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SHARON M. SUZUKI  
President  
June 28, 2017

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PUBLIC UTILITIES  
COMMISSION

The Honorable Chair and Members  
of the Hawai'i Public Utilities Commission  
Kekuanao'a Building, First Floor  
465 South King Street  
Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Maui Electric Energy Cost Adjustment Factor for July 2017

Maui Electric Company, Limited's ("Maui Electric" or "Company") July 2017 Energy Cost Adjustment factor for our Maui Division is -5.635 cents per kilowatt-hour ("kWh"), a decrease of 0.446 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$156.51, a decrease of \$3.11 compared to rates effective June 1, 2017<sup>1</sup>. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor (-\$2.22), the decrease in the Public Benefits Fund Surcharge (-\$0.81), and the decrease in the Green Infrastructure Fee rate (-\$0.09), partially offset by the increase in the Purchased Power Adjustment Clause rate (+\$0.01).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 43.44 cents per million BTU to 1,171.24 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 0.186 cents per kWh to 19.301 cents per kWh.

The Energy Cost Adjustment factor for our Lāna'i Division for July 2017 is -11.181 cents per kWh, a decrease of 0.032 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$142.28, a decrease of \$0.86 compared to rates effective June 1, 2017. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor (-\$0.12) the decrease in the Public Benefits Fund Surcharge (-\$0.65), and the decrease in the Green Infrastructure Fee rate (-\$0.09) .

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 7.17 cents per million BTU to 1,675.11 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 27.000 cents per kWh.

The Energy Cost Adjustment factor for our Moloka'i Division for July 2017 is -8.482 cents per kWh, an increase of 0.034 cents per kWh from last month. A residential

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<sup>1</sup> The June 1, 2017 revised filing inadvertently showed \$159.61 as the 500 kWh residential bill instead of the correct value of \$159.62.

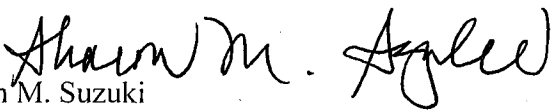
The Honorable Chair and Members  
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customer consuming 400 kWh of electricity will be paying \$138.83, a decrease of \$0.61 compared to rates effective June 1, 2017. The decrease in the typical residential bill is due to the decrease in the Public Benefits Fund Surcharge (-\$0.65) and the decrease in the Green Infrastructure Fee rate (-\$0.09), partly offset by the increase in the Energy Cost Adjustment factor (+\$0.13).

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 3.23 cents per million BTU to 1,447.68 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 21.80 cents per kWh.

The attached sheets set forth the fuel adjustment in cents per kWh for each rate schedule that is applicable for pro rata use beginning July 1, 2017.

Sincerely,

  
Sharon M. Suzuki  
President

Attachments

cc: Division of Consumer Advocacy

**MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION**

**ENERGY COST ADJUSTMENT FACTOR**

	EFFECTIVE DATES		<u>Change</u>
	<u>06-01-17</u>	<u>07-01-17</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,682.28	1,675.11	(7.17)
DG Energy, ¢/kWh	0.00	0.00	0.00
Purchased Energy, ¢/kWh	27.00	27.00	0.00
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	(11.149)	(11.181)	(0.032)
<u>Others - "G,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(11.149)	(11.181)	(0.032)
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	143.14	142.28	(0.86)
500 KWH Consumption, \$/Bill	178.03	176.97	(1.06)

Supersedes Sheet Effective:

June 1, 2017

MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION

ENERGY COST ADJUSTMENT (ECA) FILING

ENERGY COST ADJUSTMENT (ECA) FILING - July 1, 2017 (page 1 of 2)

