



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**  
**The Energy Commission**

---

Our ref: EC/BEL-BRDIR-0516

May 13, 2016

**By Mail and Email**

Bermuda Electric Light Co. Ltd.  
P.O. Box HM 1026  
Hamilton HM DX  
*Attn: Abayomi Carmichael, VP Risk Management & Analysis – Corporate Treasurer*

**Re: BELCO Base Rate Filing – June 3, 2015**

**1. PREAMBLE**

This response letter of the Bermuda Energy Commission (“Commission”) is presented in reply to the compliance letter dated May 2, 2016 submitted by the Bermuda Electric Light Company Limited (BELCO). It is the official approval of the rates and charges outlined in exhibit CF-2.0 for Option 2 of BELCO’s submission.

**2. FINDINGS**

- I. The exhibits provided were reviewed and the following were noted:
  - a. Revenues, Net Income, Rates of Return, and Revenue short coming due to delayed implementation of new 2016 rates and the various scenarios;
  - b. Rate schedules for the various scenarios;
  - c. Billing impacts for the customer classes;
- II. The Commission noted that Option 2 rate design resulted in a more balanced distribution of increase for the BELCO customer classes.
- III. The Commission noted and approves of the inclusion of a surcharge to recover potential revenue shortcomings due to delayed implementation of new rates for 2016 that will expire December 31, 2016.

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

**3. DIRECTION**

The Commission approves the rate schedule submitted for Option 2 as indicated in Exhibit CF-2.0, and directs:

- a) BELCO to commence with meter readings not before June 1, 2016;
- b) that a final copy of the approved rate schedule showing all customer classes be submitted to the Commission for publication on its website within 3 business days of the date of this letter;
- c) that a final copy of the approved rate schedule showing all customer classes to be published on the BELCO website as soon as practicable;
- d) BELCO to advise all of its customers of the proposed rate changes by way of a notice published in the daily gazette as soon as practicable;

In addition, BELCO shall submit an informational filing for all non-rate related directives and deadlines within 3 business days of the date of this letter.

Sincerely,

E. Michael Leverock  
Energy Commission Chairman

PO. BOX HM 1026, HAMILTON HM DX, BERMUDA  
TELEPHONE: (441) 295-5111  
FAX: EXECUTIVE (441) 292-8975  
CUSTOMER SERVICE (441) 292-7832  
EMAIL: info@belco.bm  
WEBSITE: www.belco.bm



PLEASE QUOTE OUR REF.

May 2, 2016

Mr. E. Michael Leverock  
Chairman, Energy Commission  
c/o Ministry of Economic Development  
Corner House 4<sup>th</sup> Floor  
20 Parliament Street  
Hamilton HM 12

Dear Chairman Leverock:

Re: 2015 Base Rate Compliance Filing

In accordance with the Energy Commission's response to our Base Rate Filing of June 3, 2015 as communicated via its December 21, 2015 directive and the subsequent March 31, 2016 addendum, BELCO hereby presents the rates derived from these directives for your approval prior to implementation.

We have used the rate table included in paragraph XXII in the March addendum (Exhibit 1.11DR-10-B) for each customer class, as if initiated on Jan 1 2016 as the basis for our calculations. From them we have detailed the evidence required to illustrate the rates which would result in the target operating income based on a 7% return on capital as described in the directive, if they had been put into effect on that date. Given the practicalities of an intended implementation date of June 1, we further provide rates in support of the yearend target as defined in the directives, detailing the lost revenue from January through May 31.

Based on the design of revenue recovery, we present two alternatives for recovery of the lost revenue such that yearend income will still align with the intent of the 2015 directive and 2016 addendum. These temporary surcharges would expire at Dec 31 2016 in accordance with yearend target return. We draw your attention specifically to the residential rate design that relies only on the 3<sup>rd</sup> energy block for all increases in energy charges and the options for recovery from this customer class.

Option 1 of these alternatives for lost revenue recovery aligns with the structure presented in the order. Of particular note here is the residential rate 4.52 c/kWh surcharge in rates in the 3<sup>rd</sup> energy block from the approved increase to 33.62 c/kWh up to 38.14 c/kWh, while leaving the first two tiers unchanged from 2015 rates. Commercial and Demand figure adjustments are much less significant. Details are shown in Exhibit CF 2.0.

As an alternative, for your consideration for approval, we also present Option 2 which spreads the surcharge for lost revenue evenly over the three energy blocks, with the most significant difference noted in the residential customer class. In the residential class, it moderately increases in all 3 tiers as detailed in Exhibit CF 2.0 and CF 5.1 and thus reduces the residential 3<sup>rd</sup> energy block to 34.99 c/kWh. This also has the benefit of less risk of recovery by moving it across the full residential customer base and the full set of energy tiers. There are also minor adjustments to Commercial and Demand figures in Option 2.

The Commission will also note we have demonstrated how we have removed employee and pensioner discounts from the rate base (Column (i) of Exhibit CFC 1.0) and the Commission will note this reduces 2016's allowed return on capital from 7% to 6.87%. It should also be noted BELCO's 2016 budgeted expenses exceed that of the 2013 test year (upon which revenue requirements are based) by \$8m and thus the 2016 allowed return is already at risk due to this regulatory lag in expense recognition.

Finally, we note a number of non-rate related directives and associated deadlines and will separately submit an informational filing in respect to these items, in short order.

We have included Exhibits in this filing as follows:

1. Exhibit CF-1.0: Statement of Operating Income at 7.0% Return on Capital (Rates Effective January 1, 2016)
2. Exhibit CF-2.0: Rate Comparison at Current and Approved Rates under Various Rate Designs (At 7.0% Return on Capital)
3. Exhibit CF-3.0 Summary of Cost of Service Study (Incorporating a 7.0% Return on Capital)
4. Exhibit CF-4.0: Illustrative Net Bill Impacts For Residential Customers: Rates Effective January 1, 2016 (At 7.0% ROC)
5. Exhibit CF-4.01: Illustrative Net Bill Impacts For Residential Customers: Rates Effective June 1, 2016 (At 7.0% ROC) **Option 1** Rate Design for Temporary Lost Revenues Surcharge
6. Exhibit CF-4.02: Illustrative Net Bill Impacts For Residential Customers: Rates Effective June 1, 2016 (At 7.0% ROC) **Option 2** Rate Design for Temporary Lost Revenues Surcharge
7. Exhibit CF-4.1: Illustrative Net Bill Impacts For Small Commercial Customers -- Rates Effective January 1, 2016 (At 7.0% ROC)
8. Exhibit CF-4.2: Illustrative Net Bill Impacts For Demand Customers -- Rates Effective January 1, 2016 (At 7.0% ROC)
9. Exhibit CF-5.0 Projected Revenue - Current Rates, January 1, 2016, and June 1, 2016 Rates
10. Exhibit CF-5.1: Total Lost Revenue from January 1, 2016 to May 31, 2016 and Calculated Temporary Lost Revenues Surcharge through December 31, 2016
11. Exhibit CF-5.2: Summary of Total Revenue under Current Rates and Option 1 and Option 2 Rate Designs for Lost Revenue Recovery

We await your confirmation on which option to proceed with such that we can communication with customers and implement accordingly.

Yours sincerely,



S Abayomi Carmichael  
 VP Risk Management & Analysis  
 Corporate Treasurer  
 BELCO

## RATE COMPARISON OF EXISTING AND NEW TARIFFS

COMPARISONS AT A GLANCE

			EXISTING EFFECTIVE JANUARY 1, 2013	NEW EFFECTIVE JUNE 1, 2016	Difference EXISTING to NEW	
					\$	%
<b>SCHEDULE A - RESIDENTIAL</b>						
<u>Graduated Facilites Charge</u>	Tier 1	0-10 kWh	\$15.00	\$20.00	\$5.00	33.3%
<i>*based on average daily consumption</i>	Tier 2	10-15 kWh	\$25.00	\$30.00	\$5.00	20.0%
	Tier 3	15-25 kWh	\$33.00	\$39.95	\$6.95	21.1%
	Tier 4	25-50 kWh	\$49.50	\$62.50	\$13.00	26.3%
	Tier 5	50+ kWh	\$75.00	\$95.00	\$20.00	26.7%
<u>Energy Charges</u>	First Block	0-250 kWh	\$0.1575	\$0.1712	\$0.0137	8.7%
	Second Block	251-700 kWh	\$0.2400	\$0.2537	\$0.0137	5.7%
	Tail Block	700+ kWh	\$0.2972	\$0.3499	\$0.0527	17.7%
<b>SCHEDULE B - COMMERCIAL</b>						
<u>Facilities Charge</u>			\$39.00	\$40.00	\$1.00	2.6%
<u>Energy Charges</u>	First Block	0-1000 kWh	\$0.2295	\$0.2675	\$0.0380	16.6%
	Second Block	1001-5000 kWh	\$0.2517	\$0.2972	\$0.0455	18.1%
	Tail Block	5001+ kWh	\$0.2800	\$0.3427	\$0.0627	22.4%
<b>SCHEDULE C - DEMAND SERVICE</b>						
<u>Facilities Charge</u>			\$100.00	\$100.00	\$0.00	0.0%
<u>Demand Charges</u>	A	1st 50 kW	\$9.14	\$12.00	\$2.86	31.3%
		Remaining kW	\$8.45	\$12.00	\$3.55	42.0%
	B	1st 50 kW	\$9.32	\$13.00	\$3.68	39.5%
		Remaining kW	\$9.93	\$13.00	\$3.07	30.9%
	C	1st 50 kW	\$9.86	\$13.50	\$3.64	36.9%
		Remaining kW	\$10.44	\$13.50	\$3.06	29.3%
<u>Energy Charges</u>		1st 200 x Demand	\$0.2314	\$0.3054	\$0.0740	32.0%
		2nd 200 x Demand	\$0.1494	\$0.1837	\$0.0343	23.0%
		Remaing kWh	\$0.1211	\$0.1070	-\$0.0141	-11.6%



## Bermuda Electric Light Company Limited

Statement of Operating Income at 7.0% Return on Capital (Rates Effective January 1, 2016)

For the Year Ending December 31, 2013

Exhibit CF-1.0

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

Line No	Description	Operating Income Unadjusted	Remove FAR Revenue and Expenses	Operating Income Less FAR Revenue and Expenses	Adjustments to Reflect Test Year	Adjusted Present (Cols. d + e)	Increase	Final (Cols. f + g)	Remove Employee Discounts
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Revenues from Base Rates	143,278,950	262,410	143,541,360	(1,590,053)	141,951,307	18,210,512	160,161,819	159,716,470
2	Less: Discounts	(6,822,549)	(12,495)	(6,835,044)	75,714	(6,759,330)	(1,447,821)	(8,207,151)	(7,761,802)
3	Subtotal: Revenue from Base Rates	136,456,401		136,706,316		135,191,977	16,762,691	151,954,668	151,954,668
4	Revenues from Fuel Adjustment Rate Charges	95,811,155	(95,811,155)						
5	Employee Discounts								(445,349)
6	Other Revenue	1,401,173	(409,850)	991,323		991,323		991,323	991,323
7	<b>TOTAL OPERATING REVENUE</b>	<b>233,668,729</b>		<b>137,697,639</b>		<b>136,183,300</b>	<b>16,762,691</b>	<b>152,945,991</b>	<b>152,500,642</b>
8	Energy Supply - Non Fuel	27,107,250		27,107,250	(1,468,188)	25,639,062		25,639,062	25,639,062
9	Energy Supply - Fuel In Rates	33,816,572		33,816,572		33,816,572		33,816,572	33,816,572
10	Energy Supply - Fuel Adjustment Rate Expense	95,811,155	(95,811,155)						
11	Subtotal: Energy Supply	156,734,977		60,923,822		59,455,634		59,455,634	59,455,634
12	Energy Delivery	9,459,227		9,459,227	483,563	9,942,790		9,942,790	9,942,790
13	Administrative and General	33,912,295	395,148	34,307,443	(2,631,307)	31,676,136		31,676,136	31,676,136
14	Depreciation and Amortization	23,856,756		23,856,756	(29,074)	23,827,682		23,827,682	23,827,682
15	Taxes and Rents	3,681,578		3,681,578		3,681,578		3,681,578	3,681,578
16	<b>TOTAL OPERATING EXPENSE</b>	<b>227,644,833</b>		<b>132,228,826</b>		<b>128,583,819</b>		<b>128,583,819</b>	<b>128,583,819</b>
17	<b>NET OPERATING INCOME (Line 6 less Line 15)</b>	<b>6,023,896</b>		<b>5,468,813</b>		<b>7,599,481</b>		<b>24,362,171</b>	<b>23,916,822</b>
18	Test Year Rate Base (Exhibit 8.0, Col.(f), line 26)	348,031,021							
19	Return on Test Year Rate Base (line 17 divided by Col. (b), line 18)			1.57%				7.00%	6.87%
20	Approved Return on Capital Applied to Test Year Rate Base (Bermuda Energy Commission Directive Dated March 31, 2016, ¶XXII)							7.00%	
21	Approved Revenue Increase (Col.(h), line 7 minus Col. (f), line 7 and Col.(i), line 7 minus Col. (f), line 7)							16,762,691	16,317,342
22	Approved Revenue Increase (line 21 divided by Col. (f), line 7)							12.31%	11.98%
23	System Wide Discounts based on percent Discounts from 2013 (Col.(b) line 2 divided by Col. (b), line 1) ==>					-4.76%			
24	Test Year Employee Discounts:	445,349							

# Bermuda Electric Light Company Limited

Rate Comparison at Current and Approved Rates under Various Rate Designs (At 7.0% Return on Capital)

Exhibit CF-2.0

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

	Existing 2015	Approved Effective January 1, 2016	OPTION 1 Effective June 1, 2016	OPTION 2 Effective June 1, 2016	Existing 2015 to January 2016		
					Difference \$	Difference %	
<b>Schedule A - Residential</b>							
<u>Facilities Charge -Residential</u>	\$ 33.00	\$ 39.95	\$ 39.95	\$ 39.95	\$ 6.95	21.1%	
<u>Energy Charges</u>							
0-250 KWh First Block	\$ 0.1575	\$ 0.1575	\$ 0.1575	\$ 0.1712	\$ -	0.0%	
251-700 KWh Second Block	\$ 0.2400	\$ 0.2400	\$ 0.2400	\$ 0.2537	\$ -	0.0%	
700+ KWh Tail Block	\$ 0.2972	\$ 0.3362	\$ 0.3814	\$ 0.3499	\$ 0.0390	13.1%	
<b>Schedule B - Small Commercial</b>							
<u>Facilities Charge - Small Commercial</u>	\$ 33.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 1.00	2.6%	
<u>Energy Charges</u>	\$ 39.00						
0-1000 KWh First Block	\$ 0.2295	\$ 0.2500	\$ 0.2707	\$ 0.2675	\$ 0.0205	8.9%	
1001-5000 KWh Second Block	\$ 0.2517	\$ 0.2797	\$ 0.2950	\$ 0.2972	\$ 0.0280	11.1%	
5001+KWh Tail Block	\$ 0.2800	\$ 0.3252	\$ 0.3430	\$ 0.3427	\$ 0.0452	16.1%	
<b>Schedule C - Demand Service</b>							
<u>Facilities Charge - Demand Service</u>	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ -	0.0%	
<u>Demand Charges</u>							
A) 1st 50 KW	\$ 9.14	\$ 12.00	\$ 12.00	\$ 12.00	\$ 2.86	31.3%	
remaining KW -A	\$ 8.45	\$ 12.00	\$ 12.00	\$ 12.00	\$ 3.55	42.0%	
B) 1st 50KW	\$ 9.32	\$ 13.00	\$ 13.00	\$ 13.00	\$ 3.68	39.5%	
remaining KW - B	\$ 9.93	\$ 13.00	\$ 13.00	\$ 13.00	\$ 3.07	30.9%	
C) 1st 50 KW	\$ 9.86	\$ 13.50	\$ 13.50	\$ 13.50	\$ 3.64	36.9%	
remaining KW - C	\$ 10.44	\$ 13.50	\$ 13.50	\$ 13.50	\$ 3.06	29.3%	
<u>Energy Charges</u>							
1st 200 x Demand	\$ 0.2314	\$ 0.2846	\$ 0.3166	\$ 0.3054	\$ 0.0532	23.0%	
2nd 200 x Demand	\$ 0.1494	\$ 0.1629	\$ 0.1775	\$ 0.1837	\$ 0.0135	9.0%	
remaining KW -energy	\$ 0.1211	\$ 0.0862	\$ 0.0862	\$ 0.1070	\$ (0.0349)	-28.8%	

Note 1: January 1, 2016 Approved Rates Exclude Employee Discounts

Note 2: Option 1 and Option 2 Rate Design developed on Exhibit CF-5.1

# Bermuda Electric Light Company Limited

Summary of Cost of Service Study (Incorporating a 7.0% Return on Capital)

For the Year Ending December 31, 2013

Exhibit CF-3.0

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

Line No.	System Total	Residential	Commercial	Demand	Street Lighting	
(a)	(b)	(c)	(d)	(e)	(f)	
1	Revenues from Tariffs	141,951,307	65,887,857	24,809,593	49,910,631	1,343,226
2	Discounts	(6,759,330)	(3,137,398)	(1,181,364)	(2,376,607)	(63,961)
3	Net Tariff Revenues	135,191,977	62,750,459	23,628,228	47,534,024	1,279,265
4	Other Revenues	991,323	419,748	149,884	412,503	9,188
5	<b>CURRENT TOTAL REVENUE</b>	<b>136,183,300</b>	<b>63,170,207</b>	<b>23,778,112</b>	<b>47,946,528</b>	<b>1,288,453</b>
6	<b>Expenses</b>					
7	Production	65,354,746	26,284,873	10,926,282	27,893,145	250,447
8	Transmission	5,170,534	1,993,034	929,556	2,241,775	6,169
9	Distribution	5,625,379	3,074,003	1,000,600	1,430,883	119,893
10	Customer Service	4,648,199	4,182,346	373,926	46,832	45,096
11	Administrative and General	27,957,148	13,790,561	4,798,703	9,104,219	263,664
12	Depreciation Expense	19,827,814	9,203,341	3,416,374	7,024,164	183,934
13	<b>TOTAL EXPENSES</b>	<b>128,583,819</b>	<b>58,528,157</b>	<b>21,445,441</b>	<b>47,741,019</b>	<b>869,203</b>
14	Total Rate Base	348,031,021	171,674,993	59,737,761	113,335,981	3,282,285
15	<b>CURRENT NET OPERATING INCOME</b>	<b>7,599,481</b>	<b>4,642,050</b>	<b>2,332,671</b>	<b>205,509</b>	<b>419,250</b>
16	Return	2.18%	2.70%	3.90%	0.18%	12.77%
17	Return Index	1.00	1.24	1.79	0.08	5.85
18	<b>Proposed Revenues at Equalized Returns</b>	<b>152,945,991</b>	<b>70,545,407</b>	<b>25,627,084</b>	<b>55,674,537</b>	<b>1,098,963</b>
19	PROPOSED NET INCOME	24,362,171	12,017,250	4,181,643	7,933,519	229,760
20	Proposed Allowed Return	7.00%	7.00%	7.00%	7.00%	7.00%
21	Proposed Return Index	1.00	1.00	1.00	1.00	1.00
22	Proposed Increase per Class	16,762,691	7,375,200	1,848,972	7,728,009	(189,490)
23	<b>Percent Increase</b>	<b>12.31%</b>	<b>11.68%</b>	<b>7.78%</b>	<b>16.12%</b>	<b>-14.71%</b>
24	<b>Proposed Revenues (Excluding Employee Discounts)</b>	<b>152,500,642</b>	<b>70,339,992</b>	<b>25,552,463</b>	<b>55,512,424</b>	<b>1,095,763</b>
25	PROPOSED NET INCOME (Constrained)	23,916,822	11,811,835	4,107,022	7,771,405	226,560
26	Proposed Returns (Constrained)	6.87%	6.88%	6.88%	6.86%	6.90%
27	Proposed Return Index	0.98	0.98	0.98	0.98	0.99
28	Proposed Increase per Class (Constrained)	16,317,342	7,169,785	1,774,351	7,565,896	(192,690)
29	<b>Percent Increase (Constrained)</b>	<b>11.98%</b>	<b>11.35%</b>	<b>7.46%</b>	<b>15.78%</b>	<b>-14.96%</b>
30	Sources:					
31	System Total Revenues: Exhibit CF-1.0, Col.(f) line 1					
32	System Total Discounts: Exhibit CF-1.0, Col.(f) line 2					
33	System Other Revenue: Exhibit CF-1.0, Col.(f) line 6					
34	System Total Expenses: Exhibit CF-1.0, Col.(f) line 16					
35	Proposed Revenues (Excluding Employee Discounts), line 24. Source: Exhibit CF-1.0 Col. (i) line 7					
36	Employee Discounts allocated to customer classes based on Percent of Total Unconstrained Revenue Requirement, line 38					
37	Percent of Total Constrained Revenue Requirement		46.12%	16.76%	36.40%	0.72%
38	Percent of Total Unconstrained Revenue Requirement		46.12%	16.76%	36.40%	0.72%



# Bermuda Electric Light Company Limited

Illustrative Net Bill Impacts For Residential Customers: Rates Effective January 1, 2016 (At 7.0% ROC)

