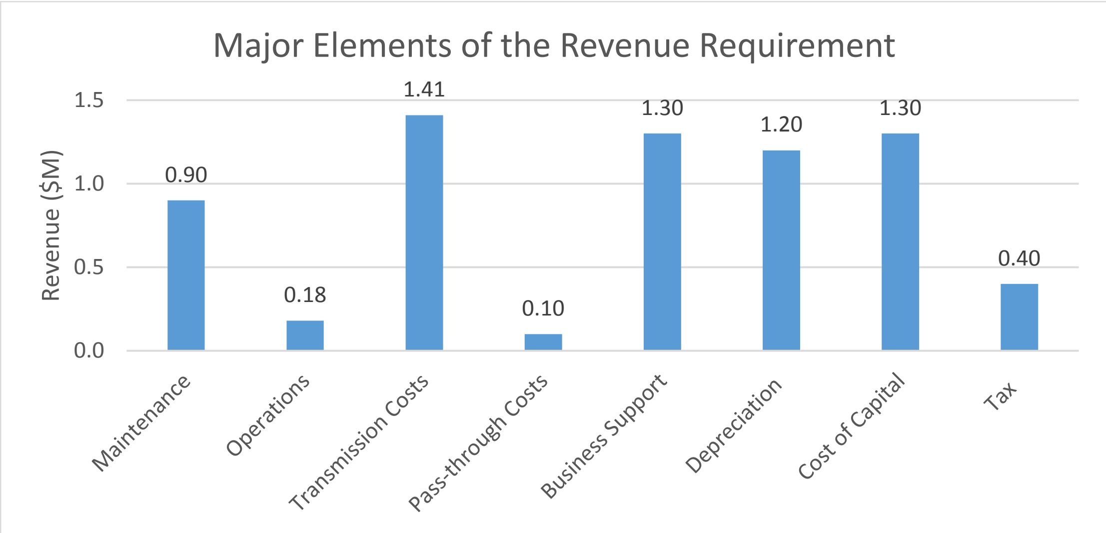

Figure 4 Major Elements of the Line Charge Revenue Requirement

The above cost estimates were based on BEL's November 2016 preliminary forecasts for the 2016-17 financial year.

The major elements of the Revenue Requirement are as follows:

- Operations and maintenance are the direct costs associated with maintaining the system assets, and includes the management of designing and running the line business and the management of the computerised load control system and geographical information system.
- Transmission charges are those paid to Transpower to recover the costs of the High Voltage National Grid together with 'Avoided Transmission' costs paid to local generators. These are referred to as *Recoverable Costs* by the Commerce Commission.
- Pass-through costs (another term used by the Commerce Commission) includes some industry Levies, and Local Authority rates.

[4] In determining its levered tax liability, BEL has adopted the regulatory leverage of 44%

- The cost of network assets is returned over time as depreciation, with the amount of depreciation being determined by the useful life of the assets.
- Taxation is covered in the cost recoveries to ensure that the return on capital is in pre-tax terms.
- Business Support costs include the other indirect costs (such as Administration and Overhead costs) necessarily incurred in providing the distribution service.

BEL has two subsidiaries – a wholly owned contracting business and a c.55% owned electricity retail business. BEL applies a cost allocation methodology for allocating indirect costs amongst its network and non-network business units, and also applies a transfer pricing methodology to account for services acquired by BEL from its contracting subsidiary. In calculating line charges, forecasts incorporating the transfer pricing (but eliminating intra-group profit margins) are used.

3.3. Cost Efficiency

BEL seeks to ensure that its consumers receive value-for-money from the services it provides given the price paid. In this respect, BEL has no intention of making its consumers pay for inefficient service delivery. BEL's current approach is to use published industry statistics, and the building blocks approach applicable to non-exempt EDBs, to guide BEL to more efficient outcomes. This is an on-going process. To keep some downwards pressure on costs, BEL has used a WACC of 6%. This is lower than the WACC allowed by BEL's non-exempt peers in their building blocks calculations.

BEL's two subsidiaries provide additional scale to its business. As mentioned previously, a measure of indirect costs are allocated to these businesses in order to reduce the overall level of costs to be recovered from BEL's network consumers through lines charges.

3.3.1. Policies or Methodologies for determining Capital Contributions

In addition to the line charge revenue BEL receives from consumer groups BEL also receives capital contributions from consumers that require new or upgraded power supply to their properties.