Line

- 1 Effective Date July 1, 2017
- 2 Supercedes Factors of June 1, 2017

**GENERATION COMPONENT**

<b><u>CENTRAL STATION</u></b>						
FUEL PRICES, ¢/mmbtu						
3	Industrial					
				0.00		
4	Diesel - Miki Basin			1,654.86		
5	Diesel - Manele Bay			1,756.31		
6	Other			0.00		
BTU MIX, %						
7	Industrial			0.00%		
8	Diesel - Miki Basin			80.04%		
9	Diesel - Manele Bay			19.96%		
10	Other			0.00%		
				<u>100.00%</u>		
11	COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10))			1,675.11		
12	% Input to System kWh Mix			91.60%		
EFFICIENCY FACTOR, mmbtu/kWh						
	(A)	(B)	(C)	(D)		
			Percent of			
	<u>Fuel Type</u>	<u>Eff Factor mmbtu/kwh</u>	<u>Centrl Stn + Other</u>	<u>Weighted Eff Factor</u>		
13	Industrial	0.000000	0.00	0.000000		
14	Diesel	0.011151	100.00	0.011151		
15	Other	0.011151	0.00	0.000000		
	(Lines 13, 14, 15): Col(B) x Col(C) = Col(D)					
16	Weighted Efficiency Factor, mmbtu/kWh [lines 13(D) + 14(D) + 15(D)]			0.011151		
17	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))			17.11010		
18	BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu			2,647.15		
19	Base % Input to Sys kWh Mix			89.65%		
20	Efficiency Factor, mmbtu/kwh			0.011151		
21	WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))			26.46322		
22	COST LESS BASE (line(17 - 21))			(9.35312)		
23	Revenue Tax Req Multiplier			1.0975		
24	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))			-10.26505		
<b><u>DG ENERGY COMPONENT</u></b>						
25	COMPOSITE COST OF DG ENERGY, ¢/kWh			0.000		
26	% Input to System kWh Mix			0.00%		
27	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 25 x 26)			0.00000		
28	BASE DG ENERGY COMP COST			0.000		
29	Base % Input to System kWh Mix			0.00%		
30	WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 28 x 29)			0.00000		
31	Cost Less Base (Line 27 - 30)			0.00000		
32	Loss Factor			1.0510		
33	Revenue Tax Req Multiplier			1.0975		
34	DG FACTOR, ¢/kWh (Line 31 x 32 x 33)			0.00000		
SUMMARY OF TOTAL GENERATION FACTOR, ¢/kWh						
35	CNTRL STN + OTHER (line 24)			(10.26505)		
36	DG (line 34)			-		
37	TOTAL GENERATION FACTOR, ¢/kWh (lines 35 + 36)			(10.26505)		

MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION

ENERGY COST ADJUSTMENT (ECA) FILING

ENERGY COST ADJUSTMENT (ECA) FILING - July 1, 2017 (page 2 of 2)

Line

1 Effective Date July 1, 2017  
2 Supercedes Factors of June 1, 2017

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>	
	PURCHASED ENERGY PRICE, ¢/kWh	
38	LANAI SOLAR RESEARCH - On Peak	27.000
39	- Off Peak	27.000
40	Sch Q	0.000
	PURCHASED ENERGY KWH MIX, %	
41	LANAI SOLAR RESEARCH - On Peak	100.00%
42	- Off Peak	0.00%
43	Sch Q	0.00%
44	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (38 x 41) + (39 x 42) + (40 x 43))	27.000
45	% Input to System kWh Mix	8.40%
46	WEIGHTED COMP. PURCH. ENERGY COST, ¢/kWh (lines (44 x 45))	2.26800
47	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh	27.000
48	Base % Input to Sys kWh Mix	10.35
49	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (47 x 48))	2.79450
50	COST LESS BASE(lines (46 - 49))	(0.52650)
51	Loss Factor	1.051
52	Revenue Tax Req Multiplier	1.0975
53	PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	(0.60730)

Line      SYSTEM COMPOSITE CALCULATIONS

54 GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (10.87235)  
(lines (37 + 53))  
55 Adjustment, ¢/kWh 0.000  
56 ECA Reconciliation Adjustment (0.309)  
57 ECA FACTOR, ¢/kWh (11.181)  
(lines (54 + 55 + 56))

