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PUBLIC UTILITIES

COMMISSION

SHARON M. SUZUKI President October 27, 2017

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 November 2017

Maui Electric Company, Limited's ("Maui Electric" or "Company") November 2017 Energy Cost Adjustment factor for our Maui Division is -5.305 cents per kilowatt-hour ("kWh"), an increase of 2.086 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$158.18, an increase of \$10.54 compared to rates effective October 1, 2017. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor (+\$10.43) and the increase in the Purchased Power Adjustment Clause rate (+\$0.11).

The Company's Maui Division fuel composite cost of generation, central station and other increased 208.68 cents per million BTU to 1,423.82 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.579 cents per kWh to 17.471 cents per kWh.

The Energy Cost Adjustment factor for our Lāna'i Division for November 2017 is -8.264 cents per kWh, an increase of 1.795 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$153.90, an increase of \$7.18 compared to rates effective October 1, 2017. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor.

The Company's Lāna'i Division fuel composite cost of generation, central station and other increased 218.45 cents per million BTU to 1,963.38 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 November 2017 is -4.912 cents per kWh, an increase of 4.181 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$153.07, an increase of \$16.72 compared to rates effective October 1, 2017. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor.

The Honorable Chair and Members of the Hawai'i Public Utilities Commission October 27, 2017 Page 2

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 347.32 cents per million BTU to 1,745.94 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 November 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>10-01-17</u>	<u>11-01-17</u>	<u>Change</u>
COMPOSITE COSTS Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh Purchased Energy, ¢/kWh	1,744.93 0.00 27.00	1,963.38 0.00 27.00	218.45 0.00 0.00
Residential Schedule "R"			
Energy Cost Adjustment, ¢/kWh	(10.059)	(8.264)	1.795
Others - "G,P,F"			
Energy Cost Adjustment, ¢/kWh	(10.059)	(8.264)	1.795
Residential Customer with			
400 KWH Consumption, \$/Bill	146.72	153.90	7.18
500 KWH Consumption, \$/Bill	182.53	191.51	8.98

Supersedes Sheet Effective: October 1, 2017

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

#### ENERGY COST ADJUSTMENT (ECA) FILING

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

Line
1 Effective Date November 1, 2017 2 Supercedes Factors of October 1, 2017

#### **GENERATION COMPONENT**

	OFNITRAL STATION		1	
	CENTRAL STATION			
2	FUEL PRICES, ¢/mmbtu Industrial	0.00		
-	Diesel - Miki Basin	1,972.65		
	Diesel - Manele Bay	1,930.66		
	Other	•		
О	Other	0.00		
	BTU MIX, %		DG ENERGY COMPONENT	
7	Industrial	0.00%	25 COMPOSITE COST OF DG	
8	Diesel - Miki Basin	77.92%	ENERGY, ¢/kWh	0.000
9	Diesel - Manele Bay	22.08%		
10	Other	0.00%	26 % Input to System kWh Mix	0.00%
		100.00%		
			27 WEIGHTED COMPOSITE DG ENERGY	
11	COMPOSITE COST OF GENERATION,		COST, ¢/kWh (Lines 25 x 26)	0.00000
	CENTRAL STATION + OTHER ¢/mmbtu	1,963.38		
	(Lines $(3 \times 7) + (4 \times 8) + (5 \times 9) + (6 \times 10)$ )			
12	% Input to System kWh Mix	90.45%	28 BASE DG ENERGY COMP COST	0.000
			29 Base % Input to System kWh Mix	0.00%
	EFFICIENCY FACTOR, mmbtu/kWh		30 WEIGHTED BASE DG ENERGY COST,	
	(A) (B) (C)	(D)	¢/kWh (Line 28 x 29)	0.00000
	Percent of			
	Eff Factor Centrl Stn +	Weighted	31 Cost Less Base (Line 27 - 30)	0.00000
	Fuel Type mmbtu/kwh Other	Eff Factor	32 Loss Factor	1.0510
13	Industrial 0.000000 0.00	0.000000	33 Revenue Tax Req Multiplier	1.0975
14	Diesel 0.011151 100.00	0.011151	34 DG FACTOR,	
15	Other 0.011151 0.00	0.000000	¢/kWh (Line 31 x 32 x 33)	0.00000
	(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 STAT	ION +		
	OTHER GEN COST, ¢/kWh	•		
	(lines (11 x 12 x 16))	19.80281		
18	BASE CENTRAL STATION + OTHER GEN			
	COST, ¢/mmbtu	2,647.15		
	Base % Input to Sys kWh Mix	89.65%		
	Efficiency Factor, mmbtu/kwh	0.011151		
21	WEIGHTED BASE CENTRAL STATION +			
	OTHER GENERATION COST ¢/kWh			
	(lines (18 x 19 x 20))	26.46322		
	00071500 0405 (** - ***	(0.055.::	SUMMARY OF	
	COST LESS BASE (line(17 - 21))	(6.66041)		
	Revenue Tax Req Multiplier	1.0975	` '	(7.30980)
24	CENTRAL STATION + OTHER GENERATI	_	36 DG (line 34)	-
	FACTOR, ¢/kWh (line (22 x 23))	-7.30980	37 TOTAL GENERATION FACTOR,	/7 0000C\
			¢/kWh (lines 35 + 36)	(7.30980)