Exhibit CF-4.0

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

Line No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
<b>Residential Customers</b>											
1			kWh	100	300	600	750	1,000	1,500	2,000	3,000
2	<b>CURRENT</b>										
3	Facilities Charge	\$ 33.00		\$ 15.00	\$ 25.00	\$ 33.00	\$ 49.50	\$ 49.50	\$ 75.00	\$ 75.00	\$ 75.00
4	Energy Charge										
5	First 250 kWh	\$ 0.1575		\$ 15.75	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38
6	Next 450 kWh	\$ 0.2400		\$ -	\$ 12.00	\$ 84.00	\$ 108.00	\$ 108.00	\$ 108.00	\$ 108.00	\$ 108.00
7	Over 700 kWh	\$ 0.2972		\$ -	\$ -	\$ -	\$ 14.86	\$ 89.16	\$ 237.76	\$ 386.36	\$ 683.56
8	Sep-14 Fuel Adjustment Rate (less taxes)*	\$ 0.1640		\$ 15.50	\$ 46.49	\$ 92.97	\$ 116.21	\$ 154.95	\$ 232.43	\$ 309.91	\$ 464.86
9	Fuel Adjustment Rate (taxes only)*	\$ 0.0260		\$ 2.60	\$ 7.80	\$ 15.60	\$ 19.50	\$ 26.00	\$ 39.00	\$ 52.00	\$ 78.00
10	May-15 Fuel Adjustment Rate (less taxes)*	\$ 0.0760		\$ 7.05	\$ 21.16	\$ 42.31	\$ 52.89	\$ 70.52	\$ 105.79	\$ 141.05	\$ 211.57
11	Fuel Adjustment Rate (taxes only)*	\$ 0.0390		\$ 3.90	\$ 11.70	\$ 23.40	\$ 29.25	\$ 39.00	\$ 58.50	\$ 78.00	\$ 117.00
12	Base Rates**			\$ 29.29	\$ 72.74	\$ 148.93	\$ 201.65	\$ 272.41	\$ 438.22	\$ 579.75	\$ 862.80
13	Total Bill (Using September 2014 FAR)			\$ 47.38	\$ 127.02	\$ 257.50	\$ 337.37	\$ 453.37	\$ 709.65	\$ 941.65	\$ 1,405.66
14	Total Bill (Using May 2015 FAR)			\$ 40.24	\$ 105.60	\$ 214.64	\$ 283.80	\$ 381.94	\$ 602.51	\$ 798.80	\$ 1,191.37
15			kWh	100	300	600	750	1,000	1,500	2,000	3,000
16	<b>APPROVED</b>										
17	Facilities Charge	\$ 39.95		\$ 20.00	\$ 30.00	\$ 39.95	\$ 62.50	\$ 62.50	\$ 95.00	\$ 95.00	\$ 95.00
18	Energy Charge										
19	First 250 kWh	\$ 0.1575		\$ 15.75	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38
20	Next 450 kWh	\$ 0.2400		\$ -	\$ 12.00	\$ 84.00	\$ 108.00	\$ 108.00	\$ 108.00	\$ 108.00	\$ 108.00
21	Over 700 kWh	\$ 0.3362		\$ -	\$ -	\$ -	\$ 16.81	\$ 100.87	\$ 268.99	\$ 437.11	\$ 773.35
22	Fuel Adjustment Rate (less taxes)*	0.0760		\$ 7.05	\$ 21.16	\$ 42.31	\$ 52.89	\$ 70.52	\$ 105.79	\$ 141.05	\$ 211.57
23	Fuel Adjustment Rate (taxes only)*	0.0390		\$ 3.90	\$ 11.70	\$ 23.40	\$ 29.25	\$ 39.00	\$ 58.50	\$ 78.00	\$ 117.00
24	Base Rates			\$ 34.05	\$ 77.50	\$ 155.55	\$ 215.89	\$ 295.95	\$ 487.02	\$ 647.13	\$ 967.36
25	Total Bill			\$ 45.00	\$ 110.36	\$ 221.26	\$ 298.04	\$ 405.47	\$ 651.30	\$ 866.18	\$ 1,295.93
26	Base Rate Bill Increase			\$4.76	\$4.76	\$6.62	\$14.24	\$23.53	\$48.79	\$67.38	\$104.56
27	Total Bill Increase (Using September 2014 FAR)			(\$2.38)	(\$16.67)	(\$36.24)	(\$39.33)	(\$47.89)	(\$58.35)	(\$75.48)	(\$109.73)
28	Total Bill Increase (Using May 2015 FAR)			\$4.76	\$4.76	\$6.62	\$14.24	\$23.53	\$48.79	\$67.38	\$104.56
29	Base Rate Bill Increase (Percent)			16.3%	6.5%	4.4%	7.1%	8.6%	11.1%	11.6%	12.1%
30	Total Bill Increase (Using September 2014 FAR, Percent)			(5.0%)	(13.1%)	(14.1%)	(11.7%)	(10.6%)	(8.2%)	(8.0%)	(7.8%)
31	Total Bill Increase (Using May 2015 FAR, Percent)			11.8%	4.5%	3.1%	5.0%	6.2%	8.1%	8.4%	8.8%
32	* BELCO Projections										
33	Net bills calculated assuming										
34	-4.76% System Average Discount										

# Bermuda Electric Light Company Limited

Illustrative Net Bill Impacts For Residential Customers: Rates Effective June 1, 2016 (At 7.0% ROC)

Bill Impacts Relative to January 1, 2016 Rates (Option 1 Rate Design for Temporary Lost Revenues Surcharge)

Exhibit CF-4.01

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

Line No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
<b>Residential Customers</b>										
1		kWh	100	300	600	750	1,000	1,500	2,000	3,000
2	<b>January 1, 2016 Rates</b>									
3	Facilities Charge	\$ 39.95	\$ 20.00	\$ 30.00	\$ 62.50	\$ 62.50	\$ 62.50	\$ 95.00	\$ 95.00	\$ 95.00
4	Energy Charge									
5	First 250 kWh	\$ 0.1575	\$ 15.75	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38
6	Next 450 kWh	\$ 0.2400	\$ -	\$ 12.00	\$ 84.00	\$ 108.00	\$ 108.00	\$ 108.00	\$ 108.00	\$ 108.00
7	Over 700 kWh	\$ 0.3362	\$ -	\$ -	\$ -	\$ 16.81	\$ 100.87	\$ 268.99	\$ 437.11	\$ 773.35
8		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Base Rates Bill		\$ 34.05	\$ 77.50	\$ 177.02	\$ 215.89	\$ 295.95	\$ 487.02	\$ 647.13	\$ 967.36
13			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15		kWh	100	300	600	750	1,000	1,500	2,000	3,000
16	<b>June 1, 2016 Rates</b>									
17	Facilities Charge	\$ 39.95	\$ 20.00	\$ 30.00	\$ 62.50	\$ 62.50	\$ 62.50	\$ 95.00	\$ 95.00	\$ 95.00
18	Energy Charge									
19	First 250 kWh	\$ 0.1575	\$ 15.75	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38
20	Next 450 kWh	\$ 0.2400	\$ -	\$ 12.00	\$ 84.00	\$ 108.00	\$ 108.00	\$ 108.00	\$ 108.00	\$ 108.00
21	Over 700 kWh	\$ 0.3814	\$ -	\$ -	\$ -	\$ 19.07	\$ 114.42	\$ 305.11	\$ 495.81	\$ 877.20
22		-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23		-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	Base Rates Bill		\$ 34.05	\$ 77.50	\$ 177.02	\$ 218.04	\$ 308.85	\$ 521.42	\$ 703.03	\$ 1,066.26
25			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	Base Rate Bill Increase		\$0.00	\$0.00	\$0.00	\$2.15	\$12.90	\$34.40	\$55.90	\$98.91
27			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
28			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
29	Base Rate Bill Increase (Percent)		0.0%	0.0%	0.0%	1.0%	4.4%	7.1%	8.6%	10.2%
30										
31										
32										
33	Net bills calculated assuming									
34	-4.76% System Average Discount									

# Bermuda Electric Light Company Limited

Illustrative Net Bill Impacts For Residential Customers: Rates Effective June 1, 2016 (At 7.0% ROC)

Bill Impacts Relative to January 1, 2016 Rates (Option 2 Rate Design for Temporary Lost Revenues Surcharge)

Exhibit CF-4.02

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

Line No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
<b>Residential Customers</b>										
1		kWh	100	300	600	750	1,000	1,500	2,000	3,000
2	<b>January 1, 2016 Rates</b>									
3	Facilities Charge	\$ 39.95	\$ 20.00	\$ 30.00	\$ 62.50	\$ 62.50	\$ 62.50	\$ 95.00	\$ 95.00	\$ 95.00
4	Energy Charge									
5	First 250 kWh	\$ 0.1575	\$ 15.75	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38	\$ 39.38
6	Next 450 kWh	\$ 0.2400	\$ -	\$ 12.00	\$ 84.00	\$ 108.00	\$ 108.00	\$ 108.00	\$ 108.00	\$ 108.00
7	Over 700 kWh	\$ 0.3362	\$ -	\$ -	\$ -	\$ 16.81	\$ 100.87	\$ 268.99	\$ 437.11	\$ 773.35
8		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Base Rates Bill		\$ 34.05	\$ 77.50	\$ 177.02	\$ 215.89	\$ 295.95	\$ 487.02	\$ 647.13	\$ 967.36
13			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15		kWh	100	300	600	750	1,000	1,500	2,000	3,000
16	<b>June 1, 2016 Rates</b>									
17	Facilities Charge	\$ 39.95	\$ 20.00	\$ 30.00	\$ 62.50	\$ 62.50	\$ 62.50	\$ 95.00	\$ 95.00	\$ 95.00
18	Energy Charge									
19	First 250 kWh	\$ 0.1712	\$ 17.12	\$ 42.79	\$ 42.79	\$ 42.79	\$ 42.79	\$ 42.79	\$ 42.79	\$ 42.79
20	Next 450 kWh	\$ 0.2537	\$ -	\$ 12.68	\$ 88.78	\$ 114.15	\$ 114.15	\$ 114.15	\$ 114.15	\$ 114.15
21	Over 700 kWh	\$ 0.3499	\$ -	\$ -	\$ -	\$ 17.50	\$ 104.97	\$ 279.93	\$ 454.88	\$ 804.79
22		-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23		-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	Base Rates Bill		\$ 35.35	\$ 81.41	\$ 184.84	\$ 225.66	\$ 308.97	\$ 506.55	\$ 673.17	\$ 1,006.42
25			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	Base Rate Bill Increase		\$1.30	\$3.91	\$7.81	\$9.76	\$13.02	\$19.53	\$26.04	\$39.06
27			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
28			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
29	Base Rate Bill Increase (Percent)		3.8%	5.0%	4.4%	4.5%	4.4%	4.0%	4.0%	4.0%
30										
31										
32										
33	Net bills calculated assuming									
34	-4.76% System Average Discount									

**Bermuda Electric Light Company Limited**

Illustrative Net Bill Impacts For Small Commercial Customers -- Rates Effective January 1, 2016 (At 7.0% ROC)

Exhibit CF-4.1

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

Line No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
<b>Small Commercial Customers</b>										
1			kWh							
2	<b>CURRENT</b>		100	300	600	750	1,500	3,000	7,500	20,000
3	Facilities Charge	\$ 39.00	\$ 39.00	\$ 39.00	\$ 39.00	\$ 39.00	\$ 39.00	\$ 39.00	\$ 39.00	\$ 39.00
4	Energy Charge									
5	First 1,000 kWh	\$ 0.2295	\$ 22.95	\$ 68.85	\$ 137.70	\$ 172.13	\$ 229.50	\$ 229.50	\$ 229.50	\$ 229.50
6	Next 4,000 kWh	\$ 0.2517	\$ -	\$ -	\$ -	\$ -	\$ 125.85	\$ 503.40	\$ 1,006.80	\$ 1,006.80
7	Over 5,000 kWh	\$ 0.2800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 700.00	\$ 4,200.00
8	Sep-14 Fuel Adjustment Rate (less taxes)*	\$ 0.1640	\$ 15.50	\$ 46.49	\$ 92.97	\$ 116.21	\$ 232.43	\$ 464.86	\$ 1,162.15	\$ 3,099.05
9	Fuel Adjustment Rate (taxes only)*	\$ 0.0260	\$ 2.60	\$ 7.80	\$ 15.60	\$ 19.50	\$ 39.00	\$ 78.00	\$ 195.00	\$ 520.00
10	May-15 Fuel Adjustment Rate (less taxes)*	\$ 0.0760	\$ 7.05	\$ 21.16	\$ 42.31	\$ 52.89	\$ 105.79	\$ 211.57	\$ 528.93	\$ 1,410.48
11	Fuel Adjustment Rate (taxes only)*	\$ 0.0390	\$ 3.90	\$ 11.70	\$ 23.40	\$ 29.25	\$ 58.50	\$ 117.00	\$ 292.50	\$ 780.00
12	Base Rates		\$ 59.00	\$ 102.71	\$ 168.29	\$ 201.07	\$ 375.57	\$ 735.14	\$ 1,881.24	\$ 5,214.58
13	Total Bill (Using September 2014 FAR)		\$ 77.10	\$ 157.00	\$ 276.86	\$ 336.79	\$ 647.00	\$ 1,278.00	\$ 3,238.39	\$ 8,833.64
14	Total Bill (Using May 2015 FAR)		\$ 69.95	\$ 135.57	\$ 234.00	\$ 283.21	\$ 539.86	\$ 1,063.72	\$ 2,702.67	\$ 7,405.06
15			kWh							
16	<b>APPROVED</b>		100	300	600	750	1,500	3,000	7,500	20,000
17	Facilities Charge	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00	\$ 40.00
18	Energy Charge									
19	First 1,000 kWh	\$ 0.2500	\$ 25.00	\$ 75.00	\$ 150.00	\$ 187.50	\$ 250.00	\$ 250.00	\$ 250.00	\$ 250.00
20	Next 4,000 kWh	\$ 0.2797	\$ -	\$ -	\$ -	\$ -	\$ 139.86	\$ 559.45	\$ 1,118.91	\$ 1,118.91
21	Over 5,000 kWh	\$ 0.3252	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 812.91	\$ 4,877.48
22	Fuel Adjustment Rate (less taxes)*	0.0760	\$ 7.05	\$ 21.16	\$ 42.31	\$ 52.89	\$ 105.79	\$ 211.57	\$ 528.93	\$ 1,410.48
23	Fuel Adjustment Rate (taxes only)*	0.0390	\$ 3.90	\$ 11.70	\$ 23.40	\$ 29.25	\$ 58.50	\$ 117.00	\$ 292.50	\$ 780.00
24	Base Rates		\$ 61.90	\$ 109.52	\$ 180.95	\$ 216.67	\$ 409.39	\$ 809.01	\$ 2,116.03	\$ 5,987.05
25	Total Bill		\$ 72.86	\$ 142.38	\$ 246.67	\$ 298.81	\$ 573.68	\$ 1,137.58	\$ 2,937.46	\$ 8,177.53
26	Base Rate Bill Increase		\$2.90	\$6.81	\$12.67	\$15.60	\$33.82	\$73.86	\$234.78	\$772.47
27	Total Bill Increase (Using September 2014 FAR)		(\$4.24)	(\$14.62)	(\$30.19)	(\$37.98)	(\$73.32)	(\$140.42)	(\$300.93)	(\$656.11)
28	Total Bill Increase (Using May 2015 FAR)		\$2.90	\$6.81	\$12.67	\$15.60	\$33.82	\$73.86	\$234.78	\$772.47
29	Base Rate Bill Increase (Percent)		4.9%	6.6%	7.5%	7.8%	9.0%	10.0%	12.5%	14.8%
30	Total Bill Increase (Using September 2014 FAR, Percent)		(5.5%)	(9.3%)	(10.9%)	(11.3%)	(11.3%)	(11.0%)	(9.3%)	(7.4%)
31	Total Bill Increase (Using May 2015 FAR, Percent)		4.2%	5.0%	5.4%	5.5%	6.3%	6.9%	8.7%	10.4%
32	* BELCO Projections									
33	Net bills calculated assuming									
34	-4.76% System Average Discount									

**Bermuda Electric Light Company Limited**

Illustrative Net Bill Impacts For Demand Customers -- Rates Effective January 1, 2016 (At 7.0% ROC)

Exhibit CF-4.2

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

Line No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
<b>Demand Service Customers</b>														
1		kW	50	50	50	50	200	200	200	200	2,000	2,000	2,000	2,000
2		kWh	-	5,000	15,000	25,000	-	20,000	60,000	100,000	-	200,000	600,000	1,000,000
3	<b>CURRENT</b>													
4	Facilities Charge	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00
5	Demand Charge													
6	A) 1st 50 KW	\$ 9.140	\$ 457.00	\$ 457.00	\$ 457.00	\$ 457.00	\$ 457.00	\$ 457.00	\$ 457.00	\$ 457.00	\$ 457.00	\$ 457.00	\$ 457.00	\$ 457.00
7	remaining KW -A	\$ 8.450	\$ -	\$ -	\$ -	\$ -	\$ 1,267.50	\$ 1,267.50	\$ 1,267.50	\$ 1,267.50	\$ 16,477.50	\$ 16,477.50	\$ 16,477.50	\$ 16,477.50
8	B) 1st 50KW	\$ 9.320	\$ 466.00	\$ 466.00	\$ 466.00	\$ 466.00	\$ 466.00	\$ 466.00	\$ 466.00	\$ 466.00	\$ 466.00	\$ 466.00	\$ 466.00	\$ 466.00
9	remaining KW - B	\$ 9.930	\$ -	\$ -	\$ -	\$ -	\$ 1,489.50	\$ 1,489.50	\$ 1,489.50	\$ 1,489.50	\$ 19,363.50	\$ 19,363.50	\$ 19,363.50	\$ 19,363.50
10	C) 1st 50 KW	\$ 9.860	\$ 493.00	\$ 493.00	\$ 493.00	\$ 493.00	\$ 493.00	\$ 493.00	\$ 493.00	\$ 493.00	\$ 493.00	\$ 493.00	\$ 493.00	\$ 493.00
11	remaining KW - C	\$ 10.440	\$ -	\$ -	\$ -	\$ -	\$ 1,566.00	\$ 1,566.00	\$ 1,566.00	\$ 1,566.00	\$ 20,358.00	\$ 20,358.00	\$ 20,358.00	\$ 20,358.00
12	Energy Charges													
13	1st 200 x Demand	\$ 0.231	\$ -	\$ 1,157.00	\$ 2,314.00	\$ 2,314.00	\$ -	\$ 4,628.00	\$ 9,256.00	\$ 9,256.00	\$ -	\$ 46,280.00	\$ 92,560.00	\$ 92,560.00
14	2nd 200 x Demand	\$ 0.149	\$ -	\$ -	\$ 747.00	\$ 1,494.00	\$ -	\$ -	\$ 2,988.00	\$ 5,976.00	\$ -	\$ -	\$ 29,880.00	\$ 59,760.00
15	remaining KW -energy	\$ 0.121	\$ -	\$ -	\$ -	\$ 605.50	\$ -	\$ -	\$ -	\$ 2,422.00	\$ -	\$ -	\$ -	\$ 24,220.00
16	Sep-14 Fuel Adjustment Rate (less taxes)*	0.1640	\$ -	\$ 774.76	\$ 2,324.29	\$ 3,873.82	\$ -	\$ 3,099.05	\$ 9,297.16	\$ 15,495.27	\$ -	\$ 30,990.54	\$ 92,971.63	\$ 154,952.72
	Fuel Adjustment Rate (taxes only)*	0.0260	\$ -	\$ 130.00	\$ 390.00	\$ 650.00	\$ -	\$ 520.00	\$ 1,560.00	\$ 2,600.00	\$ -	\$ 5,200.00	\$ 15,600.00	\$ 26,000.00
17	May-15 Fuel Adjustment Rate (less taxes)*	0.0760	\$ -	\$ 352.62	\$ 1,057.86	\$ 1,763.10	\$ -	\$ 1,410.48	\$ 4,231.44	\$ 7,052.40	\$ -	\$ 14,104.80	\$ 42,314.41	\$ 70,524.02
	Fuel Adjustment Rate (taxes only)*	0.0390	\$ -	\$ 195.00	\$ 585.00	\$ 975.00	\$ -	\$ 780.00	\$ 2,340.00	\$ 3,900.00	\$ -	\$ 7,800.00	\$ 23,400.00	\$ 39,000.00
18	Base Rates, A		\$ 530.48	\$ 1,632.38	\$ 3,445.72	\$ 4,733.82	\$ 1,737.62	\$ 6,145.25	\$ 13,398.60	\$ 18,550.99	\$ 16,223.36	\$ 60,299.64	\$ 132,833.11	\$ 184,357.02
19	Base Rates, B		\$ 539.05	\$ 1,640.96	\$ 3,454.29	\$ 4,742.39	\$ 1,957.62	\$ 6,365.25	\$ 13,618.60	\$ 18,770.99	\$ 18,980.51	\$ 63,056.79	\$ 135,590.26	\$ 187,114.16
20	Base Rates, C		\$ 564.76	\$ 1,666.67	\$ 3,480.01	\$ 4,768.10	\$ 2,056.19	\$ 6,463.82	\$ 13,717.17	\$ 18,869.56	\$ 19,953.37	\$ 64,029.64	\$ 136,563.12	\$ 188,087.02
21	Total Bill A (Using September 2014 FAR)		\$ 530.48	\$ 2,537.15	\$ 6,160.01	\$ 9,257.64	\$ 1,737.62	\$ 9,764.30	\$ 24,255.76	\$ 36,646.26	\$ 16,223.36	\$ 96,490.18	\$ 241,404.74	\$ 365,309.74
22	Total Bill B (Using September 2014 FAR)		\$ 539.05	\$ 2,545.72	\$ 6,168.58	\$ 9,266.21	\$ 1,957.62	\$ 9,984.30	\$ 24,475.76	\$ 36,866.26	\$ 18,980.51	\$ 99,247.33	\$ 244,161.89	\$ 368,066.89
23	Total Bill C (Using September 2014 FAR)		\$ 564.76	\$ 2,571.43	\$ 6,194.30	\$ 9,291.92	\$ 2,056.19	\$ 10,082.88	\$ 24,574.33	\$ 36,964.83	\$ 19,953.37	\$ 100,220.19	\$ 245,134.75	\$ 369,039.75
24	Total Bill A (Using May 2015 FAR)		\$ 530.48	\$ 2,180.00	\$ 5,088.58	\$ 7,471.92	\$ 1,737.62	\$ 8,335.73	\$ 19,970.04	\$ 29,503.39	\$ 16,223.36	\$ 82,204.44	\$ 198,547.52	\$ 293,881.03
25	Total Bill B (Using May 2015 FAR)		\$ 539.05	\$ 2,188.58	\$ 5,097.15	\$ 7,480.49	\$ 1,957.62	\$ 8,555.73	\$ 20,190.04	\$ 29,723.39	\$ 18,980.51	\$ 84,961.59	\$ 201,304.67	\$ 296,638.18
26	Total Bill C (Using May 2015 FAR)		\$ 564.76	\$ 2,214.29	\$ 5,122.87	\$ 7,506.20	\$ 2,056.19	\$ 8,654.30	\$ 20,288.61	\$ 29,821.96	\$ 19,953.37	\$ 85,934.45	\$ 202,277.53	\$ 297,611.04