As the requirement for a capital contribution can only be determined once details of the specific connection are known, BEL does not have a schedule of charges. However, as there is a high degree of consistency in prices for similar categories of connection, the level of capital contribution is transparent to consumers.

Accordingly, BEL considers that the capital contribution methodology applied is consistent with the pricing principles.

3.3.2. Policies Related to Discretionary Discounts and Rebates

BEL does not have in place specific policies regarding discretionary discounts or rebates. Any decision to provide a discount or make a rebate will be determined by the BEL Board following input from management and the shareholder.

4. COSTING PRINCIPLES

BEL is committed to achieving an efficient cost structure for its electricity distribution services; recovering these costs from consumers using cost reflective prices; and providing a high degree of price stability so consumers can make investment and consumption decisions that are not impacted by incessant and unnecessary variation.

With regard to an efficient cost structure, BEL is conscious that, *inter alia*, its network locality and geography—together with the small number of consumers—result in its costs being higher than many of its peers on a 'per consumer' or 'per km' basis. BEL monitors these industry benchmarks and looks to reduce these costs where possible.

As intended in adopting the Building Blocks method, BEL's load group prices are increasingly cost reflective. However, BEL is yet to consider cost reflectivity at the locational level. Any decision to significantly rebalance load group prices or introduce locational prices of any nature will first be discussed with BEL's shareholders, as they are representatives of consumers.

4.1. PRICING STRATEGY

BEL is committed to establishing a formal and prescribed pricing methodology which aims to allocate costs to individual consumers in a manner which fairly reflects the cost of providing the associated network connection. Historically BEL line charge revenue has been heavily weighted towards variable (kWh based) revenue compared with fixed (daily charge) revenue. As a guideline, BEL is currently aiming to migrate the line charge tariff structure so that in the future there is an even split between fixed and variable line charge revenues. This migration will be undertaken over a number of years to ensure consumers have price stability and the potential for price shocks is limited.

4.2. ELECTRICITY AUTHORITY PRINCIPLES

The core distribution pricing principles espoused by the Electricity Authority are:

- *Prices to signal the economic costs of service provision, by:*
    - *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;*
    - *having regard, to the extent practicable, to the level of available service capacity; and*
    - *signalling, to the extent practicable, the impact of additional usage on future investment costs.*

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

- *Provided that prices satisfy the first point above, prices should be responsive to the requirements and circumstances of stakeholders in order to:*

  - *discourage uneconomic bypass;*

  - *allow for negotiation to better reflect the economic value of services and enable stakeholders to make price/quality trade-offs or non-standard arrangements for services; and*

  - *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.*

- *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*

- *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*

4.3. Satisfying these Principles in BEL's Pricing

The Information Disclosure requirements (per Clause 2.4.1 of the 2012 ID Determination) require EDBs in their pricing methodologies to-

> *"Demonstrate the extent to which the pricing methodology is consistent with the pricing principles and explain the reasons for any inconsistency between the pricing methodology and the pricing principles."*

BEL acknowledges that that the Pricing Principles were introduced with a view to achieving voluntary compliance and therefore sets out below how BEL's Pricing Methodology achieves those objectives.

1. *Prices are to signal the economic costs of service provision, by:*

   a. *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 legislative and other regulations;*

   BEL believes that this methodology demonstrates that the revenue for each network tariff Load Group falls within the bounds of the stand-alone and avoidable costs and hence are subsidy-free. In particular:

- The incremental costs (for supplying another unit of electricity) are low (i.e. close to zero) in most cases.

- The standalone costs of either BEL's distribution service (evidenced by the sharing of meshed and common network costs set out in this Pricing Methodology), or the next best alternative[5], are higher than the revenue for each network tariff Load Group.

The term subsidy-free is used here in the context that costs are averaged over all consumers in a load group. The existing pricing strategy does not account for specific locational factors, network costs associated, or age of an individual consumers supply when determining network charges. In this regard there may be elements of price discrimination and/or mis-priced risks, the most significant perhaps being that between urban and rurally located consumers. However, a potential factor which mitigates this is the lower service levels (greater outage minutes) experienced by rural consumers.