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

#### **ENERGY COST ADJUSTMENT (ECA) FILING**

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

<u>Line</u>

1 Effective Date November 1, 2017 2 Supercedes Factors of October 1, 2017

<u>Line</u>	PURCHASED ENERGY COMPOR	<u>NENT</u>
38 39	PURCHASED ENERGY PRICE, ¢/kWh LANAI SOLAR RESEARCH - On Peak - Off Peak	27.000 27.000
40	Sch Q	0.000
41 42	PURCHASED ENERGY KWH MIX, % LANAI SOLAR RESEARCH - On Peak - Off Peak	100.00% 0.00%
43	Sch Q	0.00%
45	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (38 x 41) + (39 x 42) + (40 x 43)) % Input to System kWh Mix WEIGHTED COMP. PURCH. ENERGY COST, ¢/kWh (lines (44 x 45))	27.000 9.55% 2.57850
48	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh Base % Input to Sys kWh Mix WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (47 x 48))	27.000 10.35 2.79450
51 52	COST LESS BASE(lines (46 - 49)) Loss Factor Revenue Tax Req Multiplier PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	(0.21600) 1.051 1.0975 (0.24915)

#### <u>Line</u> <u>SYSTEM COMPOSITE CALCULATIONS</u>

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

#### MONTH END FUEL OIL ESTIMATE

Miki Basin - ULSD	Barrels	MBTU	\$
10/20/2017	2,179.31	12,487.39	237,716.78
Estimated Use	1,562.17	8,951.23	152,065.36
Estimated Received	833.33	4,774.98	90,276.22
Estimated Additional	1,684.79_	9,653.86	178,460.29
Estimated End	3,135.26	17,965.00	354,387.93

Next Month's Combined Miki Expense (\$/bbl) = \$ 113.0330 /bbl

Manele CHP	Barrels	MBTU	\$
10/20/2017	127.86	732.64	11,828.47
Estimated Use	15.17	86.92	1,715.68
Estimated Received	-	-	-
Estimated Additional	775.62_	4,444.28	88,157.63
Estimated End	888.31	5,090.00	98,270.41

Next Month's Manele Expense (\$/bbl) = \$ 110.6267 /bbl

#### **FUEL OIL INVENTORY PRICE USED FOR FILING**

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel - Miki Basin	\$ 113.0330	5.73 BTU/BBL	1,972.65
Diesel - Manele Bay	\$ 110.6267	5.73 BTU/BBL	1,930.66

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

#### **Contract Prices effective October 1, 2017**

TYPE OF OIL BURNED	\$/BBL	¢/MBTU
MIKI BASIN - ULTRA LOV	W SULFUR DIESE	EL (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 LOV		
Tax *	11.8062	206.04
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
MANELE DAY III TOAL		051
MANELE BAY - ULTRA L		
Tax *	16.3882	286.01
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

<sup>\*</sup> 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

#### November 2017

Amount to be refunded	(\$44,100)
2. Monthly amount (1/3 X Line	(\$14,700)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$16,133)
5. Estimated Sales (November 2	2,289 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.705 ¢/kwh

# MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION 2017 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY (Thousand \$)

	(Housand φ)			Basis for Recon	
<u>Line</u>		Without Deadband 3rd Quarter <u>YTD Total</u>	collection by company*	With Deadband 3rd Quarter <u>YTD Total</u>	collection by <u>company*</u>
1 2 3	ACTUAL COSTS: Generation Distributed Generation Purch Power	\$3,671.3 \$0.0 \$466.3		\$3,671.3 \$0.0 \$466.3	
4	TOTAL	\$4,137.6		\$4,137.6	
5 6 7	FUEL FILING COST Generation Distributed Generation Purch Power	\$3,833.3 \$0.0 \$466.3		\$3,816.1 \$0.0 \$466.3	
8	TOTAL	\$4,299.6		\$4,282.5	
9 10 11	BASE FUEL COST Generation Distributed Generation Purch Power	\$6,134.3 \$0.0 \$487.1		\$6,134.3 \$0.0 \$487.1	
12	TOTAL	\$6,621.4		\$6,621.4	
13	FUEL-BASE COST (Line 8-12)	-\$2,321.7		-\$2,338.9	
14 15	ACTUAL FOA LESS TAX FOA reconciliation adj for prior year	-\$2,313.7 -\$20.9		-\$2,313.7 -\$20.9	
16	ADJUSTED FOA LESS TAX	-\$2,292.8		-\$2,292.8	
17	FOA-(FUEL-BASE) (Line 16-13)	\$28.9	Over	\$46.1	Over
18 19 20	ADJUSTMENTS Current year FOA accrual reversal Other prior year FOA Other	\$23.6 \$0.0 \$0.0		\$23.6 \$0.0 \$0.0	
21	3rd QUARTER FOA RECONCILIATION (Lines 17+18+19+20)	\$52.5	Over	\$69.7	Over
22	2nd QUARTERLY YTD 2017 FOA Reconciliation Recognized in	FOA Rates		\$25.6	Over
23	FOA Reconciliation to be Refunded November 2017 to January	2018 (Line 22- 21)		-\$44.1	Refunded