**Bermuda Electric Light Company Limited**

Illustrative Net Bill Impacts For Demand Customers -- Rates Effective January 1, 2016 (At 7.0% ROC)

Exhibit CF-4.2

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

Line No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
<b>Demand Service Customers</b>														
27		kW	50	50	50	50	200	200	200	200	2,000	2,000	2,000	2,000
28		kWh	-	5,000	15,000	25,000	-	20,000	60,000	100,000	-	200,000	600,000	1,000,000
29	<b>APPROVED</b>													
30	Facilities Charge	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00
31	Demand Charge													
32	A) 1st 50 KW	\$ 12.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00	\$ 600.00
33	remaining KW -A	\$ 12.00	\$ -	\$ -	\$ -	\$ -	\$ 1,800.00	\$ 1,800.00	\$ 1,800.00	\$ 1,800.00	\$ 23,400.00	\$ 23,400.00	\$ 23,400.00	\$ 23,400.00
34	B) 1st 50KW	\$ 13.00	\$ 650.00	\$ 650.00	\$ 650.00	\$ 650.00	\$ 650.00	\$ 650.00	\$ 650.00	\$ 650.00	\$ 650.00	\$ 650.00	\$ 650.00	\$ 650.00
35	remaining KW - B	\$ 13.00	\$ -	\$ -	\$ -	\$ -	\$ 1,950.00	\$ 1,950.00	\$ 1,950.00	\$ 1,950.00	\$ 25,350.00	\$ 25,350.00	\$ 25,350.00	\$ 25,350.00
36	C) 1st 50 KW	\$ 13.50	\$ 675.00	\$ 675.00	\$ 675.00	\$ 675.00	\$ 675.00	\$ 675.00	\$ 675.00	\$ 675.00	\$ 675.00	\$ 675.00	\$ 675.00	\$ 675.00
37	remaining KW - C	\$ 13.50	\$ -	\$ -	\$ -	\$ -	\$ 2,025.00	\$ 2,025.00	\$ 2,025.00	\$ 2,025.00	\$ 26,325.00	\$ 26,325.00	\$ 26,325.00	\$ 26,325.00
38	Energy Charges													
39	1st 200 x Demand	\$ 0.2846	\$ -	\$ 1,422.76	\$ 2,845.52	\$ 2,845.52	\$ -	\$ 5,691.03	\$ 11,382.06	\$ 11,382.06	\$ -	\$ 56,910.32	\$ 113,820.65	\$ 113,820.65
40	2nd 200 x Demand	\$ 0.1629	\$ -	\$ -	\$ 814.28	\$ 1,628.56	\$ -	\$ -	\$ 3,257.11	\$ 6,514.22	\$ -	\$ -	\$ 32,571.12	\$ 65,142.25
41	remaining KW -energy	\$ 0.0862	\$ -	\$ -	\$ -	\$ 431.09	\$ -	\$ -	\$ -	\$ 1,724.35	\$ -	\$ -	\$ -	\$ 17,243.54
42	Fuel Adjustment Rate (less new tax)*	\$ 0.0760	\$ -	\$ 352.62	\$ 1,057.86	\$ 1,763.10	\$ -	\$ 1,410.48	\$ 4,231.44	\$ 7,052.40	\$ -	\$ 14,104.80	\$ 42,314.41	\$ 70,524.02
43	Fuel Adjustment Rate (new tax)*	\$ 0.0390	\$ -	\$ 195.00	\$ 585.00	\$ 975.00	\$ -	\$ 780.00	\$ 2,340.00	\$ 3,900.00	\$ -	\$ 7,800.00	\$ 23,400.00	\$ 39,000.00
44	Base Rates, A		\$ 666.67	\$ 2,021.68	\$ 4,152.19	\$ 5,338.26	\$ 2,380.96	\$ 7,801.00	\$ 16,323.06	\$ 21,067.32	\$ 22,952.42	\$ 77,152.84	\$ 162,373.42	\$ 209,816.04
45	Base Rates, B		\$ 714.29	\$ 2,069.30	\$ 4,199.81	\$ 5,385.88	\$ 2,571.43	\$ 7,991.47	\$ 16,513.53	\$ 21,257.80	\$ 24,857.19	\$ 79,057.60	\$ 164,278.19	\$ 211,720.81
46	Base Rates, C		\$ 738.10	\$ 2,093.11	\$ 4,223.62	\$ 5,409.69	\$ 2,666.67	\$ 8,086.71	\$ 16,608.77	\$ 21,353.03	\$ 25,809.57	\$ 80,009.98	\$ 165,230.57	\$ 212,673.19
47	Total Bill, A		\$ 666.67	\$ 2,569.30	\$ 5,795.05	\$ 8,076.36	\$ 2,380.96	\$ 9,991.48	\$ 22,894.50	\$ 32,019.72	\$ 22,952.42	\$ 99,057.64	\$ 228,087.83	\$ 319,340.06
48	Total Bill, B		\$ 714.29	\$ 2,616.92	\$ 5,842.67	\$ 8,123.98	\$ 2,571.43	\$ 10,181.95	\$ 23,084.97	\$ 32,210.20	\$ 24,857.19	\$ 100,962.40	\$ 229,992.60	\$ 321,244.83
49	Total Bill, C		\$ 738.10	\$ 2,640.73	\$ 5,866.48	\$ 8,147.79	\$ 2,666.67	\$ 10,277.19	\$ 23,180.21	\$ 32,305.44	\$ 25,809.57	\$ 101,914.79	\$ 230,944.98	\$ 322,197.21



**Bermuda Electric Light Company Limited**

Illustrative Net Bill Impacts For Demand Customers -- Rates Effective January 1, 2016 (At 7.0% ROC)

Exhibit CF-4.2

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

Line No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
<b>Demand Service Customers</b>														
		kW	50	50	50	50	200	200	200	200	2,000	2,000	2,000	2,000
		kWh	-	5,000	15,000	25,000	-	20,000	60,000	100,000	-	200,000	600,000	1,000,000
50														
51														
52	<u>Base Rate Increase</u>													
53			\$136.19	\$389.29	\$706.47	\$604.44	\$643.33	\$1,655.75	\$2,924.46	\$2,516.33	\$6,729.06	\$16,853.20	\$29,540.31	\$25,459.03
54			\$175.24	\$428.34	\$745.52	\$643.49	\$613.81	\$1,626.22	\$2,894.94	\$2,486.81	\$5,876.68	\$16,000.82	\$28,687.93	\$24,606.65
55			\$173.33	\$426.44	\$743.62	\$641.58	\$610.48	\$1,622.89	\$2,891.60	\$2,483.47	\$5,856.20	\$15,980.34	\$28,667.46	\$24,586.17
56	<u>Total Bill Increase (Using September 2014 FAR)</u>													
57			\$136.19	\$32.15	(\$364.96)	(\$1,181.28)	\$643.33	\$227.17	(\$1,361.26)	(\$4,626.54)	\$6,729.06	\$2,567.46	(\$13,316.91)	(\$45,969.68)
58			\$175.24	\$71.20	(\$325.91)	(\$1,142.23)	\$613.81	\$197.65	(\$1,390.79)	(\$4,656.06)	\$5,876.68	\$1,715.07	(\$14,169.29)	(\$46,822.06)
59			\$173.33	\$69.29	(\$327.82)	(\$1,144.13)	\$610.48	\$194.32	(\$1,394.12)	(\$4,659.40)	\$5,856.20	\$1,694.60	(\$14,189.77)	(\$46,842.54)
60	<u>Total Bill Increase (Using May 2015 FAR)</u>													
61			\$136.19	\$389.29	\$706.47	\$604.44	\$643.33	\$1,655.75	\$2,924.46	\$2,516.33	\$6,729.06	\$16,853.20	\$29,540.31	\$25,459.03
62			\$175.24	\$428.34	\$745.52	\$643.49	\$613.81	\$1,626.22	\$2,894.94	\$2,486.81	\$5,876.68	\$16,000.82	\$28,687.93	\$24,606.65
63			\$173.33	\$426.44	\$743.62	\$641.58	\$610.48	\$1,622.89	\$2,891.60	\$2,483.47	\$5,856.20	\$15,980.34	\$28,667.46	\$24,586.17
64	<u>Base Rate Bill Increase (Percent)</u>													
65			25.7%	23.8%	20.5%	12.8%	37.0%	26.9%	21.8%	13.6%	41.5%	27.9%	22.2%	13.8%
66			32.5%	26.1%	21.6%	13.6%	31.4%	25.5%	21.3%	13.2%	31.0%	25.4%	21.2%	13.2%
67			30.7%	25.6%	21.4%	13.5%	29.7%	25.1%	21.1%	13.2%	29.3%	25.0%	21.0%	13.1%
68	<u>Percent Total Bill Increase (Using September 2014 FAR)</u>													
69			25.7%	1.3%	(5.9%)	(12.8%)	37.0%	2.3%	(5.6%)	(12.6%)	41.5%	2.7%	(5.5%)	(12.6%)
70			32.5%	2.8%	(5.3%)	(12.3%)	31.4%	2.0%	(5.7%)	(12.6%)	31.0%	1.7%	(5.8%)	(12.7%)
71			30.7%	2.7%	(5.3%)	(12.3%)	29.7%	1.9%	(5.7%)	(12.6%)	29.3%	1.7%	(5.8%)	(12.7%)
72	<u>Percent Total Bill Increase (Using May 2015 FAR)</u>													
73			25.7%	17.9%	13.9%	8.1%	37.0%	19.9%	14.6%	8.5%	41.5%	20.5%	14.9%	8.7%
74			32.5%	19.6%	14.6%	8.6%	31.4%	19.0%	14.3%	8.4%	31.0%	18.8%	14.3%	8.3%
75			30.7%	19.3%	14.5%	8.5%	29.7%	18.8%	14.3%	8.3%	29.3%	18.6%	14.2%	8.3%
76			0%	14%	42%	69%	0%	14%	42%	69%	0%	14%	42%	69%
77	* BELCO Projections													
78	Net bills calculated assuming													
79	-4.76% System Average Discount													









# Bermuda Electric Light Company Limited

Total Lost Revenue from January 1, 2016 to May 31, 2016 and Calculated Temporary Lost Revenues Surcharge through December 31, 2016

Exhibit CF-5.1

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

## Total Lost Revenue Surcharge Calculation by Class (June 1, 2016 - December 31, 2016)

	Lost Revenue (January - May) Source: Exhibit CF-5.2	Total kWh (June- December) Source: Exhibit CF-5.2	OPTION 1 <sup>(1)</sup>									OPTION 2 <sup>(2)</sup>
			Residential			Commercial			Demand			Temporary Surcharge Dollars per kWh
			Temporary Surcharge Dollars per kWh			Temporary Surcharge Dollars per kWh			Temporary Surcharge Dollars per kWh			
			Block 1	Block 2	Block 3 <sup>(3)</sup>	Block 1 <sup>(3)</sup>	Block 2 <sup>(3)</sup>	Block 3 <sup>(3)</sup>	Block 1 <sup>(3)</sup>	Block 2 <sup>(3)</sup>	Block 3	
Residential	\$ (2,028,257)	148,365,535	-	-	0.0452							0.0137
Commercial	\$ (994,171)	56,752,834				\$ 0.0207	\$ 0.0152	\$ 0.0178				0.0175
Demand	\$ (3,169,384)	152,261,060							\$ 0.0320	\$ 0.0146	\$ -	0.0208
Streetlight	\$ 87,026	2,447,744										(0.0356)
Total	\$ (6,104,787)	359,827,172										0.0170

Sources and Notes:

Note (1):

OPTION 1: Allocates lost revenue to energy blocks in same relative proportions as EC approved rates

Residential: All lost revenues allocated to third energy block. EC Directive, Dated March 31, 2016, p.8

Commercial: Lost revenue allocated to energy blocks in same relative percentage as EC Directive:

	Allocation	Lost Revenues
Block 1:	24.68%	\$ (245,327)
Block 2:	30.76%	\$ (305,825)
Block 3:	44.56%	\$ (443,019)
	100.00%	\$ (994,171)

Relative increase in energy rates from EC Directive, Dated March 31, 2016, p.8; Also See: Exhibit CF-2.0

Demand: Lost revenue allocated to first two energy blocks in same relative percentage as EC Directive:

	Allocation	Lost Revenues
Block 1:	71.83%	\$ (2,276,688)
Block 2:	28.17%	\$ (892,695)
Block 3:	0.00%	\$ -
	100.00%	\$ (3,169,384)

Relative increase in energy rates from EC Directive, Dated March 31, 2016, p.8; Also See: Exhibit CF-2.0

Streetlight lost revenues charge applied to all kWhs.

Note (2):

OPTION 2: Allocates lost revenue to all energy blocks using average lost revenue per kWh.

Note (3): Block kWh units from: Exhibit CF-5.2



**Bermuda Electric Light Company Limited**

Summary of Total Revenue under Current Rates and Option 1 and Option 2 Rate Designs for Lost Revenue Recovery

Exhibit CF-5.2

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

<b>Energy (kWh) (June- December)</b>														
MONTH	Residential				Commerical				Demand				StreetLight	
	Block 1	Block 2	Block 3	Total	Block 1	Block 2	Block 3	Total	Block 1	Block 2	Block 3	Total	Block 1	
January	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June	7,056,160	7,116,696	4,799,091	18,971,947	1,654,103	2,749,383	3,193,979	7,597,465	9,953,682	8,266,990	2,392,622	20,613,294	306,981	
July	7,095,349	7,702,826	6,754,768	21,552,943	1,708,380	2,952,537	3,429,141	8,090,057	10,822,214	9,418,145	3,255,260	23,495,619	318,133	
August	7,281,554	9,277,368	11,521,093	28,080,016	1,880,978	3,691,570	5,180,570	10,753,118	10,750,334	9,661,389	3,762,672	24,174,395	338,955	
September	7,109,620	7,964,371	7,127,312	22,201,302	1,694,644	2,924,890	3,661,422	8,280,956	10,558,409	9,471,950	3,231,654	23,262,013	347,139	
October	7,074,824	7,463,065	5,550,377	20,088,267	1,655,851	2,727,957	3,417,913	7,801,720	10,409,563	9,072,016	3,412,786	22,894,365	366,029	
November	7,122,614	7,534,097	5,578,433	20,235,144	1,680,643	2,755,956	3,736,128	8,172,728	9,884,074	7,883,725	1,919,369	19,687,168	377,978	
December	6,973,919	6,673,752	3,588,245	17,235,916	1,550,790	2,262,931	2,243,068	6,056,789	8,756,630	7,356,205	2,021,371	18,134,206	392,529	
<b>Total kwh (June- December)</b>	<b>49,714,041</b>	<b>53,732,174</b>	<b>44,919,319</b>	<b>148,365,535</b>	<b>11,825,389</b>	<b>20,065,224</b>	<b>24,862,221</b>	<b>56,752,834</b>	<b>71,134,906</b>	<b>61,130,420</b>	<b>19,995,734</b>	<b>152,261,060</b>	<b>2,447,744</b>	

Source: Exhibit CF-5.0

<b>Total Revenue at December 31, 2015 Rates</b>														
MONTH	Residential				Commerical				Demand				StreetLight	
	Facilities Charge	Energy	Demand	Total	Facilities Charge	Energy	Demand	Total	Facilities Charge	Energy	Demand	Total	Energy	
January	1,074,513	4,559,170	-	5,633,683	108,576	1,598,538	-	1,707,114	20,800	3,451,055	383,724	3,855,579	124,900	
February	1,074,381	4,451,365	-	5,525,746	108,927	1,532,142	-	1,641,069	20,600	3,175,922	371,486	3,568,008	113,022	
March	1,084,083	4,073,243	-	5,157,326	111,150	1,409,254	-	1,520,404	21,000	3,125,530	375,127	3,521,658	111,170	
April	1,076,757	4,303,528	-	5,380,285	111,111	1,531,590	-	1,642,701	20,600	3,155,032	380,931	3,556,562	102,217	
May	1,081,542	3,919,159	-	5,000,701	111,618	1,698,813	-	1,810,431	21,100	3,583,552	407,274	4,011,926	104,183	
June	1,071,774	4,245,642	-	5,317,416	110,292	1,965,951	-	2,076,243	21,000	3,828,117	442,714	4,291,831	100,997	
July	1,077,153	4,973,713	-	6,050,866	110,643	2,095,386	-	2,206,029	21,000	4,305,543	477,267	4,803,810	104,666	
August	1,083,522	6,797,482	-	7,881,004	110,955	2,811,412	-	2,922,367	21,100	4,386,698	479,873	4,887,671	111,516	
September	1,074,282	5,149,451	-	6,223,733	110,565	2,150,314	-	2,260,879	21,000	4,249,678	465,388	4,736,066	114,209	
October	1,077,747	4,554,993	-	5,632,740	110,058	2,023,660	-	2,133,718	20,800	4,177,420	450,657	4,648,878	120,423	
November	1,072,830	4,587,905	-	5,660,735	110,175	2,125,498	-	2,235,673	20,900	3,697,439	429,243	4,147,582	124,355	
December	1,070,322	3,766,519	-	4,836,841	109,668	1,553,545	-	1,663,213	21,000	3,370,089	398,705	3,789,795	129,142	
<b>Total Revenue at December 31, 2015 Rates</b>	<b>12,918,906</b>	<b>55,382,169</b>	<b>-</b>	<b>68,301,075</b>	<b>1,323,738</b>	<b>22,496,102</b>	<b>-</b>	<b>23,819,840</b>	<b>250,900</b>	<b>44,506,076</b>	<b>5,062,390</b>	<b>49,819,366</b>	<b>1,360,800</b>	

<b>Total Revenue at January 1, 2016 Rates</b>														
MONTH	Residential				Commerical				Demand				StreetLight	
	Facilities Charge	Energy	Demand	Total	Facilities Charge	Energy	Demand	Total	Facilities Charge	Energy	Demand	Total	Energy	
January	1,300,812	4,766,216	-	6,067,028	111,360	1,801,801	-	1,913,161	20,800	3,931,809	534,585	4,487,194	105,333	
February	1,300,652	4,646,438	-	5,947,090	111,720	1,725,132	-	1,836,852	20,600	3,638,034	517,237	4,175,872	95,316	
March	1,312,397	4,233,835	-	5,546,232	114,000	1,584,232	-	1,698,232	21,000	3,607,667	522,212	4,150,878	93,753	
April	1,303,529	4,483,487	-	5,787,015	113,960	1,723,583	-	1,837,543	20,600	3,641,530	530,612	4,192,741	86,203	
May	1,309,321	4,069,310	-	5,378,632	114,480	1,915,622	-	2,030,102	21,100	4,087,677	567,654	4,676,431	87,861	
June	1,297,496	4,432,988	-	5,730,484	113,120	2,221,175	-	2,334,295	21,000	4,384,949	617,726	5,023,674	85,174	
July	1,304,008	5,237,404	-	6,541,412	113,480	2,368,038	-	2,481,518	21,000	4,893,937	666,726	5,581,663	88,268	
August	1,311,718	7,247,240	-	8,558,959	113,800	3,187,419	-	3,301,219	21,100	4,956,845	670,390	5,648,335	94,046	
September	1,300,532	5,427,686	-	6,728,218	113,400	2,432,400	-	2,545,800	21,000	4,825,598	649,913	5,496,511	96,316	
October	1,304,727	4,771,667	-	6,076,394	112,880	2,288,434	-	2,401,314	20,800	4,733,729	629,056	5,383,585	101,557	
November	1,298,775	4,805,675	-	6,104,449	113,000	2,405,936	-	2,518,936	20,900	4,261,922	598,755	4,881,577	104,873	
December	1,295,738	3,906,596	-	5,202,335	112,480	1,750,069	-	1,862,549	21,000	3,863,990	555,637	4,440,627	108,910	
<b>Total Revenue at January 1, 2016 Rates</b>	<b>15,639,706</b>	<b>58,028,543</b>	<b>-</b>	<b>73,668,249</b>	<b>1,357,680</b>	<b>25,403,842</b>	<b>-</b>	<b>26,761,522</b>	<b>250,900</b>	<b>50,827,688</b>	<b>7,060,501</b>	<b>58,139,089</b>	<b>1,147,611</b>	

Difference from Exhibit CF-1.0 Col. (i), line 1 - 0.00%

**Bermuda Electric Light Company Limited**

Summary of Total Revenue under Current Rates and Option 1 and Option 2 Rate Designs for Lost Revenue Recovery

Exhibit CF-5.2

Filed in Compliance with Bermuda Energy Commission Directive Dated March 31, 2016, Amending and Incorporating Draft Directive Issued December 21, 2015

**Total Revenue at June 1, 2016 (Option 1 Rate Design)**

MONTH	Residential				Commerical				Demand				StreetLight
	Facilities Charge	Energy	Demand	Total	Facilities Charge	Energy	Demand	Total	Facilities Charge	Energy	Demand	Total	Energy
January	1,074,513	4,559,170	-	5,633,683	108,576	1,598,538	-	1,707,114	20,800	3,451,055	383,724	3,855,579	124,900
February	1,074,381	4,451,365	-	5,525,746	108,927	1,532,142	-	1,641,069	20,600	3,175,922	371,486	3,568,008	113,022
March	1,084,083	4,073,243	-	5,157,326	111,150	1,409,254	-	1,520,404	21,000	3,125,530	375,127	3,521,658	111,170
April	1,076,757	4,303,528	-	5,380,285	111,111	1,531,590	-	1,642,701	20,600	3,155,032	380,931	3,556,562	102,217
May	1,081,542	3,919,159	-	5,000,701	111,618	1,698,813	-	1,810,431	21,100	3,583,552	407,274	4,011,926	104,183
June	1,297,496	4,692,348	-	5,989,844	113,120	2,354,264	-	2,467,384	21,000	4,814,024	617,726	5,452,749	74,260
July	1,304,008	5,532,047	-	6,836,055	113,480	2,509,756	-	2,623,236	21,000	5,383,009	666,726	6,070,735	76,958
August	1,311,718	7,631,113	-	8,942,831	113,800	3,375,788	-	3,489,588	21,100	5,460,046	670,390	6,151,537	81,995
September	1,300,532	5,731,193	-	7,031,725	113,400	2,577,462	-	2,690,862	21,000	5,309,808	649,913	5,980,720	83,974
October	1,304,727	5,046,287	-	6,351,014	112,880	2,425,101	-	2,537,981	20,800	5,210,286	629,056	5,860,142	88,544
November	1,298,775	5,082,303	-	6,381,078	113,000	2,549,103	-	2,662,103	20,900	4,671,719	598,755	5,291,374	91,434
December	1,295,738	4,142,223	-	5,437,961	112,480	1,856,169	-	1,968,649	21,000	4,241,462	555,637	4,818,099	94,954
	14,504,271	59,163,978	-	73,668,249	1,343,542	25,417,980	-	26,761,522	250,900	51,581,445	6,306,744	58,139,089	1,147,611

