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August 24, 2011

<u>Via Email</u>
Original via mail

Ms. Alanna Gillis
Acting Commission Secretary
BC Utilities Commission
Sixth Floor, 900 Howe Street, Box 250
Vancouver, BC V6Z 2N3

Dear Ms. Gillis:

Re: ***FortisBC Inc. Residential Inclining Block Rate Application – Filing of Additional Evidence pursuant to Commission Order G-142-11***

Please find attached the additional evidence of FortisBC Inc. which is filed as directed by the British Columbia Utilities Commission in Exhibit A-17 in the above noted matter.

Sincerely,

Dennis Swanson
Director, Regulatory Affairs

Residential Inclining Block (RIB) Rate Application

Additional Evidence Filing Pursuant to Order G-142-11

August 24, 2011

FortisBC Inc.

Table of Contents

1. REVENUE STABILITY

a. Demonstrate the need for revenue stability;

Revenue stability refers to the extent that a variation in load will lead to variation in net income from year to year. It follows that the more a utility's revenue is tied to variable rather than fixed sources, the less stable that revenue is. Fluctuations in load, due to weather conditions, economic conditions, or the energy conservation efforts of its customers such that energy sales fall short of forecasts may cause the utility to not reach its required revenue and rate of return.

Through this regulatory process, the writings of James Bonbright have been relied upon as providing guidance in the setting of rates. FortisBC has employed the criteria denoted as "Attributes a Sound Rate Structure", articulated by Bonbright to evaluate the various options presented in its RIB Application. In Section 3.1 of the RIB Application, the Company provides a paraphrased summary of the Bonbright principles including Number 7, which is simply stated as, "Revenue Stability". The full text of this principle, as it appears in the referenced literature is,

Revenue stability and predictability, with a minimum of unexpected changes seriously adverse to utility companies.

While the Bonbright criteria related to energy efficiency and fairness in rates have received relatively more attention from the Commission and intervenors, Revenue Stability, as a desired characteristic of sound rate design has been raised in Company information request responses and has prompted requests for further explanation.

Reference to the importance of Revenue Stability appears in the responses to the following information requests: BCUC 1.12.4, BCSEA 1.2.1, and OEIA 1.7.2. In these responses, the Company has stated,

> *....the Company maintains that the collection of fixed costs through fixed charges, as well as the established need for revenue stability needs to be considered. Decreasing the customer charge and increasing the energy charges adds sales revenue volatility. FortisBC believes that its proposal provides an appropriate balance between the needs of the Company and the concerns customers may have with the level of the customer charge. (BCUC 1.12.4)*

The need for revenue stability is best demonstrated by way of example, as contained in the following sections.

b. Demonstrate that decreasing the Basic Charge and increasing the energy charge adds sales revenue volatility;

In order to demonstrate the impact of the Customer Charge as a mitigating factor on revenue fluctuations resulting from variation in load, consider the following example. The concept is not confined to RIB rates, so for the purpose of simplicity, a comparison of flat rates can be used. It should be noted however, that a RIB rate will exacerbate the situation as revenues are non-linear and load that does not materialize above the threshold has a larger impact. The example uses the following basic assumptions:

- Load, number of bills, current Customer and flat Consumption charge for the base case are the same as presented in the RIB Application;
- Alternate Customer Charges used are those appearing in the Application and subsequent Information Requests;
- Alternative flat rates are set to recover the same revenue as the base case rate at the base case load level;
- Load shortfall is assumed to result from a reduction in use per customer; and
- The examples shown represent a shortfall in residential load forecast of 2%, 4% and 6%. Revenue variations of the same magnitude would result from an increase in load as well, just in the opposite direction.

Rates compared are:

Table 1 Rates and Revenues at 100% Forecast Load

Customer Charge	Rate per kWh	# of bills	Load (kWh)	Customer Charge Revenue	Energy revenue	Total Revenue
$28.93(Base Case)	$0.09090	592,857	1,261,232,787	17,151,353	114,646,060	131,797,413
$21.50*	$0.09439	592,857	1,261,232,787	12,746,426	119,050,988	131,797,413
$15.00	$0.09745	592,857	1,261,232,787	8,892,855	122,904,558	131,797,413
$10.00	$0.09980	592,857	1,261,232,787	5,928,570	125,868,843	131,797,413
$7.50	$0.10097	592,857	1,261,232,787	4,446,428	127,350,986	131,797,413
$0.00	$0.10450	592,857	1,261,232,787	0	131,797,413	131,797,413

*A reduction of $1.00 in the basic charge results in an increase in the flat energy rate of $0.00047.

To see the mitigating effect of the Customer Charge, total revenues and revenue variation is calculated assuming that load is less than forecast when the base case rates were determined.

In the table below, these revenues are shown when load varies 2%, 4%, and 6% from forecast. These numbers are within the range of past experience as variation from forecast residential sales was approximately 5% in 2006 and 4% in 2005, and 2% in 2009.

With a 2% load reduction, revenues from the rate featuring no Customer Charge will naturally also fall by 2% (since the rate is 100% variable with load). The increasing shortfall that occurs as the Customer charge is lowered from the base case of $28.93 to zero is shown in the "Shortfall over Base Case" column. At a 2% reduction in load the elimination of the Customer Charge would result in a revenue shortfall greater by $343,027 than the resulting shortfall if the rate featured a Customer Charge of $28.93.

This clearly demonstrates that sales revenue volatility is increased as the Customer Charge is lowered and the energy charge is increased.

As shown below, should actual load during the year be 6% lower than forecast during the Revenue Requirements process in which initial rates are set, the elimination of the Customer Charge would result in an incremental revenue shortfall of $1,029,081 versus the rate featuring a Customer Charge of $28.93.

A revenue shortfall of this amount would translate to a rate impact of .36% based on the 2012 revenue requirement.

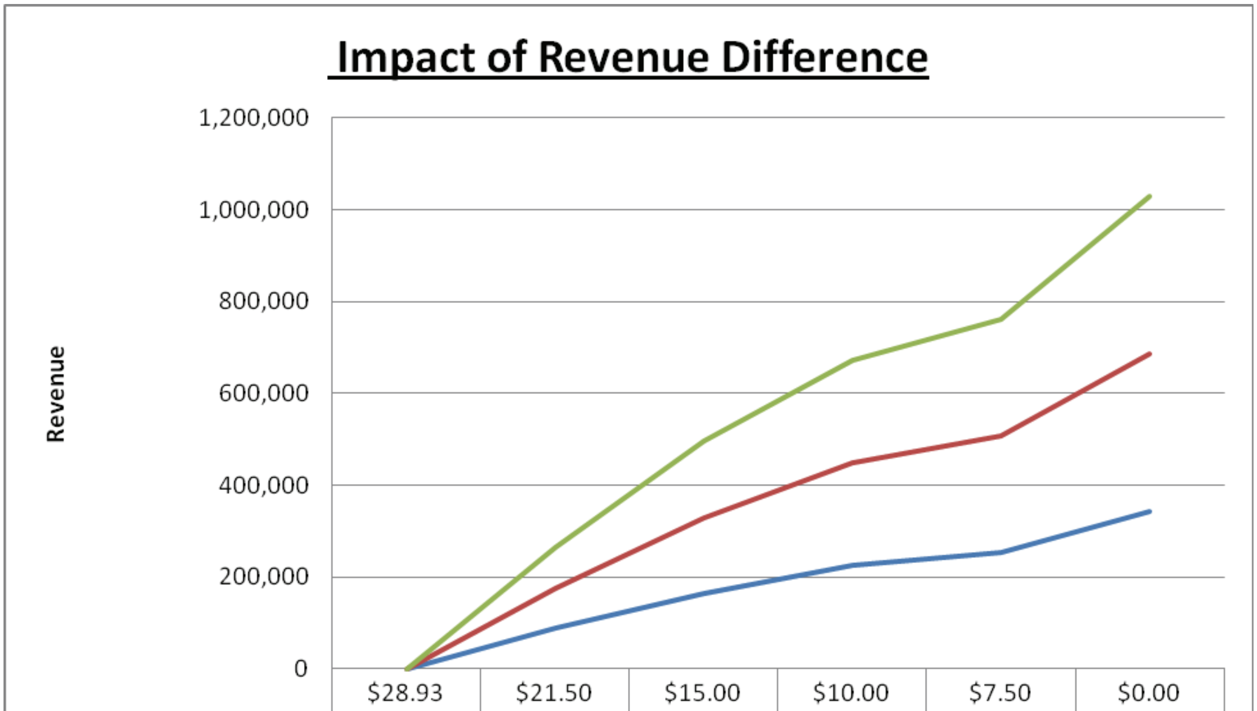
The magnitude of these fluctuations holds in cases where actual loads are greater than forecast as well – leading to a revenue excess of the same absolute amount.

Table 2. Effect of Lower Customer Charge on Total Revenue

Customer Charge	Revenue @ 98% Load ($)	Revenue Shortfall	Shortfall over Base Case	Revenue @ 96% Load ($)	Revenue Shortfall	Shortfall over Base Case	Revenue @ 94% Load ($)	Revenue Shortfall	Shortfall over Base Case
$28.93	129,504,492	2,292,921	0	127,211,571	4,585,842	0	124,918,650	6,878,764	0
$21.50	129,416,394	2,381,020	88,099	127,035,374	4,762,040	176,197	124,654,354	7,143,059	264,296
$15.00	129,339,322	2,458,091	165,170	126,881,231	4,916,182	330,340	124,423,140	7,374,274	495,510
$10.00	129,280,036	2,517,377	224,456	126,762,660	5,034,754	448,911	124,245,283	7,552,131	673,367
$7.50	129,250,394	2,547,020	254,099	126,703,374	5,094,039	508,197	124,156,354	7,641,059	762,296
$0.00	129,161,465	2,635,948	343,027	126,525,517	5,271,897	686,054	123,889,569	7,907,845	1,029,081

Graphically, this is shown in Figure 1 below.

Figure 1 Revenue Difference at Various Load levels



	$28.93	$21.50	$15.00	$10.00	$7.50	$0.00
2% Load Difference	0	88,099	165,170	224,456	254,099	343,027
4% Load Difference	0	176,197	330,340	448,911	508,197	686,054
6% Load Difference	0	264,296	495,510	673,367	762,296	1,029,081

c. Provide the anticipated costs of revenue volatility;

The potential costs to the utility of the revenue volatility are those costs identified in Table 2 above in the columns headed Shortfall over Base Case.

With the use of a deferral account as proposed in the FortisBC 2012/2013 Revenue Requirement Application, the impact of such revenue variations could be managed such that Revenue Stability becomes less of a concern.

Revenue stability is viewed positively in capital markets. Insofar as annual variations in load and revenues erode this stability, access to capital and the associated costs can be affected.

d. Provide the "specific needs of the company" with respect to revenue stability.

The need is revenue stability itself (which also directly impacts rate stability for customers). Revenue stability is a means of ensuring that the Company's need to reach its required revenue (and thus have resources to pay for specific expenditures which the Commission has otherwise approved for the good of all customers) and rate of return are met. When referring to the specific "needs of the Company" in the information request response repeated above, the

Company is drawing attention to the balance that must be struck when designing the RIB or any other rate. Bonbright notes that, "there are conflicts among the competing objectives of ratemaking that are difficult to resolve."

2. THE RIB RATE WILL NOT BE INTRODUCED UNTIL 2012 AT THE EARLIEST.

a. Provide clarification on how 2012 rates are to be calculated. Are they based on the 2011 rate increased by the revenue requirements for 2012?

Yes. In response to BCUC IR 1.1.1a and 1.1.1b, the Company indicated that it had applied for the rates included in the Application and for the pricing principle to be applied to those rates as a means of escalation. As stated in the RIB Application, implementation can occur within 6 to 9 months after receiving a Commission decision due to the amount of customer education and technical consideration. Therefore, 2012 rates will be calculated by applying the pricing principles to the 2011 rates.

The proposed pricing principle is:

Customer charge: exempt from revenue requirement rate increases (but subject to rebalancing adjustments);

Block 1: adjusted by an amount equal to the sum of the general revenue requirement increase and any rebalancing adjustments; and

Block 2: adjusted by an amount sufficient to recover the balance of the general revenue requirement and any rebalancing adjustments.

To illustrate this point, the proposed pricing principle, based on the most current information, would generate increases applied in the following manner:

	Application		
Rate in effect at:	May 1, 2011 Pre-BCH flow-through	May 1, 2011 Post-BCH flow-through	January 1, 2012
May 1, 2011 BCH Flow-through		1.40%	
January 1, 2012 Rebalancing			2.50%
January 1, 2012 RRA Increase			4.00%
Rate Component *			
Customer Charge (per billing period)	28.93	28.93	29.65
Block 1 (/kWh)	0.07828	0.07938	0.08453
Block 2 (/kWh)	0.11272	(set residually)	(set residually)

* Illustration using the FortisBC proposed Option #8 from the Application.

While the beginning rate and methodology is consistent with the Application, the table above contains two pieces of information not known at the time the Application was filed. First, the amount of the BC Hydro flow-through increase was finalized at 1.4%, and the 2012/2013 Revenue Requirement Application has been filed which contains an update to the forecast rate increase for 2012.

The rates in the January 1, 2012 column would be effective upon implementation in 2012 and would vary with any change in the approved 2012 revenue requirement increase. Note that the current flat rates as at August 24, 2011 have a Customer Charge of $29.34 per billing period and an energy rate of $.09217 per kWh. Thus upon implementation the Customer Charge will be decreased.

If a different pricing principle is approved by the Commission it would necessarily change the outcome.

For clarity, if the starting rate, and pricing principle contained in the RIB Application were approved without change, the January 1, 2012 Customer Charge and Block 1 Rate would be the values contained in the table above. The Block 2 rate would be set in consideration of the residential load forecast approved for 2012.

b. Provide conservation and bill impact analysis for RIB scenarios for 2012 to 2015.

The estimated conservation savings and bill impact analysis as requested is provided in the tables attached as Appendix A. Note that use of these estimated numbers is meant to be representative for comparison purposes and have an inherent amount of uncertainty as explained below.

The RIB options included in these tables include the following:

Original options proposed by FortisBC in Table 8-3:

- Option 2
- Option 8
- Option 11
- Option 17

Customer Charge of $28.93 with highest savings estimate:

- Option 4
- Option 7
- Option 31

Customer Charge of $21.50 with highest savings estimate:

- Option 13
- Option 16
- Option 33

Customer Charge of $15.00 with highest savings estimate:

- Option 28
- Option 66
- Option 69

Customer Charge of $7.50 with highest savings estimate:

- Option 22
- Option 25
- Option 19

Customer Charge of $10.00 with highest savings estimate:

- Option 60

- Option 61
- Option 63

Customer Charge of $0.00 with highest savings estimate:

- Option 51
- Option 54
- Option 57

The rate increases projected by FortisBC are:

	2012	2013	2014	2015
RRA Increase	4.00%	6.90%	5.80%	11.40%
Rebalancing Increase	2.50%	2.30%	0.00%	0.00%

These increases have been updated from the original filings as they are the current figures from the 2012/2013 Revenue Requirement Application. In Appendix A, the 2011 rates are those prior to the May 1, 2011 BC Hydro flow-through increase. While the rates shown for 2012 rates and beyond reflect the 2011 BC Hydro increase, it is not shown as an interim step in the tables. BC Hydro flow-through increases are likely in and after 2012 and the impacts of these increases have been estimated by the Company and are included in the 2012 through 2015 projected increases included in the 2012/2013 Revenue Requirement Application and shown above.

For each option, different pricing principles were used to increase the rates over the 5-year period.

For the $28.93 and $0.00 customer charge levels, the pricing principles included:

- Pricing Principle 1 – Both Blocks. The customer charge was escalated by the amount of the rebalancing increase. Block 1 was increased by the average combined rate increase. Block 2 was set to recover all remaining revenue.
- Pricing Principle 2 – Block 2 Only. The customer charge was escalated by the amount of the rebalancing increase. Block 1 was not increased. Block 2 was set to recover all remaining revenue.
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For the customer charge levels of $21.50, $10.00 and $7.50, the pricing principles included:

- Pricing Principle 3 – All Components. All three rate components were increased by the average combined rate increase.
- Pricing Principle 4 – Customer and Block 2. The customer charge was escalated by the by the average combined rate increase. Block 1 was not increased. Block 2 was set to recover all remaining revenue.

For the $15.00 customer charge level, all 4 pricing principles were applied. Conservation savings are once again estimated using elasticity values of (.05/.10), (.10/.20) and (.20/.30) for each of the 5 years. Savings are shown on a cumulative basis for each of the 5 years.

Because a certain amount of the rate increases by component will occur as a result of the projected general rate increases, independent of a RIB rate, the cumulative savings shown reflect a net amount associated with the RIB rate structure. This net amount is calculated by taking the total cumulative savings associated with each year and subtracting the expected savings that would occur under a flat block rate scenario.

As previously stated, there is a great deal of uncertainty associated with the elasticity estimates as elasticity is impacted by the level of the rate, the income levels in the area, appliance saturations and weather and other things. The use of elasticity numbers taken from other sources is somewhat useful but will likely not provide reliable information given the unique circumstances of FortisBC.