BEL has commenced work on understanding the extent and magnitude that locational aspects impact on the cost and quality of its lines service. The purpose of this is to better understand the 'locational' implications and then develop options for managing the issues associated with them.

b. *having regard, to the extent practicable, to the level of available service capacity; and*

c. *signalling, to the extent practicable, the impact of additional usage on future investment costs.*

BEL's prices signal capacity constraints in the following manner.

Controlled Load - BEL has a day and night price signal which incentivises movement of controllable load away from periods of high usage (congested periods that might give rise to a need for future investment). BEL's prices provide to certain consumer groups, a signal that there is an opportunity for consumers to receive a lower price for service by allowing their load to be shifted in periods of high demand on the network.

Demand (kW) -The demand charge provides a strong price signal by incentivising consumers to reduce their demand at high network congestion

[5] The next best alternative would likely be Solar PV with storage for domestic customers and Diesel Generation for major consumers. At present, for the majority of consumers connected to BEL's network, these alternatives are likely to have a cost exceeding a typical Retailer's tariff (which is inclusive of energy and BEL's network tariff).

periods by curtailing their loads. Any growth in the demand results in higher charges to the consumer.

Power Factor Charge - BEL does not have significant issues with power factor on its network. However, in the event that price signals are required to assist in the management of power factor issues then a power factor charge will be developed and charged to consumers whose load gives rise to a need for power factor correction to be implemented.

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

   BEL's costs are largely fixed, and prices based on marginal cost will under-recover BEL's total costs of providing a distribution service. Whilst acknowledging the 'efficiency' of Ramsay-type pricing, BEL has a relatively small number of consumers in most of its Load Groups. Amongst the smaller Load Groups with 'lower' demand responsiveness are regional schools and the hospital. To avoid detrimental impacts to the community, BEL, at this point in time, addresses *the need for prices that have regard to the ability of consumers to respond* by maintaining variable consumption tariffs that are based on the consumers actual energy use.

3. *Provided that prices satisfy (1) above, prices should be responsive to the requirements and circumstances of stakeholders in order to:*

   a. *discourage uneconomic bypass;*

   b. *allow for negotiation to better reflect the economic value of services and enable stakeholders to make price/quality trade-offs or nonstandard arrangements for services; and*

   c. *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.*

   In all recent surveys of consumer preferences, the majority of responders have been happy with the status quo, and are not inclined to trade current reliability levels for higher or lower prices.

   When prices are above the standalone cost for particular consumers, a situation is created where the possibility of efficient bypass of the existing infrastructure is created. BEL's prices are below the stand alone costs (for the vast majority of connected customers), thereby discouraging bypassing the network. In addition, while BEL uses standard tariffs, it may negotiate connection costs with consumers requiring non-standard connections or with non-standard loads. To date this has not been required. BEL believes that this approach will allow it to make price and service trade-offs with consumers to better match their circumstances.

BEL supports the connection of embedded generation on our network and negotiated a service contract with a new generator in the 2013/14 financial year.

As the relative cost of photovoltaic and other emerging technologies drops, incentives for bypass may increase. BEL is monitoring this. In the medium term, BEL intends to consider options for encouraging alternative supply when that is economic/efficient, and the possibility of locational pricing to provide the right signals for the uptake of new technologies.

4. *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.*

All prices are developed in a systematic approach that broadly reflects the consumer profile and connection characteristics. All of these prices are published in public documents and thus the delivery of standard prices is transparent.

Recent prices changes have been applied on a reasonably uniform basis relative to changes BEL's identified revenue requirement—which has been developed in a manner consistent with that applying to an EDB subject to a DPP Determination.

To avoid price shocks, any rebalancing between load groups, or any reweighting between tariffs within a Load Group are modelled, using actual customer demand, to assess the impact on customers—with an intention of demonstrating and ensuring that price adjustments are not unreasonably large from year to year.

5. *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.*

BEL attempts to minimise possible transaction costs arising from its network tariffs, by limiting the complexity of tariff structures and the number of charging parameters within each tariff.

BEL applies the same tariff structure to all retailers and has not introduced any new tariffs or tariff structures in the 2016/17 disclosure year.

5. RECOVERY OF LINE CHARGES

The total line charge is allocated across 6 Load Groups based on the Load Group's use of the various network components and their capacity requirements. Line charge revenue is collected as a combination of fixed and variable line charges.