Total Revenue at June 1, 2016 (Option 1 Rate Design) 159,716,470

Difference from Exhibit CF-1.0 Col. (i), line 1 - 0.00%

**Total Revenue at June 1, 2016 (Option 2 Rate Design)**

MONTH	Residential				Commerical				Demand				StreetLight
	Facilities Charge	Energy	Demand	Total	Facilities Charge	Energy	Demand	Total	Facilities Charge	Energy	Demand	Total	Energy
January	1,074,513	4,559,170	-	5,633,683	108,576	1,598,538	-	1,707,114	20,800	3,451,055	383,724	3,855,579	124,900
February	1,074,381	4,451,365	-	5,525,746	108,927	1,532,142	-	1,641,069	20,600	3,175,922	371,486	3,568,008	113,022
March	1,084,083	4,073,243	-	5,157,326	111,150	1,409,254	-	1,520,404	21,000	3,125,530	375,127	3,521,658	111,170
April	1,076,757	4,303,528	-	5,380,285	111,111	1,531,590	-	1,642,701	20,600	3,155,032	380,931	3,556,562	102,217
May	1,081,542	3,919,159	-	5,000,701	111,618	1,698,813	-	1,810,431	21,100	3,583,552	407,274	4,011,926	104,183
June	1,297,496	4,649,683	-	5,947,179	113,120	2,354,309	-	2,467,429	21,000	4,824,242	617,726	5,462,968	74,260
July	1,304,008	5,542,404	-	6,846,412	113,480	2,509,585	-	2,623,065	21,000	5,377,839	666,726	6,065,565	76,958
August	1,311,718	7,767,456	-	9,079,174	113,800	3,375,019	-	3,488,819	21,100	5,441,999	670,390	6,133,489	81,995
September	1,300,532	5,749,508	-	7,050,040	113,400	2,577,379	-	2,690,779	21,000	5,301,843	649,913	5,972,755	83,974
October	1,304,727	5,022,285	-	6,327,012	112,880	2,425,267	-	2,538,147	20,800	5,199,369	629,056	5,849,225	88,544
November	1,298,775	5,057,560	-	6,356,334	113,000	2,549,382	-	2,662,382	20,900	4,693,391	598,755	5,313,046	91,434
December	1,295,738	4,068,618	-	5,364,356	112,480	1,856,701	-	1,969,181	21,000	4,251,672	555,637	4,828,309	94,954
	14,504,271	59,163,978	-	73,668,249	1,343,542	25,417,980	-	26,761,522	250,900	51,581,445	6,306,744	58,139,089	1,147,611

Total Revenue at June 1, 2016 (Option 2 Rate Design) 159,716,470

Difference from Exhibit CF-1.0 Col. (i), line 1 - 0.00%

**Total Lost Revenue January 1, 2016 through May 31, 2016 Recovered through EOY 2016**

MONTH	Residential				Commerical				Demand				StreetLight
	Facilities Charge	Energy	Demand	Total	Facilities Charge	Energy	Demand	Total	Facilities Charge	Energy	Demand	Total	Energy
January	(226,299)	(207,046)	-	(433,345)	(2,784)	(203,263)	-	(206,047)	-	(480,755)	(150,861)	(631,616)	19,567
February	(226,271)	(195,073)	-	(421,344)	(2,793)	(192,990)	-	(195,783)	-	(462,112)	(145,751)	(607,863)	17,707
March	(228,314)	(160,592)	-	(388,906)	(2,850)	(174,978)	-	(177,828)	-	(482,136)	(147,084)	(629,221)	17,416
April	(226,772)	(179,959)	-	(406,731)	(2,849)	(191,993)	-	(194,842)	-	(486,498)	(149,681)	(636,179)	16,014
May	(227,779)	(150,152)	-	(377,931)	(2,862)	(216,809)	-	(219,671)	-	(504,125)	(160,380)	(664,505)	16,322
June	-	-	-	-	-	-	-	-	-	-	-	-	-
July	-	-	-	-	-	-	-	-	-	-	-	-	-
August	-	-	-	-	-	-	-	-	-	-	-	-	-
September	-	-	-	-	-	-	-	-	-	-	-	-	-
October	-	-	-	-	-	-	-	-	-	-	-	-	-
November	-	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-	-	-	-
				(2,028,257)				(994,171)				(3,169,384)	87,026

Total January 1, 2016 through May 31, 2016 Recovered through EOY 2016 (6,104,787)



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

Our ref: EC/BEL-BRDIR-0316

March 31, 2016

**By Mail and Email**

Bermuda Electric Light Co. Ltd.  
P.O. Box HM 1026  
Hamilton HM DX  
*Attn: Abayomi Carmichael, VP Risk Management & Analysis – Corporate Treasurer*

**Re: BELCO Base Rate Filing – June 3, 2015**

**1. BACKGROUND**

**Preamble**

This Directive letter addendum is presented as the fait accompli decision of the Bermuda Energy Commission (“Commission”) in response to a base rate filing submitted by the Bermuda Electric Light Company Limited (BELCO). It is presented following a series of meetings between BELCO and the Commission and subsequent submissions by the company in response to the directive letter dated December 21, 2015.

It should be noted that during the meetings the implications of the requirements contained in the directive letter were highlighted and discussed to ensure the parties gained clarity and garnered a full understanding of the impact on stakeholders. Below is a summary of the topics of discussion:

- Comparison of NRRI Report with BELCO Filing
- Rate Base and Net Income
- Proposed Return
- Credit card convenience fee
- Affiliate transactions
- Depreciation expenses
- Intercompany loans
- Captive insurance
- Discounts

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

- Expense management, benchmarking
- Collaboration on operational and capital expenditures
- Incentives on fuel purchases/usage
- Basis of returns
- Impairment risk
- Comparable utilities & cost of debt
- Customer rate impacts
- Implementation

BELCO submitted responses to the Commission's directive by way of two letters dated February 15, 2016 and March 2, 2016. The February letter addressed those items listed above in the topics of discussion, wherein the March letter more specifically addressed the financial implications and impacts of the stated allowed Return on Equity (ROE) in the December directive and the Return on Capital (ROC) stated in the NRRI report.

## **2. FINDINGS**

- I. The Commission erroneously stated that the NRRI report indicated that BELCO's (ROE) stood at 7.7%. The NRRI report actually stated that BELCO's (ROC) stood at 7.7%.
- II. An analysis of the audited financial statements provided to the Commission for BELCO revealed that the company's US GAAP ROC was 3.3% and 2.6% for the years 2013 and 2014 respectively, and its US GAAP ROE was 1.9% and 3.3% for the years 2013 and 2014.



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**  

---

**The Energy Commission**

**Table 3**  
**Bermuda Electric Light Company Historic Return on Equity**

Year	Return on Equity(1)
1996	9.98 %
1997	10.23 %
1998	10.34 %
1999	10.27 %
2000	10.40 %
2001	10.00 %
2002	9.47 %
2003	7.55 %
2004	7.65 %
2005	7.78 %
2006	7.97 %
2007	6.75 %
2008	7.51 %
2009	6.59 %
2010	5.44 %
2011	4.69 %
2012	4.15 %
2013	1.81 %

(1): Net Earnings/ (Total Capitalization +Net Retained Earnings)  
Source: NERA Economic Consulting analysis of BELCO data.

BELCO's ROE has trended below 10% and steadily declined for the past 13 years (2002 – 2014), and has been below 6% for the past 5 years (2010 – 2014).

**Comparison of NRRI Report with BELCO Filing**

- III. The Commission noted the differences in revenues (-8.4%), operating expenses (-2.4%), net income (-29.4%), and rate base (-3.6%) as indicated in Table 1 – Comparison of BELCO and NRRI Report.

**Rate Base and Net Income**

- IV. The Commission notes that BELCO does not dispute the adjustments shown in the NRRI report which impacts the company's rate base and net income and plan to address those adjustments in its next rate case filing. Also, whilst BELCO's assertions re-



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

garding the lack of exercise of prudence implied the Commission's direction is not in accordance with the Energy Act and not in the public's best interest are noted. The Commission does not agree with such assertions.

**Proposed Return**

- V. The Commission notes BELCO's arguments regarding the NERA and NRRI country risk premium whereby BELCO (NERA) states that it should be 2.19% and NRRI states a 1.05% premium. In addition, comments relating to the imputed debt costs, estimated weighted average cost of capital (WACC), and gearing ratios are also noted
- VI. The Commission acknowledges comments regarding the adjustment of NRRI inputs in determining ROE, WACC and cost of debt.
- VII. Arguments presented by BELCO regarding affordability are duly noted.

**Credit Card Convenience Fee**

- VIII. The Commission acknowledges comments submitted regarding the socialization of the convenience fees for credit card paying customers.

**Affiliate Transactions**

- IX. The Commission notes the advantages presented for the shared services model, and agrees with the benefits derived from leveraging of resources.

**Depreciation Expenses**

- X. The Commission appreciates the comments provided which clarifies the company's handling of depreciation.

**Intercompany Loans**

- XI. The narrative relating to intercompany loans is appreciated and duly noted..

**Captive Insurance**

- XII. The Commission duly notes the rational for the establishment of a Captive and its financial risk mitigation benefits.

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)





**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

**Discounts**

XIII. Clarification and historical background regarding the discounting practices applied by BELCO are duly noted.

**Expense Management, Benchmarking**

XIV. The commentary has provided more insight on the expense containment/reduction initiatives of the company. The Commission looks forward to continued efforts in this regard and receipt of the benchmarking report(s) mentioned.

**Collaboration on Operational and Capital Expenses**

XV. The Commission notes comments submitted relating to BELCO's willingness to be more transparent with the company's Operating Expenses (OPEX) and Capital Expenditures (CAPEX), and looks forward to increased collaboration.

**Incentives on Fuel Purchases/ Usage**

XVI. The Commission acknowledges comments provided and encourages BELCO to proceed with collaborative efforts with the Commission with a view to establishing a fuel efficiency metric as suggested.

**Basis of Returns**

XVII. Discussions during the informational meetings were duly noted. The Commission is treating the information presented during the sessions as confidential.

**Impairment Risk**

XVIII. Discussions during the informational meetings were duly noted. The Commission is treating the information presented during the sessions as confidential.

**Comparable Utilities and Cost of Debt**

XIX. Discussions during the informational meetings were duly noted.



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

**Customer Rate Impacts**

XX. The Commission acknowledges and duly notes the commentary and assessment results provided by BELCO regarding the demand customer impact for an inclining rate tier structure, and appreciates the detail of the information submitted.

**Implementation**

XXI. The Commission acknowledges and accepts the time requirement for BELCO to gear up, including stakeholder notifications, for the reconfiguration, testing, and rollout of new tariffs.

**3. DIRECTION**

The Commission presents this directive addendum with the backdrop of not having in hand detailed information that definitively shows that BELCO:

- a) Has a final integrated resource plan (IRP) to be released to the public for debate, or that the Commission has been made privy to its contents;
- b) Has a timeline for capital restructuring that includes the securing of long term debt and the associated terms and conditions;
- c) Has a final CAPEX budget in place which outlines a five year plan for various initiatives outside of routine upkeep and maintenance;
- d) Has a definitive plan that outlines short to medium term OPEX containment initiatives;

In addition, it is anticipated that BELCO will submit a new base rate case filing once the above listed initiatives have been fully finalized. Further the Commission is of the view that a decision on a base rate case with all of the relevant information will be better suited to establishing a Bermuda energy sector return on capital rate setting regime which may be based on return on assets scenario.

**Approved Rates**

The Energy Commission directs:-

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**  
**The Energy Commission**

XXII. The approved Return on Equity (ROC) shall be 7 % for fiscal year 2016 and 8 % for fiscal year 2017 respectively subject to certain information provisions. These ROE rates shall be applied to the Rate Base of BELCO as of the Test Year (excluding the portion funded by debt), and December 31, 2016 for the subsequent rate period. In addition to the ROC amount, interest costs associated with BELCO's debt should be included in its calculated revenue requirements. The base rate tariffs to support these returns shall be determined and submitted for approval within 90 days after the close of the fiscal year, and shall be subject to a review at the end of the 3<sup>rd</sup> quarter to determine if the base rates require adjustment to reach the targeted rate of return. This paragraph supersedes paragraph 52 of the directive letter dated December 21, 2015.

Bermuda Electric Light Company Limited  
 Summary of Cost of Service Study (Incorporating a 7 percent Return on Equity)  
 For the Year Ending December 31, 2013  
 Exhibit 1.1DR-10-B

Line No.	System Total	Residential	Commercial	Demand	Street Lighting	
(a)	(b)	(c)	(d)	(e)	(f)	
1	Revenues from Tariffs	141,951,307	65,887,857	24,809,593	49,910,631	1,343,226
2	Discounts	(6,759,330)	(3,137,398)	(1,181,364)	(2,376,607)	(63,961)
3	Net Tariff Revenues	135,191,977	62,750,459	23,628,228	47,534,024	1,279,265
4	Other Revenues	991,323	419,748	149,884	412,503	9,188
5	<b>CURRENT TOTAL REVENUE</b>	<b>136,183,300</b>	<b>63,170,207</b>	<b>23,778,112</b>	<b>47,946,528</b>	<b>1,288,453</b>
6	<b>Expenses</b>					
7	Production	65,354,746	26,284,873	10,926,282	27,893,145	250,447
8	Transmission	5,170,534	1,993,034	929,556	2,241,775	6,169
9	Distribution	5,625,379	3,074,003	1,000,600	1,430,883	119,893
10	Customer Service	4,648,199	4,182,346	373,926	46,832	45,096
11	Administrative and General	27,957,148	13,790,561	4,798,703	9,104,219	263,664
12	Depreciation Expense	19,827,814	9,203,341	3,416,374	7,024,164	183,934
13	<b>TOTAL EXPENSES</b>	<b>128,583,819</b>	<b>58,528,157</b>	<b>21,445,441</b>	<b>47,741,019</b>	<b>869,203</b>
14	Total Rate Base	348,031,021	171,674,993	59,737,761	113,335,981	3,282,285
15	<b>CURRENT NET OPERATING INCOME</b>	<b>7,599,481</b>	<b>4,642,050</b>	<b>2,332,671</b>	<b>205,509</b>	<b>419,250</b>
17	Return	2.18%	2.70%	3.90%	0.18%	12.77%
18	Return Index	1.00	1.24	1.79	0.08	5.85
19	<b>Proposed Revenues at Equalized Returns</b>	<b>152,945,991</b>	<b>70,545,407</b>	<b>25,627,084</b>	<b>55,674,537</b>	<b>1,098,963</b>
20	PROPOSED NET INCOME	24,362,171	12,017,250	4,181,643	7,933,519	229,760
21	Proposed Allowed Return	7.00%	7.00%	7.00%	7.00%	7.00%
22	Proposed Return Index	1.00	1.00	1.00	1.00	1.00
23	Proposed Increase per Class	16,762,691	7,375,200	1,848,972	7,728,009	(189,490)
24	<b>Percent Increase</b>	<b>12.31%</b>	<b>11.68%</b>	<b>7.78%</b>	<b>16.12%</b>	<b>-14.71%</b>
25	<b>Proposed Revenues (Constrained Increase)</b>	<b>152,945,991</b>	<b>70,545,407</b>	<b>25,627,084</b>	<b>55,674,537</b>	<b>1,098,963</b>
26	PROPOSED NET INCOME (Constrained)	24,362,171	12,017,250	4,181,643	7,933,519	229,760
27	Proposed Returns (Constrained)	7.00%	7.00%	7.00%	7.00%	7.00%
28	Proposed Return Index	1.00	1.00	1.00	1.00	1.00
29	Proposed Increase per Class (Constrained)	16,762,691	7,375,200	1,848,972	7,728,009	(189,490)
30	<b>Percent Increase (Constrained)</b>	<b>12.31%</b>	<b>11.68%</b>	<b>7.78%</b>	<b>16.12%</b>	<b>-14.71%</b>
31	Sources:					
32	System Total Revenues: Exhibit 7.0DR-10-B, Col.(f) line 1					
33	System Total Discounts: Exhibit 7.0DR-10-B, Col.(f) line 2					
34	System Other Revenue: Exhibit 7.0DR-10-B, Col.(f) line 5					
35	System Total Expenses: Exhibit 1.2, Col.(g) line 40					

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
 PO Box HM 101, Hamilton HM AX, Bermuda  
 Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**  
**The Energy Commission**

Bermuda Electric Light Company Limited  
Statement of Operating Income at 5 percent Cost of Capital (Rates Effective September 2015)  
For the Year Ending December 31, 2013  
Exhibit 7.0DR-10-B

Line No.	Description	Operating Income Unadjusted (b)	Remove FAR Revenue and Expenses (c)	Operating Income Less FAR Revenue and Expenses (d)	Adjustments to Reflect Test Year (e)	Adjusted Present (Cols. d + e) (f)	Proposed Increase (g)	Proposed Final (Cols. f + g) (h)
(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Revenues from Base Rates	143,278,950	262,410	143,541,360	(1,590,053)	141,951,307	18,210,512	160,161,819
2	Less: Discounts	(6,822,549)	(12,495)	(6,835,044)	75,714	(6,759,330)	(1,447,821)	(8,207,151)
3	Subtotal: Revenue from Base Rates	136,456,401		136,706,316		135,191,977	16,762,691	151,954,668
4	Revenues from Fuel Adjustment Rate Charges	95,811,155	(95,811,155)					
5	Other Revenue	1,401,173	(409,850)	991,323		991,323		991,323
6	<b>TOTAL OPERATING REVENUE</b>	<b>233,668,729</b>		<b>137,697,639</b>		<b>136,183,300</b>	<b>16,762,691</b>	<b>152,945,991</b>
7	Energy Supply - Non Fuel	27,107,250		27,107,250	(1,468,188)	25,639,062		25,639,062
8	Energy Supply - Fuel In Rates	33,816,572		33,816,572		33,816,572		33,816,572
9	Energy Supply - Fuel Adjustment Rate Expense	95,811,155	(95,811,155)					
10	Subtotal: Energy Supply	156,734,977		60,923,822		59,455,634		59,455,634
11	Energy Delivery	9,459,227		9,459,227	483,563	9,942,790		9,942,790
12	Administrative and General	33,912,295	395,148	34,307,443	(2,631,307)	31,676,136		31,676,136
13	Depreciation and Amortization	23,856,756		23,856,756	(29,074)	23,827,682		23,827,682
14	Taxes and Rents	3,681,578		3,681,578		3,681,578		3,681,578
15	<b>TOTAL OPERATING EXPENSE</b>	<b>227,644,833</b>		<b>132,228,826</b>		<b>128,583,819</b>		<b>128,583,819</b>
16	<b>NET OPERATING INCOME (Line 6 less Line 15)</b>	<b>6,023,896</b>		<b>5,468,813</b>		<b>7,599,481</b>		<b>24,362,171</b>
17	Rate Base (Exhibit 8.0, Col.(f), line 26)	348,031,021						
18	Return on Rate Base (line 16 divided by Col. (b), line 17)			1.57%				7.00%
19	Estimated Market-based Return on Rate Base							7.00%
20	Proposed Revenue Increase (Col.(h) line 6 minus Col. (f), line 6)							16,762,691
21	Proposed Revenue Increase (Col.(h) line 20 divided by Col. (f), line 6)							12.31%
22	System Wide Discounts based on percent Discounts from 2013 (Col.(b) line 2 divided by Col. (b), line 1) ==>				-4.76%			

Bermuda Electric Light Company Limited  
Rate Comparison at Current and Proposed Rates (At 7% ROE)  
Exhibit 1.11DR-10-B

<b>Proposed September 2015</b>					
	Existing 2013			Difference Relative to September 2015	
				Difference \$	Difference %
<b>Schedule A - Residential</b>					
<b>Facilities Charge - Residential</b>					
Energy Charge	\$ 33.00	\$ 39.95	\$ 6.95		21.1%
<b>Energy Charges</b>					
0-250 KWh First Block	\$ 0.1575	\$ 0.1575	\$ -		0.0%
251-700 KWh Second Block	\$ 0.2400	\$ 0.2400	\$ -		0.0%
700+ KWh Tail Block	\$ 0.2972	\$ 0.3393	\$ 0.0421		14.2%
<b>Schedule B - Small Commercial</b>					
<b>Facilities Charge - Small Commercial</b>					
Energy Charge	\$ 33.00	\$ 40.00	\$ 7.00		21.1%
<b>Energy Charges</b>					
0-1000 KWh First Block	\$ 0.2295	\$ 0.2500	\$ 0.0205		8.9%
1001-5000 KWh Second Block	\$ 0.2517	\$ 0.2805	\$ 0.0288		11.4%
5001+KWh Tail Block	\$ 0.2800	\$ 0.3270	\$ 0.0470		16.8%
<b>Schedule C - Demand Service</b>					
<b>Facilities Charge - Demand Service</b>					
Demand Charge	\$ 100.00	\$ 100.00	\$ -		0.0%
<b>Demand Charges</b>					
A) 1st 50 KW remaining KW - A	\$ 9.14	\$ 12.00	\$ 2.86		31.3%
B) 1st 50KW remaining KW - B	\$ 8.45	\$ 12.00	\$ 3.55		42.0%
C) 1st 50 KW remaining KW - C	\$ 9.32	\$ 13.00	\$ 3.68		39.5%
1st 200 x Demand	\$ 9.93	\$ 13.00	\$ 3.07		30.9%
2nd 200 x Demand	\$ 9.86	\$ 13.50	\$ 3.64		36.9%
remaining KW -energy	\$ 10.44	\$ 13.50	\$ 3.06		29.3%
<b>Energy Charges</b>					
1st 200 x Demand	\$ 0.2314	\$ 0.2855	\$ 0.0541		23.4%
2nd 200 x Demand	\$ 0.1494	\$ 0.1633	\$ 0.0139		9.3%
remaining KW -energy	\$ 0.1211	\$ 0.0865	\$ (0.0346)		-28.6%

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

- XXIII. BELCO to commence meter readings starting as soon as practically possible with rates as outlined in the approved schedule of rates in accordance with paragraph 57 (a) above. These shall be interim tariffs until such time that BELCO submits new/ revised tariffs rates that includes the requirements of paragraphs XXIV and XXV. This paragraph supersedes paragraph 53 of the directive letter dated December 21, 2015.
- XXIV. The convenience fee charged to customers for the use of credit cards for bill payments shall be discontinued. Efforts shall be made simultaneously to facilitate the use of all credit and debit cards currently utilized in the market as soon as practically possible. This paragraph supersedes paragraph 54 of the directive letter dated December 21, 2015.
- XXV. All staff, hotel, special groups, or any other discounts applied to both the base and fuel adjustment rates (with the exception of the waiver of the facilities fee to the Bermuda Government's Social assistance program and the quick payment discounts) shall be phased out over a two year period commence on the date of this letter. This paragraph supersedes paragraph 55 of the directive letter dated December 21, 2015.
- XXVI. Paragraph 57(a) of the directive letter regarding the revision of the demand class customer energy usage rates to an inclining tier structure is rescinded.
- XXVII. Return on Equity (ROC) Provisions & Conditions:
- a. In the event that the targeted ROC is not likely to be achieved BELCO shall submit by the end of the third quarter of the respective fiscal year at the latest, financial performance data showing the extent of the ROC shortfall together with potential rate adjustments for the next year fiscal year that shall include provisions for making up of the ROC differential. This paragraph supersedes paragraph 56(a) of the directive letter dated December 21, 2015.
  - b. In the event that the targeted ROC is or likely to be exceeded for a given fiscal year, the excess differential shall be allocated to a tariff stabilization account in accordance with standard industry practice as suggested by BELCO, however, priority for utility directed initiatives shall be used to defer tariff increases or to make up revenue requirement shortfalls similar to the FAR balancing account concept.