Further, the elasticity calculations for each year reflect eventual savings as a result of the rate change and will not necessarily all occur in the same year as the rate is changed. So while elasticity savings are shown by year, as requested, they reflect the savings that will occur over time associated with the change in rates for each year. FortisBC is not able to estimate how much of the savings will occur in any given year. Elasticity values should be seen as long-term with the three elasticity scenarios representing varying degrees of customer response.

It is also FortisBC's experience that despite annual rate increase in recent years, use per customer continues to rise. That is contradictory to the elasticity results when the calculations are applied to the projected annual rate increases for 2012-2015 under a continued flat rate design. These calculations show an expected savings ranging from 2.4% to 7.5% over the 5-year period. This finding leads us to further question the validity of relying on the calculated conservation savings for the RIB rate when selecting the appropriate rate design.

The estimated bill impacts include the minimum and maximum rate increases, as well as a breakdown of the percent of customers that annual bill impacts in the following categories:

- Decrease of greater than 30%
- Decrease of 20-30%
- Decrease of 10-20%
- Decrease of 0-10%
- Increase of 0-10%
- Increase of 10-20%
- Increase of 20-30%
- Increase of 30-40%
- Increase of 40-50%
- Increase of greater than 50%

The bill impacts are shown for the 2011 period representing the initial change from a flat rate to an RIB rate, for the cumulative 5-year period with the net impact from RIB rates, and for the cumulative 5-year period reflecting the total increase in rates. The net impact of the RIB rates reflect the exclusion of the annual average rate increases projected over the 5-year period, which is 34.3% in total.

Because the 5-year forecast of rate increases carries a great deal of uncertainty, the bill impacts in later years are less reliable than for 2011. While the projected rate increases reflect the best information available at the present time, there is uncertainty surrounding the required rate increases in the future, particularly in the later years. Because it is also unknown how customers will respond to the selected RIB rate, and how that will impact sales over the next 5 years, it is difficult to know if the RIB rates will impact the required rate increases. And the bill impacts to customers will also change as a result in the RIB rate design. If customers using block 2 conserve energy, their bill impacts will be lower. Customer that see only block 1 may increase their consumption and their bill impacts may be higher.

As a general comment on the analysis, the Company believes that there is value in reducing the number of options from Appendix A that continue to be examined. This can simply be done by identifying those options that can simply be termed “reasonable”. Pricing Principles 2 and 4, which do not escalate the block 1 rate at all lead to block 2 rates that grow too quickly to be acceptable to the Company or its customers.

In doing this, the number of options is reduced to 25, which includes FortisBC's original preferred option. A summary of these options is attached as Appendix B. Also included in this table is a breakdown of the percentage of revenue that comes from each rate component.

3. A RESPONSE TO THE SPECIFIC QUESTIONS RAISED BY MR. SHADRACK IN THE HEARING, INCLUDING:

a. Whether customers that purchase over 1900 kilowatts in a billing cycle are receiving power below the costs of delivering it; and

b. The threshold consumption below which customers pay less than 9.35 cents.

In order to address Mr. Shadrack's assertions, the Company has reviewed the regulatory record from the 2009 COSA proceeding and identified the set of assumptions used in the calculations and conclusions that are drawn by Mr. Shadrack. Namely:

- The "*estimated delivery cost*" relied upon by Mr. Shadrack in his examples is drawn from the COSA materials. The current value can be found in Schedule 1.1 of the revised COSA filed with the Compliance filing of November 19, 2010 (Attached as Appendix C to this Filing.) This number represents a combined average rate calculated by dividing the total costs allocated to the residential customer class divided by the total number of kilowatt-hours consumed over the year. The updated value is $0.0935 per kWh.
- Mr. Shadrack asserts that any time the total *blended* cost of power over a billing period is less the estimated delivery cost on a per kWh basis, that the customer is receiving power at less than the cost of delivery.
- The rates used to arrive at these conclusions are those in effect on December 31, 2009. The Customer Charge at that time was $24.26 per billing period, and the energy rate was $0.07627 per kilowatt-hour. In Shadrack COSA IR 2 Question 3 (dated February 2, 2010) Mr. Shadrack presents information that a customer using 1000 kWh over a billing period will have a *blended* cost of power of 10.05 cents per kWh. Mr. Shadrack also calculates that a customer using 1906 kWh over a billing period will have a *blended* cost of power of 8.8998 cents per kWh.

- This is shown in the table below. The initial COSA materials, which were updated with the November 19, 2010, showed an estimated delivery cost of $0.0890 / kWh in Schedule 1.1. This is the basis for the claim that a consumption of 1906 kWh is the point above which customers will be subsidized by customers below that level.

Table Shadrack 1 – Original Shadrack Calculations

Consumption per billing period	Customer Charge	Energy Charge @$0.07627 / kWh	Total Charge	Blended Cost (total charge/ kWh)
1000 kWh	24.26	76.27	100.53	0.10053
1906 kWh	24.26	145.37	169.63	0.088998

Foregoing for the moment any comment on the validity of these basic assumptions, the Company believes that as a starting point, two adjustments should be made to Mr. Shadrack's methodology. First, the "subsidization point" should be updated with the most current COSA estimated delivery cost from the November 19, 2010 update - $0.0935 per kWh. Second, for consistency, the rates used in the analysis should be those in effect at the time the COSA was conducted (and used elsewhere in the COSA), not the higher current (at the time) rates used in Mr. Shadrack's previous submission.

Using the same methodology, these updated numbers yield the following results.

Table Shadrack 2 – Revised Shadrack Calculations

Consumption per billing period	Customer Charge	Energy Charge @$0.07463 / kWh	Total Charge	Blended Cost (total charge/ kWh)
1000 kWh	23.74	74.63	98.37	0.09837
1256 kWh	23.74	93.74	117.48	0.09353

Using Mr. Shadrack's logic then, any residential customer using over 1256 kWh per billing period is receiving service at a cost lower than to provide it and is being subsidized by those customers with consumption below that level.

The Company does not however agree that the assumptions and methodology employed by Mr. Shadrack appropriately describes the cost relationships derived from the COSA. This is primarily because:

- The use of a "blended cost" value does not recognize that customers place a fixed cost on the utility regardless of the level of consumption.

- The methodology does not recognize that a portion the fixed per-customer costs identified in the COSA are currently being collected in the variable energy rate charged to customers.

In addition, the assumptions used in the methodology essentially argue that the fixed costs involved in the delivery of service should not be paid by some customers.

In the opinion of the Company, any such analysis aimed at identifying a “subsidization point” should consider both appropriate fixed and variable charges.

In the same COSA Schedule 1.1 there is additional information relevant to the analysis. While the estimated delivery cost number is convenient, the component parts are more appropriate. The fixed cost per customer is $28.74 per customer per month ($57.48 per billing period), and with the customer costs removed from the total allocated costs, the remaining variable costs are $0.06631 on a per kWh basis.

To arrive at a COSA derived point at which a customer will have consumption sufficient to produce revenues adequate to cover the cost of service, one needs to compare revenues at the rates in effect at the time the COSA was conducted against the COSA derived cost of providing service. These costs need to include the full fixed customer costs, and the variable costs that remain after the customer costs have been removed. When the revenues and costs at various levels of consumption are compared in this manner, it can be seen that until consumption rises above approximately 4050 kWh in a billing period, revenues are not sufficient to recover the shortfall in the customer charge revenue. Under the current rate structure, customers consuming below 4050 kWh in a billing period pay less than their COSA derived costs and customers consuming below 4050 kWh pay more. Therefore, customers consuming less than 4050 kWh in a billing period are being subsidized by those consuming above that level.

Table Shadrack 3 – Revenue vs COSA Cost to Serve

	Revenues			Costs				
Consumption	Customer Charge	Energy Charge @$0.07463 / kWh	Total Charge	Variable Costs @$0.06631/ kWh	COSA Allocated Fixed Costs	Total Cost	Costs less Revenue	Revenue to Cost Ratio
a	b	c = a x .07463	d=b + c	e = a x.06631	f	g = e+f	h=g-d	d/g
500	23.74	37.32	61.06	33.15	$57.48	90.64	29.58	67.4%
1000	23.74	74.63	98.37	66.31	$57.48	123.79	25.42	79.5%
1500	23.74	111.95	135.69	99.46	$57.48	156.95	21.26	86.5%
2000	23.74	149.26	173.00	132.62	$57.48	190.10	17.10	91.0%
2500	23.74	186.58	210.32	165.77	$57.48	223.25	12.94	94.2%
3000	23.74	223.89	247.63	198.92	$57.48	256.41	8.78	96.6%
3500	23.74	261.21	284.95	232.08	$57.48	289.56	4.62	98.4%
4000	23.74	298.52	322.26	265.23	$57.48	322.72	0.46	99.9%
4050	23.74	302.25	325.99	268.55	$57.48	326.03	0.04	100.0%
4060	23.74	303.00	326.74	269.21	$57.48	326.69	-0.04	100.0%
4100	23.74	305.98	329.72	271.86	$57.48	329.35	-0.38	100.1%
4500	23.74	335.84	359.58	298.39	$57.48	355.87	-3.71	101.0%
5000	23.74	373.15	396.89	331.54	$57.48	389.02	-7.87	102.0%

Therefore, although using the assumptions and methodology employed by Mr. Shadrack will produce results consistent with his findings, the Company does not believe that they can appropriately be used to support the conclusions that are drawn from them. In response to the specific BCUC questions above,

Customers that purchase 1900 kilowatt-hours or more in a billing cycle (bi-monthly) are not receiving power below the cost of delivery, and

Using Mr. Shadrack's approach and both rates and costs contained in the COSA, on a blended cost basis, customers pay less than 9.35 cents per kWh at approximately 1256 kWh in a billing period.

4. LONG-RUN MARGINAL COST

a. Explain why FortisBC does not agree that the Block 2 rate should be capped at the long-run marginal cost of power

The Company has not said that a cap on the block 2 rate set or based on the Long Run Marginal Cost (LRMC) is not appropriate; rather, it has maintained that the primary consideration in the rate design was the limitation of customer impact. In any case, although the Company recognizes the rationale for instituting such a cap, it also recognizes that as a practical matter it must be considered in the context of each particular utility's circumstance. In FortisBCs case, should such a cap be introduced, the block 1 and block 2 rates would rapidly converge and the conservation impact would dwindle.

Fundamentally, the move to marginal cost based pricing is undertaken to set prices that lead to the most efficient use of resources, or at the very least, to allow customers to determine how much it is worth, based on competing priorities, to consume more or less of a commodity, in this case – electricity.

In the short term, a customer can alter the way electricity is consumed, and in the longer term make decisions about possible capital expenditures such as energy efficient appliances or heating sources.

If one accepts the customers are responsive to price signals (as FortisBC does) then in order to promote efficiency in the producing and supplying of electricity, the prices facing the consumer should reflect (though not necessarily match) the marginal cost to the utility of producing more or less electricity. In this manner, customers who increase their consumption during time periods that are expensive to the utility will see that cost reflected in their bills. Of course, a customer who chooses to, and is able to reduce consumption during peak periods can see an overall reduction in bill amounts. This time-matching of consumption to costs is feature of time-of-use rates but not inherent in a RIB structure.

For a RIB rate, using the LRMC as the referent and cap for the second block is appropriate and effective when it exceeds the block 2 rate by an appreciable amount. This is the case with BC Hydro, where its LRMC is based on prices paid for power flowing from the 2008 Clean Power Call which in turn reflects policy objectives. For FortisBC, with a smaller, less densely populated service area amongst which to spread fixed costs, the difference between a potential block 2 rate and the LRMC is small enough that the cap may be reached quite quickly.

In FortisBC's view if the desired end result of the RIB rate is conservation, that objective can only be achieved by pricing the second block above the first block regardless of where the second block is in relation to the long run marginal cost. Purely in terms of economic theory, it may not be desirable to price any electricity above the marginal cost, but in the Company's circumstance, were the Commission to determine that the block 2 rate should be capped at the LRMC, it should be recognized that some adjustment to that methodology will be required with the first few years.

b. What value would FortisBC propose to use for its long-run marginal cost of power (as opposed to FortisBC's marginal cost of power in the near to medium term). Why? How is this value determined? In what year's dollar is it expressed?

In FortisBC's response to BCUC IR2 Q7.1, FortisBC defined long-run marginal cost as the cost to acquire additional power where existing resources are insufficient to meet load requirements. As outlined in the 2012 Long-Term Resource Plan (Resource Plan), in the near to medium term FortisBC expects to meet incremental requirements through increased market purchases. Therefore, for the purpose of this Application, the determination of long-run marginal cost was based on the forecast of the market price of power and does not represent the cost of new construction. As outlined in Table 4b, that value is $84.94.

BC Hydro calculates its LRMC from new resources as $124.3/MWh. This is based on projects granted contracts under its 2008 Clean Power Call, so their LRMC is a fair representation of its avoided costs. The $124.3/MWh represents an adjusted weighted average levelized firm energy price, using a nominal 8% discount rate (which assumes 2.1% inflation). The price is adjusted for the costs to deliver energy to the lower mainland, including transmission upgrades. The corresponding plantgate price is $111.3/MWh. The BCH LRMC price is based on firm delivery, which has a built-in capacity component. There is additional non-firm energy acquired under this call which is priced significantly lower which is not included in the BC Hydro calculation of LRMC (approximately $57/MWh).

FortisBC does not have an equivalent energy call to base a calculation of LRMC from new resources. In addition, as discussed in the Resource Plan, FortisBC expects to meet incremental requirements primarily through additional energy purchases under the BC Hydro 3808 contract and market purchases and is not planning to acquire new resources in the near to medium term.

Nevertheless, a LRMC from new resources could to be developed from a forecast of the cost of potential new resources. The Resource Plan contains a preliminary estimate of the cost of BC new resources in the Midgard Resource Options Report (Appendix C of the Resource Plan). A reasonable proxy for the cost of new resources in the long term is to use the BC New Resources Market Energy Curve presented as Table 5.2-A in the Midgard 2011 FortisBC Energy and Capacity Market Assessment (Appendix B of the Resource Plan).

Using the projections contained in the Midgard Report, and a nominal discount rate of 8%, FortisBC has calculated a levelized value for its LRMC, for use in this Application, of $111.96 per MWh. Grossed up for losses at 11%, the value becomes $125.80 per MWh. Table 4.b provides a summary of the LRMC discussed in this Application, including the $125.80 per MWh figure.

Table 4b

Reference	Definition	Value
Exhibit B8 Q7.1, 7.2	Marginal Cost (defined as Short Term Avoided Costs over 2012 to 2015 period (based on primarily avoided 3808 Energy Purchases with minor amount of market purchases and surplus sales)	$38.04 /MWh (energy only)
Exhibit B8 Q7.1, 7.2	LRMC (define as the cost to acquire additional power through market purchases where the existing resources are insufficient to meet load requirements).	$84.94/MWh
FortisBC 2012 Resource Plan – Appendix C: Midgard Resource Option Report	LRMC New Construction – Similkameen UEC	$97/MWh (6% real) $124/MWh (8% real)
FortisBC 2012 Resource Plan – Midgard 2011 FortisBC Energy and Capacity Market Assessment	BC New Resources Market Energy	$111.96/MWh (8% real) $125.80/MWh including losses
Clean Power Call RFP– Report on the RFP Process – August 3, 2010	BCH LRMC (Clean Power Call) Delivered to LML	$124.30/MWh (8% Nominal)
Clean Power Call Request For Proposals – Report on the RFP Process – August 3, 2010	BCH LRMC (Clean Power Call) Plantgate	$111.3/MWh (8% Nominal)
	Proposed FortisBC RIB Block 1 Rate	$0.07828 / kWh

	Proposed FortisBC RIB Block 2 Rate	$0.11272 / kWh

FortisBC has higher residential rates than BC Hydro. With FortisBC's LRMC for new resources at $125.80, it is very close to the block 2 rate that would be in effect within a small number of years regardless of the starting rate option selected, so capping Block 2 at the LRMC of new resources may not provide a proper conservation signal. Indeed, capping the Block 2 rate at BC Hydro's LRMC, would result in only a very small gap between Block 1 and Block 2 rates which would close quickly over the next few years. As such, given FortisBC's situation, if capping the Block 2 rate at the LRMC is determined to be appropriate, it may lead to the conclusion that either continuation of the current flat rate structure is more appropriate or some modification of the cap may be required in the short term.

In addition, Section 2.5.1 of the June 2011 Review of BC Hydro recommends that government clarify the objectives, priorities and/or relative ranking among competing objectives of the rate structure design. This may have implications for FortisBC's RIB structure.

c. BCOAPO's position is that prices that exceed the long-run marginal cost can lead to inefficient consumption decisions. Does FortisBC agree with this statement? Provide reasons for the response.

Under specifically defined conditions, economic efficiency is maximized (in the long run) where price equals long run marginal cost. Therefore, if price is either higher or lower than long run marginal cost, efficiency will not be maximized.

Notwithstanding the comments above, which tend to support BCOAPO's contention, the Company notes that there are other benefits to conservation to the utility and its customers that are extremely difficult to quantify. Any embedded conservation reduces electrical load, which can also delay the need for capital expenditures related to the transmission and distribution of that electricity.

5. ELASTICITY AND OTHER CONSERVATION MEASURES

a. Provide further analysis on elasticity and RIB rates to support FortisBC's position that the values for each of the two steps should be modeled differently. Is the difference in values of the two elasticity values a function of the size of the step?