**Maui Electric Company, Ltd.  
Lanai Division**

**MONTH END FUEL OIL ESTIMATE**

<b><u>Miki Basin - ULSD</u></b>	<b><u>Barrels</u></b>	<b><u>MBTU</u></b>	<b><u>\$</u></b>
6/21/2017	3,916.62	22,442.24	375,019.56
Estimated Use	1,290.81	7,396.34	124,427.17
Estimated Received	1,571.43	9,004.29	147,403.91
Estimated Additional	-	-	-
Estimated End	<u>4,197.24</u>	<u>24,050.19</u>	<u>397,996.30</u>

Next Month's Combined Miki Expense (\$/bbl) = \$ 94.8233 /bbl

<b><u>Manele CHP</u></b>	<b><u>Barrels</u></b>	<b><u>MBTU</u></b>	<b><u>\$</u></b>
6/21/2017	182.36	1,044.92	21,094.86
Estimated Use	-	-	-
Estimated Received	-	-	-
Estimated Additional	<u>651.85</u>	<u>3,735.08</u>	<u>62,856.91</u>
Estimated End	<u>834.21</u>	<u>4,780.00</u>	<u>83,951.77</u>

Next Month's Manele Expense (\$/bbl) = \$ 100.6367 /bbl

**FUEL OIL INVENTORY PRICE USED FOR FILING**

<b><u>Type of Oil Burned</u></b>	<b><u>Price</u></b>	<b><u>Conversion Factor</u></b>	<b><u>Prices ¢/MBTU</u></b>
Diesel - Miki Basin	\$ 94.8233	5.73 BTU/BBL	1,654.86
Diesel - Manele Bay	\$ 100.6367	5.73 BTU/BBL	1,756.31

**MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION**

**Contract Prices effective June 1, 2017**

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
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**MIKI BASIN - ULTRA LOW SULFUR DIESEL (DYED)**

Tax *	1.6002	27.93
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

**MIKI BASIN - ULTRA LOW SULFUR DIESEL**

Tax *	11.8062	206.04
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

**MANELE BAY - ULTRA LOW SULFUR DIESEL**

Tax *	15.9196	277.83
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

\* Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST tax, Environmental Response Tax, Customs Duty Fee, Fed Oil Spill Recovery Fee, Federal Oil Spill Liability Tax, and Federal Excise Tax.

Note: Since these components are not accounted for separately in inventory, contract prices for the current month are being provided. Contract prices are considered accurate pending actual delivery of the fuel.

Reference: Decision and Order No. 16134, Docket No. 96-0040.

**MAUI ELECTRIC COMPANY, LTD.**  
**Lanai Division**  
**ECA Reconciliation Adjustment**

**July 2017**

1. Amount to be refunded	(\$19,800)
2. Monthly amount (1 / 3 X Line 1)	(\$6,600)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$7,244)
5. Estimated Sales (July 2017)	2,346 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.309 ¢/kwh



**MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION  
2017 Cumulative Reconciliation Balance**

<u>Month</u>	<u>(1)</u> YTD FOA Reconciliation	<u>Qtr</u>	<u>(2)</u> FOA Rec Adjust Variance	<u>(3)</u> FOA Rec Less Variance	<u>(4)</u> Try to Collect	<u>(5)</u> Actual Collect	<u>(6)</u> Month-end Cumulative Balance
December '16					(3,767)	(4,443)	1,351
January '17					(3,767)	(3,949)	(2,598)
February	17,200	(4)	(2,409)	19,609	(5,733)	(6,375)	10,636
March					(5,733)	(6,727)	3,909
April					(5,733)	(6,537)	(2,628)
May	19,800	(1)	(1,818)	21,618	(6,600)	(7,182)	11,808
June					(6,600)		
July					(6,600)		

## NOTES:

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 13)  
A positive number is an over-collection. A negative number is an under-collection.
- Col(2): FOA reconciliation adjustment variance accumulated during the last three months, starting with the fourth prior month; the difference between the estimated recorded sales used to derive the \$/kwh adjustment and the actual recorded sales.  
(Col(5) - Col(4))
- Col(3): FOA reconciliation generated in the current quarter. The YTD FOA reconciliation difference minus the adjustment variance. Col(1) - Col(2)
- Col(4): Amount that the FOA reconciliation adjustment is trying to collect. (Col(1) \* 1/3)
- Col(5): Actual collected amount. (recorded sales \* \$/kwh adjustment/1.09751)
- Col(6): Cumulative balance of the FOA reconciliation (Previous balance + Col(3) + Col(5))