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**  

---

**The Energy Commission**

This paragraph supersedes paragraph 56(b) of the directive letter dated December 21, 2015.

**Conditions Precedent Concurrent & Subsequent**

XXVIII. The Commission further directs that BELCO shall:

- c. Provide in accordance with paragraph XXIII, by June 30, 2016, a new tariff schedule that includes a proposal for the separation of Hotels as a new customer class from the current Demand category in for approval by the Commission.
- d. Devise in collaboration with the Commission a fuel efficiency metric by April 30, 2016. This paragraph supersedes paragraph 57(b) of the directive letter dated December 21, 2015.
- e. Create a new over/under recovery account, similar to the Fuel Adjustment recovery account and to include a new separate item on BELCO's billing indicating this new adjustment. The Commercial Renewable System Excess Energy Rate (CRSEER) and the Net Metering payments that BELCO currently makes to customers should be moved from the Fuel Adjustment Rate (FAR) account to the new account by May 31, 2016. This paragraph supersedes paragraph 57(d) of the directive letter dated December 21, 2015.
- f. Inter group or related party loans shall be settled as stated in paragraph of your letter dated February 15, 2016, with no further similar arrangements undertaken unless authorized by the Regulator. This paragraph supersedes paragraph 57(f) of the directive letter dated December 21, 2015.
- g. Submit to the Commission a Capital Projects and Expenditure plan for works in progress and to be completed during the rate period by May 31, 2016. Update reports to be submitted semi annually for the duration of the rate period. This paragraph supersedes paragraph 57(k) of the directive letter dated December 21, 2015.
- h. Develop and submit to the Commission a plan to collaborate with Commercial, Demand, and any other class established that is not residential class customers for an energy conservation and efficiency initiative by June 30, 2016. This para-

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)





**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

graph supersedes paragraph 57(m) of the directive letter dated December 21, 2015.

- i. Develop and submit a working paper for the enhancement of the transmission and distribution system that shall include, but not limited to, facilitation of distributed generation and energy feed-in and intelligent technology integration. To be submitted by November 30, 2016. This paragraph supersedes paragraph 57(n) of the directive letter dated December 21, 2015.

XXIX. Paragraph 57(l) of the directive letter regarding the submission of a national solar water heating initiative is rescinded. It was stated during the informational meetings that economical analysis does not support such an initiative when compared to that of a utility grade solar farm. Details of this will be contained in the impending IRP.

Sincerely,

A handwritten signature in black ink, appearing to be 'E. Michael Leverock'.

E. Michael Leverock  
Energy Commission Chairman

PO. BOX HM 1026, HAMILTON HM DX, BERMUDA  
TELEPHONE: (441) 295-5111  
FAX: EXECUTIVE (441) 292-8975  
CUSTOMER SERVICE (441) 292-7832  
EMAIL: info@belco.bm  
WEBSITE: www.belco.bm



PLEASE QUOTE OUR REF.

March 2, 2016

Mr. E. Michael Leverock  
Chairman, Energy Commission  
c/o Ministry of Economic Development  
Corner House, 4th Floor  
20 Parliament Street  
Hamilton HM 12  
Bermuda

Re: Base Rate Case Filing

Dear Chairman Leverock:

Further to our conversation, we have prepared some additional financial analysis to (1) show the impact of the Energy Commission's draft directive on rates and (2) to provide some further clarity on the tariff implications associated with the application of a range of costs of capital as suggested by our rate filing and follow-up correspondence. This letter also provides a formal response to your inquiries regarding hotel discounts and the block structure for the Demand class.

#### Tariff Scenarios

Attachment 1 provides NERA's estimated impact to rates applying a 6.0% return to BELCO's estimated 2015 year-end unaudited shareholders' equity. Under this return scenario, BELCO's average base rates would increase by \$6.5m, or 4.8%. BELCO's projected operating income, based on test year operating expenses, would be approximately \$14.1m.

Attachment 2 provides a table which outlines financial ramifications of the test year baseline, the June 2015 rate filing, the draft directive, potential outcomes based on different weighted average costs of capital (NRRI 7.7%, BELCO low WACC 9.0%) as well as a scenario where upon the test year operating costs were adjusted to reflect BELCO's 2016 Budget. It should be noted that BELCO's 2016 Budget includes higher operating expenses reflecting three years of escalation, additional maintenance expense and higher depreciation & amortization costs (largely due to the adoption of IFRS).

In preparing this table, we have also included a revised fuel cost forecast for 2016 in order to put into context the overall tariff impacts. It should be noted that we have not included the Government's recently announced increase in fuel oil taxes.

As described in our February 15, 2016 letter, we believe that our cost of capital range (9.0% - 10.5%), which was based on the NRRI methodology adjusted for a realistic political risk premium, cross checks with our own practical analysis on our potential financing options (i.e. realistic gearing levels, cost of debt). Should the Energy Commission choose to lower our request, we believe the low-end of our range (9.0%) is the minimum acceptable outcome which would meet the requirements of providing sufficient cash flow to support continued infrastructure investment along with a reasonable return for capital providers.

At this proposed return level, BELCO's base rate revenue requirements would increase by \$23.7m or approximately 17.5%. Even with this increase in base rates, it should be noted that the total average tariff would be approximately 9.8% lower than the test year tariff due to the significant reduction in fuel costs.

The permitted 9.0% return will essentially establish BELCO's level of operating income in our revenue requirements. This level of operating income will cover debt, equity and unfunded legacy cost liabilities and would be calculated before permanent debt interest expense and non-recurring items (i.e. defined benefit/future healthcare gains/losses, material asset impairments). We propose that revenues in excess of the permitted return will be accounted for in a separate tariff stabilization fund which will be used to defer rate increases or to compensate for earnings shortfalls in future years. Alternatively, BELCO could be required to file a rate case within 180 days should the return exceed the permitted return. We would propose that these concepts and mechanics of a tariff stabilization fund or future rate filings would be reviewed with the Regulatory Authority as they would have oversight moving forward.

Finally, pursuant to your draft directive, BELCO will be seeking to raise permanent debt financing on its balance sheet over time. Our financial strategy contemplates raising longer-term debt at levels consistent with the need to maintain a strong investment grade credit rating in order to optimize the cost and availability. Needless to say, a reasonable return level and clear and certain regulatory outcome will be helpful with respect to future discussions with the credit rating agencies which will be crucial to obtaining competitively-priced debt. A reasonable outcome in this rate determination will also be important in our discussions with our auditors with respect to any potential impairment analysis.

#### Hotel Discounts/Block Structure

Upon your final directive, we believe that we will need 6 weeks to finalize rate schedules and put the ordered rates into effect.

Separately, BELCO is willing to establish special rate classes for hotels (Demand and non-Demand) corresponding with the removal of the special discounts utilizing the aggregate revenue requirements for the hotel industry as determined by the final rate directive. BELCO is also willing to study the impacts of changing the declining block structure for the Demand class to a flat block structure. We note that such a move would be contradictory to the cost of service for the Demand class, inconsistent with treatment in other jurisdictions and politically sensitive. It would also potentially lead to a decline in demand which could require future rate adjustments to balance BELCO's revenue requirements.

For the new special Hotel rate class and the Demand rate class, we believe that we would be in a position to submit these new rate structures to the Energy Commission (or Regulatory Authority) within 3 months of the final rate directive.

We remain appreciative of the Energy Commission's efforts to-date and remain open for further dialogue should you have any questions or queries.

Abayomi Carmichael  
Vice President, Risk Management & Analysis  
Corporate Treasurer

## Bermuda Electric Light Company Limited

Statement of Operating Income using BEC December 21, 2015 Implied Net Income (Revised to Include FAR in Base Rates)

For the Year Ending December 31, 2013

Exhibit 7.0R-4 (With FAR)

Line No	Description	Operating Income Unadjusted	Remove FAR Revenue and Expenses	Operating Income Less FAR Revenue and Expenses	Adjustments to Reflect Test Year	Adjusted Present (Cols. d + e)	Proposed Increase	Proposed Final (Cols. f + g)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Revenues from Base Rates	143,278,950	262,410	143,541,360	(1,590,053)	141,951,307	6,809,216	148,760,524
2	Less: Discounts	(6,822,549)	(12,495)	(6,835,044)	75,714	(6,759,330)	(324,236)	(7,083,566)
3	Subtotal: Revenue from Base Rates	136,456,401		136,706,316		135,191,977	6,484,980	141,676,957
4	Revenues from Fuel Adjustment Rate Charges	95,811,155	(95,811,155)					
5	Other Revenue	1,401,173	(409,850)	991,323		991,323		991,323
6	<b>TOTAL OPERATING REVENUE</b>	<b>233,668,729</b>		<b>137,697,639</b>		<b>136,183,300</b>	<b>6,484,980</b>	<b>142,668,280</b>
7	Energy Supply - Non Fuel	27,107,250		27,107,250	(1,468,188)	25,639,062		25,639,062
8	Energy Supply - Fuel In Rates	33,816,572		33,816,572		33,816,572		33,816,572
9	Energy Supply - Fuel Adjustment Rate Expense	95,811,155	(95,811,155)					
10	Subtotal: Energy Supply	156,734,977		60,923,822		59,455,634		59,455,634
11	Energy Delivery	9,459,227		9,459,227	483,563	9,942,790		9,942,790
12	Administrative and General	33,912,295	395,148	34,307,443	(2,631,307)	31,676,136		31,676,136
13	Depreciation and Amortization	23,856,756		23,856,756	(29,074)	23,827,682		23,827,682
14	Taxes and Rents	3,681,578		3,681,578		3,681,578		3,681,578
15	<b>TOTAL OPERATING EXPENSE</b>	<b>227,644,833</b>		<b>132,228,826</b>		<b>128,583,819</b>		<b>128,583,819</b>
16	<b>NET OPERATING INCOME (Line 6 less Line 15)</b>	<b>6,023,896</b>		<b>5,468,813</b>		<b>7,599,481</b>		<b>14,084,461</b>
17	Rate Base (Exhibit 8.0, Col.(f), line 26)	348,031,021						
18	Return on Rate Base (line 16 divided by Col. (b), line 17)			1.57%				4.05%
19	Estimated Market-based Return on Rate Base							6.00%
20	Proposed Revenue Increase (Col.(h) line 6 minus Col. (f), line 6))							6,484,980
21	Proposed Revenue Increase (Col.(h) line 20 divided by Col. (f), line 6))							4.76%
22	System Wide Discounts based on percent Discounts from 2013 (Col.(b) line 2 divided by Col. (b), line 1)) ==>				-4.76%			
23	EOY 2015 Shareholder's Equity per IFRS Accounting	234,741,017						

**BELCO Rate Scenarios**  
(\$ millions)

	Test Year	Rate	Draft	NRRI	Scenarios	
	Baseline	Filing	Order (1)		BELCO Low (2)	BELCO Low (3)
Net Sales	231.0	260.0	191.2	202.9	208.4	208.4
Fuel Costs	<u>-129.6</u>	<u>-129.6</u>	<u>-83.3</u>	<u>-83.3</u>	<u>-83.3</u>	<u>-83.3</u>
Gross Margin	101.4	130.4	107.9	119.6	125.1	125.1
Other Income	1.0	1.0	1.0	1.0	1.0	1.0
Non-Fuel Operating Expenses	-71.0	-71.0	-71.0	-71.0	-71.0	-74.9
Depreciation & Amortization (4)	<u>-23.8</u>	<u>-23.8</u>	<u>-23.8</u>	<u>-23.8</u>	<u>-23.8</u>	<u>-27.5</u>
Operating Income	7.6	36.6	14.1	25.8	31.3	23.7
Interest Expense (5)	0.0	0.0	0.0	0.0	0.0	0.0
Non-recurring items (6)	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Net Income	7.6	36.6	14.1	25.8	31.3	23.7
Capital Employed (Test Year)	348	348	348	335	348	348
Capital Employed (2015 IFRS) (7)					317	317
Net Fixed Assets/Regulatory Assets (2015 IFRS)				269	269	269
Equity (2015 IFRS)			235	235	235	235
Return on Equity (2015 IFRS)			6.0%			
Return on Capital Employed (Test Year)	2.2%	10.5%	4.1%	7.7%	9.0%	
Return on Capital Employed (2015 IFRS)						7.5%
FAR Revenues	33.8	33.8	33.8	33.8	33.8	33.8
Sales (million kwh)	577	577	577	577	577	578
Avg Base Rates Revenue (cts/kwh)	23.4	28.5	24.6	26.6	27.5	27.5
Avg FAR (cts/kwh)	16.6	16.6	8.6	8.6	8.6	8.6
Avg Total Revenue (cts/kwh) (8)	40.0	45.1	33.1	35.2	36.1	36.1
Basic Rate Revenue Requirement Increase		29.0	6.5	18.2	23.7	23.7
Total Tariff Revenue Requirement Increase		29.0	-39.8	-28.1	-22.6	-22.6
Increase from baseline - Avg Basic Rates Tariff (cts/kwh)		21.4%	4.8%	13.5%	17.5%	17.3%
Increase from baseline - Avg Total Tariff (cts/kwh)		12.6%	-17.2%	-12.2%	-9.8%	-9.9%

Notes:

- (1) 6% permitted return applied to updated 2015 IFRS equity balance; Fuel costs updated to reflect 2016 Budget.
- (2) NERA/BELCO low end of WACC range (9-10.5%) applied to test year rate base and test year opex; fuel costs updated to reflect 2016 Budget.
- (3) Revenue requirements from test year case; fuel costs, opex and sales updated to reflect 2016 Budget.
- (4) Increase in depreciation & amortization largely related to IFRS transition (ARO/strategic spare depreciation)
- (5) Interest expense on fuel working capital included in fuel expense and FAR recovery
- (6) Non-recurring items include DB/future health care gains/losses, material asset impairments, other IFRS MTM movements
- (7) Non-current assets plus net working capital (current assets less current liabilities).
- (8) Proposed future Government tax increases (oil tax/GST) not included.

PO. BOX HM 1026, HAMILTON HM DX, BERMUDA  
TELEPHONE: (441) 295-5111  
FAX: EXECUTIVE (441) 292-8975  
CUSTOMER SERVICE (441) 292-7832  
EMAIL: info@belco.bm  
WEBSITE: www.belco.bm



PLEASE QUOTE OUR REF.

Feb 15, 2016

Mr. E. Michael Leverock  
Chairman, Energy Commission  
c/o Ministry of Economic Development  
Corner House 4<sup>th</sup> Floor  
20 Parliament Street  
Hamilton HM 12  
Bermuda

Re: Base Rate Case Filing

Dear Chairman Leverock:

Please find our commentary below as it relates to the pending final directive in response to our June 2015 base rate case filing.

Abayomi Carmichael  
VP Risk Management & Analysis  
Corporate Treasurer  
BELCO



**Contents**

- Comparison of NRRI Report with BELCO Filing ..... 2
- Rate Base and Net Income..... 5
- Proposed Return ..... 6
  - NRRI’s recommended rate of return is implausibly low because it relies on flawed inputs and unrealistic assumptions. .... 6
  - NRRI’s country risk premium of 1.05% not credible because it is not a country risk premium for Bermuda..... 6
  - NRRI’s use of an implied debt structure and cost for BELCO is not realistic and underestimates the actual cost of BELCO’s capital used to support investment ..... 6
  - Minor adjustments to the NRRI analysis to incorporate more accurate inputs lead to returns that fall within the zone of reasonableness ..... 8
  - The Commission must follow the evidence to make its decision..... 9
  - The Earnings Cap and Sharing Mechanism should be removed from the Directive ..... 9
- Credit Card Convenience Fee..... 11
- Affiliate Transactions ..... 11
- Depreciation Expenses..... 12
- Intercompany Loans..... 13
- Captive Insurance..... 13
- Discounts..... 15
  - History ..... 15
    - Government ..... 15
    - The Bermuda Hotel Association (BHA) ..... 15
    - The Princess Hotels ..... 15
    - Employees ..... 15
  - Expenses ..... 16
  - Benchmarking ..... 16
  - Operations & Maintenance Expenses..... 17
  - Capital Investments ..... 17
  - Collaboration..... 17
  - Fuel Purchases ..... 18
  - Customer Rate Impacts..... 19
- Implementation ..... 23
- Summary ..... 23

## Comparison of NRRI Report with BELCO Filing

The NRRI Report and BELCO agree on two key concepts in ratemaking:

- BELCO should be allowed a return on its employed assets as embodied in the Rate Base calculation. (BELCO Exhibit 7.0 and NRRI Report, Table 9, Col. (h), line 17)
- BELCO's cost of capital should reflect the market return expected by investors in the utility plus a country risk premium (BELCO Exhibit 2.0 and NRRI Report, p. 10)

Further standard regulatory practice dictates that the Commission must make its decision based on the evidence before it and not outside factors that are not evidence. The Commission has two expert reports from which to make a decision.

### Expense Levels

The NRRI Report and BELCO very nearly agree on the expenses though BELCO agrees with the Commission that current fuel costs in rates should remain in the base rates. Table 1 compares the two expert reports and shows that when the fuel costs are added back into rates the difference between the NRRI report are relatively minor with respect to expenses and rate base. (See Table 1, Col. (f), line 15). There are, however, some key aspects worth understanding:

- BELCO had already proposed to adjust its expenses downward by a net \$3.6 million. (Exhibit 7.0 Col. (e) lines 7-13). These adjustments were made after a careful review of all of BELCO's expense accounts, contrary to the NRRI's conclusion that the adjustments were made selectively.
- BELCO proposed net negative adjustments to its test year expenses, but some accounts were adjusted upward. The NRRI Report made no effort to review those adjustments nor did it propose any upward adjustments to expenses. It is not credible that test year normalizing adjustments would only serve to reduce expenses. The very nature of a normalizing process suggests that in some cases expenses will have to be adjusted upward and other cases downward.
- The NRRI Report made these adjustments in addition to the adjustments proposed by BELCO with no comment. The NRRI Report served to further reduce BELCO's expenses for ratemaking purposes downward by \$3.1 million (Table 1, Col. (f), line 15)
- The NRRI Report made the following adjustments to expenses
  - \$936,526 to Administrative and General Expenses (NRRI Report, p. 6), which is actually a reduction of \$1,331,674 because the NRRI Report also disallows \$395,148 of adjustments from Exhibit 7.0, Col. (c), line 12, NRRI Report, p. 7, Section 4.3)
  - \$1,316,837 to Depreciation and Amortization (Id. p. 7, calculated as the difference between the NRRI Report allowed D&A costs and BELCO proposed D&A costs)

- BELCO does not agree with any of the NRRI Report adjustments to expenses because NRRI did no auditing and did not talk to BELCO accounting staff or BELCO's experts. However, even if the Commission were to accept those adjustments the total expenses and including base rate fuel costs BELCO's proposed expense level are less than 2.5 percent higher than the recommended expense levels. BELCO considers this difference to be minor.

The summary of the comparisons between BELCO's and the NRRI's report is shown in the following table.

Table 1: Comparison of BELCO and NRRI Report

Bermuda Electric Light Company Limited

Statement of Operating Income Comparing NRRI Report with BELCO Filing

Line No	Description	Operating Income BELCO (1)	Operating Income NRRI (2)	Difference (Cols. c - b)	Operating Income NRRI with Fuel in Rates	Difference (Cols. e - b)	Directive (3)	Difference (Cols. g - b)	Difference (Cols. g - c)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(h)
1	Revenues from Base Rates	172,378,758	121,868,631	(50,510,127)	157,019,129	(15,359,629)			
2	Less: Discounts	(8,208,202)	(5,803,049)	2,405,153	(7,136,975)	1,071,226			
3	Subtotal: Revenue from Base Rates	164,170,557	116,065,582	(48,104,975)	149,882,154	(14,288,403)			
4	Revenues from Fuel Adjustment Rate Charges								
5	Other Revenue	991,323	1,401,173	409,850	1,401,173	409,850			
6	<b>TOTAL OPERATING REVENUE</b>	<b>165,161,880</b>	<b>117,466,755</b>	<b>(47,695,125)</b>	<b>151,283,327</b>	<b>(13,878,553)</b>			
7	Energy Supply - Non Fuel	25,639,062	25,639,062		25,639,062				
8	Energy Supply - Fuel In Rates	33,816,572	0	(33,816,572)	33,816,572				
9	Energy Supply - Fuel Adjustment Rate Expense								
10	Subtotal: Energy Supply	59,455,634	25,639,062	(33,816,572)	59,455,634				
11	Energy Delivery	9,942,790	9,459,227	(483,563)	9,459,227	(483,563)			
12	Administrative and General	31,676,136	30,344,462	(1,331,674)	30,344,462	(1,331,674)			
13	Depreciation and Amortization	23,827,682	22,510,845	(1,316,837)	22,510,845	(1,316,837)			
14	Taxes and Rents	3,681,578	3,681,578		3,681,578				
15	<b>TOTAL OPERATING EXPENSE</b>	<b>128,583,819</b>	<b>91,635,174</b>	<b>(36,948,645)</b>	<b>125,451,746</b>	<b>(3,132,073)</b>			
16	<b>NET OPERATING INCOME (Line 6 less Line 15)</b>	<b>36,578,060</b>	<b>25,831,581</b>	<b>(10,746,479)</b>	<b>25,831,581</b>	<b>(10,746,479)</b>	<b>13,425,183</b>	<b>(23,152,877)</b>	<b>(12,406,398)</b>
17	Rate Base	348,031,021	335,475,091	12,555,930		(12,555,930)	223,753,049	(124,277,972)	(111,722,042)
18	Return on Rate Base (line 16 divided by line 17)	10.51%	7.70%						
19	Proposed Revenue Increase	28,978,580	13,425,753	(15,552,827)	13,425,753.00	(15,552,827)	3,234,459	(25,744,121)	(10,191,294)

Sources and Notes:

(1) BELCO Proposed Numbers from Exhibit 7.0 Col. (h), Rate Base From: Exhibit 8.0, Col.(f), line 26, Proposed Increase from Exhibit 7.0, Col. (h), line 20

(2) NRRI Proposed Numbers from Table 9, Col (h); Rate Base from: Table 9, Col. (h), Line 17 and Proposed Increase from Table 9, Col. (j), line 20

(3) There is no evidence before the Commission to support this figure.