FortisBC is unaware of any recognized body of economic research regarding price elasticity under multiple tier pricing that would enable an analysis of the impacts of block sizes and relative prices. As stated in the response to BCUC IR 9.1 price elasticity is generally believed to increase for any good as it becomes a greater percentage of disposable income. This effect will be seen due to either a lower level of income or an increase in rates. Other things being equal if a customer is in block two electricity costs will form a higher share of disposable income than they would if the customers' experienced only block one levels of consumption. Thus it can be inferred that price elasticity should be higher in block two than in block one.

Conservation impacts of the two tier rate were modelled using the same methodology as employed by BC Hydro in its RIB application. BC Hydro prepared its application showing impacts for cases where the elasticities in the blocks were uniform (the same in block one and block two) and cases where the block two elasticity was higher than in block one. There were conservation impacts in all cases, but the impact was lessened in the uniform elasticity cases. FortisBC found the same results in its modelling – even if elasticity is the same in block one and block two there is still a conservation impact for the RIB rate. While it would be desirable to have definitive answers regarding the relative elasticities and the impact of different block sizes, FortisBC believes that customer impacts are the more determinative factor in choosing a rate option.

b. Provide further evidence on price elasticities in other jurisdictions.

While FortisBC believes that the implementation of a conservation rate, whether RIB, Time-of-Use, Critical Peak pricing or other, will have some level of impact on consumption, it has stated that the results are uncertain due to the difficulty in identifying the magnitude of the expected response. This uncertainty is due at least in part due to the unique circumstances of each utility and is impacted by the rate levels, income levels, weather, appliance saturations and the specific design of the rates. It is therefore difficult to transfer the assumptions about elasticity values between utilities.

For this reason, the Company has presented a range of conservation estimates in both the Application and IR responses under a number of elasticity assumptions.

The Company has opined that elasticity values are lower at lower levels of consumption than at higher levels of consumption. For this reason, a different elasticity value is assumed for consumption above and below the threshold. In summary, these values are, in terms above/below the threshold, -.05/-.10, -.10/-.20, and -.20/-.30. (Elasticity values are typically shown as negative reflecting the decrease in consumption as price rises. Most of the Tables presented by FortisBC in this proceeding have simply stated the value – which is assumed to be negative in all cases)

BC Hydro stated however that, *"In developing its net conservation estimates, BC Hydro assumes a uniform elasticity for all consumption under the RIB rate. This modeling method is referred to by BC Hydro as "Uniform RIB Rate Elasticity"."*

BC Hydro presented uniform elasticity conservation results based on elasticity values of -0.075, -0.10 and -0.15 for its RIB rate. It also stated that the elasticity of demand on the existing flat rate structure is estimated at -0.05.

FortisBC's approach is consistent with alternative information presented by BC Hydro in its 2008 RIB Application in what it called the "Non-uniform RIB Rate Elasticity" approach. The values BC Hydro used are, in terms above/below the threshold, -.05/-.075, -.05/-.10, and -.20/-.30.

Price elasticity estimates in other jurisdictions provide some information that can be considered when deciding the values to use in estimating conservation impacts in the local service area. In developing its Application, BC Hydro conducted an extensive review of 105 existing published literature and studies which it listed in response to a BCOAPO information request in its 2008 RIB Rate Application process (BCOAPO IR #1 Question 8). The most relevant four studies were included in whole as attachments to BCUC IR #1, Question 28.1 in the same proceeding.

FortisBC did not conduct an additional review of literature given the extensive information and the general acceptance in that proceeding that identifying the specific level of conservation was not determinative of whether a RIB rate would be put in place. FortisBC considers that any updated elasticity values garnered from BC Hydro's experience with its RIB rate will be the best approximation for the FortisBC service area and will continue to monitor those results.

FortisBC is unaware of information in addition to that already filed by BC Hydro on elasticity assumptions used in the design of conservation rates in neighbouring jurisdictions other than BC Hydro; however, further general evidence has been published since the conclusion of the BC Hydro process in 2008. The Company has attached one article titled Inclining Toward Efficiency by Ahmad Faruqui that appeared in the August 2008 issue of Public Utilities

Fortnightly, and an additional review of others' studies published by the Electric Power Research Institute titled Price Elasticity of Demand for Electricity: A Primer and Synthesis. EPRI, Palo Alto, CA: 2007, 1016264.[1]

These studies, while not specific to any utility that FortisBC would nicely compare, do tend to support the notion that determining elasticity values is utility specific, and the conclusion that properly designed conservation rates will impact customer behaviour. They do however, in a general way include elasticity estimates at the higher end of (or simply higher than) the ranges that FortisBC has presented.

[1] Copyright ©2008 Electric Power Research Institute (EPRI), Palo Alto, CA USA

6. PRICING PRINCIPLES

a. Demonstrate how the Bonbright principles are satisfied in options 8, 19, 22 and 25.

Detail on the specific rate options requested are repeated in the table below.

Option	Criterion	Threshold	Customer Charge	Block 1 Rate	Block 2 Rate	Block Differential	Annual Breakeven kWh	Percentage of customers better off	Maximum Bill Impact	Percentage of Customers with Bill Increases > 20%	Percentage of customers who have consumption in the second block at least once	Percentage of load billed in Block 2	Conservation Impact (-lower/upper)		
													.05/.10	.10/.20	.20/.30
8	95% see <10%	1600	28.93	0.07828	0.11272	44.0%	15000	75.7%	22.6%	0.2%	72.8%	36.6%	1.9%	3.7%	5.5%
19	90% see <10%	1350	7.50	0.08671	0.11966	38.0%	13500	70.7%	30.0%	1.9%	79.2%	43.3%	2.7%	5.5%	8.2%
22	90% see <10%	2100	7.50	0.09111	0.12847	41.0%	14000	72.5%	38.9%	2.7%	60.7%	26.4%	3.0%	5.9%	8.9%
25	90% see <10%	1600	7.50	0.08893	0.12183	37.0%	13500	70.7%	32.2%	1.9%	72.8%	36.6%	2.8%	5.6%	8.4%

The summary of the Bonbright Principles which are paraphrased at page 9 of the RIB Application is relied upon to "*provide a framework against which all rate design activities and options can be compared*"[2].

The Company believes that the Principles should be considered in a general sense and properly can be used to check for obvious violations. It cautions however that attempting to tightly define the criteria or attempt to weight or otherwise rank options according to the Principles is not an exercise that is particularly helpful. There is attractiveness when attempting to choose from amongst many competing but similar options to any system that may help with the task. However, the Company notes that in the introduction to the Principles, Bonbright made the following observations,

Moreover, there is, perforce, some inconsistency and redundancy in any such listing. We are simply trying to identify the desirable characteristics of utility performance that regulators should seek to compel through edict.

And,

Lists of this nature are useful in reminding the ratemaker of considerations that might otherwise be neglected and also useful in suggesting important reasons why problems of practical rate design do not yield readily to scientific principles of optimum pricing. But they are unqualified to serve as a base on which to build these principles because of their ambiguities (how, for example, does one define "undue discrimination"?), their overlapping character, their inconsistencies, and their failure to offer any basis for establishing priorities in the event of a conflict.

[2] FortisBC RIB rate Application Page 9, line 19

The Company is not intending to now trivialize the criteria that it included in its Application, but only to draw attention to the limitations they have as an evaluative tool.

On the page following, the Company presents a table that presents the four options specified by the Commission (Options 8, 19,22, and 25) along with the Bonbright Principles as summarized in the Application. In the opinion of the Company, there is very little difference in the options as they relate to the principles. None of the options violate the principles as noted in the table. As there is little difference in the manner that each option relates to the Bonbright criteria, there are few differences noted in the table.

<table>
<tr><th></th><th></th><th colspan="4">Option 8</th><th colspan="4">Option 19</th><th colspan="4">Option 22</th><th colspan="4">Option 25</th></tr>
<tr><th></th><th></th><th>Threshold</th><th>C. Charge</th><th>Blk 1</th><th>Blk2</th><th>Threshold</th><th>C. Charge</th><th>Blk 1</th><th>Blk2</th><th>Threshold</th><th>C. Charge</th><th>Blk 1</th><th>Blk2</th><th>Threshold</th><th>C. Charge</th><th>Blk 1</th><th>Blk2</th></tr>
<tr><td></td><td></td><td>1600</td><td>28.93</td><td>0.07828</td><td>0.11272</td><td>1350</td><td>7.50</td><td>0.08671</td><td>0.11966</td><td>2100</td><td>7.50</td><td>0.09111</td><td>0.12847</td><td>1600</td><td>7.50</td><td>0.08893</td><td>0.12183</td></tr>
<tr><td>Principle 1</td><td>Recovery of the revenue requirement</td><td colspan="4">All options on the record are designed to meet the revenue requirement at the forecast load levels. This option, with a higher Customer Charge, will provide better revenue stability than the other options in this table.</td><td colspan="4">All options on the record are designed to meet the revenue requirement at the forecast load levels. The $7.50 Customer Charge options will not provide the revenue stability of the $28.93 option.</td><td colspan="4">All options on the record are designed to meet the revenue requirement at the forecast load levels. The $7.50 Customer Charge options will not provide the revenue stability of the $28.93 option.</td><td colspan="4">All options on the record are designed to meet the revenue requirement at the forecast load levels. The $7.50 Customer Charge options will not provide the revenue stability of the $28.93 option.</td></tr>
<tr><td>Principle 2</td><td>Fair apportionment of costs among customers (appropriate cost recovery should be reflected in rates)</td><td colspan="4">RIB rates will treat customers with similar attributes in a similar manner. The option with a higher basic charge will be better at recovering fixed costs.</td><td colspan="4">RIB rates will treat customers with similar attributes in a similar manner and will impose higher costs on those customers who drive the acquisition of higher cost power.</td><td colspan="4">RIB rates will treat customers with similar attributes in a similar manner and will impose higher costs on those customers who drive the acquisition of higher cost power.</td><td colspan="4">RIB rates will treat customers with similar attributes in a similar manner and will impose higher costs on those customers who drive the acquisition of higher cost power.</td></tr>
<tr><td>Principle 3</td><td>Price signals that encourage efficient use and discourage inefficient use (consideration of social issues including</td><td colspan="4">All of the selected option have similar Block 1:Block2 differentials and would be epected to send similar price signals. Options 19, 22, and 25 have slightly higher overall energy rates and result in higher conservation than Option 8.</td><td colspan="4">Of the 3 options with a $7.50 basic charge, conservation impacts are comparable but rank, hghest to lowest - 22, 25, then 19.</td><td colspan="4">Of the 3 options with a $7.50 basic charge, conservation impacts are comparable but rank, hghest to lowest - 22, 25, then 19.</td><td colspan="4">Of the 3 options with a $7.50 basic charge, conservation impacts are comparable but rank, hghest to lowest - 22, 25, then 19.</td></tr>
<tr><td>Principle 4</td><td>Customer understanding and acceptance</td><td colspan="4">This criterion includes consideration of simplicity, covenience of payment, economy of collection, understandability, and public acceptability. All options are satisfactory and the Company does not foresee major obstacles provided there is ample time for customer education and communication.</td><td colspan="4">This criterion includes consideration of simplicity, covenience of payment, economy of collection, understandability, and public acceptability. All options are satisfactory and the Company does not foresee major obstacles provided there is ample time for customer education and communication.</td><td colspan="4">This criterion includes consideration of simplicity, covenience of payment, economy of collection, understandability, and public acceptability. All options are satisfactory and the Company does not foresee major obstacles provided there is ample time for customer education and communication.</td><td colspan="4">This criterion includes consideration of simplicity, covenience of payment, economy of collection, understandability, and public acceptability. All options are satisfactory and the Company does not foresee major obstacles provided there is ample time for customer education and communication.</td></tr>
<tr><td>Principle 5</td><td>Practical and cost-effective to implement (sustainable and meet long term objectives)</td><td colspan="4">The Company believes that all the cost to implement al Options will be similar and reasonable</td><td colspan="4">The Company believes that all the cost to implement al Options will be similar and reasonable</td><td colspan="4">The Company believes that all the cost to implement al Options will be similar and reasonable</td><td colspan="4">The Company believes that all the cost to implement al Options will be similar and reasonable</td></tr>
<tr><td>Principle 6</td><td>Rate stability (customer rate impact should be managed)</td><td colspan="4">The RIB rate itself will be a departure from past structures. Once implemented, options with a lower basic charge will result in higher seasonal variation. Of the 4 options in the table, this rate offers the most stability.</td><td colspan="4">The RIB rate itself will be a departure from past structures. Once implemented, options with a lower basic charge will result in higher seasonal variation.</td><td colspan="4">The RIB rate itself will be a departure from past structures. Once implemented, options with a lower basic charge will result in higher seasonal variation.</td><td colspan="4">The RIB rate itself will be a departure from past structures. Once implemented, options with a lower basic charge will result in higher seasonal variation.</td></tr>
<tr><td>Principle 7</td><td>Revenue stability</td><td colspan="4">Revenue stability is largely a function of the extent to which revenues rely on a fixed versus variable component. Option 8 provides more stability that the other options with the lower Customer Charge. See Section 1.</td><td colspan="4">Revenue stability is largely a function of the extent to which revenues rely on a fixed versus variable component. Option 8 provides more stability that the other options with the lower Customer Charge. See Section 1.</td><td colspan="4">As the Option with the highest block 2 rate, load variation may have the greatest impact on revenues with this option.</td><td colspan="4">Revenue stability is largely a function of the extent to which revenues rely on a fixed versus variable component. Option 8 provides more stability that the other options with the lower Customer Charge. See Section 1.</td></tr>
<tr><td>Principle 8</td><td>Avoidance of undue discrimination (interclass equity must be enhanced and maintained)</td><td colspan="4">Any RIB rate may result in customers who are not wasteful or inefficient incurring higher bills due to circumstance (such as family size). This is mitigated by a higher threshold but not entirely avoidable.</td><td colspan="4">Any RIB rate may result in customers who are not wasteful or inefficient incurring higher bills due to circumstance (such as family size). This is mitigated by a higher threshold but not entirely avoidable.</td><td colspan="4">Any RIB rate may result in customers who are not wasteful or inefficient incurring higher bills due to circumstance (such as family size). This is mitigated by a higher threshold but not entirely avoidable.</td><td colspan="4">Any RIB rate may result in customers who are not wasteful or inefficient incurring higher bills due to circumstance (such as family size). This is mitigated by a higher threshold but not entirely avoidable.</td></tr>
</table>

b. Demonstrate how the four pricing principles satisfy the Bonbright criteria.

As noted in Appendix A of Commission Order G-142-11, FortisBC has previously defined pricing principles *as the manner in which general rate increases are applied to the pricing elements of the RIB rate*: the Customer charge, Block 1 and Block 2.

For clarification, there are four pricing principles contained in the Application (although FortisBC does not use the terminology). To which rate options they are applied depended on the level of Customer Charge put in place with the implementation of the RIB rate.

For any option where the Customer Charge is set at the equivalent flat rate level and in subsequent years is frozen and only subject to rebalancing increases, the pricing principles are:

1. Revenue Requirement Increases applied to both blocks 1 and 2
    - In the opinion of the Company, by failing to apply increases to the basic charge, the principle of revenue stability is compromised. The trade-off is that with the commensurate increase in the energy rates, conservation impacts may be enhanced.
2. Revenue Requirement Increases applied to block 2 only
    - As with principle 1, revenue stability is lacking under this pricing principle.
    - The rapid escalation of the second block under this principle causes very high block 2 rates over a relatively short period that would impact high consumption unfairly.
    - Customer acceptance is not likely with this scenario.
    - FortisBC does not support this pricing principle.

For any options with a Customer Charges that is initially set below the current rate:

3. Revenue Requirement Increases applied to all components
    - This alternative satisfies all the Bonbright principles. Since all rate components are escalated in the same manner, the percentage change in each is constant. This will produce a smaller conservation impact than allowing the block 2 rate to climb faster.
4. Revenue Requirement Increases applied to Customer Charge and block 2 only
    - As with principle 1, revenue stability is lacking under this pricing principle.

- The rapid escalation of the second block under this principle causes very high block 2 rates over a relatively short period that would impact high consumption unfairly.
- Customer acceptance is not likely with this scenario.
- FortisBC does not support this pricing principle.

7. TEST PERIOD.

a. Provide further information about the test data. What period(s) does it cover?

The survey of customers used to generate the sample data was conducted in 2009 - all of the demographic data provided reflects that year. The survey data for each survey customer was linked to the 2010 bills for each of those customers. In addition, the average use for all customers in 2009 and 2010 was distributed over various usage categories to determine the percent of customers within each usage category.

b. Provide evidence that the test years can be considered normal years and are a representative sample of the customer class for the forecast period.

The survey of customers was a random sample of 2049 residential and small commercial customers, representing accuracy of ±2.2%, at the 95% confidence interval. The survey represented direct customers of FortisBC as well as customers of the wholesale utilities. The sample of 871 direct residential customers taken from the survey for use in the bill impact analysis reflects a 6.6 margin of error at the 95% confidence level. We believe this data is representative of the entire residential class. The percent of customer in each usage category reflects all customers on the system and therefore fully represents the entire class.