As per the Government Policy Statement, Buller Electricity Limited does not differentiate in pricing by geographic location for load groups even though the cost of supply for rural areas is higher than urban areas. This could mean there is an element of price discrimination in BEL's prices that rural consumers benefit from – however, the service quality must also be taken into account.

5.1. LINE LOSSES

The cost of distribution line losses between the Grid Exit Point and the Consumers premises are treated as an electricity supply business cost and are included in the variable energy charge of the energy trader.

Loss adjustment factors are disclosed for each consumer and reflect the total losses incurred via the various components of the distribution network when electricity is conveyed across the network.

5.2. FIXED CHARGES

All consumers except those in Load Groups LG4 and LG7 attract a fixed daily charge ($ per day). For low user domestic consumers the fixed charge amount is controlled by regulation. BEL applies different fixed charges to standard domestic and low user fixed charges to encourage consumers eligible for low fixed charges to apply to the energy retailer for the low fixed charge tariff.

Commercial consumers in Load Groups LG4 and LG7 attract a maximum demand charge which is charged as a fixed rate ($ per kW per day). This is a lagged charge (i.e. based on demand in the previous year).

5.3. VARIABLE CHARGES

All consumers attract variable charges which are dependent on the kWh (units of consumption) used.

5.4. METERING AND LOAD CONTROL EQUIPMENT

Whilst BEL sold its metering and ripple control relays to TrustPower, it retained the operational services for load control and charges the network users for this service. The revenue from these services is included in the line charge revenue.

5.5. ALLOCATING THE REVENUE REQUIREMENT TO LOAD GROUPS

The individual revenue requirement costs identified in Section 3.2 are allocated across the load groups using percentage weighting factors derived from the most appropriate and available cost allocation parameters (i.e. proximate cost drivers).

The cost allocation parameters used are given in Table 2 and described below:

Parameter	LG1	LG1L	LG2	LG3	LG4	LG7	Total
Connections	1,727	2,249	539	79	14	1	4,609
Energy (GWh)	10.7	9.4	9.5	4.5	6.3	9.0	49.4
RCPD (kW)	1,693	1,488	1,503	712	1,314	1,368	8,078
AMD (kW)	1,947	1,711	1,729	819	1,505	2,279	9,990
Asset Value ($M)	8.93	8.07	7.61	3.55	5.15	3.60	36.90

Table 2 Cost allocation parameters

Connections – The expected average ICP consumer connections for each Load Group for the 2016-17 financial year.

Energy (GWh) – The expected energy consumption for each Load Group in the 2016-17 financial year.

The remaining allocation parameters are only partially known for the Load Groups and determining values for each Load Group involves making certain assumptions and approximations.

RCPD (Regional Coincident Peak Demand) – This parameter is derived from the BEL network load which is coincident with the 12 highest peaks of the Upper South Island Transmission System for the Capacity Measurement Period ending 31st August 2015. RCPD at Grid Exit Points (GXPs) during this period is used by Transpower to determine its Interconnection Charges for the 2016-17 financial year, and is therefore an appropriate allocator for these charges. Load Group RCPD is calculated as the result of a three-step process:

> **Step 1 –** Determine the total RCPD of the BEL network load from a knowledge of GXP RCPD, significant local distribution generation, and assuming network losses of 6%. These parameters are summarised in Table 3.
>
> **Step 2 –** Determine the contribution of half hour metered LG4 and LG7 ICPs to the RCPD. Estimate the RCPD contribution of non-half hour metered LG4 and LG7 ICPs. Combining these known and estimated quantities allows the RCPD for Load Groups LG4 and LG7 to be determined.

Step 3 – The remaining portion of the 8,078W RCPD is allocated across LG1-LG3 pro-rata using the Energy (GWh) parameter.

RCPD Parameter	Value
RCPD ORO GXP	3,998 kW
RCPD WPT GXP	6,465 kW
BEL RCPD	8,594 kW
BEL RCPD Load (assumes 6% loss)	**8,078 kW**

Table 3 Summary of RCPD Parameters

AMD (Anytime Maximum Demand) – This parameter provides a measure of the contribution of the Load Group to the peak loading on the BEL distribution network. A peak demand of 10,628 kW occurred on the BEL network occur on 28/7/2015 in Trading Period 36. Assuming a 6% loss this corresponds to an AMD of 9,990kW at consumers' meters. AMD is apportioned across the Load Groups in a similar manner to RCPD. For Load Groups LG4 & LG7 half hour meter data is used where available, otherwise estimates are made. The remainder of the RCPD is allocated between LG1-LG3 pro-rata using the Energy (GWh) parameter.