-4.76% 35,507,333.43

## Rate Base and Net Income

As with expense levels BELCO and the NRRI Report largely agree on the proper asset base to apply the rate of return. There are two areas of disagreement.

- Fuel inventories should be reduced to reflect end of year 2014 values. (NRRI Report, p. 4)
- Intangible assets should also be adjusted to reflect end of year 2014 values. (NRRI Report, p. 4)
- Land rights should be adjusted to reflect conferred land.

For the sake of expediency only, BELCO does not dispute these adjustments for the purposes of this rate case and will clarify its approach to these issues more fully in the next rate case. However, even with these adjustments BELCO and the NRRI Report are within about 4 percent of total rate base. Again, BELCO considers this to be a minor difference between experts.

- BELCO notes the draft directive's significant disallowance of prudently-incurred capital employed by using recently established IFRS shareholder's equity as the basis for returns instead.
- This is in contradiction to both the NRRI and NERA reports and established standards for utility regulation.
- The Commission has an obligation to demonstrate imprudence on the utility's part before disallowing return on a portion of its investment to serve customers and has not done so in the draft directive nor has the Commission's consultant done so. This would appear to be inconsistent with the Energy Act and would be unprecedented in comparable jurisdictions.
- BELCO reiterates NERA and the NRRI's use of the traditional rate base of prudently-incurred capital employed (non-current assets plus regulatory assets plus net working capital not included in the FAR) as the basis for returns and deems deviation from this a disincentive to make the ongoing investments required to serve customers and thus against the public interest.

The other major difference between NRRI and BELCO is on the cost of capital applied to the rate base. We turn to that next.

## Proposed Return

### **NRRI's recommended rate of return is implausibly low because it relies on flawed inputs and unrealistic assumptions.**

NRRI's analysis contains major flaws that render it unreliable for the purposes of establishing BELCO's required return. Specifically, the NRRI Report:

1. Incorporates a country risk premium for Bermuda that is not consistent with real world experience.
2. Imputes implausibly high debt levels based on US electric utilities into its recommendations.
3. Does not consider the tax differences between BELCO and US utilities; and
4. Fails to account for factors considered by debt markets when pricing new debt instruments.

### **NRRI's country risk premium of 1.05% not credible because it is not a country risk premium for Bermuda**

NRRI's methodology adjusts the weighted average cost of capital (WACC) for a Bermuda country risk premium of 1.05%. The premium has been extrapolated from a table which summarizes Professor Aswath Damodaran of New York University's analysis based on an assumption as to how Bermuda's credit default swaps (CDS<sup>1</sup>) would be priced based on the country's A1 credit rating. The use of this number taken directly from a website unadjusted is in error for several reasons:

1. NRRI has misunderstood the citation it is using for the 1.05% country risk. Professor Damodaran is not finding a country risk premium for Bermuda with this analysis it is a calculation of an unadjusted risk premium for a country with an A1 rating.
2. Bermuda bonds are actively traded and do trade at a higher premium than even BELCO proposed. Currently, it is estimated that a new Bermuda 10-year sovereign bond would be priced at an approximately 3 percent premium to the 10-year US Treasury rate.
3. BELCO's proposed 2.19% country risk premium is far more realistic to actual market data and is based on a rating agency's estimates. (Morningstar, Inc. cited in Exhibit 2.0, p. 10)

### **NRRI's use of an implied debt structure and cost for BELCO is not realistic and underestimates the actual cost of BELCO's capital used to support investment**

Conceptually, BELCO agrees that debt can sometimes lead to a lower cost of capital and the company commits to evaluate this approach in the future. However, the NRRI Report's reliance on debt costs and levels of US utilities is undermined because:

---

<sup>1</sup> According to HSBC, there is no active market for Bermuda Credit Default Swaps.

1. NRRI used unadjusted (pre-tax) debt costs from US utilities which benefit from the deduction of interest payments which lowers a utility's debt burden
2. If BELCO had 53% debt in its capital structure in 2013, as NRRI analysis implicitly assumes it could have, the interest expense would have exceeded earnings. Of course, this would have been a disaster for BELCO and its customers. NRRI nowhere acknowledges this reality.
3. BELCO faces a relatively weak regulatory framework as measured against published standards of assessment by the Ratings Agency, S&P.<sup>2</sup>
4. NRRI reports a comparable sample of Caribbean Electric Utilities which shows debt levels generally far below their US counterparts but then ignore this evidence in their recommendation. (Table 6, NRRI Report: NRRI's reports that comparable Caribbean utilities average debt cost is 7.4% and the average debt-to-capital ratio 36 %.)
5. BELCO's faces significantly declining energy demand (sales) that US utilities do not face;
6. BELCO would have to pay a foreign currency purchase tax in order to pay the principle and interest payments to bond holders, if long term debt was raised overseas. This has not been taken into account by NRRI.
7. NRRI either misunderstood or did not take into account the fact that NERA's cost of equity report explicitly took into account the fact that BELCO has a 100 percent equity capital structure and reduced the proposed return by 1.68% to reflect that fact.<sup>3</sup>

The Commission should understand that while economic theory suggests that there are wide ranges of debt levels that minimize the cost of capital to a firm, when debt is taken on it does **raises** the risk to, and cost of, equity, as the NRRI affirm. For example, if we use the WACC approach Based on the NERA study, an appropriate cost of equity for BELCO is 10.51% (10.0% comparable company cost of equity plus 2.19% country risk premium less 1.68% reflecting the lack of any debt). On a leveraged basis, BELCO's cost of equity is estimated to be 12.2% (10.51+2.19).

Utilizing a gearing ratio of 25-30%, a cost of debt of 6-7% and a cost of equity of 12.2%, we estimate that BELCO's current WACC (based on target debt levels that would be achievable in a reasonable regulatory regime over time) would be in the 10.3-10.9% range. Essentially, this is the same as NERA's unleveraged 10.51% cost of equity estimate.

Moreover, while some economic theory suggests that debt levels do not matter, they do in fact matter in setting rates despite what NRRI seems to imply (in fact if that were really true NRRI would not have imputed a capital structure).

---

<sup>2</sup> Based on the S&P June 2014 published corporate rating methodology for assessing utility regulatory environment.

<sup>3</sup> NERA relied upon a comparison of the levered beta for the proxy group to the unlevered beta in order to determine the effects of financial leverage on the ROE. The method used by NERA is objective and tracks the well-established methodologies in applied finance for making leverage adjustments using betas.

Whether the debt structure is 53% or 30%<sup>4</sup> does change the weighted-average cost of capital for the utility in the rate-setting process. For this reason most US regulators do not impute capital structures to US utilities as NRRI did here.

### **Minor adjustments to the NRRI analysis to incorporate more accurate inputs lead to returns that fall within the zone of reasonableness**

BELCO does not object, in general, to the NRRI approach to estimating the cost of equity. BELCO also recognizes that experts may disagree on the proper inputs and models for calculating cost of equity. Because of this inherently difficult task of estimating cost of capital, it is imperative that hypothetical models be checked against real world results. Several obvious real world data can be used as a check:

- The average ROE estimated from NRRI's model for its US comparable electric group is 8.90% but that average is 60 basis points **below** the lowest ROE granted by a US regulator in 2015. (NRRI Report Table 5, DCF ROE column and BELCO Exhibit 2.1, p. 1). It is simply not credible that the average utility in NRRI's comparable group is less risky than then the lowest risk US electric utility as evidenced by actual regulatory decisions. We believe just addressing this problem would add, at a minimum, 0.30% to NRRI's calculation.
- NRRI reported data on debt costs for a comparable sample of Caribbean utilities and found that debt costs averaged 7.4 % (Table 6, NRRI Report). It is implausible that the WACC for Caribbean utilities would only be 0.3% above the cost of debt when debt is less than half of the capital structure.
- These debt spreads for Caribbean utilities over their US counterparts (approximately 3%) underscores the inappropriateness of using a 1.05% premium over the US utility WACC and, as noted above, NRRI's estimate of country risk is simply in error (which is why NRRI found this counterintuitive result). A more reasonable estimate is NERA's 2.19%. (Exhibit 2.0, p. 10)
- NRRI assumes that BELCO could obtain debt at the same level and cost as a US utility. This is simply unreasonable and represents a misunderstanding of BELCO's financial position. A debt level of around 36% debt would have been a more realistic level to impute. This alone would likely add 1.1% to NRRI's WACC estimate.

---

<sup>4</sup> It is our view that the appropriate capital structure/financing strategy for BELCO would be predicated on the maintenance of an investment grade credit rating (target BBB S&P credit rating). In accordance with S&P guidelines, the level of gearing would largely be driven by the strength of the regulatory regime and the projected credit ratios. In our opinion, the low returns, declining demand and inherent regulatory uncertainty (compared to the US or other international jurisdictions) would likely result in a "weak" to "fair" business risk profile for BELCO. This would in turn likely constrain BELCO's gearing ratio to approximately 2x EBITDA which we estimate would correlate to a debt/total capitalization ratio of 25-30% (compared to 53% in the NRRI analysis).



While BELCO does not agree with the NRRI Report on cost of capital, if just the above errors were fixed NRRI's unreasonably low weighted average cost of capital would increase by at least 2.19% and perhaps as much as 3.6%. This would put NRRI's proposal in the more reasonable range of 8.84% to 10.15% with a midpoint of 9.5%.

## **The Commission must follow the evidence to make its decision.**

It is a bedrock principle of public rate-setting that regulators cannot use data that is not properly before them to make decisions. To do otherwise makes the process untenable, arbitrary and a waste of resources used to produce the data for the Commission to make its decision.

For example, the draft directive reduces NRRI's calculated WACC from 7.7% to 6.0% based on Bermuda's current economic recovery status without any support. Neither expert report suggested such a reduction nor is such an arbitrary reduction standard regulatory practice.

At best we can deduce the Commission is making an affordability argument. But this does not recognize that rates have actually fallen by \$29m between the 2013 BELCO's proposed rates for 2016. If rates were affordable in 2013 they must be even more affordable in 2016. Given a 12% reduction in customer bills – based on projected total operating revenues even using forward fuel curves – and even with three years of inflation, any rational person would be at a loss as to how the BELCO proposal could legitimately be deemed unaffordable.

Further, it must be noted that the Bermuda Government statistics indicate that total energy costs were only 4% (including vehicular fuels) of CPI in 2014<sup>5</sup>. A rough estimate would place electricity at only 3% of CPI. The Bermuda Digest of Statistics 2014 details how this level has been consistently low over the 40 years, while housing (27% of CPI) and education (15% of CPI) are up by half and health care (13% of CPI) has doubled during the same period.

## **The Earnings Cap and Sharing Mechanism should be removed from the Directive**

We take note of the draft directive mandates that profits in between a 6.0% and 10.0% return be redirected to energy efficiency initiatives, customer rebates and alternative energy initiatives. It is our view that caps on returns only work where the target returns fit within the framework the NRRI lays out:

---

5

[http://www.govsubportal.com/images/Cabinet\\_Office/Dept\\_of\\_Statistics/Docs/SociaOtherPublications/2015\\_Digest\\_of\\_Statistics\\_Final.pdf](http://www.govsubportal.com/images/Cabinet_Office/Dept_of_Statistics/Docs/SociaOtherPublications/2015_Digest_of_Statistics_Final.pdf)

Terms that do not create a situation where “the firm cannot secure funding” and thus enable the company to “maintain investment in the firm”. With assets used to serve customers being that which the company funds, it is in the public interest to ensure ongoing financing of these long term capital investments is sufficiently maintained.

We agree with the Commission’s draft directive’s desire to increase spending on energy efficiency and alternative energy programs. We believe that this should be accomplished through targeted utility-sponsored programs, which will allow the costs to be captured and financed across the entire rate base. US utilities have significant experience in this approach which could be utilized proactively in Bermuda as opposed to a retroactive basis. Needless to say, the Commission’s profit cap approach (at a level which is below 4.5% return on capital employed based on the current formulation) is punitive to shareholders and inconsistent with international practice. There are price cap mechanisms, such as tariff stabilization funds, which can be utilized to benefit both shareholders and customers. These only work where target returns fit within the framework of enabling ongoing investment.

## **Summary on Proposed Return**

In summary, the Energy Commission draft directive suggests that BELCO investments should only earn a relatively small and capped return just above the local risk-free rate for debt , without due regard to the operating, regulatory, economic and force majeure risks the company faces. By using credible inputs, market verified data, and the requirements to show and follow evidence, a much more defensible outcome can be reached. If the draft directive approach on returns is pursued as put forth, the embedded approach will be in direct opposition to the public interest of a secure electricity supply in that it will act as a strong disincentive to invest in the infrastructure required to sustain service excellence for customers.

## Credit Card Convenience Fee

BELCO notes the draft directive's commentary regarding the perceived "disincentive in place regarding the convenience fee relating to the use of credit cards for bill payments and that it would be in the public interest to discontinue the charging of this fee." There are a number of ways the credit card company's fee could be handled. By way of background, you will note as a rate regulated entity, we are unable to adjust our pricing to account for the fees charged by credit card companies. After some time negotiating on the matter, MasterCard agreed to go outside of its normal operating model and enable us to pass on their fee on to customers who choose to use their credit card. We took the view because it is the users of the credit cards who generate any associated fees that this is a fairest way to allocate the costs. An alternate approach would be to spread all costs incurred for credit card fees across all customers.

It remains our view this would cause those not using the credit card to be essentially penalized for doing so. Given the benefits associated with the use of the card – deferred use of cash and reward points – coupled with still being afforded an early pay discount, if the costs were absorbed by the company and socialized to all customers, it would be reasonable to expect a dramatic increase in usage. Currently the expense to those who use cards to pay their BELCO bills is approximately \$45,000 per year as a group. This could instead exceed a million of dollars if costs are socialized. Ironically, it would be those who can least afford a credit card and continue to make payments by cash under this scenario that would be financing those who do pay by credit card. While we remain open to pursuing this course of action if the Commission insists that we do, we suggest against it, noting the results (usage rates) would be unpredictable and unfairly allocate costs to non-users. It is our view the socialization of these very specific costs go against the public interest.

## Affiliate Transactions

### Shared Services

In 2010, BELCO's corporate functions (Finance, IT, HR, ERCC) were moved into a separate legal entity, Sigma. The objective of this re-organization was to leverage common functional resources across the Group of companies to leverage synergies and realize operating efficiencies. In 2013, the same functions were moved into Ascendant in an effort to streamline the number of legal entities, while still maintaining the objective from the original re-organization. In addition to the corporate functions, the BELCO transportation group also serves as a Group shared service, as it performs vehicle maintenance for Air Care and Bermuda Gas via a service level agreement, with appropriate transfer prices.

Ascendant's functional areas are run on a lean basis and costs are budgeted annually based on approved headcounts and estimated materials and service expenses. The budget is reviewed by Management and approved by the Board. Shared service allocations are then determined taking into consideration system usage (IT license fees/maintenance charges) and budgeted effort (routine overhead support and

material costs are allocated on an estimated % of effort basis). Ascendant's Executives are charged out on an allocated effort basis (i.e. the respective Executives of Ascendant Group Holdings and Bermuda Gas are 100% charged to their respective businesses).

Project-related consulting costs (i.e. legal fees) are charged directly to the responsible entity and Ascendant's Director costs are allocated 50% to BELCO given the time spent directing its affairs, as well as the fact that Ascendant is largely a conduit to the capital markets for BELCO. It is our view the shared service methodology results in savings for BELCO and its customers, and we will endeavor to provide the Energy Commission with any additional details required to deliver the transparency needed to give assurance of the appropriateness of cost allocations.

## **Depreciation Expenses**

Based on commentary from the NRRI, the Commission's draft directive suggests that BELCO's depreciation and amortization expense is potentially overstated compared to the Group's depreciation and amortization expense. It would have been useful if we were queried by the NRRI prior to their report to the Commission on these matters. Given the differences in the nature of the non-regulated businesses under Ascendant, it would not be appropriate to compare asset treatment without first having awareness of these differences. Ascendant's unregulated subsidiaries included a significant amount of non-depreciable assets (\$7.6 million of goodwill and \$13.2 million of land) as shown in the following table. In addition, BELCO's capitalized engine overhauls typically are amortized over a very short period (2-3 years). Thus we hold the view our depreciation and amortization expense is appropriate and in line with its proportion of the consolidated depreciable assets. It should also be noted, of its own accord, BELCO commissioned an independent assessment of its depreciation rates by American Appraisal, with their report published by in Dec 2014 proposing only minor adjustments on the odd asset class and affirming our approach on the majority of asset classes.

Ascendant Group of Companies					
Analysis of Assets					
Fiscal Year: 2013					
	AGL (Parent)	BELCO	BGU	AGH	Total
<u>Non-current assets subject to depreciation:</u>					
PP&E	298,212	666,741,295	7,945,193	13,605,687	688,590,387
Intangibles	571,053	5,455,793	204,105	4,981	6,235,932
Accum Depr	(3,732)	(423,983,371)	(4,139,151)	(5,344,251)	(433,470,505)
	865,533	248,213,717	4,010,147	8,266,417	261,355,814
<u>Non-current assets not subject to depreciation:</u>					
CWIP	-	11,134,806	-	-	11,134,806
Land	-	2,460,182	-	13,159,935	15,620,117
Goodwill	718,006	-	-	6,914,976	7,632,982
	718,006	13,594,988	-	20,074,911	34,387,905
<b>Total non-current assets</b>	<b>1,583,539</b>	<b>261,808,705</b>	<b>4,010,147</b>	<b>28,341,328</b>	<b>295,743,719</b>
	0.54%	88.53%	1.36%	9.58%	100.00%
<b>Total depreciable (non-current) assets</b>	<b>865,533</b>	<b>248,213,717</b>	<b>4,010,147</b>	<b>8,266,417</b>	<b>261,355,814</b>
	0.33%	94.97%	1.53%	3.16%	100.00%
<u>Total depreciation expense:</u>					
Depreciation - PP&E and Intangibles	58,346	19,778,238	570,243	716,078	21,122,905
Amortization - Major Overhauls	-	3,999,868	-	-	3,999,868
	58,346	23,778,106	570,243	716,078	25,122,773
	0.23%	94.65%	2.27%	2.85%	100.00%
<b>Note:-</b>					
<i>Both intangible expenditures (computer software) and major deferred overhaul expenditures are depreciated over an short time frame (3 to 7 years) as compared to other long term PP&amp;E assets.</i>					

## Intercompany Loans

Intercompany loans reflect a historical cash management practice where the company's corporate revolving credit facility was at BELCO. We are seeking approval from our Board of Directors to establish a distinct revolving facility at Ascendant to handle all non-BELCO requirements. Thereafter any existing loans will be cleared and if any further loans are required from BELCO, which we do not anticipate being the case, we will seek preapproval by the Commission as directed.

## Captive Insurance

As discussed during our meetings, in 2013 Ascendant began to explore the feasibility of forming a captive insurance company to better manage the risks under its array of insurance coverage for its subsidiaries. The study by our broker indicated the Plant, Property and Equipment class of business was the most suitable at inception given the deductible levels used to insure the class. BELCO is spending in excess of \$2m per annum on this business class with a \$750,000 deductible per incident. BELCO also has currently uninsured lines of business including the distribution system, which incurred unplanned

expenses of >\$4m in 2012, funded from the balance sheet and unrecovered from customers. An actuarial analysis of BELCO claims history indicated the forecasted loss of \$531,000 per annum and a total cost of risk of \$500,000 per annum.

Ascendant agreed to finance the risk at the \$500,000 premium level, providing a maximum \$750,000 of cover per annum for claims. The analysis suggests a 40% chance of no claim within in given year hence any premium payments retained could be accumulated and used to offset the larger and less frequent events that require significant cash to pay for unplanned events and damages. Per our discussion, BELCO can request the insurance market to price our PP&E policy with and without the \$750,000 deductible and thereby annually provide a form of independent assessment on the cost effectiveness of insuring it through Ascendant's captive. We can also commission and provide to the Commission an actuarial study on a 5 year basis as well, to ensure pricing remains competitive relative to risk.

The captive represents a transition from our historic "pay as you go" mode of operating for the first loss/deductible, which requires unexpected financing from our balance sheet, to a vehicle that offers to smooth out some of that volatility. Ascendant and its subsidiaries have substantial annual insurance expenses, the bulk of which reside in BELCO, and there are further possible synergies between lines of business that could reduce the total cost of risk and thus costs to customers. The direct access to the reinsurance market via the licensed and regulated captive company, formalized ring fencing of funds, some protection of balance sheet volatility and potential to insure uninsured or uninsurable risks are all benefits for Ascendant and its subsidiaries and by extension its customers.