**Maui Electric Company, Ltd.**  
**Lanai Division**  
**Calculations of the Average Residential Customer Bill**

	Rate			Charge (\$) at 400 Kwh		
		06-01-17	07-01-17	06-01-17	07-01-17	Difference
<b>Base Rates</b>	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	32.2668	32.2668	129.07	129.07	0.00
Non-fuel Fuel Energy Charge						
First 250 kWhr per month	¢/kWh	9.1240	9.1240	22.81	22.81	0.00
Next 500 kWhr per month	¢/kWh	11.6240	11.6240	17.44	17.44	0.00
Customer Charge	\$	8.50	8.50	8.50	8.50	0.00
<b>Total Base Charges</b>				<b>177.82</b>	<b>177.82</b>	<b>0.00</b>
<b>IRP Refund</b>	% on base	0.0000	0.0000	0.00	0.00	0.00
<b>Revenue Balancing Rate Adjustment</b>	¢/kWh	1.5654	1.5654	6.26	6.26	0.00
<b>PBF Surcharge</b>	¢/kWh	0.5865	0.4244	2.35	1.70	-0.65
<b>Renewable Energy Infrastructure Cost</b>						
<b>Recovery Provision</b>	¢/kWh	0.0098	0.0098	0.04	0.04	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Adjustment</b>	¢/kWh	-11.149	-11.181	-44.60	-44.72	-0.12
<b>Green Infrastructure Fee</b>	\$	1.27	1.18	1.27	1.18	-0.09
<b>Avg Residential Bill at 400 kwh</b>				<b>143.14</b>	<b>142.28</b>	
				Increase (Decrease -)		-0.86
				% Change		-0.60%

	Rate			Charge (\$) at 500 Kwh		
		06-01-17	07-01-17	06-01-17	07-01-17	Difference
<b>Base Rates</b>	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	32.2668	32.2668	161.33	161.33	0.00
Non-fuel Fuel Energy Charge						
First 250 kWhr per month	¢/kWh	9.1240	9.1240	22.81	22.81	0.00
Next 500 kWhr per month	¢/kWh	11.6240	11.6240	29.06	29.06	0.00
Customer Charge	\$	8.50	8.50	8.50	8.50	0.00
<b>Total Base Charges</b>				<b>221.70</b>	<b>221.70</b>	<b>0.00</b>
<b>IRP Refund</b>	% on base	0.0000	0.0000	0.00	0.00	0.00
<b>Revenue Balancing Rate Adjustment</b>	¢/kWh	1.5654	1.5654	7.83	7.83	0.00
<b>PBF Surcharge</b>	¢/kWh	0.5865	0.4244	2.93	2.12	-0.81
<b>Renewable Energy Infrastructure Cost</b>						
<b>Recovery Provision</b>	¢/kWh	0.0098	0.0098	0.05	0.05	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Adjustment</b>	¢/kWh	-11.149	-11.181	-55.75	-55.91	-0.16
<b>Green Infrastructure Fee</b>	\$	1.27	1.18	1.27	1.18	-0.09
<b>Avg Residential Bill at 500 kwh</b>				<b>178.03</b>	<b>176.97</b>	
				Increase (Decrease -)		-1.06
				% Change		-0.60%