<sup>\*</sup> Over means an over-collection by the company. Under means an under-collection by the company.

# MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION DEADBAND CALCULATION

Determination of Efficiency Factor to use for Cost-Recovery Purposes Period: January 1, 2017 through September 30, 2017

	Notes <u></u>	<u>lan 1 - Sep 30</u>
<u>Diesel</u> Diesel Efficiency Factor (TY2009), BTU/kWh Diesel Deadband Definition, +/- BTU/kWh	f d	11,151 <b>50</b>
Diesel Portion of Recorded Sales, MWh Diesel Consumption (Recorded), MMBTU Diesel Efficiency Factor (Recorded), BTU/kWh	a b c = (b/a)*1000	20,865 222,825 10,679
Lower limit of Diesel Deadband, BTU/kWh Higher limit of Diesel Deadband, BTU/kWh	e = f-d g = f+d	11,101 11,201
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	11,101

# MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST, WITHOUT and WITH DEADBAND 2017

	Without Deadband	With Deadband - AS FILED
	<u>Jan 1 - Sep 30</u>	<u>Jan 1 - Sep 30</u>
Diesel Portion of Recorded Sales, MWH	20,865	20,865
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.011151	0.011101
Mmbtu adjusted for Sales Efficiency Factor	232,663	231,620
\$/mmbtu	<u>\$16.4758</u>	<u>\$16.4758</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$3,833.3	\$3,816.1
TOTAL GENERATION FUEL FILING COST, \$000s	\$3,833.3	\$3,816.1
TOTAL GENERATION BASE FUEL COST , \$000s YTD	\$6,134.3	\$6,134.3
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$3,833.3	\$3,816.1
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$6,134.3	\$6,134.3

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

	(1)	(2)	(3)	(4)	(5)	(6)
	VTD FOA	FOA Red		Tructo	A atual	Month-end
Month	YTD FOA Reconciliation C	Adjust Otr Variance	Less <u>Variance</u>	Try to <u>Collect</u>	Actual <u>Collect</u>	Cumulative <u>Balance</u>
<u>IVIOTILIT</u>	Reconciliation C	<u>vanance</u>	<u>variance</u>	Collect	Collect	<u>Dalarice</u>
December '16	3			(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)	(7,559)	4,249
July				(6,600)	(7,242)	(2,993)
August	5,800 (	2) (2,345)	8,145	(1,933)	(2,207)	2,945
September				(1,933)	(2,170)	775
October				(1,933)		
November	44,100	(1,153)	45,253	(14,700)		
NOTES:						
NOTES.						
Col(1):	Quarterly FOA r					
0.1(0)	A positive numb			-		
Col(2):	FOA reconciliati	•			•	•
	starting with the sales used to de	•				
	(Col(5) - Col(4))		m aujustinent a	and the actual	recorded said	55.
Col(3):	` ',		d in the current	guarter. The	YTD FOA red	conciliation
Col(3): FOA reconciliation generated in the current quarter. The YTD FOA reconciliation difference minus the adjustment variance. Col(1) - Col(2)						
Col(4):	•					(1) * 1/3)
Col(5):						,
Col(6):	Cumulative bala	ince of the F	OA reconciliation	on (Previous b	alance + Col	(3) + Col(5))