2010 was not a remarkable year such that loads were impacted significantly by items such as weather. 2010 saw sales down about 44 GWh due to weather. On total sales of a little over 3,000 GWh this is about 1.5%.

8. BASIC CHARGE

a. Provide more information about how the Basic Charge is calculated on a cost of service basis.

The most recent COSA was completed using 2009 approved revenue requirements information. It has not been updated to reflect 2009 actual data or any other test year. Residential customer charges were developed using the approved COSA results included in the compliance filing in November of 2010.

The COSA classifies certain costs as customer-related. These costs are limited to distribution plant and expense items, as well as a pro-rated share of general rate base and expenses.

Rate base items that are all classified as customer-related include meters, services and installations on customer premises. In addition, a share of the rate base associated with poles, towers & fixtures, conductors & devices and line transformers are also classified as customer related using the minimum system approach. Expense accounts that correspond to those plant items, including O&M, depreciation, taxes and return are also classified as customer-related. In addition, all costs associated with customer service, accounts & sales are classified as customer-related. A pro-rated share of general plant and A&G costs follow the customer-related costs.

The results of the approved COSA show that customer-related costs on a per unit basis are $57.48 for each 2-month period (i.e. 2 x the $28.74 referenced in Appendix C).

This value breaks down as follows:

Share of the fixed costs of the distribution system needed to connect each customer (includes poles, wires and transformers)	$43.86
Costs of the meter, service and meter reading	$ 5.88
Per customer cost of accounting, billing and customer service	$ 7.74
Total unit cost for 2-months	$57.48

If the meter and billing components are subtracted from the $23.74 customer charge in place during 2009, the remaining amount is only $10.11, which further illustrates the shortfall in collecting fixed costs.

For the same year, the customer charge for the class was $23.74, which is only 41% of the assigned unit cost. To develop comparable COSA costs for 2011, the amount must be escalated to account for the increases in the revenue requirements. Applying approved rate increases to the 2009 COSA amount would result in a customer-related cost of $65.53 per 2 month period. This compares to the proposed customer charge of $28.93 per 2 month period.

In looking at reducing the customer charge, it must be recognized that a lower amount would deviate even more from the Commission-approved COSA.

While the COSA reflects what the Company believes to be an appropriate amount of costs as customer-related, if the customer charge is to be reduced it should at a minimum recover the minimal costs associated with a connected customer. In the 2009 RDA, FortisBC provided a response to information request BCOAPO 16.1 regarding the customer-related costs in the event that the minimum system methodology was not used. The results showed a customer-related cost of $12.95 for a 2-month period for 2009. This reflects a scenario where only those costs associated with metering, customer service, accounts and sales and a lower pro-rated share of general plant and A&G were included.

To develop comparable costs for 2011, the $12.95 amount must be escalated to account for the increases in the revenue requirements Applying approved rate increases to this adjusted 2009 COSA amount would result in a customer-related cost of $14.77 per 2 month period. This lower amount is the minimum that would be cost-based. While this calculation could be used to support a $15 customer charge, it is well above the $10.00, $7.50 and $0.00 customer charge levels used for some of the requested cases.

While the proposed $28.93 customer charge is higher than the current level for BC Hydro, it is well within the range of the residential customer charge for utilities in other Provinces and FortisBC believes that its approach of freezing, rather than outright lower, of the Customer Charge is appropriate. The following table shows the customer charge, adjusted to a 2-month period, for other major utilities in Canada.

Customer Charge Comparison

UTILITY	PROVINCE	CHARGE PER 2-MONTHS
ATCO Electric Limited	Alberta	$35.37
ENMAX Power Company	Alberta	$34.84
EPCOR Utilities Inc	Alberta	$13.34
Toronto Hydro	Ontario	$37.86
Hydro Ottawa	Ontario	$20.28
NS Power	Nova Scotia	$37.64
NF Power	Newfoundland	$31.42
NB Power (urban)	New Brunswick	$39.46

NB Power (rural)	New Brunswick	$43.26
Hydro Quebec	Quebec	$24.38
Manitoba (<= 200A)	Manitoba	$13.70
Manitoba (> 200A)	Manitoba	$27.40
Saskpower (urban)	Saskatchewan	$38.56
Saskpower (rural)	Saskatchewan	$55.66
BC Hydro	BC	$9.28

In potentially lowering the customer charge at the same time as introducing a RIB rate, it is important to understand that a lower customer charge has the same impact a RIB rate. Both actions result in a reduction in bills for customers with low usage levels and an increase in bills for customers with high usage levels. FortisBC is concerned about the impacts on its customers in any given year. In fact, the rebalancing of rates among customers classes resulting from the 2009 RDA was phased in and limited to a cap of 10% (when combined with revenue required increases) per year in order to minimize bill impacts to customers. Introducing a lower customer charge at the same time a RIB rate is implemented will lead to substantially greater bill impacts for a large number of customers, well in excess of the 10% rate cap used for rebalancing.

Appendix A Table 1: Comparison of Options with $28.93 Customer Charge

					5-Year Rate Projection					Elasticity	Cumulative Conservation Impact from RIB						Min Bill	Max Bill	Percent of Customers with Decrease of:				Percent of Customers with Increase of:					
	Base Rate Option	Threshold kWh	Rate Increase Applied		2011	2012	2013	2014	2015	Estimate	2011	2012	2013	2014	2015		Impact	Impact	30% +	20-30%	10-20%	0-10%	0-10%	10-20%	20-30%	30-40%	40-50%	50% +
				RRA Increase		4.00%	6.90%	5.80%	11.40%																			
				Rebalancing Increase		2.50%	2.30%	0.00%	0.00%																			
	Continued Flat Rate		Pricing Principle 3 - All Components	Customer Charge	28.93	31.24	34.12	36.09	40.21	.05/.10	0.0%	0.6%	1.2%	1.6%	2.4%	2011 RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 1 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.10/.20	0.0%	1.1%	2.5%	3.1%	4.9%	5-yr Net RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 2 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.20/.30	0.0%	1.7%	3.8%	4.8%	7.5%	5-yr Total Impact	34.3%	34.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Ratio: Block 2 / Block 1	1.00	1.00	1.00	1.00	1.00																			
2.1	2	1350	Pricing Principle 1 - Both Blocks	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	1.9%	2.0%	2.1%	2.2%	2.4%	2011 Impact	-12.1%	21.3%	0.0%	0.0%	40.0%	32.5%	22.3%	5.1%	0.1%	0.0%	0.0%	0.0%
				Block 1 Rate	0.07526	0.08127	0.08875	0.09389	0.10460	.10/.20	3.7%	4.0%	4.2%	4.4%	4.9%	5-yr Net RIB Impact	-27.2%	28.6%	0.0%	29.2%	22.7%	18.7%	19.2%	8.7%	1.3%	0.0%	0.0%	0.0%
				Block 2 Rate	0.11138	0.12202	0.13550	0.14532	0.16575	.20/.30	5.5%	5.8%	6.2%	6.6%	7.2%	5-yr Total Impact	7.1%	62.9%	0.0%	0.0%	0.0%	0.0%	4.3%	41.7%	13.9%	21.4%	16.0%	2.7%
				Ratio: Block 2 / Block 1	1.48	1.50	1.53	1.55	1.58																			
2.2	2	1350	Pricing Principle 2 - Block 2 Only	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	1.9%	2.5%	3.2%	3.6%	4.3%	2011 Impact	-12.1%	21.3%	0.0%	0.0%	40.0%	32.5%	22.3%	5.1%	0.1%	0.0%	0.0%	0.0%
				Block 1 Rate	0.07526	0.07526	0.07526	0.07526	0.07526	.10/.20	3.7%	5.1%	6.4%	7.2%	8.5%	5-yr Net RIB Impact	-44.2%	51.4%	46.0%	8.8%	5.1%	10.8%	10.6%	8.6%	7.4%	1.7%	1.0%	0.1%
				Block 2 Rate	0.11138	0.12989	0.15316	0.16971	0.20416	.20/.30	5.5%	7.5%	9.4%	10.5%	12.4%	5-yr Total Impact	-9.9%	85.7%	0.0%	0.0%	0.0%	37.8%	14.2%	5.4%	11.4%	8.5%	9.9%	12.9%
				Ratio: Block 2 / Block 1	1.48	1.73	2.04	2.26	2.71																			
4.1	4	2100	Pricing Principle 1 - Both Blocks	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	3.3%	3.4%	3.5%	3.6%	3.7%	2011 Impact	-14.1%	46.9%	0.0%	0.0%	51.4%	27.3%	11.2%	5.8%	2.9%	1.1%	0.2%	0.0%
				Block 1 Rate	0.07454	0.08050	0.08790	0.09300	0.10360	.10/.20	6.6%	6.8%	7.0%	7.1%	7.4%	5-yr Net RIB Impact	-27.5%	56.5%	0.0%	35.9%	32.9%	9.9%	6.7%	8.1%	3.7%	1.7%	0.9%	0.2%
				Block 2 Rate	0.13641	0.15016	0.16768	0.18060	0.20752	.20/.30	9.7%	10.0%	10.3%	10.5%	11.0%	5-yr Total Impact	6.8%	90.8%	0.0%	0.0%	0.0%	0.0%	4.3%	53.1%	13.3%	12.9%	6.4%	10.1%
				Ratio: Block 2 / Block 1	1.83	1.87	1.91	1.94	2.00																			
4.2	4	2100	Pricing Principle 2 - Block 2 Only	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	3.3%	4.1%	4.9%	5.3%	5.9%	2011 Impact	-14.1%	46.9%	0.0%	0.0%	51.4%	27.3%	11.2%	5.8%	2.9%	1.1%	0.2%	0.0%
				Block 1 Rate	0.07454	0.07454	0.07454	0.07454	0.07454	.10/.20	6.6%	8.3%	9.8%	10.5%	11.8%	5-yr Net RIB Impact	-46.1%	93.4%	57.4%	11.4%	1.9%	8.0%	4.8%	3.6%	2.8%	3.7%	3.7%	2.7%
				Block 2 Rate	0.13641	0.16673	0.20485	0.23196	0.28838	.20/.30	9.7%	12.1%	14.3%	15.4%	17.2%	5-yr Total Impact	-11.8%	127.7%	0.0%	0.0%	23.5%	32.4%	12.9%	1.9%	4.9%	5.7%	4.2%	14.5%
				Ratio: Block 2 / Block 1	1.83	2.24	2.75	3.11	3.87																			
7.1	7	1600	Pricing Principle 1 - Both Blocks	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	3.0%	3.1%	3.2%	3.3%	3.5%	2011 Impact	-16.2%	36.2%	0.0%	0.0%	53.1%	21.0%	15.9%	7.4%	2.4%	0.3%	0.0%	0.0%
				Block 1 Rate	0.07069	0.07634	0.08337	0.08820	0.09826	.10/.20	6.0%	6.2%	6.4%	6.6%	6.9%	5-yr Net RIB Impact	-28.6%	43.9%	0.0%	46.0%	13.9%	12.6%	13.0%	8.1%	5.1%	1.2%	0.2%	0.0%
				Block 2 Rate	0.12584	0.13795	0.15331	0.16451	0.18784	.20/.30	8.8%	9.1%	9.5%	9.7%	10.3%	5-yr Total Impact	5.7%	78.2%	0.0%	0.0%	0.0%	0.0%	29.2%	25.6%	14.0%	11.3%	9.8%	10.1%
				Ratio: Block 2 / Block 1	1.78	1.81	1.84	1.87	1.91																			
7.2	7	1600	Pricing Principle 2 - Block 2 Only	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	3.0%	3.7%	4.3%	4.7%	5.3%	2011 Impact	-16.2%	36.2%	0.0%	0.0%	53.1%	21.0%	15.9%	7.4%	2.4%	0.3%	0.0%	0.0%
				Block 1 Rate	0.07069	0.07069	0.07069	0.07069	0.07069	.10/.20	6.0%	7.3%	8.6%	9.3%	10.6%	5-yr Net RIB Impact	-48.7%	68.8%	52.0%	8.0%	8.8%	3.7%	8.8%	5.8%	6.5%	3.7%	1.4%	1.3%
				Block 2 Rate	0.12584	0.14772	0.17522	0.19479	0.23550	.20/.30	8.8%	10.8%	12.7%	13.6%	15.4%	5-yr Total Impact	-14.4%	103.1%	0.0%	0.0%	26.6%	25.4%	5.4%	4.9%	8.3%	8.0%	6.7%	14.5%
				Ratio: Block 2 / Block 1	1.78	2.09	2.48	2.76	3.33																			
8.1	8	1600	Pricing Principle 1 - Both Blocks	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	1.9%	2.0%	2.1%	2.2%	2.5%	2011 Impact	-10.1%	22.6%	0.0%	0.0%	3.6%	70.5%	20.7%	5.0%	0.2%	0.0%	0.0%	0.0%
				Block 1 Rate	0.07828	0.08453	0.09231	0.09767	0.10880	.10/.20	3.7%	4.0%	4.3%	4.5%	4.9%	5-yr Net RIB Impact	-26.3%	31.1%	0.0%	7.9%	46.9%	17.7%	17.4%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 2 Rate	0.11272	0.12379	0.13784	0.14815	0.16961	.20/.30	5.5%	5.9%	6.3%	6.7%	7.3%	5-yr Total Impact	8.0%	65.4%	0.0%	0.0%	0.0%	0.0%	1.6%	44.4%	22.8%	14.8%	12.2%	4.2%
				Ratio: Block 2 / Block 1	1.44	1.46	1.49	1.52	1.56																			
8.2	8	1600	Pricing Principle 2 - Block 2 Only	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	1.9%	2.7%	3.5%	4.0%	4.7%	2011 Impact	-10.1%	22.6%	0.0%	0.0%	3.6%	70.5%	20.7%	5.0%	0.2%	0.0%	0.0%	0.0%
				Block 1 Rate	0.07828	0.07828	0.07828	0.07828	0.07828	.10/.20	3.7%	5.4%	7.1%	7.9%	9.4%	5-yr Net RIB Impact	-42.7%	61.0%	52.0%	5.4%	11.4%	3.7%	8.8%	8.6%	3.7%	4.5%	1.2%	0.6%
				Block 2 Rate	0.11272	0.13460	0.16211	0.18167	0.22239	.20/.30	5.5%	8.0%	10.4%	11.6%	13.8%	5-yr Total Impact	-8.4%	95.3%	0.0%	0.0%	0.0%	44.4%	13.0%	2.5%	10.8%	9.4%	5.3%	14.5%
				Ratio: Block 2 / Block 1	1.44	1.72	2.07	2.32	2.84																			
31.1	31	1500	Pricing Principle 1 - Both Blocks	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	3.1%	3.2%	3.3%	3.4%	3.6%	2011 Impact	-17.0%	34.6%	0.0%	0.0%	53.1%	19.4%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.06942	0.07497	0.08186	0.08661	0.09648	.10/.20	6.1%	6.3%	6.6%	6.8%	7.2%	5-yr Net RIB Impact	-29.0%	41.9%	0.0%	46.0%	11.4%	15.1%	13.0%	9.3%	3.9%	1.3%	0.1%	0.0%
				Block 2 Rate	0.12426	0.13611	0.15113	0.16206	0.18481	.20/.30	9.0%	9.3%	9.7%	10.0%	10.6%	5-yr Total Impact	5.3%	76.2%	0.0%	0.0%	0.0%	0.0%	29.2%	22.7%	16.8%	11.3%	9.8%	10.1%
				Ratio: Block 2 / Block 1	1.79	1.82	1.85	1.87	1.92																			
31.2	31	1500	Pricing Principle 2 - Block 2 Only	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	3.1%	3.7%	4.4%	4.7%	5.4%	2011 Impact	-17.0%	34.6%	0.0%	0.0%	53.1%	19.4%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.06942	0.06942	0.06942	0.06942	0.06942	.10/.20	6.1%	7.4%	8.7%	9.4%	10.7%	5-yr Net RIB Impact	-49.0%	64.4%	52.0%	5.4%	11.4%	3.7%	7.6%	7.0%	6.5%	3.7%	1.7%	1.0%
				Block 2 Rate	0.12426	0.14473	0.17046	0.18876	0.22684	.20/.30	9.0%	10.9%	12.8%	13.9%	15.7%	5-yr Total Impact	-14.7%	98.7%	0.0%	0.0%	26.6%	22.4%	8.4%	2.5%	10.8%	6.6%	8.2%	14.5%
				Ratio: Block 2 / Block 1	1.79	2.08	2.46	2.72	3.27																			