Asset Value – The value of different asset classes is obtained from BEL's asset database and are given in Table 4. The asset value for each asset class is allocated across the Load Groups using the indicated Allocation Method. AMD % is used as the allocation method for the majority of asset classes. In several cases the AMD % is modified if a particular Load Group does not utilise a particular asset class. For example LG4 and LG7 do not use the 400V network and as a result this asset class is only allocated across Load Groups LG1-LG3. In the case of Zone Substation and 33kV assets, LG7 is deemed to utilise 33% of these assets. Asset values for BEL's pricing methodology were last updated for the 2014/15 pricing year. Asset values will be recalculated for the 2017/18 pricing year.

The cost allocation parameters in Table 2 are expressed as a percentage of the total for each Load Group and are given in Table 5 (also shown graphically in Figure 5). It is noted that the RCPD % and AMD % allocators are very similar.

Asset Class	Allocation Method	Value ($k)
110kV	AMD %	51
GXP Assets	AMD %	3,429
Zone Substation	Modified AMD % with LG7 set to 33%	3,007
33kV	Modified AMD % with LG7 set to 33%	5,487
11kV	Modified AMD % with LG7 excluded	10,634
400V	Modified AMD % with LG4-LG7 excluded	5,506
Switchgear	Modified AMD % with LG7 excluded	3,068
Transformers	Modified AMD % with LG7 excluded	4,266
SCADA	Connections %	181
Communications	Connections %	190
Load Control	Connections %	204
Generators	Connections %	881
Total		36,904

Table 4 Asset classes, values, and allocation methods used

Parameter	LG1	LG1L	LG2	LG3	LG4	LG7
Connections %	37.5%	48.8%	11.7%	1.7%	0.3%	0.0%
Energy %	21.7%	19.0%	19.2%	9.1%	12.8%	18.2%
RCPD %	21.0%	18.4%	18.6%	8.8%	16.3%	16.9%
AMD %	19.5%	17.1%	17.3%	8.2%	15.1%	22.8%
Asset %	24.2%	21.9%	20.6%	9.6%	13.9%	9.7%

Table 5 Cost allocation parameters expressed as a percentage of the total for each Load Group.

The percentage cost allocation parameters are then applied to the components of the Revenue Requirement as indicated in Table 6. This allows the Revenue Requirement for each Load Group to be determined as well as the percentage allocation across the Load Groups.