## Discounts

### History

The prompt pay discount for customers was initiated decades ago in a high-interest rate environment and was created in order to incentivize customers to pay in a timely manner, thus diminishing the requirement for and cost of working capital from lending institutions. To accomplish this goal, the gross electricity bill to every customer was discounted by 5% and this discount has remained in effect since inception. Discounts outside of the prompt payment discount are explained as follows, noting they only apply for timely payments or customers not in arrears.

#### Government

The Bermuda Government currently receives an additional 5% discount.

#### The Bermuda Hotel Association (BHA)

The Bermuda Hotel Association currently receives an additional +5% discount during the tourism "shoulder season" of November to April inclusive to assist with its operating costs. This was provided during the beginning of the recent economic downturn, with the caveats of ending when the government payroll tax concessions ended for the hospitality industry. The BHA must provide consolidated income statements to BELCO during this period in part to substantiate the ongoing need for the agreement.

#### The Princess Hotels

The Princess Hotels receive an additional +5% discount. This was originally negotiated in the early 1990s when the hotels were seeking to self-generate and disconnect from the grid. The disconnection would have caused a shift in the costs to the remaining customer base and this was agreed an incentive for them to remain on the system. Note as BHA members, the Princess Hotel discounts are cumulative. I.e. in addition to their prompt pay and BHA membership discounts.

#### Employees

For many years employees have received a +25% discount. This was initiated as an agreed alternative to base salary increases during union negotiations. The Company pays for this cost and does not recover it as a part of the cost of service to customers. All non-BELCO entities in the group of companies pay BELCO for the costs of any employee electricity discounts they have.

Class	Discount 1 (Prompt Pay)	Discount 2	Discount 3	Total
All Customers	5%			5%
Government	5%	5%		10%
BHA	5%	5% (shoulder months) BHA		5 - 10%
Princess Hotels	5%	5% (shoulder months) BHA	5%	10 - 15%
Employees	5%	25%		30%

The company is aware there are those who may view the various discounting regimes unfavorably and we note the draft directive denoted them as “not the public interest whereby the public pays for these discounts without regulatory approval.” Further it is stated that should they continue they be “deducted from the allowed rate of return”, and “with immediate effect” “prior written and express approval of the Commission” is required to offer a discount to any customer. As discussed, BELCO has been considering for some time a means to extract itself from any legacy special discounts not already paid for by shareholders. Yet we also recognize the economic and political sensitivities of immediately ceasing these discounts and bring to the attention of the Commission the need for sensitivity regarding an exit from them. Through “immediate effect” as indicated by the draft directive, there will likely be a substantial outcry from some key components of Bermuda’s economy, noting the government itself has discounts that amount to upwards of \$1.5m per annum. While we can cease special discounts as directed, we suggest a more palatable approach would be a plan that sees the discounts phased out over a reasonable window of time, with fair notice given to affected parties. With that said, if ordered to by the Commission, we will proceed as directed.

## Expenses

BELCO has continually pursued cost reductions and expenses management in the operation of the electricity system. Some examples of cost reducing efforts are head count management, which requires the authorization of each new hire by the CEO, and rotating asset management for major engine overhauls, which allows the value of individual engine components to tracked as the parts move in and out of service, inventory and repair.

The Company has for several years implemented wage and salary freezes and undertaken the reduction of benefits to both current employees and retirees, and as you are at least partially aware have received substantial pushback from these stakeholders. These include, but are not limited to, current employee healthcare, existing and future retiree healthcare and discounts. These changes have proven challenging for employees, retirees and management with disputes on a number of items currently in proceedings.

## Benchmarking

Benchmarking is a common practice amongst electric utilities to compare costs, tariffs, and performance metrics. BELCO participates in an annual benchmarking activity with other CARILEC (an association of



Caribbean electric utilities) members. It is noteworthy, that BELCO received the award for the 2013 CARILEC Utility of the Year, based on the results of this benchmarking exercise. BELCO will share the annual benchmarking results with the Energy Commission, if desired.

### **Operations & Maintenance Expenses**

BELCO is willing to provide complete insight into the annual Operations & Maintenance Expenses (OPEX) for transparency purposes. The OPEX can be split into cost categories of depreciation/amortization, labour, fuel and other non-fuel expenses as required. The Company is open to using mutually agreed metrics that effectively measure and incent continuation of quality customer service levels Bermuda has become accustomed to expecting.

### **Capital Investments**

It is our view collaboration between the company and the Regulator on the capital spending plans of the utility would be in the public interest to ensure the projects undertaken continue to be in alignment with customer interests and the company can be confident in investing in these assets prior to deployment of capital. As a first step, the company has split capital projects into two categories for 2016. The first category is “maintenance capex” which are projects we deem essential enough they be funded out of operating cash flow in the period between rate filings, subject to an appropriate regulatory framework and treatment. The second category is deemed “growth capex” which encompasses capital works that are enhancements to our existing services that we deem to be good value for customers. It is BELCO’s intent to present the case for growth capex investments to our regulator in between rate cases, for both agreement and preapproval prior to proceeding to deploy capital into assets.

### **Collaboration**

In summary, the company agrees with the view that collaboration would be useful in regards to operational and capital spending and benchmarking financial and operational performance against its peers.

## Fuel Purchases

The company notes the Commission's commentary that "at present BELCO has little financial incentive to reduce the cost of fuels purchased". Per our discussion, we suggest caution around the perception that it is possible to take action to "reduce the costs of fuel". On the one hand it is true BELCO has no financial reward if it is able to secure pricing below the normal contractual terms of month average pricing for a given delivery. However, we draw to your attention that to date most of our customers remain are focused on the total bill and do not have much regard for the fuel adjustment line item within their electric bills. Our experience has been, and remains, that it is in our customer relations interest to always secure the best pricing possible to keep customer sentiment as positive as possible. This is the case, even without financial benefit to BELCO, due to the zero margin nature of the fuel adjustment rate.

We further encourage the Commission to recognize incentives are only useful where there is the ability to improve performance. Without clairvoyance regarding the future oil prices, there is no one who can reliably "reduce the costs of fuel". It is our view the Commission should avoid encouragement of speculation in the oil markets, noting the benefits or added costs of such speculation fall entirely upon customers through the fuel adjustment rate.

As an alternative to the suggested incentive, we suggest the Commission consider incenting behavior that is fully within the control of the company, namely employing fuel efficiency metrics with the ability to earn beyond allowed returns through exceeding reasonable generating efficiency and losses targets and thus lowering the cost to customers. We are open to discuss such metrics relative to our own past performance and those of comparable utilities.

## Customer Rate Impacts

According to page 6 of the NRRI report “The inclining block structure exacerbates BELCO’s business risk and results in greater costs socialized across the island. BELCO should consider flattening the inclining block structure.

We concur with the position of the NRRI and the business risks we face, the greater socialized costs to customers, driven by the policy we have been directed to implement. While this has a modest impact at the residential and commercial level, it would have a substantial and negative impact at the large business level.

We noted with interest to the comments from one commercial entity who stated in their public comment that declining energy usage rate tiers for demand customers is “discouraging energy conservation by the bigger consumers”. Per our discussion and other public comments the Commission forwarded on to us, we note the conflict between national policy and the laws of economics. Policy and by extension BELCO have been promoting energy conservation for some time and is at least part of the reason for the decline in electricity sales. Beyond promoting efficient use, BELCO has employed the inclining block structure for most customers, as directed by the regulator, for some time. Per our reply to public comments in August last year, we and at least one public commenter noted how the policy contradicts the laws of economics, which should afford lower costs for greater consumption through economies of scale and volume rates.

While we have implemented inclining blocks as directed for residential and commercial customers, it remains a problematic approach for demand customers. In fact our experts can find not even a single US state where large customers pay on an inclining block. This is very telling regarding the economic impact it has to what is essentially the engine of the economy. It is ironic to place the Commission’s “affordability” directive regarding returns, alongside a directive that we all acknowledge is uneconomical with regard to imposing inclining block rates on demand customers.

For sure we agree that a fair share of costs should be allocated to all customer classes based on the service costs they incur. Yet at the same time we must acknowledge the place demand customers have within our economy as the engine of it. BELCO is seeking full cost recovery from all customers in a way that is aligned with their demand on the system. Given electricity remains such a low percentage of CPI<sup>10</sup>, it is feasible for the Commission to continue to direct the company to employ this pricing structure in the residential and perhaps the small commercial customer classes and rationalize this as being in the public interest. However if we pursue policy for the demand customers, where electricity is a greater proportion of their total cost of business, it could have disproportionate impacts to not just the demand class but all the commercial establishments who rely on them for business and the residential population who rely on them for jobs. The “fragility of the Bermuda economy” warrants avoiding blind

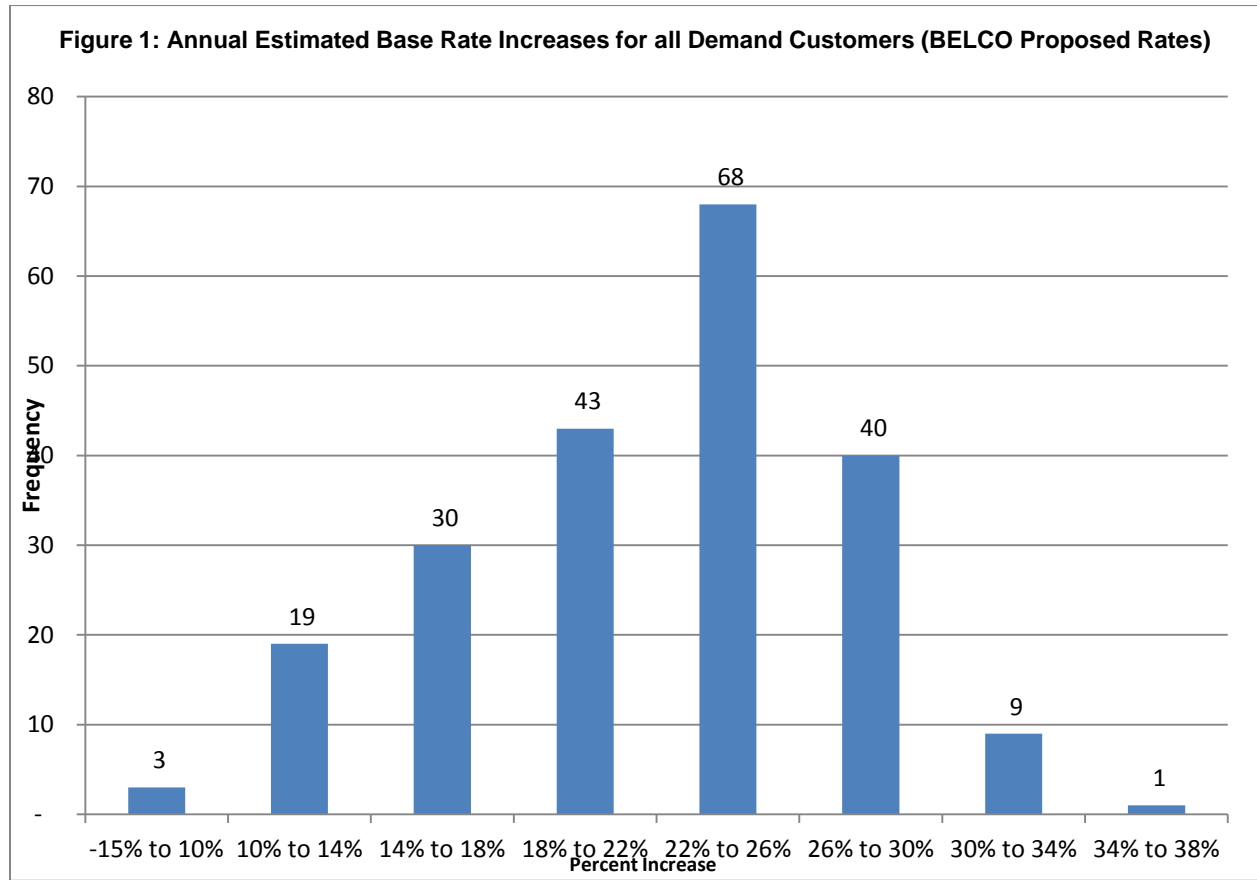
---

10

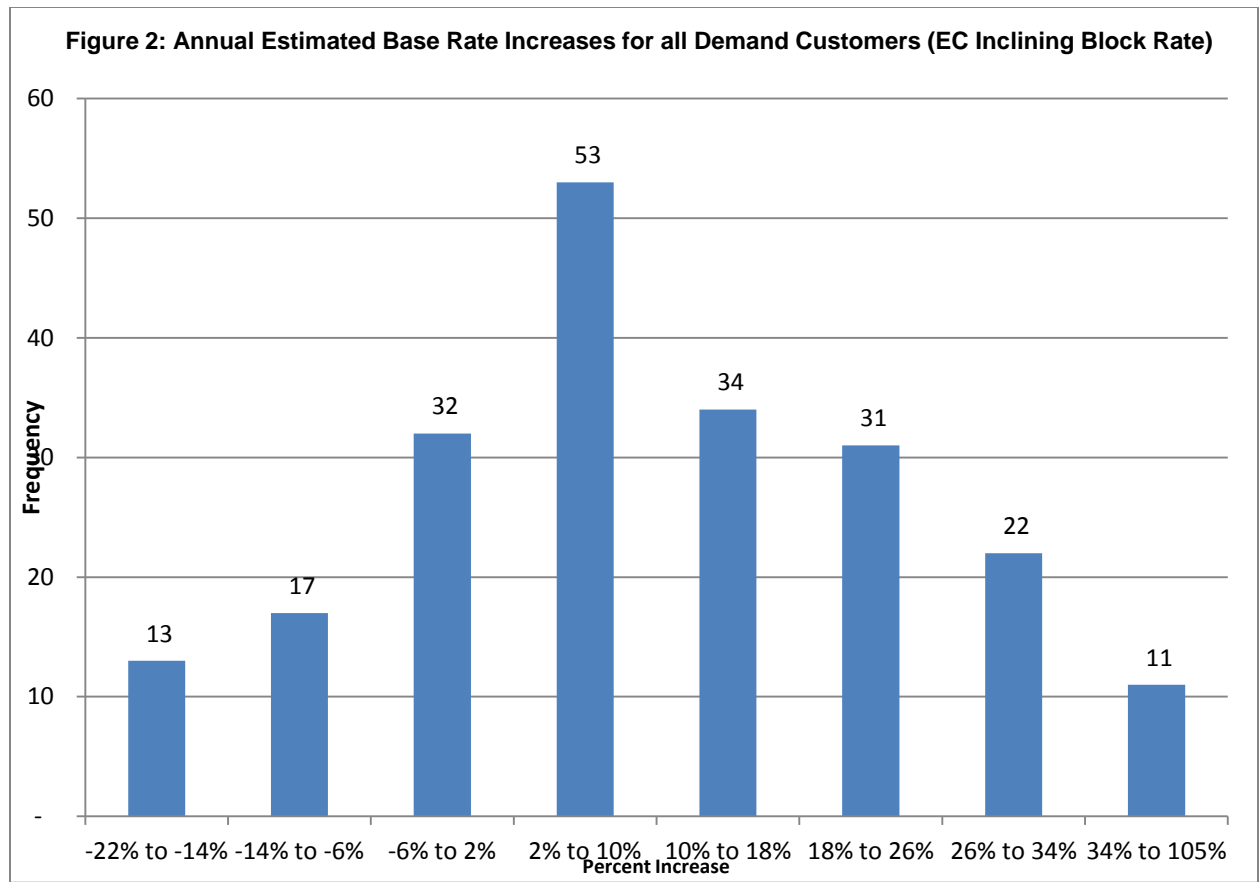
[http://www.govsubportal.com/images/Cabinet\\_Office/Dept\\_of\\_Statistics/Docs/SociaOtherPublications/2015\\_Digest\\_of\\_Statistics\\_Final.pdf](http://www.govsubportal.com/images/Cabinet_Office/Dept_of_Statistics/Docs/SociaOtherPublications/2015_Digest_of_Statistics_Final.pdf)

but adamant pursuit of uneconomic policies with potentially irreversible consequences to business in Bermuda.

With that said, in good faith we did assess options to impose such a policy on the demand class. The results are instructive. See Figure 1 and 2 below.



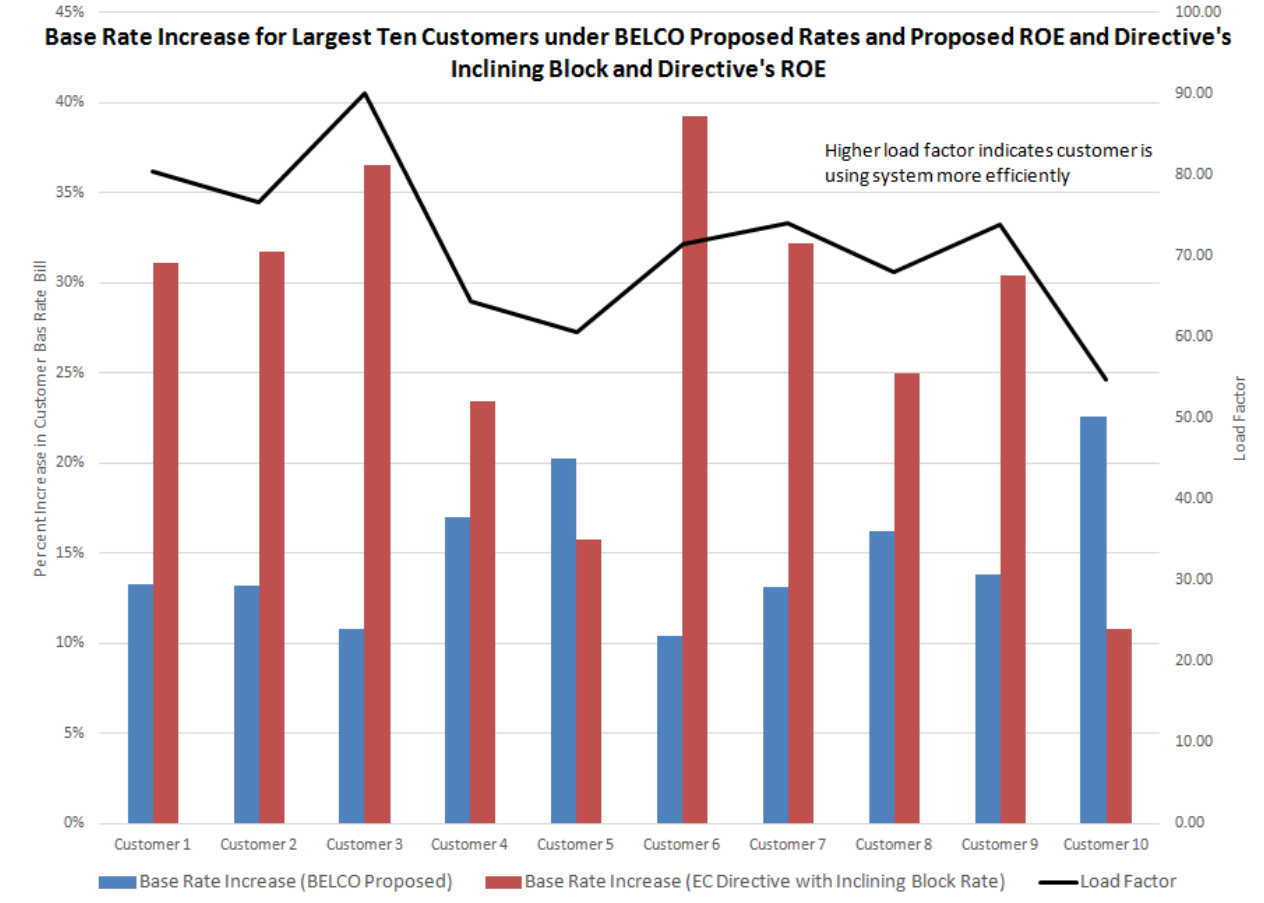
By employing an inclining block and keeping the customer class revenue neutral, we note the distinct differences between our case as filed and this iteration. As filed the rates would vary from -15% up to 38% with the highest impact affecting only one customer who has a particularly low load (utilization) factor. Per our August 2014 reply to public comments, demand customers should be rewarded for efficient use of infrastructure, the often overlooked component of the energy and infrastructure service BELCO provides. Given the scale of the infrastructure deployed to serve a large customer, all other customers benefit when they use it efficiently, as this avoids overbuilding generation and transmission systems to serve peak loads that are unnecessarily high.



Contrast this with spread of billing impacts under an inclining demand block structure for the demand class and it becomes clear that the range of billing impacts widens from -22% up to 105%, with 11 customers now seeing bills of greater than 34% - where only 1 customer does under our proposed rates. At the level of bills demand customers generate, we strongly suggest this is untenable for these businesses and would put at risk all the downstream benefits they provide to the commercial and residential customers and Bermuda as a whole. It should be noted large customers generally have relocation choices to other jurisdictions, and Bermuda as well as others, have seen these choices exercised – sometimes to our benefit, sometimes to our detriment. As discussed, these decisions have inertia – once made they will not be reversed by simply reversing policy to once again align with economics. That these uneconomic rates drive businesses to more welcoming jurisdictions is the reason these rates do not feature in any other developed jurisdiction we are aware of.

We also assessed the individual billing impacts under both directives to the top 10 demand customers. Figure 3 below underscores what we have found. The inclining block allocates the largest increases to customers most efficiently using the system infrastructure, and we view this as a particularly punitive consequence that is in direct opposition to the public interest (see load factor on the right hand scale).

**Figure 3**



## Implementation

As discussed during our meetings, we request the Commission give a sufficient window of time for the implementation of the finalizing directive once it is made. Entering new rates into our billing systems and testing the entire billing process will be required to ensure customer bills reflect the final directive. The importance of the billing process necessitates several steps prior to enabling the new rates to go live. Beyond this, the billing impacts to demand customers in particular require us to engage many of them to socialize them to the specifics of the order as it relates to their business. This goes beyond the public advertising of new rates and into one on one conversation with the appropriate parties within each large customer's business. With this in mind, we ask the Commission consider at least a full month's window and ideally 6 weeks from the final directive until new rates become effective.

## Summary

In summary, we thank the Commission for the opportunity to view the draft directive prior to finalizing it and the time spent meeting with us to enable our input to key aspects of the directive. For your consideration we have detailed our positions on:

- Comparison of NRR1 Report with BELCO Filing
- Rate Base and Net Income
- Proposed Return
- Credit card convenience fee
- Affiliate transactions
- Depreciation expenses
- Intercompany loans
- Captive insurance
- Discounts
- Expense management, benchmarking
- Collaboration on operational and capital expenditures
- Incentives on fuel purchases/usage
- Basis of returns
- Impairment risk
- Comparable utilities & cost of debt
- Customer rate impacts
- Implementation

We stand ready to continue to serve the public interest and trust the details we have provided will enable to Commission to produce a final directive that enables us to continue to do so.