Appendix A Table 2: Comparison of Options with $21.50 Customer Charge

	Base Rate Option	Threshold kWh	Rate Increase Applied		5-Year Rate Projection 2011	2012	2013	2014	2015	Elasticity Estimate	Cumulative Conservation Impact 2011	2012	2013	2014	2015		Min Bill Impact	Max Bill Impact	Percent of Customers with Decrease of: 30% +	20-30%	10-20%	0-10%	Percent of Customers with Increase of: 0-10%	10-20%	20-30%	30-40%	40-50%	50% +
				RRA Increase		4.00%	6.90%	5.80%	11.40%																			
				Rebalancing Increase		2.50%	2.30%	0.00%	0.00%																			
	Continued Flat Rate		Pricing Principle 3 - All Components	Customer Charge	28.93	31.24	34.12	36.09	40.21	.05/.10	0.0%	0.6%	1.2%	1.6%	2.4%	2011 RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 1 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.10/.20	0.0%	1.1%	2.5%	3.1%	4.9%	5-yr Net RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 2 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.20/.30	0.0%	1.7%	3.8%	4.8%	7.5%	5-yr Total Impact	34.3%	34.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Ratio: Block 2 / Block 1	1.00	1.00	1.00	1.00	1.00																			
11.3	11	1350	Pricing Principle 3 - All Components	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	1.8%	1.8%	1.8%	1.8%	1.8%	2011 Impact	-22.3%	20.6%	0.0%	1.6%	44.4%	24.7%	24.1%	5.1%	0.1%	0.0%	0.0%	0.0%
				Block 1 Rate	0.08197	0.08852	0.09666	0.10227	0.11393	.10/.20	3.7%	3.6%	3.6%	3.6%	3.5%	5-yr Net RIB Impact	-22.2%	20.7%	0.0%	1.6%	41.4%	27.8%	24.1%	5.1%	0.1%	0.0%	0.0%	0.0%
				Block 2 Rate	0.11066	0.11950	0.13049	0.13806	0.15380	.20/.30	5.4%	5.4%	5.3%	5.3%	5.2%	5-yr Total Impact	12.1%	55.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.6%	41.9%	29.7%	11.8%	1.0%
				Ratio: Block 2 / Block 1	1.35	1.35	1.35	1.35	1.35																			
11.4	11	1350	Pricing Principle 4 - Customer and Block 2	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	1.8%	2.4%	3.0%	3.3%	3.9%	2011 Impact	-22.3%	20.6%	0.0%	1.6%	44.4%	24.7%	24.1%	5.1%	0.1%	0.0%	0.0%	0.0%
				Block 1 Rate	0.08197	0.08197	0.08197	0.08197	0.08197	.10/.20	3.7%	4.9%	6.1%	6.7%	7.7%	5-yr Net RIB Impact	-38.6%	46.6%	39.4%	12.6%	8.0%	10.8%	10.6%	10.7%	5.3%	2.4%	0.3%	0.0%
				Block 2 Rate	0.11066	0.12807	0.14973	0.16463	0.19563	.20/.30	5.4%	7.2%	8.9%	9.8%	11.3%	5-yr Total Impact	-4.3%	80.9%	0.0%	0.0%	0.0%	28.3%	20.7%	8.4%	11.4%	9.9%	8.5%	12.9%
				Ratio: Block 2 / Block 1	1.35	1.56	1.83	2.01	2.39																			
13.3	13	2100	Pricing Principle 3 - All Components	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	3.2%	3.1%	3.0%	3.0%	2.9%	2011 Impact	-22.6%	43.8%	0.0%	2.9%	54.5%	21.3%	11.2%	7.4%	1.7%	1.0%	0.1%	0.0%
				Block 1 Rate	0.08037	0.08679	0.09477	0.10027	0.11170	.10/.20	6.4%	6.2%	6.0%	5.9%	5.7%	5-yr Net RIB Impact	-22.5%	43.9%	0.0%	2.9%	54.5%	21.3%	11.2%	7.4%	1.7%	1.0%	0.1%	0.0%
				Block 2 Rate	0.13341	0.14407	0.15733	0.16645	0.18543	.20/.30	9.4%	9.2%	9.0%	8.8%	8.6%	5-yr Total Impact	11.8%	78.2%	0.0%	0.0%	0.0%	0.0%	0.0%	29.2%	41.4%	14.8%	8.1%	6.4%
				Ratio: Block 2 / Block 1	1.66	1.66	1.66	1.66	1.66																			
13.4	13	2100	Pricing Principle 4 - Customer and Block 2	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	3.2%	3.9%	4.6%	4.9%	5.5%	2011 Impact	-22.6%	43.8%	0.0%	2.9%	54.5%	21.3%	11.2%	7.4%	1.7%	1.0%	0.1%	0.0%
				Block 1 Rate	0.08037	0.08037	0.08037	0.08037	0.08037	.10/.20	6.4%	7.9%	9.3%	9.9%	10.9%	5-yr Net RIB Impact	-40.9%	86.3%	57.4%	11.4%	1.9%	8.0%	4.8%	5.0%	3.4%	3.7%	1.5%	2.7%
				Block 2 Rate	0.13341	0.16194	0.19741	0.22183	0.27260	.20/.30	9.4%	11.6%	13.6%	14.5%	16.0%	5-yr Total Impact	-6.6%	120.6%	0.0%	0.0%	0.0%	49.1%	10.8%	10.8%	4.9%	5.7%	4.2%	14.5%
				Ratio: Block 2 / Block 1	1.66	2.01	2.46	2.76	3.39																			
16.3	16	1600	Pricing Principle 3 - All Components	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	2.9%	2.9%	2.8%	2.8%	2.7%	2011 Impact	-23.4%	34.6%	0.0%	6.0%	51.4%	15.1%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.07715	0.08331	0.09098	0.09626	0.10723	.10/.20	5.8%	5.7%	5.7%	5.6%	5.5%	5-yr Net RIB Impact	-23.3%	34.7%	0.0%	6.0%	51.4%	15.1%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 2 Rate	0.12421	0.13413	0.14648	0.15497	0.17264	.20/.30	8.6%	8.5%	8.4%	8.3%	8.2%	5-yr Total Impact	11.0%	69.0%	0.0%	0.0%	0.0%	0.0%	0.0%	46.0%	22.8%	14.8%	11.2%	5.2%
				Ratio: Block 2 / Block 1	1.61	1.61	1.61	1.61	1.61																			
16.4	16	1600	Pricing Principle 4 - Customer and Block 2	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	2.9%	3.5%	4.1%	4.4%	4.9%	2011 Impact	-23.4%	34.6%	0.0%	6.0%	51.4%	15.1%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.07715	0.07715	0.07715	0.07715	0.07715	.10/.20	5.8%	7.0%	8.2%	8.7%	9.8%	5-yr Net RIB Impact	-42.8%	63.2%	52.0%	5.4%	11.4%	5.3%	7.2%	8.6%	3.7%	3.7%	1.7%	1.0%
				Block 2 Rate	0.12421	0.14480	0.17039	0.18801	0.22465	.20/.30	8.6%	10.4%	12.0%	12.8%	14.3%	5-yr Total Impact	-8.5%	97.5%	0.0%	0.0%	0.0%	44.4%	13.0%	2.5%	10.8%	9.4%	5.3%	14.5%
				Ratio: Block 2 / Block 1	1.61	1.88	2.21	2.44	2.91																			
17.3	17	1600	Pricing Principle 3 - All Components	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	1.8%	1.8%	1.8%	1.7%	1.7%	2011 Impact	-21.7%	21.4%	0.0%	1.6%	31.1%	39.9%	23.3%	4.2%	0.1%	0.0%	0.0%	0.0%
				Block 1 Rate	0.08449	0.09124	0.09963	0.10541	0.11743	.10/.20	3.6%	3.6%	3.5%	3.5%	3.4%	5-yr Net RIB Impact	-21.6%	21.5%	0.0%	1.6%	31.1%	39.9%	22.3%	5.1%	0.1%	0.0%	0.0%	0.0%
				Block 2 Rate	0.11152	0.12043	0.13151	0.13914	0.15500	.20/.30	5.4%	5.3%	5.2%	5.2%	5.1%	5-yr Total Impact	12.7%	55.8%	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%	52.1%	27.2%	11.8%	1.0%
				Ratio: Block 2 / Block 1	1.32	1.32	1.32	1.32	1.32																			
17.4	17	1600	Pricing Principle 4 - Customer and Block 2	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	1.8%	2.6%	3.3%	3.7%	4.3%	2011 Impact	-21.7%	21.4%	0.0%	1.6%	31.1%	39.9%	23.3%	4.2%	0.1%	0.0%	0.0%	0.0%
				Block 1 Rate	0.08449	0.08449	0.08449	0.08449	0.08449	.10/.20	3.6%	5.2%	6.6%	7.3%	8.6%	5-yr Net RIB Impact	-37.5%	55.5%	44.4%	13.0%	9.1%	6.0%	8.8%	8.6%	7.4%	1.4%	1.2%	0.2%
				Block 2 Rate	0.11152	0.13211	0.15770	0.17532	0.21197	.20/.30	5.4%	7.7%	9.8%	10.8%	12.6%	5-yr Total Impact	-3.2%	89.8%	0.0%	0.0%	0.0%	28.3%	23.6%	8.0%	10.8%	9.4%	7.0%	12.9%
				Ratio: Block 2 / Block 1	1.32	1.56	1.87	2.08	2.51																			
32.3	32	1500	Pricing Principle 3 - All Components	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	2.8%	3.0%	3.0%	2.9%	2.9%	2011 Impact	-23.7%	33.8%	0.0%	10.5%	44.3%	17.7%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.07571	0.08176	0.08928	0.09446	0.10523	.10/.20	5.6%	6.0%	5.9%	5.9%	5.8%	5-yr Net RIB Impact	-23.7%	33.9%	0.0%	7.9%	46.9%	17.7%	16.1%	8.7%	2.5%	0.2%	0.0%	0.0%
				Block 2 Rate	0.12341	0.13327	0.14553	0.15397	0.17153	.20/.30	8.2%	8.9%	8.8%	8.7%	8.6%	5-yr Total Impact	10.6%	68.2%	0.0%	0.0%	0.0%	0.0%	0.0%	46.0%	18.4%	17.0%	13.5%	5.2%
				Ratio: Block 2 / Block 1	1.63	1.63	1.63	1.63	1.63																			
32.4	32	1500	Pricing Principle 4 - Customer and Block 2	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	2.8%	3.6%	4.2%	4.4%	5.0%	2011 Impact	-23.7%	33.8%	0.0%	10.5%	44.3%	17.7%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.07571	0.07571	0.07571	0.07571	0.07571	.10/.20	5.6%	7.2%	8.3%	8.9%	9.9%	5-yr Net RIB Impact	-43.3%	59.5%	52.0%	5.4%	6.9%	8.2%	8.8%	8.6%	4.9%	3.3%	1.4%	0.4%
				Block 2 Rate	0.12341	0.14267	0.16661	0.18309	0.21737	.20/.30	8.2%	10.6%	12.3%	13.1%	14.6%	5-yr Total Impact	-9.0%	93.8%	0.0%	0.0%	0.0%	44.4%	7.6%	8.0%	10.8%	8.0%	6.8%	14.5%
				Ratio: Block 2 / Block 1	1.63	1.88	2.20	2.42	2.87																			