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

Rate			
	10-01-17	11-01-17	
effective date:	08/01/13	08/01/13	
¢/kWh	32.2668	32.2668	
¢/kWh	9.1240	9.1240	
¢/kWh	11.6240	11.6240	
\$	8.50	8.50	
% on base	0.0000	0.0000	
¢/kWh	1.5654	1.5654	
¢/kWh	0.4244	0.4244	
¢/kWh	0.0000	0.0000	
¢/kWh	0.0000	0.0000	
¢/kWh	-10.059	-8.264	
\$	1.18	1.18	

	e (\$) at 4		
10-01-17	11-01-17   Differenc		
129.07	129.07	0.00	
22.81	22.81	0.00	
17.44	17.44	0.00	
8.50	8.50	0.00	
177.82	177.82	0.00	
0.00	0.00	0.00	
6.26	6.26	0.00	
1.70	1.70	0.00	
0.00 0.00	0.00 0.00	0.00 0.00	
-40.24	-33.06	7.18	
1.18	1.18	0.00	
146.72	153.90		

Increase (Decrease -) % Change

7.18 4.89%

Base Rates Base Fuel/Energy Charge Non-fuel Fuel Energy Charge First 250 kWhr per month Next 500 kWhr per month Customer Charge Total Base Charges
IRP Refund
Revenue Balancing Rate Adjustment PBF Surcharge Renewable Energy Infrastructure Cost Recovery Provision SolarSaver Adjustment
Energy Cost Adjustment Green Infrastructure Fee
Avg Residential Bill at 500 kwh

Rate			
10-01-17	11-01-17		
08/01/13	08/01/13		
32.2668	32.2668		
9.1240	9.1240		
11.6240	11.6240		
8.50	8.50		
0.0000	0.0000		
1.5654	1.5654		
0.4244	0.4244		
0.0000	0.0000		
0.0000	0.0000		
-10.059	-8.264		
1.18	1.18		
	08/01/13 32.2668 9.1240 11.6240 8.50 0.0000 1.5654 0.4244 0.0000 0.0000		

Charge (\$) at 500 Kwh			
10-01-17	11-01-17   Difference		
161.33	161.33	0.00	
22.81	22.81	0.00	
29.06	29.06	0.00	
8.50	8.50	0.00	
221.70	221.70	0.00	
0.00	0.00	0.00	
	<b>-</b> 00	0.00	
7.83	7.83	0.00	
2.12	2.12	0.00	
0.00	0.00	0.00	
0.00	0.00	0.00	
0.00	0.00	0.00	
-50.30	-41.32	8.98	
1.18	1.18	0.00	
	1110	0.00	
182.53	191 51		

Increase (Decrease -) % Change

8.98
4.92%

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

FUEL FACTOR CENTS / KWH

	CENIS/KWH	DECIDENT	IAI DIII (A)
	RESIDENTIAL &		IAL BILL (\$)
EFFECTIVE DATE	COMMERCIAL	<u>@ 400 KWH</u>	<u>@ 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	172.23
December 1, 2015	-12.177	142.35	177.04
December 1, 2013	-11.304	142.33	177.01
January 1, 2016	10 0E7	125 62	160.60
January 1, 2016 February 1, 2016	-12.957 -14.236	135.62 130.51	168.62 162.23
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
August 1, 2017	-11.659	140.36	174.58
September 1, 2017 October 1, 2017	-10.389 -10.059	145.40 146.72	180.88 182.53
November 1, 2017	-10.059 -8.264	153.90	191.51
INUVEITIDEL 1, ZUIT	<del>-</del> 0.204	155.90	181.31

#### 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
06/01/11	IRP RECOVERY REFUND	0.000	PERCENT ON BASE
08/01/13	FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2	012 TEST Y	EAR)
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	0.0103	CENTS/KWH
	RECOVERY PROVISION		
01/01/16 - 06/30/16	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
03/01/16 - 02/28/17	RENEWABLE ENERGY INFRASTRUCTURE COST	0.0099	CENTS/KWH
	RECOVERY PROVISION		
04/01/16 - 04/30/16	SOLARSAVER ADJUSTMENT		CENTS/KWH
05/01/16 - 03/31/17	SOLARSAVER ADJUSTMENT		CENTS/KWH
06/01/16 - 05/31/17	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
07/01/16 - 06/30/17	RESID. PBF SURCHARGE ADJUSTMENT		CENTS/KWH
07/01/16 - 12/31/16	GREEN INFRASTRUCTURE FEE	_	DOLLARS/MONTH
01/01/17 - 06/30/17	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
03/01/17	RENEWABLE ENERGY INFRASTRUCTURE COST	0.0098	CENTS/KWH
04/04/47 04/00/47	RECOVERY PROVISION	0.4070	OENTO//ANIII
04/01/17 - 04/30/17	SOLARSAVER ADJUSTMENT		CENTS/KWH
05/01/17	SOLARSAVER ADJUSTMENT		CENTS/KWH
06/01/17	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
07/01/17	GREEN INFRASTRUCTURE FEE	_	DOLLARS/MONTH
07/01/17	RESID. PBF SURCHARGE ADJUSTMENT	0.4244	CENTS/KWH

Surcharges currently in effect are in bold.
 Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount and minimum charge.