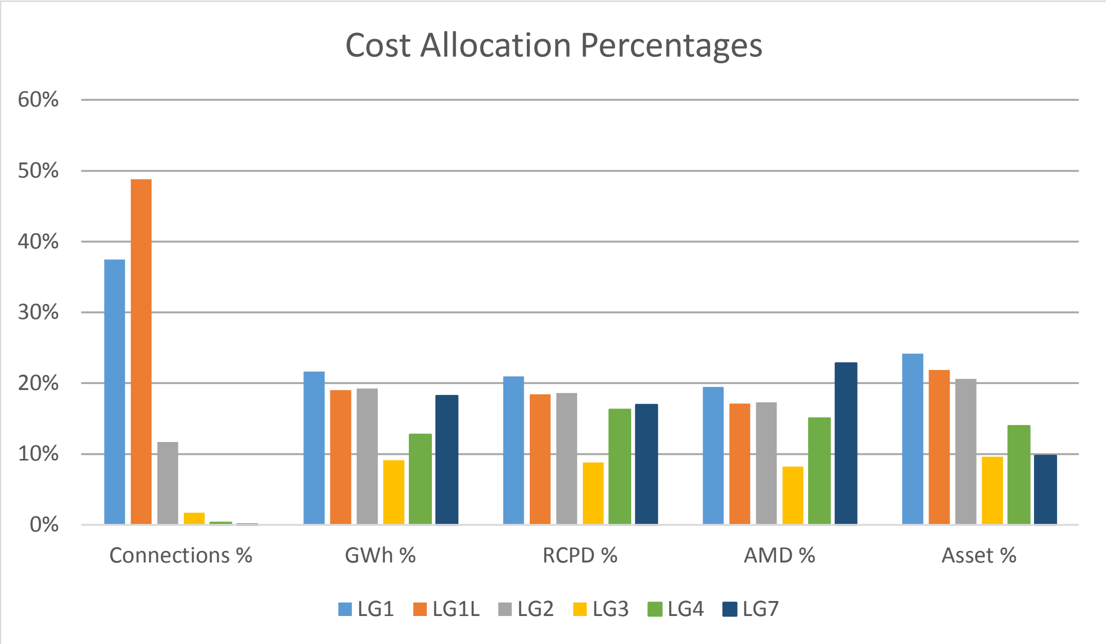

Figure 5 Cost allocation parameters expressed as percentages

Revenue Component	Allocation Parameter	LG1 ($k)	LG1L ($k)	LG2 ($k)	LG3 ($k)	LG4 ($k)	LG7 ($k)	Total ($k)
Maintenance	**Asset %**	218	197	186	87	126	88	900
Operations	**AMD %**	35	31	31	15	27	41	180
Transmission Costs	**RCPD %**	295	259	262	124	229	238	1,407
Pass-Through Costs	**Energy %**	22	19	19	9	13	18	100
Business Support	**Energy %**	282	247	250	118	166	237	1,300
Depreciation	**Asset %**	290	263	247	115	167	117	1,200
Cost of Capital	**Asset %**	314	284	268	125	181	127	1,300
Tax	**Energy %**	87	76	77	36	51	73	400
Total		**1,542**	**1,376**	**1,340**	**630**	**960**	**939**	**6,787**
Total %		**22.7%**	**20.3%**	**19.7%**	**9.3%**	**14.1%**	**13.8%**	**100%**

Table 6 Allocation of the Revenue Requirement to the Load Groups

5.6. TARIFF STRUCTURE

The next step in the Pricing Methodology is to set line charge tariffs for each Load Group to recover the targeted Revenue Requirement for each Load Group (from Table 6). With reference to Step 3 in Figure 2, an initial set of tariffs are chosen once the consumer groupings have been reviewed. The Forecast Load Group Revenue can be calculated using a forecast of consumer numbers (fixed charges) and a forecast of the energy consumption for each line charge tariff (variable charges). In general terms the initial set of tariffs will not meet all requirements and will not provide for the final pricing solution.

An iterative process is then initiated, where the fixed and variable tariffs for each load group are manually scaled in order to find the best solution for obtaining line charge revenue. At each iteration consideration is given to the following:

- The difference between the Target and Forecast Load Group Revenues.
- The split between fixed and variable line charge revenue for each Load Group and for the overall revenue[6].
- Percentage and dollar value allocation of the forecast revenue across the load groups.
- Minimising the potential for price shocks to consumers[7].
- Compliance of the tariffs with the low user domestic pricing regulations.

There are many competing factors which need to be taken into account and a good compromise must be found.

BEL's forecasts for 2016/17 take the view that there will be no increases in energy (GWh) and no material changes in customer numbers. This meant that price, and not volumetric factors would be required to recover any increase in the revenue requirement.

The expected percentage revenue allocations between Load Groups for:

- the 2015/16 financial year (expected);
- the 2016/17 financial year as is <u>now</u> forecast; and
- the 2016/17 financial year as was initially desired (pricing model target), are given in Table 6 and shown graphically in Figure 6.

[6] BEL has a policy in place to increase the proportion of revenue received from fixed charges to 50% over the next 3 years.

Allocation	LG1	LG1L	LG2	LG3	LG4	LG7	Total
Expected 2015/16	24.8%	19.6%	20.1%	7.7%	12.7%	15.0%	100%
Forecast 2016/17	24.9%	20.5%	20.5%	7.9%	12.4%	13.7%	100%
Pricing Model Target 2016/17	22.7%	20.3%	19.8%	9.3%	14.1%	13.8%	100%