Appendix A Table 3: Comparison of Options with $15.00 Customer Charge

					5-Year Rate Projection					Elasticity	Cumulative Conservation Impact						Min Bill	Max Bill	Percent of Customers with Decrease of:				Percent of Customers with Increase of:					
	Base Rate Option	Threshold kWh	Rate Increase Applied		2011	2012	2013	2014	2015	Estimate	2011	2012	2013	2014	2015		Impact	Impact	30% +	20-30%	10-20%	0-10%	0-10%	10-20%	20-30%	30-40%	40-50%	50% +
				RRA Increase		4.00%	6.90%	5.80%	11.40%																			
				Rebalancing Increase		2.50%	2.30%	0.00%	0.00%																			
	Continued Flat Rate		Pricing Principle 3 - All Components	Customer Charge	28.93	31.24	34.12	36.09	40.21	.05/.10	0.0%	0.6%	1.2%	1.6%	2.4%	2011 RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 1 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.10/.20	0.0%	1.1%	2.5%	3.1%	4.9%	5-yr Net RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 2 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.20/.30	0.0%	1.7%	3.8%	4.8%	7.5%	5-yr Total Impact	34.3%	34.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Ratio: Block 2 / Block 1	1.00	1.00	1.00	1.00	1.00																			
28.1	28	2100	Pricing Principle 1 - Both Blocks	Customer Charge	15.00	15.38	15.73	15.73	15.73	.05/.10	2.6%	2.5%	2.5%	2.5%	2.5%	2011 Impact	-39.1%	41.8%	4.3%	11.3%	41.9%	19.9%	12.7%	7.4%	1.7%	1.0%	0.1%	0.0%
				Block 1 Rate	0.08529	0.09211	0.10058	0.10641	0.11854	.10/.20	5.2%	5.1%	5.0%	5.0%	4.9%	5-yr Net RIB Impact	-58.1%	47.1%	6.0%	23.2%	28.2%	19.9%	9.9%	7.7%	3.9%	1.1%	0.2%	0.0%
				Block 2 Rate	0.13135	0.14332	0.15843	0.16928	0.19186	.20/.30	7.6%	7.7%	7.7%	7.7%	7.7%	5-yr Total Impact	-23.8%	81.4%	0.0%	1.6%	1.3%	3.1%	9.5%	36.4%	18.7%	12.9%	8.5%	8.0%
				Ratio: Block 2 / Block 1	1.54	1.56	1.58	1.59	1.62																			
28.2	28	2100	Pricing Principle 2 - Block 2 Only	Customer Charge	15.00	15.38	15.73	15.73	15.73	.05/.10	2.6%	3.3%	3.8%	4.1%	4.5%	2011 Impact	-39.1%	41.8%	4.3%	11.3%	41.9%	19.9%	12.7%	7.4%	1.7%	1.0%	0.1%	0.0%
				Block 1 Rate	0.08529	0.08529	0.08529	0.08529	0.08529	.10/.20	5.2%	6.5%	7.7%	8.2%	9.1%	5-yr Net RIB Impact	-70.2%	91.0%	57.4%	11.4%	1.9%	8.0%	2.6%	5.8%	2.8%	3.7%	3.7%	2.7%
				Block 2 Rate	0.13135	0.16229	0.20096	0.22804	0.28438	.20/.30	7.6%	9.7%	11.4%	12.1%	13.3%	5-yr Total Impact	-35.9%	125.3%	2.9%	7.6%	32.0%	15.0%	4.5%	8.8%	4.9%	5.7%	4.2%	14.5%
				Ratio: Block 2 / Block 1	1.54	1.90	2.36	2.67	3.33																			
28.3	28	2100	Pricing Principle 3 - All Components	Customer Charge	15.00	16.20	17.69	18.71	20.85	.05/.10	2.6%	2.5%	2.4%	2.3%	2.1%	2011 Impact	-39.1%	41.8%	4.3%	11.3%	41.9%	19.9%	12.7%	7.4%	1.7%	1.0%	0.1%	0.0%
				Block 1 Rate	0.08529	0.09211	0.10058	0.10641	0.11854	.10/.20	5.2%	5.0%	4.7%	4.6%	4.3%	5-yr Net RIB Impact	-39.0%	41.9%	4.3%	8.4%	44.8%	19.9%	12.7%	7.4%	1.7%	1.0%	0.1%	0.0%
				Block 2 Rate	0.13135	0.14185	0.15490	0.16388	0.18256	.20/.30	7.6%	7.5%	7.3%	7.1%	6.8%	5-yr Total Impact	-4.7%	76.2%	0.0%	0.0%	0.0%	1.6%	4.4%	30.2%	34.5%	12.9%	10.0%	6.4%
				Ratio: Block 2 / Block 1	1.54	1.54	1.54	1.54	1.54																			
28.4	28	2100	Pricing Principle 4 - Customer and Block 2	Customer Charge	15.00	16.20	17.69	18.71	20.85	.05/.10	2.6%	3.2%	3.7%	3.9%	4.3%	2011 Impact	-39.1%	41.8%	4.3%	11.3%	41.9%	19.9%	12.7%	7.4%	1.7%	1.0%	0.1%	0.0%
				Block 1 Rate	0.08529	0.08529	0.08529	0.08529	0.08529	.10/.20	5.2%	6.4%	7.4%	7.9%	8.6%	5-yr Net RIB Impact	-49.5%	87.1%	57.4%	11.4%	1.9%	8.0%	4.8%	3.6%	2.8%	4.9%	2.5%	2.7%
				Block 2 Rate	0.13135	0.16081	0.19743	0.22265	0.27508	.20/.30	7.6%	9.5%	11.0%	11.6%	12.6%	5-yr Total Impact	-15.2%	121.4%	0.0%	0.0%	29.2%	22.7%	8.0%	10.8%	4.9%	5.7%	4.2%	14.5%
				Ratio: Block 2 / Block 1	1.54	1.89	2.31	2.61	3.23																			
66.1	66	1350	Pricing Principle 1 - Both Blocks	Customer Charge	15.00	15.38	15.73	15.73	15.73	.05/.10	2.5%	2.5%	2.5%	2.5%	2.5%	2011 Impact	-40.4%	30.9%	4.3%	24.9%	22.7%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 1 Rate	0.07982	0.08620	0.09413	0.09959	0.11094	.10/.20	4.9%	4.9%	5.0%	5.0%	5.1%	5-yr Net RIB Impact	-59.8%	34.5%	12.7%	20.0%	22.2%	15.9%	16.5%	10.2%	2.5%	0.2%	0.0%	0.0%
				Block 2 Rate	0.12053	0.13106	0.14429	0.15367	0.17320	.20/.30	7.6%	7.3%	7.4%	7.5%	7.6%	5-yr Total Impact	-25.5%	68.8%	0.0%	1.6%	2.7%	1.7%	23.2%	19.8%	13.4%	17.8%	13.5%	6.4%
				Ratio: Block 2 / Block 1	1.51	1.52	1.53	1.54	1.56																			
66.2	66	1350	Pricing Principle 2 - Block 2 Only	Customer Charge	15.00	15.38	15.73	15.73	15.73	.05/.10	2.5%	2.9%	3.4%	3.6%	4.1%	2011 Impact	-40.4%	30.9%	4.3%	24.9%	22.7%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 1 Rate	0.07982	0.07982	0.07982	0.07982	0.07982	.10/.20	4.9%	5.9%	6.8%	7.3%	8.1%	5-yr Net RIB Impact	-71.4%	57.4%	49.0%	8.4%	2.5%	10.8%	9.4%	8.5%	6.2%	3.3%	1.6%	0.2%
				Block 2 Rate	0.12053	0.13941	0.16302	0.17955	0.21393	.20/.30	7.6%	8.6%	9.9%	10.6%	11.8%	5-yr Total Impact	-37.1%	91.7%	4.3%	17.8%	10.5%	13.3%	6.0%	5.4%	11.4%	8.5%	8.2%	14.5%
				Ratio: Block 2 / Block 1	1.51	1.75	2.04	2.25	2.68																			
66.3	66	1350	Pricing Principle 3 - All Components	Customer Charge	15.00	16.20	17.69	18.71	20.85	.05/.10	2.6%	2.4%	2.4%	2.3%	2.3%	2011 Impact	-40.4%	30.9%	4.3%	24.9%	22.7%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 1 Rate	0.07982	0.08620	0.09413	0.09959	0.11094	.10/.20	4.9%	4.8%	4.7%	4.6%	4.5%	5-yr Net RIB Impact	-40.3%	31.0%	4.3%	24.9%	22.7%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 2 Rate	0.12053	0.13016	0.14214	0.15038	0.16752	.20/.30	7.2%	7.1%	7.0%	6.9%	6.8%	5-yr Total Impact	-6.0%	65.3%	0.0%	0.0%	0.0%	2.9%	9.8%	33.3%	13.9%	21.4%	14.5%	4.2%
				Ratio: Block 2 / Block 1	1.51	1.51	1.51	1.51	1.51																			
66.4	66	1350	Pricing Principle 4 - Customer and Block 2	Customer Charge	15.00	16.20	17.69	18.71	20.85	.05/.10	2.6%	2.9%	3.3%	3.5%	3.8%	2011 Impact	-40.4%	30.9%	4.3%	24.9%	22.7%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 1 Rate	0.07982	0.07982	0.07982	0.07982	0.07982	.10/.20	4.9%	5.8%	6.5%	6.9%	7.6%	5-yr Net RIB Impact	-50.9%	54.4%	46.0%	8.8%	5.1%	10.8%	9.4%	9.8%	7.4%	1.4%	1.2%	0.2%
				Block 2 Rate	0.12053	0.13851	0.16087	0.17626	0.20826	.20/.30	7.2%	8.4%	9.6%	10.1%	11.1%	5-yr Total Impact	-16.6%	88.7%	0.0%	0.0%	29.2%	16.8%	6.0%	5.4%	11.4%	8.5%	8.2%	14.5%
				Ratio: Block 2 / Block 1	1.51	1.74	2.02	2.21	2.61																			
69.1	69	1600	Pricing Principle 1 - Both Blocks	Customer Charge	15.00	15.38	15.73	15.73	15.73	.05/.10	2.5%	2.5%	2.5%	2.5%	2.5%	2011 Impact	-39.8%	33.9%	4.3%	17.8%	32.7%	17.7%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.08237	0.08896	0.09714	0.10277	0.11449	.10/.20	5.0%	5.0%	5.0%	5.0%	5.0%	5-yr Net RIB Impact	-59.0%	38.1%	10.5%	22.1%	24.8%	15.1%	14.6%	10.2%	2.1%	0.6%	0.0%	0.0%
				Block 2 Rate	0.12356	0.13450	0.14826	0.15806	0.17844	.20/.30	7.6%	7.4%	7.4%	7.5%	7.6%	5-yr Total Impact	-24.7%	72.4%	0.0%	1.6%	2.7%	1.7%	16.1%	29.9%	16.8%	12.5%	12.3%	6.4%
				Ratio: Block 2 / Block 1	1.50	1.51	1.53	1.54	1.56																			
69.2	69	1600	Pricing Principle 2 - Block 2 Only	Customer Charge	15.00	15.38	15.73	15.73	15.73	.05/.10	2.5%	3.1%	3.6%	3.8%	4.3%	2011 Impact	-39.8%	33.9%	4.3%	17.8%	32.7%	17.7%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.08237	0.08237	0.08237	0.08237	0.08237	.10/.20	5.0%	6.1%	7.1%	7.6%	8.5%	5-yr Net RIB Impact	-70.8%	67.7%	52.0%	5.4%	11.4%	3.7%	7.6%	7.0%	6.5%	3.7%	1.4%	1.3%
				Block 2 Rate	0.12356	0.14588	0.17379	0.19333	0.23398	.20/.30	7.6%	9.0%	10.4%	11.2%	12.4%	5-yr Total Impact	-36.5%	102.0%	2.9%	9.8%	23.5%	15.8%	5.4%	2.5%	10.8%	6.6%	8.2%	14.5%
				Ratio: Block 2 / Block 1	1.50	1.77	2.11	2.35	2.84																			
69.3	69	1600	Pricing Principle 3 - All Components	Customer Charge	15.00	16.20	17.69	18.71	20.85	.05/.10	2.5%	2.4%	2.3%	2.3%	2.2%	2011 Impact	-39.8%	33.9%	4.3%	17.8%	32.7%	17.7%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.08237	0.08896	0.09714	0.10277	0.11449	.10/.20	5.0%	4.9%	4.7%	4.6%	4.4%	5-yr Net RIB Impact	-39.7%	34.0%	4.3%	17.8%	32.7%	17.7%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 2 Rate	0.12356	0.13343	0.14571	0.15416	0.17174	.20/.30	7.3%	7.2%	7.0%	6.9%	6.7%	5-yr Total Impact	-5.4%	68.3%	0.0%	0.0%	0.0%	1.6%	6.3%	38.1%	18.4%	17.0%	13.5%	5.2%
				Ratio: Block 2 / Block 1	1.50	1.50	1.50	1.50	1.50																			
69.4	69	1600	Pricing Principle 4 - Customer and Block 2	Customer Charge	15.00	16.20	17.69	18.71	20.85	.05/.10	2.5%	3.0%	3.4%	3.7%	4.0%	2011 Impact	-39.8%	33.9%	4.3%	17.8%	32.7%	17.7%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.08237	0.08237	0.08237	0.08237	0.08237	.10/.20	5.0%	6.0%	6.9%	7.3%	8.0%	5-yr Net RIB Impact	-50.1%	64.4%	52.0%	5.4%	11.4%	3.7%	8.8%	5.8%	6.5%	3.7%	1.7%	1.0%
				Block 2 Rate	0.12356	0.14482	0.17124	0.18944	0.22727	.20/.30	7.3%	8.8%	10.1%	10.6%	11.7%	5-yr Total Impact	-15.8%	98.7%	0.0%	0.0%	29.2%	16.8%	11.4%	2.5%	10.8%	9.4%	5.3%	14.5%
				Ratio: Block 2 / Block 1	1.50	1.76	2.08	2.30	2.76																			

Appendix A Table 4: Comparison of Options with $10.00 Customer Charge

	Base Rate Option	Threshold kWh	Rate Increase Applied		5-Year Rate Projection					Elasticity Estimate	Cumulative Conservation Impact						Min Bill Impact	Max Bill Impact	Percent of Customers with Decrease of:				Percent of Customers with Increase of:					
					2011	2012	2013	2014	2015		2011	2012	2013	2014	2015				30% +	20-30%	10-20%	0-10%	0-10%	10-20%	20-30%	30-40%	40-50%	50% +
				RRA Increase		4.00%	6.90%	5.80%	11.40%																			
				Rebalancing Increase		2.50%	2.30%	0.00%	0.00%																			
	Continued Flat Rate		Pricing Principle 3 - All Components	Customer Charge	28.93	31.24	34.12	36.09	40.21	.05/.10	0.0%	0.6%	1.2%	1.6%	2.4%	2011 RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 1 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.10/.20	0.0%	1.1%	2.5%	3.1%	4.9%	5-yr Net RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 2 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.20/.30	0.0%	1.7%	3.8%	4.8%	7.5%	5-yr Total Impact	34.3%	34.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Ratio: Block 2 / Block 1	1.00	1.00	1.00	1.00	1.00																			
60.3	60	1350	Pricing Principle 3 - All Components	Customer Charge	10.00	10.80	11.79	12.48	13.90	.05/.10	2.5%	2.4%	2.4%	2.4%	2.3%	2011 Impact	-52.9%	30.6%	7.9%	21.4%	22.7%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 1 Rate	0.08413	0.09086	0.09922	0.10497	0.11694	.10/.20	5.0%	4.9%	4.8%	4.7%	4.6%	5-yr Net RIB Impact	-52.8%	30.7%	7.9%	21.4%	22.7%	18.7%	17.9%	9.5%	1.8%	0.1%	0.0%	0.0%
				Block 2 Rate	0.12031	0.12992	0.14188	0.15011	0.16722	.20/.30	7.4%	7.3%	7.1%	7.0%	6.9%	5-yr Total Impact	-18.5%	65.0%	0.0%	0.0%	1.6%	4.4%	12.7%	27.3%	13.9%	21.4%	14.5%	4.2%
				Ratio: Block 2 / Block 1	1.43	1.43	1.43	1.43	1.43																			
60.4	60	1350	Pricing Principle 4 - Customer and Block 2	Customer Charge	10.00	10.80	11.79	12.48	13.90	.05/.10	2.5%	2.9%	3.4%	3.6%	3.9%	2011 Impact	-52.9%	30.6%	7.9%	21.4%	22.7%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 1 Rate	0.08413	0.08413	0.08413	0.08413	0.08413	.10/.20	5.0%	5.9%	6.7%	7.1%	7.9%	5-yr Net RIB Impact	-66.4%	55.4%	49.0%	5.8%	5.1%	10.8%	9.4%	9.8%	5.8%	2.9%	1.2%	0.2%
				Block 2 Rate	0.12031	0.13872	0.16162	0.17738	0.21016	.20/.30	7.4%	8.7%	9.9%	10.5%	11.5%	5-yr Total Impact	-32.1%	89.7%	1.6%	11.1%	20.0%	13.3%	6.0%	5.4%	11.4%	8.5%	8.2%	14.5%
				Ratio: Block 2 / Block 1	1.43	1.65	1.92	2.11	2.50																			
61.3	61	1350	Pricing Principle 3 - All Components	Customer Charge	10.00	10.80	11.79	12.48	13.90	.05/.10	1.7%	1.7%	1.6%	1.6%	1.5%	2011 Impact	-51.1%	20.1%	6.0%	9.5%	30.4%	24.7%	24.1%	5.1%	0.1%	0.0%	0.0%	0.0%
				Block 1 Rate	0.09184	0.09918	0.10831	0.11459	0.12765	.10/.20	3.4%	3.3%	3.2%	3.2%	3.1%	5-yr Net RIB Impact	-51.0%	20.2%	6.0%	9.5%	27.4%	25.9%	26.0%	5.1%	0.1%	0.0%	0.0%	0.0%
				Block 2 Rate	0.11021	0.11902	0.12997	0.13751	0.15318	.20/.30	5.1%	5.0%	4.9%	4.8%	4.7%	5-yr Total Impact	-16.7%	54.5%	0.0%	0.0%	1.6%	2.7%	3.6%	21.4%	28.2%	28.1%	13.5%	1.0%
				Ratio: Block 2 / Block 1	1.20	1.20	1.20	1.20	1.20																			
61.4	61	1350	Pricing Principle 4 - Customer and Block 2	Customer Charge	10.00	10.80	11.79	12.48	13.90	.05/.10	1.7%	2.3%	2.8%	3.1%	3.5%	2011 Impact	-51.1%	20.1%	6.0%	9.5%	30.4%	24.7%	24.1%	5.1%	0.1%	0.0%	0.0%	0.0%
				Block 1 Rate	0.09184	0.09184	0.09184	0.09184	0.09184	.10/.20	3.4%	4.5%	5.6%	6.1%	7.0%	5-yr Net RIB Impact	-65.3%	49.1%	46.0%	6.0%	8.0%	10.8%	10.6%	8.6%	7.4%	2.1%	0.6%	0.0%
				Block 2 Rate	0.11021	0.12863	0.15152	0.16728	0.20006	.20/.30	5.1%	6.7%	8.3%	9.0%	10.3%	5-yr Total Impact	-31.0%	83.4%	1.6%	4.4%	23.2%	6.9%	12.8%	8.4%	11.4%	8.5%	9.9%	12.9%
				Ratio: Block 2 / Block 1	1.20	1.40	1.65	1.82	2.18																			
63.3	63	1600	Pricing Principle 3 - All Components	Customer Charge	10.00	10.80	11.79	12.48	13.90	.05/.10	2.5%	2.4%	2.4%	2.3%	2.2%	2011 Impact	-52.3%	33.2%	6.0%	23.2%	22.7%	20.5%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.08650	0.09341	0.10201	0.10792	0.12023	.10/.20	5.0%	4.9%	4.7%	4.6%	4.4%	5-yr Net RIB Impact	-52.3%	33.3%	6.0%	23.2%	22.7%	20.5%	16.1%	8.7%	2.5%	0.2%	0.0%	0.0%
				Block 2 Rate	0.12283	0.13265	0.14485	0.15325	0.17072	.20/.30	7.4%	7.3%	7.1%	7.0%	6.8%	5-yr Total Impact	-18.0%	67.6%	0.0%	0.0%	1.6%	2.7%	11.3%	30.4%	16.4%	19.0%	13.5%	5.2%
				Ratio: Block 2 / Block 1	1.42	1.42	1.42	1.42	1.42																			
63.4	63	1600	Pricing Principle 4 - Customer and Block 2	Customer Charge	10.00	10.80	11.79	12.48	13.90	.05/.10	2.5%	3.0%	3.5%	3.7%	4.1%	2011 Impact	-52.3%	33.2%	6.0%	23.2%	22.7%	20.5%	17.4%	7.4%	2.5%	0.2%	0.0%	0.0%
				Block 1 Rate	0.08650	0.08650	0.08650	0.08650	0.08650	.10/.20	5.0%	6.1%	7.0%	7.5%	8.3%	5-yr Net RIB Impact	-66.1%	65.2%	52.0%	5.4%	11.4%	3.7%	8.8%	5.8%	6.5%	3.7%	1.7%	1.0%
				Block 2 Rate	0.12283	0.14460	0.17167	0.19030	0.22904	.20/.30	7.4%	9.0%	10.3%	11.0%	12.1%	5-yr Total Impact	-31.8%	99.5%	1.6%	8.9%	22.1%	16.4%	8.4%	2.5%	10.8%	6.6%	8.2%	14.5%
				Ratio: Block 2 / Block 1	1.42	1.67	1.98	2.20	2.65																			