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

REDACTED

Our ref: EC/BEL-BRDIR-1215

December 21, 2015

**By Mail and Email**

Bermuda Electric Light Co. Ltd.  
P.O. Box HM 1026  
Hamilton HM DX  
*Attn: Abayomi Carmichael, VP Risk Management & Analysis – Corporate Treasurer*

**Re: BELCO Base Rate Filing – June 3, 2015**

**1. BACKGROUND**

**Preamble**

This Directive letter is presented as the final decision of the Bermuda Energy Commission (“Commission”) in response to a base rate filing submitted by the Bermuda Electric Light Company Limited (BELCO). BELCO’s tariff filing was filed with the backdrop of Bermuda’s economy in recovery from a significant recession, the issuance of a new Government energy sector policy statement, and an impending regulatory regime transition.

In addition, in its directive letter date June 2, 2014 for the revised Facilities charges filed by BELCO, the Energy Commission requested that the company submit a base rate case by September 1, 2015. It is also noted that the approval of the 2010 rate filing was for a period ending December 31, 2013, however, BELCO submitted a notice to the Commission stating that they did intend to not make a new base rate case submission with the then approved rates and charges remaining in place until such time that an internal review and Integrated Resource Plan (IRP) development initiative completed, and the local economy had a chance to stabilize.

**Overview**

1. By way of a document dated and received June 3, 2015, BELCO submitted a tariff filing for new base rates in accordance with Section 12(1) of the Energy Act 2009 (“Energy Act”) for an unspecified period commencing September 1, 2015 to the Commission.

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)





**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

2. The Commission is of the view that the recent BELCO rate filing supersedes all previously approved rates granted by the Commission in February 2011, and corresponding support documentation that accompanied that rate case submission.
3. The Commission used as its guide the tariff filing process overview developed by the Commission and used for the assessment of the 2010 base rate case filing.
4. The Commission directed that BELCO place three advertisements in the Royal Gazette on June 19, 20, and 22 advising the public of the proposed increases, which included a full copy of its proposed tariff rate schedule and to invite public input to the Commission by the end of the business day July 10, 2015. It was determined by the Commission that the public required additional time for review and submission of comments with a two week extension granted with the deadline for submissions extended to July 24, 2015.
5. BELCO did not request that certain portions of the tariff filing to be considered proprietary and operationally sensitive, whereby the entire rate case submission was available for public disclosure.
6. The Commission received a number of submissions from the public and was also made aware of public comments posted to the BERNEWS and The Royal Gazette websites in response to these news website articles about the BELCO base rate tariff filing.
7. The Commission is grateful to all members of the public for their submissions and the Commission is particularly appreciative of the more substantive input from Green Rock, the Bermuda Hotel Association (BHA), BAE Ltd., BEESG/CP, BeSolar, and Consumer Affairs.
8. The Commission did request that the BHA submit more detailed information that supported its assertions regarding the financial impact the proposed base rate increases would have on its member organizations. This information was received and requested to be confidential in accordance with Section 26A of the Energy Act.
9. The Commission provided all public input, except the BHB confidential information, specifically relevant to the rate case filing to BELCO and received its rebuttal comments on October 9, 2015



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

10. All public submissions were reviewed, and the Commission especially noted comments that were relevant to the BELCO base rate case filing.
11. The Commission requested further data from BELCO June 25, 2015 by way of a letter, and has carefully considered this further data in conjunction with the original data provided in the tariff filing. BELCO submitted its responses to the question set on July 7, 2015.
12. The Commission is grateful to BELCO for making Messrs. Dr. Karl McDermott and Carl Peterson of NERA, BELCO's rate consultants, available to the Commission for face-to-face meetings and discussions.
13. The Commission realized that it was unable to fully deliberate the various issues that this tariff filing raised before the deadline imposed by the Energy Act of August 3, 2015 and therefore requested and received a 90 day extension until October 31, 2015 from the Minister. BELCO was advised of the extension.
14. In light of further information provided by BELCO during a meeting held on 16<sup>th</sup> September, 2015 where the impact of accounting treatments resulting from the company's transition to International Financial Reporting Standards (IFRS) was noted, and other matters that came to light during continued review and assessment, the Commission requested and received an additional 60 day extension until December 30, 2015 from the Minister.
15. The second extension allowed the Commission the opportunity to present a second question set to BELCO for response, and to ascertain if the proposed Return on Equity (ROE) rate base scenario was still appropriate given BELCO's transition to IFRS and the necessary accounting treatment adjustments required. This required a review of a potential shift to a Return on Assets (ROA) scenario.
16. The Commission did engage Messrs. Rajnish Barua and Ted Kury as consultants with a Terms of Reference as follows:

*The specific tasks of the consultants will, inter alia, comprise the following:*

- (i) *Review available information with as provided by the Bermuda Energy Commission (EC) comprising of:*



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

- a. *The BELCO rate case filing*
  - b. *The Bermuda Government Energy Policy Paper*
  - c. *The EC's Question Set and BELCO Responses*
  - d. *The public submissions in relation to the BELCO rate filing;*
- (ii) *Perform required analysis and assessments to ascertain the validity of the BELCO filing, and with a view to formulating and expert opinion;*
- (iii) *Make recommendations to the EC that will assist with the final determination of the filing decision, in particular considerations for incentive initiatives aligned with industry standards;*
17. The Commission wishes to thank BELCO's financial and administrative staff members who have responded in a timely manner to the Commission's queries and questions under the tight time constraints imposed by the Energy Act.
18. The Commission has taken careful note of BELCO's aging plant and the obvious need to replace some generating equipment.
19. The Commission considered the capital needs presented by BELCO but noted this was in the absence of the anticipated Integrated Resource Plan ("IRP").
20. The Commission noted the various projections for demand and energy usage provided by BELCO and observed that the projections going forward to 2020 showed no return to historical higher levels of peak demand or energy requirements for the period 2008-2010, but project only a very modest growth until 2020 from the current peak demand and energy requirements being experienced in 2014.
21. In accordance with the Energy Act Section 17(2) which states; 'In the exercise of its discretion under subsection (1), the Commission shall have regard to— (a) the cost to the specified business of the specified commodity; (b) the needs of the specified business for adequate working capital and reasonable reserves; (c) the need to afford investors a reasonable rate of return on their investment; (d) the public interest; and (e) any other matters which, to the Commission, appear relevant'. The Commission also considered:-
- a. The current economic climate the country is experiencing, where facets of the community are being economically challenged.



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

- b. The potential impact that any price increase for electrical energy consumption will have on the public as a whole, in that increases across all customer classes will result in increased costs to the individual consumer for both energy consumed and products and services purchased.
  - c. The reasonableness of the service provided by BELCO including, but not limited to, the value and quality of service.
  - d. The historical rate variations for the past 5 years in that rate increases were granted by the Commission for 2011, 2012, 2013 albeit BELCO did make submission for new rates post December 31, 2013.
  - e. BELCO's financial history for the past 5 years, where the company has maintained moderate profit margins and remained consistently solvent.
22. The Commission took note that the burden of proof to show that any variation in the price or charge of a specified commodity is just and reasonable is upon the specified business that seeks the variation.
23. The Commission notes that there remains an apparent lack of full understanding by some members of the public of the Fuel Adjustment Rate "FAR" as a mechanism to "smooth out" abrupt hikes in world oil prices to the Bermuda public.
24. The Commission noted some erroneous assertions from the public that BELCO profits from the Fuel Adjustment Rate system. The Commission however wishes to advise that the FAR system does not produce profit for BELCO for fuel costs net of a \$30 per barrel charge embedded in the approved energy consumption rates.

## **2. FINDINGS**

### **Public Comment**

25. The Commission concurs with observations that the declining energy usage rate tiers for demand customers is "discouraging energy conservation by the bigger consumers"<sup>1</sup> and is contrary to the intentions of the national energy policy and is the only rate class that still has a declining rate block. An inclining block structure would then "provide uni-

---

<sup>1</sup> BAE to EC 3 July 2015



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**  

---

**The Energy Commission**

formity across the rate classes and would provide an incentive for larger demand customers to use less energy”<sup>2</sup>

26. The Commission observes that the perception does exist that BELCO is providing Ascendant with “free” services including rent, utility bills, employee benefits, HR, IT, procurement etc., and that The Ascendant Group Limited (AGL) staff also enjoy BELCO’s staff discount benefits. Comments assert that any increase should not take place “before you dispose of these subsidiaries freeloading off BELCO”<sup>3</sup> and “Ascendant and BELCO have a large and costly executive and the Commission needs a full understanding of the cost of same that is being passed onto BELCO”<sup>4</sup>. The same respondent asks if the captive insurance company formed by BELCO is benefiting Ascendant at the expense of BELCO?
27. The Commission agrees that Performance Incentives will assist BELCO to strive for the same objectives that public policy may dictate and reward BELCO for that performance. Comments suggest it is time to “give BELCO a variety of metrics to strive for in order for any increase to be considered”<sup>5</sup>. Also “the EC consider a range of metrics to encourage efficiency”<sup>6</sup> and suggest # of employees per kwh generated, CHP implementation, smokestack emissions and dependable capacity vs built capacity as potential metrics”.

**Consultants’ Report**

28. Report Summary

**1.4 Summary of This Report (a) Rate Base**

- (i) [REDACTED]
- (ii) Rate base includes the value of freehold land rights. If these rights were conferred by the Crown and do not represent a capital investment on the part of the company’s investors, then this amount should be an offset to rate base and not included in the rate base.

**(b) Operating Expenditures and Depreciation**

---

<sup>2</sup> BESOLAR to EC 17 July 2015

<sup>3</sup> Response 2

<sup>4</sup> Response 3

<sup>5</sup> Response 4

<sup>6</sup> ibid



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

**The Energy Commission**

- . (i) [REDACTED]
- . (ii) [REDACTED]
- . (iii) [REDACTED]

**(c) Weighted Average Cost of Capital**

- . (i) The Return on Equity model presented over-estimates the return on equity capital necessary for BELCO to provide sustainable service.
- . (ii) A proper return on BELCO's capital is 6.65% plus a country risk premium of 1.05%.
- . (iii) BELCO should consider debt financing to better balance its capital structure.

**(d) Rate Design**

- . (i) The inclining block structure exacerbates BELCO's business risk and results in greater costs socialized across the island. BELCO should consider flattening the inclining block structure.
- . (ii) BELCO should recover all fuel costs through the fuel adjustment charge.

**(e) Policy Recommendations**

- . (i) BELCO should institute ring fencing of BELCO's assets and operations from Ascendant Group and require greater transparency regarding the allocation of shared costs.
- . (ii) The Energy Commission (and/or its successor agency) should amend its filing requirements for BELCO as well as other companies under the Commission's jurisdiction.

**Commission's Commentary**

**Demand Class & Rates**

29. The Commission accepts that the demand class rate blocks do not incentivize demand clients to reduce their energy consumption.
30. The Commission acknowledges that some high consumption customers might further consider alternate energy sources as their base prices continue to increase.
31. The Commission also understands that BELCO's Demand clients are also not likely in a position to withstand significant increases to the demand base rates. The Commission also fully understands that it is these very clients who can least withstand any interrup-



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

tion of service from BELCO.

Commercial Class & Rates

32. The Commission finds that the proposed tariff rates submitted by BELCO are extraordinarily higher for the small and larger Commercial users, in comparison with the other rate classes. The Commission fully understands the reasons why and the desire for each rate class to be treated the same. (See Direction below)

Fuel Adjustment Rate (FAR)

33. At present BELCO has little financial incentive to reduce the cost of fuels chased. The FAR mechanism transfers the over \$ 30 cost per barrel to its customers, regardless of the total fuel price paid.
34. Commission accepts the notion that the FAR mechanism should remain with the embedded \$ 30 per barrel as an incentive to BELCO to reduce consumption via efficiency whenever possible.
35. The Commission finds that it would be in both BELCO and the public interest to further increase the importance of the incentive to reduce the purchases of "non-green" barrels of fuel.
36. The Commission does not accept the fact that discounting to any rate class or to Ascendant and/or subsidiary firm and/or active or non-active staff members is in the public interest (whether FAR or Base Rate) without regulatory approval.
37. The Commission understands the reasoning behind Management's discounting of the facilities fee to Government's social assistance group but is not convinced this should be at the remaining rate-payers' expense.
38. The Commission reasons that it would be in the public interest to provide a performance incentive to BELCO to encourage lowest price fuel purchases such that fuel costs contained in the FAR are as low as possible. (See Direction below)
39. The Commission finds that the inclusion of the Commercial Renewable System Excess Energy Rate (CRSEER) in the FAR adjustment can lead to confusion and that the CRSEER and Net Metering payments that BELCO currently gives to home owners should be re-



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

imbursed in a FAR like mechanism (See Direction below)

Profitability

40. The Commission concurs that BELCO's profitability has been declining and that it is not in the public interest for this situation to be a long-term issue for BELCO. The Energy Act requires the Commission to specifically ensure that BELCO has adequate working capital and reasonable reserves, and the need to afford investors a reasonable rate of return on their investment.
41. The Commission fully understands the conundrum that in order to increase profits, BELCO must have higher sales and yet public policy is requiring BELCO to actually assist its customers to reduce sales through implementation of energy efficiency initiatives.
42. The Commission, after very careful consideration, finds that the current price cap regulation is no longer suitable for Bermuda. The Commission, after considering both Return on Assets (ROA) and Return on Equity (ROE) as suitable methods for determining rate cases, finds Return on Equity to be the appropriate method at this time. It was determined that the ROA scenario is not commonly used in the western region, there was a lack adequate accessible information on the methodology's mechanisms used, and that BELCO would require time to gear up for a shift to a new rate case scenario within the current time frame.
43. The Commission finds that a weakness in the ROE model could encourage the inflating of expenses (i.e. expenses not deemed to be absolutely critical for operations) if BELCO is allowed to utilize a Return on Equity methodology as opposed to the Price Cap approach.
44. The Commission concludes that due to the fragility of the Bermuda economy, which is showing signs of a recovery, granting BELCO the full ROE request of 10.15% is not in best interest of the public at this time.
45. The Commission has relied on the expert advice of the National Regulatory Research Institute to determine the correct Rate of Return. Its recommendation is for a 6.65 % ROE plus a 1.05 % Country risk assessment. It is the Commission's view that at this time the 7.7 % ROE is too high for Bermuda's current economic recovery status.





**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

46. The Commission finds that there could have been more prudent distribution of dividends by Ascendant during the “lean” years, and that with the potential results of the return on equity scenario for BELCO there may be a tendency by the Board of Directors to return the quantum of dividends back to prior historical levels by increasing its dividend payout to “make up” for the reduced levels of the previous periods at the expense of other BELCO initiatives. The Commission therefore encourages the BELCO and Ascendant Board of Directors to ensure that the other priorities of BELCO and the public interest are attended to first during the immediate term.
47. The Commission concurs that long-term rate stability is in both BELCO and the public’s best interest.

General

48. The Commission finds that there is a disincentive in place regarding the convenience fee relating to the use of credit cards for bill payments and that it would be in the public interest to discontinue the charging of this fee.
49. The Commission finds that the embedded staff and special hotel discounts are not in the public interest whereby the public pays for these discounts without regulatory approval. The Commission notes that the discounts are appreciated by BELCO staff members, and beneficial for the hoteliers during the tourism off-season.
50. The Commission finds that the Regulator should be more closely involved in the planned capital projects that the utility embarks upon during a rate period to ensure that there is alignment between public policy and the practical needs of rate-payers. It is recognized by the Commission that there may be Capital Projects that could benefit from changes in regulation that the Commission might favorably consider.
51. The Commission finds the perception remains that BELCO substantially subsidizes its parent entity. Shared services, loans and insurance risks are examples. Efforts to regularize cost/benefits would be encouraged to place BELCO in a more favorable position in this regard (see direction below).

**3. DIRECTION**

**Approved Rates**

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

The Energy Commission directs:-

52. The approved Return on Equity (ROE) shall be 6 % for fiscal year 2016 and 7 % for fiscal years 2017 and 2018 respectively subject to certain information provisions. These ROE rates shall be applied to the Equity of BELCO as of December 31, 2015, (under IFRS accounting standards) for the first year and to the Equity of BELCO, as at December 31, 2016 and December 31, 2017 for the subsequent rate periods. The base rate tariffs to support these returns shall be determined and submitted for approval within 15 days after the close of the fiscal year, and shall be subject to a review at the end of the 2<sup>nd</sup> quarter to determine if the base rates require adjustment to reach the targeted rate of return.
53. BELCO to commence meter readings starting on January 1, 2016 with rates as outlined in the approved schedule of rates to be determined in accordance with paragraph 57 (a).
54. The convenience fee charged to customers for the use of credit cards for bill payments be discontinued effective immediately.
55. All staff, hotel, special groups, or any other discounts applied to both the base and fuel adjustment rates (with the exception of the waiver of the facilities fee to the Bermuda Government's Social assistance program and the quick payment discounts) shall be the responsibility of BELCO, and that such discounting, if continued, shall be deducted from the allowed Rate of Return.
56. Return on Equity (ROE) Provisions & Conditions:
- a. In the event that the targeted ROE is not likely to be achieved BELCO shall submit by the end of the third quarter of the respective fiscal year at the earliest, financial performance data showing the extent of the ROE shortfall together with potential rate adjustments for the next year fiscal year that shall include provisions for making up of the ROE differential.
  - b. In the event that the targeted ROE is or likely to be exceeded for a given fiscal year, the excess differential shall be proportioned as follows:
    - i.  $ROE^A - ROE^T < 1\%$  - 100% to be designated for energy conservation & efficiency initiative.

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

- ii.  $ROE^A - ROE^T > 1\%$  but  $< 1.5\%$  - 50% to be designated for energy conservation & efficiency initiative, and 50% to customer cash back.
- iii.  $ROE^A - ROE^T > 1.5\%$  but  $< 2.0\%$  - 33% to be designated for energy conservation & efficiency initiative, 33% to customer cash back, and 33% to alternative energy initiative.
- iv.  $ROE^A - ROE^T > 2.0\%$  - 33% to be designated for energy conservation & efficiency initiative, 33% to customer cash back, and 33% to alternative energy initiative for the first 2% and the remainder to be used at BELCO's discretion.

Note:  $ROE^T$  = Return on Equity targeted;  $ROE^A$  = Return on Equity Actual

**Conditions Precedent Concurrent & Subsequent**

57. The Commission further directs that BELCO shall:

- a. Provide, by January 31, 2016, a new tariff proposal for all Rate Classes that adequately distributes the burden of the ROE increase to all rate payers, which shall include a new tariff tier structure for the Demand class with inclining rates for higher usage for approval by the Commission
- b. Devise in collaboration with the Commission an incentive initiative that will allow BELCO to retain a percentage split of the differential savings between actual cost and an indexed price resulting from prudent fuel purchases for the Commission's approval, by January 31, 2016. The percentage split shall be in addition to the allowed rate of return.
- c. Devise in collaboration with the Commission a formula to increase the incentive to purchase "green" fuels, in the absence of an IRP, defined as solar, wind, waste to energy, and/or bio thermal for the term of this rate period for implementation by March 31, 2016. The intent is to directly reward BELCO for increasing "green" fuel usage only, by way of purchasing or from self produced "green" fuels sources.
- d. Create a new over/under recovery account, similar to the Fuel Adjustment recovery account and to include a new separate item on BELCO's billing indicating this new adjustment. The CRSEER and the Net Metering payments that BELCO

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

currently makes to customers should be moved from the FAR account to the new account by February 28, 2016.

- e. Release an IRP ready for national debate by June 30, 2016.
- f. Cease any inter group or related party loans, unless authorized by the Regulator.
- g. Provide to the Commission all Ascendant Group shared services allocations and methodologies and shall eliminate any such expenses from the Allowed Rate of Return determination for any expenses that are not in accordance with the normal expense that BELCO would incur for those same services if sourced from the private sector or using its own internal resources.
- h. That all insurance coverage to be provided by Ascendant's insurance company, shall be subject to at least one other private sector quotation for the same risks coverage. Ascendant's insurance company coverage cost to match or be less than the comparable coverage cost.
- i. BELCO shall collaborate with the Commission to determine baseline operating expenses as a percentage of revenue for financial years 2013, 2014 and 2015. The "base line" expenses shall be used as a means to assess whether to disallow certain extraordinary expenses from inclusion in the determination of net income for calculation of the Allowed Rate of Return. As one example, the Commission will not allow extraordinary expenses relating to its Pension and Past Medical obligations to be included in calculation of the allowed Rate of Return.
- j. With immediate effect, not discount or give a non-approved rate to any of its customers without the prior written and express approval of the Commission.
- k. Submit to the Commission a Capital Projects and Expenditure plan for works in progress and to be completed during the rate period by January 31, 2016. Update reports to be submitted semi annually for the duration of the rate period.
- l. Develop and submit a national solar water heating deployment initiative plan for approval to the Commission by June 30, 2016.

Corner House, 4<sup>th</sup> Floor, 20 Parliament Street, Hamilton HM 12, Bermuda  
PO Box HM 101, Hamilton HM AX, Bermuda  
Phone: 1 (441) 202-4595 FAX: 1 (441) 292-1462 Email: [energy@gov.bm](mailto:energy@gov.bm) Website: [www.energy.gov.bm](http://www.energy.gov.bm)



**GOVERNMENT OF BERMUDA**  
**Ministry of Economic Development**

---

**The Energy Commission**

- m. Develop and submit to the Commission a plan to collaborate with Commercial and Demand class customers for an energy conservation and efficiency initiative by June 30, 2016.
- n. Develop and submit a working paper for the enhancement of the transmission and distribution system that shall include, but not limited to, facilitation of distributed generation and energy feed-in and intelligent technology integration. To be submitted by September 30, 2016.

**Final Remarks**

58. The Commission commends BELCO for its noteworthy level of cooperation and transparency during the entire review and assessment process. The demonstration of a willingness to work closely with the Commission is appreciated, and it is hoped that this spirit of collaboration continues during the regulatory regime transition.

Sincerely,

E. Michael Leverock  
Energy Commission Chairman