Table 7 Load Group Revenue Percentage Allocations

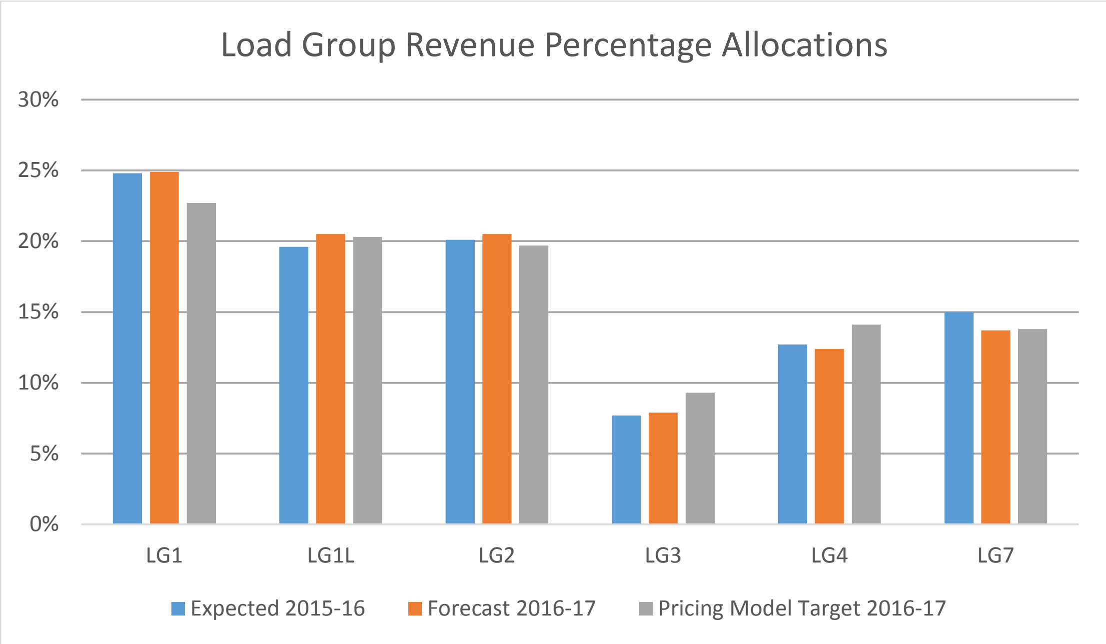

Figure 6 Load Group Revenue Percentage Allocations

In each Load Group BEL offers Anytime (24 hour), Day (8am-Midnght) and Night (Midnight-8am) variable tariffs. In addition Controlled (water heating) variable tariffs are also offered for domestic and small non-domestic (LG2) consumers. Tariffs are set in a manner to incentivise the use of electricity during off peak times (Night) and to encourage the control of hot water heating.

The proportions between the current variable tariff values in each Load Group are those which have been historically used. At this point in time it is uncertain how tariffs could be adjusted in order to achieve more desirable and/or efficient outcomes for BEL and its consumers.

A summary of network statistics used to forecast the expected revenue for the 2016/17 financial year is given in Table 8. The expected fixed and variable revenues for each Load Group are given as well as the fixed/variable revenue percentage split.

Load Group	ICPs	Energy (GWh)	Capacity (kW)	Fixed Revenue (%)	Variable Revenue (%)	Fixed Revenue ($k)	Variable Revenue ($k)	Total Revenue ($k)
LG1	1,727	10.7		43.3	56.7	794	1,038	1,832
LG1L	2,249	9.4		8.2	91.8	123	1,383	1,506
LG2	539	9.5		29.8	70.2	449	1,059	1,507
LG3	79	4.5		36.4	63.6	212	371	583
LG4	14	6.3	2,617	38.7	61.3	354	560	914
LG7	1	9.0	2,692	42.7	57.3	429	577	1,006
Total	**4,609**	**49.4**		**32.1**	**67.9**	**2,361**	**4,987**	**7,348**

Table 8 Expect revenue statistics for the 2016-17 financial year

Fixed charges for LG4 and LG7 consumers are based on their half hour maximum demand (Capacity) in the previous year. In this case the Capacity measurement period was defined to occur from November 2014 – October 2015. Where half hour meter data is not available Capacity is estimated and generally based on the capacity of the power supply.

The published line charge tariffs can be found in Section 8.

6. TRANSMISSION PRICING

Transmission costs (including ACOT) were allocated to Load Groups using the RCPD %. Transmission tariffs for 2016/17 were set so that where possible transmission costs are recovered from each Load Group as part of the fixed component of line charges. Where transmission costs could not be fully recovered as a fixed line charge the remainder is recovered as at flat variable line charge.