Appendix A Table 5: Comparison of Options with $7.50 Customer Charge

	Base Rate Option	Threshold kWh	Rate Increase Applied		5-Year Rate Projection					Elasticity Estimate	Cumulative Conservation Impact						Min Bill Impact	Max Bill Impact	Percent of Customers with Decrease of:				Percent of Customers with Increase of:					
					2011	2012	2013	2014	2015		2011	2012	2013	2014	2015				30% +	20-30%	10-20%	0-10%	0-10%	10-20%	20-30%	30-40%	40-50%	50% +
				RRA Increase		4.00%	6.90%	5.80%	11.40%																			
				Rebalancing Increase		2.50%	2.30%	0.00%	0.00%																			
	Continued Flat Rate		Pricing Principle 3 - All Components	Customer Charge	28.93	31.24	34.12	36.09	40.21	.05/.10	0.0%	0.6%	1.2%	1.6%	2.4%	2011 RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 1 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.10/.20	0.0%	1.1%	2.5%	3.1%	4.9%	5-yr Net RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 2 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.20/.30	0.0%	1.7%	3.8%	4.8%	7.5%	5-yr Total Impact	34.3%	34.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Ratio: Block 2 / Block 1	1.00	1.00	1.00	1.00	1.00																			
19.3	19	1350	Pricing Principle 3 - All Components	Customer Charge	7.50	8.10	8.84	9.36	10.42	.05/.10	2.7%	2.7%	2.7%	2.7%	2.6%	2011 Impact	-59.1%	30.0%	10.5%	18.7%	22.7%	18.7%	19.2%	8.2%	1.9%	0.0%	0.0%	0.0%
				Block 1 Rate	0.08671	0.09364	0.10225	0.10818	0.12052	.10/.20	5.5%	5.4%	5.4%	5.3%	5.3%	5-yr Net RIB Impact	-59.0%	30.1%	10.5%	18.7%	22.7%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 2 Rate	0.11966	0.12922	0.14111	0.14929	0.16631	.20/.30	8.2%	8.1%	8.0%	7.9%	7.9%	5-yr Total Impact	-24.7%	64.4%	0.0%	1.6%	2.7%	1.7%	16.1%	23.9%	13.9%	21.4%	16.0%	2.7%
				Ratio: Block 2 / Block 1	1.38	1.38	1.38	1.38	1.38																			
19.4	19	1350	Pricing Principle 4 - Customer and Block 2	Customer Charge	7.50	8.10	8.84	9.36	10.42	.05/.10	2.7%	3.3%	3.9%	4.2%	4.7%	2011 Impact	-59.1%	30.0%	10.5%	18.7%	22.7%	18.7%	19.2%	8.2%	1.9%	0.0%	0.0%	0.0%
				Block 1 Rate	0.08671	0.08671	0.08671	0.08671	0.08671	.10/.20	5.5%	6.6%	7.8%	8.3%	9.4%	5-yr Net RIB Impact	-75.2%	55.5%	49.0%	5.8%	5.1%	10.8%	9.4%	9.8%	5.8%	2.9%	1.2%	0.2%
				Block 2 Rate	0.11966	0.13829	0.16146	0.17740	0.21057	.20/.30	8.2%	9.9%	11.5%	12.3%	13.8%	5-yr Total Impact	-40.9%	89.8%	6.0%	13.0%	13.6%	13.3%	6.0%	5.4%	11.4%	8.5%	8.2%	14.5%
				Ratio: Block 2 / Block 1	1.38	1.59	1.86	2.05	2.43																			
22.3	22	2100	Pricing Principle 3 - All Components	Customer Charge	7.50	8.10	8.84	9.36	10.42	.05/.10	3.0%	2.9%	2.8%	2.7%	2.6%	2011 Impact	-58.0%	38.9%	6.0%	16.1%	29.9%	23.6%	14.3%	7.4%	2.1%	0.6%	0.0%	0.0%
				Block 1 Rate	0.09111	0.09839	0.10744	0.11367	0.12663	.10/.20	5.9%	5.8%	5.6%	5.5%	5.3%	5-yr Net RIB Impact	-57.9%	38.9%	6.0%	16.1%	29.9%	23.6%	14.3%	7.4%	2.1%	0.6%	0.0%	0.0%
				Block 2 Rate	0.12847	0.13874	0.15150	0.16029	0.17856	.20/.30	8.9%	8.7%	8.5%	8.4%	8.1%	5-yr Total Impact	-23.6%	73.2%	0.0%	1.6%	1.3%	3.1%	9.5%	24.1%	29.1%	14.8%	10.0%	6.4%
				Ratio: Block 2 / Block 1	1.41	1.41	1.41	1.41	1.41																			
22.4	22	2100	Pricing Principle 4 - Customer and Block 2	Customer Charge	7.50	8.10	8.84	9.36	10.42	.05/.10	3.0%	3.9%	4.7%	5.1%	5.7%	2011 Impact	-58.0%	38.9%	6.0%	16.1%	29.9%	23.6%	14.3%	7.4%	2.1%	0.6%	0.0%	0.0%
				Block 1 Rate	0.09111	0.09111	0.09111	0.09111	0.09111	.10/.20	5.9%	7.8%	9.4%	10.2%	11.5%	5-yr Net RIB Impact	-74.6%	87.7%	57.4%	11.4%	1.9%	8.0%	2.6%	5.8%	2.8%	3.7%	3.7%	2.7%
				Block 2 Rate	0.12847	0.15899	0.19694	0.22306	0.27739	.20/.30	8.9%	11.6%	14.0%	15.1%	16.9%	5-yr Total Impact	-40.3%	122.0%	4.3%	8.4%	29.8%	9.5%	8.0%	10.8%	4.9%	5.7%	4.2%	14.5%
				Ratio: Block 2 / Block 1	1.41	1.75	2.16	2.45	3.04																			
25.3	25	1600	Pricing Principle 3 - All Components	Customer Charge	7.50	8.10	8.84	9.36	10.42	.05/.10	2.8%	2.8%	2.7%	2.7%	2.6%	2011 Impact	-58.5%	32.2%	7.9%	21.4%	22.7%	20.5%	17.4%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 1 Rate	0.08893	0.09604	0.10487	0.11095	0.12360	.10/.20	5.6%	5.5%	5.4%	5.4%	5.3%	5-yr Net RIB Impact	-58.5%	32.3%	7.9%	21.4%	22.7%	18.7%	19.2%	7.4%	2.6%	0.1%	0.0%	0.0%
				Block 2 Rate	0.12183	0.13157	0.14367	0.15200	0.16933	.20/.30	8.4%	8.3%	8.2%	8.1%	8.0%	5-yr Total Impact	-24.2%	66.6%	0.0%	1.6%	1.3%	3.1%	9.5%	30.4%	16.4%	19.0%	14.5%	4.2%
				Ratio: Block 2 / Block 1	1.37	1.37	1.37	1.37	1.37																			
25.4	25	1600	Pricing Principle 4 - Customer and Block 2	Customer Charge	7.50	8.10	8.84	9.36	10.42	.05/.10	2.8%	3.5%	4.2%	4.6%	5.2%	2011 Impact	-58.5%	32.2%	7.9%	21.4%	22.7%	20.5%	17.4%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 1 Rate	0.08893	0.08893	0.08893	0.08893	0.08893	.10/.20	5.6%	7.1%	8.4%	9.1%	10.3%	5-yr Net RIB Impact	-74.9%	65.2%	52.0%	5.4%	11.4%	3.7%	7.6%	7.0%	6.5%	3.7%	1.7%	1.0%
				Block 2 Rate	0.12183	0.14385	0.17124	0.19009	0.22929	.20/.30	8.4%	10.5%	12.5%	13.5%	15.2%	5-yr Total Impact	-40.6%	99.5%	4.3%	8.4%	20.0%	16.4%	8.4%	2.5%	10.8%	6.6%	8.2%	14.5%
				Ratio: Block 2 / Block 1	1.37	1.62	1.93	2.14	2.58																			

Appendix A Table 6: Comparison of Options with $0.00 Customer Charge

	Base Rate Option	Threshold kWh	Rate Increase Applied		5-Year Rate Projection 2011	2012	2013	2014	2015	Elasticity Estimate	Cumulative Conservation Impact 2011	2012	2013	2014	2015		Min Bill Impact	Max Bill Impact	Percent of Customers with Decrease of: 30% +	20-30%	10-20%	0-10%	Percent of Customers with Increase of: 0-10%	10-20%	20-30%	30-40%	40-50%	50% +
				RRA Increase		4.00%	6.90%	5.80%	11.40%																			
				Rebalancing Increase		2.50%	2.30%	0.00%	0.00%																			
	Continued Flat Rate		Pricing Principle 3 - All Components	Customer Charge	28.93	31.24	34.12	36.09	40.21	.05/.10	0.0%	0.6%	1.2%	1.6%	2.4%	2011 RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 1 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.10/.20	0.0%	1.1%	2.5%	3.1%	4.9%	5-yr Net RIB Impact	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Block 2 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.20/.30	0.0%	1.7%	3.8%	4.8%	7.5%	5-yr Total Impact	34.3%	34.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
				Ratio: Block 2 / Block 1	1.00	1.00	1.00	1.00	1.00																			
51.1	51	1350	Pricing Principle 1 - Both Blocks	Customer Charge	0.00	0.00	0.00	0.00	0.00	.05/.10	2.7%	2.7%	2.7%	2.7%	2.6%	2011 Impact	-77.9%	29.6%	15.6%	17.1%	19.3%	18.7%	19.2%	8.2%	1.9%	0.0%	0.0%	0.0%
				Block 1 Rate	0.09320	0.10065	0.10991	0.11628	0.12954	.10/.20	5.5%	5.4%	5.4%	5.3%	5.3%	5-yr Net RIB Impact	-77.8%	29.7%	15.6%	17.1%	19.3%	16.8%	21.2%	8.2%	1.9%	0.0%	0.0%	0.0%
				Block 2 Rate	0.11930	0.12883	0.14069	0.14885	0.16581	.20/.30	8.2%	8.2%	8.1%	8.0%	7.9%	5-yr Total Impact	-43.5%	64.0%	1.6%	2.7%	1.7%	4.5%	15.2%	20.3%	13.9%	20.2%	17.2%	2.7%
				Ratio: Block 2 / Block 1	1.28	1.28	1.28	1.28	1.28																			
51.2	51	1350	Pricing Principle 2 - Block 2 Only	Customer Charge	0.00	0.00	0.00	0.00	0.00	.05/.10	2.7%	3.4%	4.0%	4.3%	4.9%	2011 Impact	-77.9%	29.6%	15.6%	17.1%	19.3%	18.7%	19.2%	8.2%	1.9%	0.0%	0.0%	0.0%
				Block 1 Rate	0.09320	0.09320	0.09320	0.09320	0.09320	.10/.20	5.5%	6.8%	8.0%	8.6%	9.7%	5-yr Net RIB Impact	-112.2%	57.0%	49.0%	8.4%	2.5%	10.8%	9.4%	7.0%	7.7%	3.3%	1.6%	0.2%
				Block 2 Rate	0.11930	0.13858	0.16255	0.17906	0.21338	.20/.30	8.2%	10.1%	11.9%	12.8%	14.4%	5-yr Total Impact	-77.9%	91.3%	12.7%	16.6%	3.4%	13.3%	6.0%	5.4%	11.4%	8.5%	8.2%	14.5%
				Ratio: Block 2 / Block 1	1.28	1.49	1.74	1.92	2.29																			
54.1	54	2100	Pricing Principle 1 - Both Blocks	Customer Charge	0.00	0.00	0.00	0.00	0.00	.05/.10	2.8%	2.8%	2.7%	2.6%	2.5%	2011 Impact	-77.0%	36.2%	12.7%	16.6%	22.7%	22.1%	15.9%	7.4%	2.4%	0.3%	0.0%	0.0%
				Block 1 Rate	0.09683	0.10457	0.11419	0.12081	0.13458	.10/.20	5.7%	5.5%	5.4%	5.3%	5.1%	5-yr Net RIB Impact	-76.9%	36.3%	12.7%	16.6%	22.7%	22.1%	15.9%	7.4%	2.4%	0.3%	0.0%	0.0%
				Block 2 Rate	0.12588	0.13594	0.14845	0.15706	0.17496	.20/.30	8.6%	8.5%	8.3%	8.1%	7.9%	5-yr Total Impact	-42.6%	70.6%	1.6%	2.7%	0.0%	3.6%	14.2%	17.6%	29.1%	14.8%	10.0%	6.4%
				Ratio: Block 2 / Block 1	1.30	1.30	1.30	1.30	1.30																			
54.2	54	2100	Pricing Principle 2 - Block 2 Only	Customer Charge	0.00	0.00	0.00	0.00	0.00	.05/.10	2.8%	3.9%	4.8%	5.2%	5.9%	2011 Impact	-77.0%	36.2%	12.7%	16.6%	22.7%	22.1%	15.9%	7.4%	2.4%	0.3%	0.0%	0.0%
				Block 1 Rate	0.09683	0.09683	0.09683	0.09683	0.09683	.10/.20	5.7%	7.8%	9.6%	10.4%	11.8%	5-yr Net RIB Impact	-111.3%	88.6%	57.4%	11.4%	1.9%	6.6%	4.0%	5.8%	2.8%	3.7%	3.7%	2.7%
				Block 2 Rate	0.12588	0.15747	0.19674	0.22377	0.27999	.20/.30	8.6%	11.7%	14.3%	15.5%	17.5%	5-yr Total Impact	-77.0%	122.9%	12.7%	16.6%	16.8%	8.6%	5.3%	10.8%	3.4%	7.2%	4.2%	14.5%
				Ratio: Block 2 / Block 1	1.30	1.63	2.03	2.31	2.89																			
57.1	57	1600	Pricing Principle 1 - Both Blocks	Customer Charge	0.00	0.00	0.00	0.00	0.00	.05/.10	2.8%	2.7%	2.7%	2.7%	2.6%	2011 Impact	-77.4%	31.1%	15.6%	17.1%	19.3%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 1 Rate	0.09510	0.10270	0.11215	0.11865	0.13218	.10/.20	5.5%	5.5%	5.4%	5.3%	5.2%	5-yr Net RIB Impact	-77.3%	31.2%	15.6%	17.1%	19.3%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 2 Rate	0.12078	0.13043	0.14243	0.15069	0.16787	.20/.30	8.3%	8.2%	8.1%	8.0%	7.9%	5-yr Total Impact	-43.0%	65.5%	1.6%	2.7%	1.7%	1.9%	14.2%	23.9%	13.9%	21.4%	14.5%	4.2%
				Ratio: Block 2 / Block 1	1.27	1.27	1.27	1.27	1.27																			
57.2	57	1600	Pricing Principle 2 - Block 2 Only	Customer Charge	0.00	0.00	0.00	0.00	0.00	.05/.10	2.8%	3.6%	4.3%	4.7%	5.3%	2011 Impact	-77.4%	31.1%	15.6%	17.1%	19.3%	18.7%	19.2%	8.2%	1.8%	0.1%	0.0%	0.0%
				Block 1 Rate	0.09510	0.09510	0.09510	0.09510	0.09510	.10/.20	5.5%	7.1%	8.6%	9.3%	10.6%	5-yr Net RIB Impact	-111.7%	66.5%	52.0%	5.4%	11.4%	3.7%	7.6%	7.0%	6.5%	3.7%	1.7%	1.0%
				Block 2 Rate	0.12078	0.14357	0.17191	0.19142	0.23199	.20/.30	8.3%	10.7%	12.8%	13.9%	15.7%	5-yr Total Impact	-77.4%	100.8%	12.7%	16.6%	6.9%	15.8%	5.4%	2.5%	10.8%	6.6%	6.3%	16.4%
				Ratio: Block 2 / Block 1	1.27	1.51	1.81	2.01	2.44																			