**MAUI ELECTRIC COMPANY, LTD. -- Lanai Division  
FUEL OIL ADJUSTMENT FACTOR DATA**

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR</u> <u>CENTS / KWH</u>		<u>RESIDENTIAL BILL (\$)</u>
	<u>RESIDENTIAL &amp; COMMERCIAL</u>	<u>@ 400 KWH @ 500 KWH</u>	
January 1, 2015	-4.698	169.85	211.41
February 1, 2015	-7.361	159.20	198.09
March 1, 2015	-8.793	153.47	190.93
April 1, 2015	-6.831	160.22	199.37
May 1, 2015	-9.750	149.64	186.15
June 8, 2015	-8.842	153.16	190.56
July 1, 2015	-7.314	158.27	196.91
August 1, 2015	-8.457	153.70	191.19
September 1, 2015	-10.465	145.71	181.20
October 1, 2015	-12.259	138.53	172.23
November 1, 2015	-12.177	138.86	172.64
December 1, 2015	-11.304	142.35	177.01
January 1, 2016	-12.957	135.62	168.62
February 1, 2016	-14.236	130.51	162.23
March 1, 2016	-15.833	124.12	154.24
April 1, 2016	-15.204	125.90	156.47
May 1, 2016	-13.856	132.03	164.13
June 1, 2016	-12.617	136.22	169.37
July 1, 2016	-11.833	139.64	173.68
August 1, 2016	-12.201	138.17	171.84
September 1, 2016	-12.634	136.43	169.68
October 1, 2016	-12.723	136.08	169.23
November 1, 2016	-12.595	136.59	169.87
December 1, 2016	-11.160	142.33	177.05
January 1, 2017	-11.861	139.67	173.68
February 1, 2017	-11.218	142.24	176.90
March 1, 2017	-10.975	143.21	178.11
April 1, 2017	-10.875	143.06	177.92
May 1, 2017	-11.993	139.14	173.02
June 1, 2017	-11.149	143.14	178.03
July 1, 2017	-11.181	142.28	176.97

**MAUI ELECTRIC COMPANY, LTD. -- Lanai Division  
RESIDENTIAL SURCHARGE DATA**

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
01/01/11 - 12/31/11	RESID. PBF SURCHARGE ADJUSTMENT	0.5944 CENTS/KWH
<b>06/01/11</b>	<b>IRP RECOVERY REFUND</b>	<b>0.000 PERCENT ON BASE</b>
<b>08/01/13</b>	<b>FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2012 TEST YEAR)</b>	
04/01/15 - 04/30/15	SOLARSAVER ADJUSTMENT	-0.2744 CENTS/KWH
05/01/15 - 03/31/16	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/15 - 06/07/15	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.0000 CENTS/KWH
06/08/15 - 05/31/16	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.5987 CENTS/KWH
07/01/15 - 06/30/16	RESID. PBF SURCHARGE ADJUSTMENT	0.4749 CENTS/KWH
07/01/15 - 12/31/15	GREEN INFRASTRUCTURE FEE	1.42 DOLLARS/MONTH
08/17/15 - 02/29/16	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0103 CENTS/KWH
01/01/16 - 06/30/16	GREEN INFRASTRUCTURE FEE	1.3000 DOLLARS/MONTH
03/01/16 - 02/28/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0099 CENTS/KWH
04/01/16 - 04/30/16	SOLARSAVER ADJUSTMENT	-0.1835 CENTS/KWH
05/01/16 - 03/31/17	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/16 - 05/31/17	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.4082 CENTS/KWH
07/01/16 - 06/30/17	RESID. PBF SURCHARGE ADJUSTMENT	0.5865 CENTS/KWH
07/01/16 - 12/31/16	GREEN INFRASTRUCTURE FEE	1.13 DOLLARS/MONTH
01/01/17 - 06/30/17	GREEN INFRASTRUCTURE FEE	1.27 DOLLARS/MONTH
<b>03/01/17</b>	<b>RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION</b>	<b>0.0098 CENTS/KWH</b>
04/01/17 - 04/30/17	SOLARSAVER ADJUSTMENT	-0.1378 CENTS/KWH
<b>05/01/17</b>	<b>SOLARSAVER ADJUSTMENT</b>	<b>0.0000 CENTS/KWH</b>
<b>06/01/17</b>	<b>REVENUE BALANCING ACCOUNT RATE ADJUSTMENT</b>	<b>1.5654 CENTS/KWH</b>
<b>07/01/17</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.18 DOLLARS/MONTH</b>
<b>07/01/17</b>	<b>RESID. PBF SURCHARGE ADJUSTMENT</b>	<b>0.4244 CENTS/KWH</b>

~ Surcharges currently in effect are in bold.

~ Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount and minimum charge.