7. NOTE TO CONSUMERS

All energy retailers using the Buller Electricity Limited network pay the same line charges. However pricing options may differ between energy retailers which may have an effect on the final charge the consumer pays.

8. PUBLISHED CONSUMER PRICING

Buller Electricity Limited

New Line Charges

From

1st April 2016

The following information is published to enable electricity consumers to determine the total charge (excluding GST) for line business activities for each consumer group which is applicable to them. It also indicates the transmission charges, the number of consumers in each load group, the date the new line charges will be introduced, and the line charge payable prior to these new charges.

Chief Executive

Line Charges to apply from 1st April 2016

			As at April 2016			As at April 2015		
Description		**Number of Consumers**	**Buller Electricity Charges**	**Transmission Charges**	**Total Line Charges**	**Buller Electricity Charges**	**Transmission Charges**	**Total Line Charges**
Domestic Consumers		1,727						
Fixed Charge	$/day		$0.79	$0.47	$1.26	$0.60	$0.53	$1.13
24 Hours	c/unit		11.35	0	11.35	11.88	0	11.88
Controlled	c/unit		5.11	0	5.11	5.35	0	5.35
All Inclusive	c/unit		9.00	0	9.00	9.42	0	9.42
Day	c/unit		13.64	0	13.64	14.28	0	14.28
Night	c/unit		3.40	0	3.40	3.56	0	3.56
Domestic Consumers Low User		2,249						
Fixed Charge	$/day		$0	$0.15	$0.15	$0	$0.15	$0.15
24 Hours	c/unit		14.79	1.45	16.24	14.25	1.75	16.00
Controlled	c/unit		8.96	1.45	10.41	8.51	1.75	10.26
All Inclusive	c/unit		12.60	1.45	14.05	12.09	1.75	13.84
Day	c/unit		16.94	1.45	18.39	16.37	1.75	18.12
Night	c/unit		7.38	1.45	8.83	6.95	1.75	8.70
Commercial Consumers up to 15kVA		539						
Fixed Charge	$/day		$0.95	$1.33	$2.28	$0.07	$1.40	$1.47
24 Hours	c/unit		11.77	0	11.77	13.22	0	13.22
Controlled	c/unit		5.30	0	5.30	5.95	0	5.95
Day	c/unit		14.14	0	14.14	15.89	0	15.89
Night	c/unit		3.52	0	3.52	3.96	0	3.96
Lighting	c/unit		9.08	0	9.08	10.20	0	10.20
Commercial Consumers over 15kVA		79						
Fixed Charge	$/day		$3.05	$4.30	$7.35	$1.97	$3.89	$5.86
24 Hours	c/unit		8.65	0	8.65	9.40	0	9.40
Day	c/unit		11.21	0	11.21	12.19	0	12.19
Night	c/unit		3.33	0	3.33	3.62	0	3.62
Commercial Consumers over 100kVA		14						
Fixed Charge*	c/kW/day		13.08	23.97	37.05	4.81	25.56	30.37
24 Hours	c/unit		8.64	0	8.64	9.34	0	9.34
Day	c/unit		11.21	0	11.21	12.12	0	12.12
Night	c/unit		3.33	0	3.33	3.60	0	3.60
Commercial Consumers over 1000kVA		1						
Fixed Charge*	c/kW/day		19.47	24.22	43.69	1.57	32.56	34.13
24 Hours	c/unit		6.46	0	6.46	6.91	0	6.91
Day	c/unit		8.39	0	8.39	8.97	0	8.97
Night	c/unit		2.49	0	2.49	2.66	0	2.66

Day: 8am – Midnight Night: Midnight – 8am

*Based on peak metered kW demand for the previous year. Where peak kW demand is not metered based on a portion of the installed capacity as determined by Buller Electricity Limited.

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IN ACCORDANCE WITH THE COMMERCE ACT

Electricity Distribution Information Disclosure Determination 2012

Certification for year beginning Disclosure 2016

We, **Francis Thomas Dooley** and **Graham Arthur Naylor**, being directors of Buller Electricity Limited certify that, having made all reasonable enquiry, to the best of our knowledge-

a) the following attached information of Buller Electricity Limited prepared for the purposes of clause 2.4.1 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination.

b) the prospective financial or nonfinancial information included in the attached information has been measured on a basis consistent with regulatory requirements or recognised industry standards.

....
Director

....
Director

Dated: 28 January 2016