					5-Year Rate Projection						Cumulative Conservation Impact from RIB					
	Base Rate Option	Threshold kWh	Rate Increase Applied		2011	2012	2013	2014	2015	Elasticity Estimate	2011	2012	2013	2014	2015	Percentage of total revenue by Bill Compnent
				RRA Increase		4.00%	6.90%	5.80%	11.40%							
				Rebalancing Increase		2.50%	2.30%	0.00%	0.00%							
	Continued Flat Rate		Pricing Principle 3 - All Components	Customer Charge	28.93	31.27	34.20	36.18	40.31	.05/.10	0.0%	0.6%	1.3%	1.6%	2.5%	13.0%
				Block 1 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.10/.20	0.0%	1.1%	2.5%	3.2%	4.9%	87.0%
				Block 2 Rate	0.09090	0.09816	0.10719	0.11341	0.12634	.20/.30	0.0%	1.7%	3.8%	4.9%	7.6%	
				Ratio: Block 2 / Block 1	1.00	1.00	1.00	1.00	1.00							100.0%
2.1	2	1350	Pricing Principle 1 - Both Blocks	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	1.9%	2.0%	2.1%	2.2%	2.4%	13.0%
				Block 1 Rate	0.07526	0.08127	0.08875	0.09389	0.10460	.10/.20	3.7%	3.9%	4.2%	4.4%	4.8%	40.8%
				Block 2 Rate	0.11138	0.12202	0.13550	0.14532	0.16575	.20/.30	5.5%	5.8%	6.2%	6.5%	7.1%	46.2%
				Ratio: Block 2 / Block 1	1.48	1.50	1.53	1.55	1.58							100.0%
4.1	4	2100	Pricing Principle 1 - Both Blocks	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	3.3%	3.4%	3.5%	3.5%	3.7%	13.0%
				Block 1 Rate	0.07454	0.08050	0.08790	0.09300	0.10360	.10/.20	6.6%	6.8%	6.9%	7.1%	7.3%	52.5%
				Block 2 Rate	0.13641	0.15016	0.16768	0.18060	0.20752	.20/.30	9.7%	10.0%	10.2%	10.5%	11.0%	34.5%
				Ratio: Block 2 / Block 1	1.83	1.87	1.91	1.94	2.00							100.0%
7.1	7	1600	Pricing Principle 1 - Both Blocks	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	3.0%	3.1%	3.2%	3.3%	3.4%	13.0%
				Block 1 Rate	0.07069	0.07634	0.08337	0.08820	0.09826	.10/.20	6.0%	6.2%	6.4%	6.5%	6.9%	42.9%
				Block 2 Rate	0.12584	0.13795	0.15331	0.16451	0.18784	.20/.30	8.8%	9.1%	9.4%	9.7%	10.2%	44.1%
				Ratio: Block 2 / Block 1	1.78	1.81	1.84	1.87	1.91							100.0%
8.1	8	1600	Pricing Principle 1 - Both Blocks	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	1.9%	2.0%	2.1%	2.2%	2.4%	13.0%
				Block 1 Rate	0.07828	0.08453	0.09231	0.09767	0.10880	.10/.20	3.7%	4.0%	4.2%	4.4%	4.9%	47.5%
				Block 2 Rate	0.11272	0.12379	0.13784	0.14815	0.16961	.20/.30	5.5%	5.8%	6.2%	6.6%	7.3%	39.5%
				Ratio: Block 2 / Block 1	1.44	1.46	1.49	1.52	1.56							100.0%
31.1	31	1500	Pricing Principle 1 - Both Blocks	Customer Charge	28.93	29.65	30.34	30.34	30.34	.05/.10	3.1%	3.2%	3.3%	3.4%	3.6%	13.0%
				Block 1 Rate	0.06942	0.07497	0.08186	0.08661	0.09648	.10/.20	6.1%	6.3%	6.5%	6.7%	7.1%	40.4%
				Block 2 Rate	0.12426	0.13611	0.15113	0.16206	0.18481	.20/.30	9.0%	9.3%	9.6%	9.9%	10.5%	46.6%
				Ratio: Block 2 / Block 1	1.79	1.82	1.85	1.87	1.92							100.0%
11.3	11	1350	Pricing Principle 3 - All Components	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	1.8%	1.8%	1.8%	1.8%	1.7%	9.7%
				Block 1 Rate	0.08197	0.08852	0.09666	0.10227	0.11393	.10/.20	3.7%	3.6%	3.6%	3.5%	3.5%	44.5%
				Block 2 Rate	0.11066	0.11950	0.13049	0.13806	0.15380	.20/.30	5.4%	5.4%	5.3%	5.2%	5.2%	45.9%
				Ratio: Block 2 / Block 1	1.35	1.35	1.35	1.35	1.35							100.0%
13.3	13	2100	Pricing Principle 3 - All Components	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	3.2%	3.1%	3.0%	2.9%	2.8%	9.7%
				Block 1 Rate	0.08037	0.08679	0.09477	0.10027	0.11170	.10/.20	6.4%	6.2%	6.0%	5.9%	5.7%	56.6%
				Block 2 Rate	0.13341	0.14407	0.15733	0.16645	0.18543	.20/.30	9.4%	9.2%	8.9%	8.8%	8.5%	33.7%
				Ratio: Block 2 / Block 1	1.66	1.66	1.66	1.66	1.66							100.0%
16.3	16	1600	Pricing Principle 3 - All Components	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	2.9%	2.9%	2.8%	2.8%	2.7%	9.7%
				Block 1 Rate	0.07715	0.08331	0.09098	0.09626	0.10723	.10/.20	5.8%	5.7%	5.6%	5.5%	5.4%	46.8%
				Block 2 Rate	0.12421	0.13413	0.14648	0.15497	0.17264	.20/.30	8.6%	8.5%	8.3%	8.2%	8.1%	43.5%
				Ratio: Block 2 / Block 1	1.61	1.61	1.61	1.61	1.61							100.0%
17.3	17	1600	Pricing Principle 3 - All Components	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	1.8%	1.8%	1.7%	1.7%	1.7%	9.7%
				Block 1 Rate	0.08449	0.09124	0.09963	0.10541	0.11743	.10/.20	3.6%	3.6%	3.5%	3.4%	3.3%	51.3%
				Block 2 Rate	0.11152	0.12043	0.13151	0.13914	0.15500	.20/.30	5.4%	5.3%	5.2%	5.1%	5.0%	39.1%
				Ratio: Block 2 / Block 1	1.32	1.32	1.32	1.32	1.32							100.0%
32.3	32	1500	Pricing Principle 3 - All Components	Customer Charge	21.50	23.22	25.35	26.82	29.88	.05/.10	2.8%	3.0%	2.9%	2.9%	2.9%	9.7%
				Block 1 Rate	0.07571	0.08176	0.08928	0.09446	0.10523	.10/.20	5.6%	6.0%	5.9%	5.8%	5.8%	44.0%
				Block 2 Rate	0.12341	0.13327	0.14553	0.15397	0.17153	.20/.30	8.2%	8.8%	8.7%	8.6%	8.5%	46.3%
				Ratio: Block 2 / Block 1	1.63	1.63	1.63	1.63	1.63							100.0%
28.1	28	2100	Pricing Principle 1 - Both Blocks	Customer Charge	15.00	15.38	15.73	15.73	15.73	.05/.10	2.6%	2.5%	2.5%	2.5%	2.4%	6.7%
				Block 1 Rate	0.08529	0.09211	0.10058	0.10641	0.11854	.10/.20	5.2%	5.1%	5.0%	4.9%	4.9%	60.1%
				Block 2 Rate	0.13135	0.14332	0.15843	0.16928	0.19186	.20/.30	7.6%	7.7%	7.6%	7.6%	7.7%	33.2%
				Ratio: Block 2 / Block 1	1.54	1.56	1.58	1.59	1.62							100.0%
28.3	28	2100	Pricing Principle 3 - All Components	Customer Charge	15.00	16.20	17.69	18.71	20.85	.05/.10	2.6%	2.5%	2.3%	2.3%	2.1%	6.7%
				Block 1 Rate	0.08529	0.09211	0.10058	0.10641	0.11854	.10/.20	5.2%	4.9%	4.7%	4.5%	4.2%	60.1%
				Block 2 Rate	0.13135	0.14185	0.15490	0.16388	0.18256	.20/.30	7.6%	7.5%	7.2%	7.0%	6.7%	33.2%
				Ratio: Block 2 / Block 1	1.54	1.54	1.54	1.54	1.54							100.0%
66.1	66	1350	Pricing Principle 1 - Both Blocks	Customer Charge	15.00	15.38	15.73	15.73	15.73	.05/.10	2.5%	2.5%	2.5%	2.5%	2.5%	6.7%
				Block 1 Rate	0.07982	0.08620	0.09413	0.09959	0.11094	.10/.20	4.9%	4.9%	4.9%	5.0%	5.0%	43.3%
				Block 2 Rate	0.12053	0.13106	0.14429	0.15367	0.17320	.20/.30	7.6%	7.3%	7.3%	7.4%	7.5%	49.9%
				Ratio: Block 2 / Block 1	1.51	1.52	1.53	1.54	1.56							100.0%
66.3	66	1350	Pricing Principle 3 - All Components	Customer Charge	15.00	16.20	17.69	18.71	20.85	.05/.10	2.6%	2.4%	2.3%	2.3%	2.2%	6.7%
				Block 1 Rate	0.07982	0.08620	0.09413	0.09959	0.11094	.10/.20	4.9%	4.8%	4.7%	4.6%	4.5%	43.3%
				Block 2 Rate	0.12053	0.13016	0.14214	0.15038	0.16752	.20/.30	7.2%	7.1%	6.9%	6.8%	6.7%	49.9%
				Ratio: Block 2 / Block 1	1.51	1.51	1.51	1.51	1.51							100.0%
69.1	69	1600	Pricing Principle 1 - Both Blocks	Customer Charge	15.00	15.38	15.73	15.73	15.73	.05/.10	2.5%	2.5%	2.5%	2.5%	2.5%	6.7%
				Block 1 Rate	0.08237	0.08896	0.09714	0.10277	0.11449	.10/.20	5.0%	5.0%	4.9%	4.9%	5.0%	50.0%
				Block 2 Rate	0.12356	0.13450	0.14826	0.15806	0.17844	.20/.30	7.6%	7.4%	7.4%	7.4%	7.5%	43.3%
				Ratio: Block 2 / Block 1	1.50	1.51	1.53	1.54	1.56							100.0%
69.3	69	1600	Pricing Principle 3 - All Components	Customer Charge	15.00	16.20	17.69	18.71	20.85	.05/.10	2.5%	2.4%	2.3%	2.3%	2.2%	6.7%
				Block 1 Rate	0.08237	0.08896	0.09714	0.10277	0.11449	.10/.20	5.0%	4.8%	4.7%	4.6%	4.4%	50.0%
				Block 2 Rate	0.12356	0.13343	0.14571	0.15416	0.17174	.20/.30	7.3%	7.2%	6.9%	6.8%	6.6%	43.3%
				Ratio: Block 2 / Block 1	1.50	1.50	1.50	1.50	1.50							100.0%
60.3	60	1350	Pricing Principle 3 - All Components	Customer Charge	10.00	10.80	11.79	12.48	13.90	.05/.10	2.5%	2.4%	2.4%	2.3%	2.3%	4.5%
				Block 1 Rate	0.08413	0.09086	0.09922	0.10497	0.11694	.10/.20	5.0%	4.9%	4.7%	4.7%	4.5%	45.6%
				Block 2 Rate	0.12031	0.12992	0.14188	0.15011	0.16722	.20/.30	7.4%	7.2%	7.1%	7.0%	6.8%	49.9%
				Ratio: Block 2 / Block 1	1.43	1.43	1.43	1.43	1.43							100.0%
61.3	61	1350	Pricing Principle 3 - All Components	Customer Charge	10.00	10.80	11.79	12.48	13.90	.05/.10	1.7%	1.6%	1.6%	1.6%	1.5%	4.5%
				Block 1 Rate	0.09184	0.09918	0.10831	0.11459	0.12765	.10/.20	3.4%	3.3%	3.2%	3.1%	3.0%	49.8%
				Block 2 Rate	0.11021	0.11902	0.12997	0.13751	0.15318	.20/.30	5.1%	5.0%	4.8%	4.7%	4.6%	45.7%
				Ratio: Block 2 / Block 1	1.20	1.20	1.20	1.20	1.20							100.0%
63.3	63	1600	Pricing Principle 3 - All Components	Customer Charge	10.00	10.80	11.79	12.48	13.90	.05/.10	2.5%	2.4%	2.3%	2.3%	2.2%	4.5%
				Block 1 Rate	0.08650	0.09341	0.10201	0.10792	0.12023	.10/.20	5.0%	4.8%	4.7%	4.6%	4.4%	52.5%
				Block 2 Rate	0.12283	0.13265	0.14485	0.15325	0.17072	.20/.30	7.4%	7.2%	7.0%	6.9%	6.7%	43.0%
				Ratio: Block 2 / Block 1	1.42	1.42	1.42	1.42	1.42							100.0%
19.3	19	1350	Pricing Principle 3 - All Components	Customer Charge	7.50	8.10	8.84	9.36	10.42	.05/.10	2.7%	2.7%	2.7%	2.6%	2.6%	3.4%
				Block 1 Rate	0.08671	0.09364	0.10225	0.10818	0.12052	.10/.20	5.5%	5.4%	5.3%	5.3%	5.2%	47.0%
				Block 2 Rate	0.11966	0.12922	0.14111	0.14929	0.16631	.20/.30	8.2%	8.1%	7.9%	7.9%	7.8%	49.6%
				Ratio: Block 2 / Block 1	1.38	1.38	1.38	1.38	1.38							100.0%
22.3	22	2100	Pricing Principle 3 - All Components	Customer Charge	7.50	8.10	8.84	9.36	10.42	.05/.10	3.0%	2.9%	2.8%	2.7%	2.6%	3.4%
				Block 1 Rate	0.09111	0.09839	0.10744	0.11367	0.12663	.10/.20	5.9%	5.8%	5.6%	5.4%	5.2%	64.2%
				Block 2 Rate	0.12847	0.13874	0.15150	0.16029	0.17856	.20/.30	8.9%	8.7%	8.4%	8.3%	8.1%	32.5%
				Ratio: Block 2 / Block 1	1.41	1.41	1.41	1.41	1.41							100.0%
25.3	25	1600	Pricing Principle 3 - All Components	Customer Charge	7.50	8.10	8.84	9.36	10.42	.05/.10	2.8%	2.8%	2.7%	2.7%	2.6%	3.4%
				Block 1 Rate	0.08893	0.09604	0.10487	0.11095	0.12360	.10/.20	5.6%	5.5%	5.4%	5.3%	5.2%	54.0%
				Block 2 Rate	0.12183	0.13157	0.14367	0.15200	0.16933	.20/.30	8.4%	8.3%	8.1%	8.0%	7.9%	42.7%
				Ratio: Block 2 / Block 1	1.37	1.37	1.37	1.37	1.37							100.0%
51.1	51	1350	Pricing Principle 1 - Both Blocks	Customer Charge	0.00	0.00	0.00	0.00	0.00	.05/.10	2.7%	2.7%	2.7%	2.6%	2.6%	0.0%
				Block 1 Rate	0.09320	0.10065	0.10991	0.11628	0.12954	.10/.20	5.5%	5.4%	5.3%	5.3%	5.2%	50.6%
				Block 2 Rate	0.11930	0.12883	0.14069	0.14885	0.16581	.20/.30	8.2%	8.1%	8.0%	7.9%	7.9%	49.4%
				Ratio: Block 2 / Block 1	1.28	1.28	1.28	1.28	1.28							100.0%
54.1	54	2100	Pricing Principle 1 - Both Blocks	Customer Charge	0.00	0.00	0.00	0.00	0.00	.05/.10	2.8%	2.8%	2.7%	2.6%	2.5%	0.0%
				Block 1 Rate	0.09683	0.10457	0.11419	0.12081	0.13458	.10/.20	5.7%	5.5%	5.3%	5.2%	5.0%	68.2%
				Block 2 Rate	0.12588	0.13594	0.14845	0.15706	0.17496	.20/.30	8.6%	8.4%	8.2%	8.0%	7.8%	31.8%
				Ratio: Block 2 / Block 1	1.30	1.30	1.30	1.30	1.30							100.0%
57.1	57	1600	Pricing Principle 1 - Both Blocks	Customer Charge	0.00	0.00	0.00	0.00	0.00	.05/.10	2.8%	2.7%	2.7%	2.6%	2.6%	0.0%
				Block 1 Rate	0.09510	0.10270	0.11215	0.11865	0.13218	.10/.20	5.5%	5.4%	5.3%	5.3%	5.2%	57.7%
				Block 2 Rate	0.12078	0.13043	0.14243	0.15069	0.16787	.20/.30	8.3%	8.2%	8.1%	8.0%	7.8%	42.3%
				Ratio: Block 2 / Block 1	1.27	1.27	1.27	1.27	1.27							100.0%

COST OF SERVICE SUMMARY
BY CUSTOMER CLASS
Schedule 1.1

Forecast Year: 2009	Total	Residential	Small General Service	General Service	Industrial Primary	Rate 31 Industrial	Lighting	Irrigation	Wholesale Primary	Nelson Wholesale
Revenues:										
Customer Charge Revenues	$16,784,024	$13,870,451	$1,543,005	$423,237	$290,114	$105,498		$180,478	$324,837	$46,406
Energy Revenues	$187,055,769	$92,085,331	$16,297,213	$30,129,853	$6,262,625	$3,249,852	$1,974,565	$2,522,827	$30,372,067	$4,161,435
Demand Revenues	$29,875,563			$10,732,074	$3,175,819	$1,103,599			$13,445,646	$1,418,425
Total Revenues at Existing Rates	**$233,715,356**	**$105,955,782**	**$17,840,218**	**$41,285,164**	**$9,728,558**	**$4,458,949**	**$1,974,565**	**$2,703,305**	**$44,142,550**	**$5,626,265**
Production-Related Costs	108,039,022	43,468,448	6,929,234	16,916,680	4,779,687	2,773,600	447,205	1,444,952	27,433,180	3,846,036
Transmission-Related Costs	56,673,241	23,241,815	3,589,898	8,881,795	2,414,982	1,403,860	111,925	572,864	14,402,335	2,053,768
Distribution-Related Costs	70,438,871	47,550,019	6,170,361	6,598,714	1,482,685	173,617	1,910,743	1,046,029	5,451,746	54,958
Total Allocated Revenue Requirements	**$235,151,134**	**$114,260,282**	**$16,689,493**	**$32,397,188**	**$8,677,354**	**$4,351,078**	**$2,469,872**	**$3,063,844**	**$47,287,260**	**$5,954,762**
Difference	-$1,435,778	-$8,304,500	$1,150,725	$8,887,976	$1,051,204	$107,872	-$495,307	-$360,539	-$3,144,710	-$328,497
% Increase to Equal Allocated Cost	0.6%	7.8%	-6.5%	-21.5%	-10.8%	-2.4%	25.1%	13.3%	7.1%	6%
Revenue To Cost Ratio	**99.4%**	**92.7%**	**106.9%**	**127.4%**	**112.1%**	**102.5%**	**79.9%**	**88.2%**	**93.3%**	**94.5%**
Adjusted Revenues at Existing Rates	$235,151,134	$106,606,698	$17,949,815	$41,538,790	$9,788,323	$4,486,342	$1,986,695	$2,719,912	$44,413,730	$5,660,829
Adjusted Revenue to Cost Ratio	**100.0%**	**93.302%**	**107.552%**	**128.217%**	**112.803%**	**103.109%**	**80.437%**	**88.775%**	**93.923%**	**95.064%**
Average Unit Costs:										
Customer Charge $ / Per Customer / Month	$31.91	$28.74	$33.45	$57.27	$952.09	$3,608.33	$29.59	$35.24	$30,064.85	$4,875.14
Average Energy + Demand Charge $ / kWh	$0.02617	$0.02641	$0.02629	$0.02641	$0.02495	$0.02469	$0.09312	$0.02526	$0.02509	$0.02488
Average Energy Charge $ / kWh	$0.06201	$0.06631	$0.06430	$0.06468	$0.05886	$0.05023	$0.12741	$0.05480	$0.05579	$0.05240
Demand Charge $ / kW	$13.63	$15.17	$12.16	$10.56	$11.11	$10.88	$34.38	$14.47	$15.10	$11.98
Combined Average Rate $ / kWh	**$0.0757**	**$0.0935**	**$0.0820**	**$0.0682**	**$0.0615**	**$0.0523**	**$0.1781**	**$0.0641**	**$0.0585**	**$0.0529**