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SHARON M. SUZUKI
President

October 27, 2017

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 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
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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.
MAUI DIVISION**

ENERGY COST ADJUSTMENT FACTOR

	EFFECTIVE DATES		<u>Change</u>
	<u>10/01/2017</u>	<u>11/01/2017</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,215.14	1,423.82	208.68
DG Energy, ¢/kWh	0.00	0.00	0.000
Purchased Energy, ¢/kWh	18.050	17.471	(0.579)
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	(7.391)	(5.305)	2.086
<u>Others - "G,H,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(7.391)	(5.305)	2.086
<u>Residential Customer with</u>			
500 KWH Consumption, \$/Bill	147.64	158.18	10.54
600 KWH Consumption, \$/Bill	176.80	189.46	12.66

Supersedes Sheet Effective:

October 1, 2017

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
ENERGY COST ADJUSTMENT (ECA) FILING

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

<u>Line</u>		
1	Effective Date	November 1, 2017
2	Supercedes Factors of	October 1, 2017

GENERATION COMPONENT

<u>CENTRAL STATION</u>							
FUEL PRICES, ¢/mmbtu							
3	Industrial			871.43			
4	Diesel			1,637.36			
5	Other						
BTU MIX, %							
6	Industrial			27.88%			
7	Diesel			72.12%			
8	Other			0.00%			
				100.00%			
9	COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 6) + (4 x 7) + (5 x 8))			1,423.82			
10	% Input to System kWh Mix			72.75%			
EFFICIENCY FACTOR, mmbtu/kWh							
	(A)	(B)	(C)	(D)			
			Percent of				
			Centrl Stn +				
			Other				
	<u>Fuel Type</u>	<u>Eff Factor</u>	<u>Centrl Stn +</u>	<u>Weighted</u>			
		<u>mmbtu/kwh</u>	<u>Other</u>	<u>Eff Factor</u>			
11	Industrial	0.015126	19.65	0.002972			
12	Diesel	0.010026	80.35	0.008056			
13	Other	0.010951	0.00	-			
	(Lines 11, 12, 13): Col(B) x Col(C) = Col(D)						
14	Weighted Efficiency Factor, mmbtu/kWh [(lines 11(D) + 12(D) + 13(D))]			0.011028			
15	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh (lines (9 x 10 x 14))			11.42312			
16	BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu			2,019.39			
17	Base % Input to Sys kWh Mix			78.09			
18	Efficiency Factor, mmbtu/kwh			0.010951			
19	WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (16 x 17 x 18))			17.26909			
20	COST LESS BASE (line(15 - 19))			(5.84597)			
21	Revenue Tax Req Multiplier			1.0975			
22	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))			(6.41595)			
					<u>DG ENERGY COMPONENT</u>		
					23	COMPOSITE COST OF DG ENERGY, ¢/kWh	0.000
					24	% Input to System kWh Mix	0.00%
					25	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 23 x 24)	-
					26	BASE DG ENERGY COMP COST	0.000
					27	Base % Input to System kWh Mix	0.01
					28	WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 26 x 27)	0.00000
					29	Cost Less Base (Line 25 - 28)	0.00000
					30	Loss Factor	1.063
					31	Revenue Tax Req Multiplier	1.0975
					32	DG FACTOR, ¢/kWh (Line 29 x 30 x 31)	0.00000
					SUMMARY OF		
					TOTAL GENERATION FACTOR, ¢/kWh		
					33	CNTRL STN + OTHER (line 22)	(6.41595)
					34	DG (line 32)	-
					35	TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)	(6.41595)

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
ENERGY COST ADJUSTMENT (ECA) FILING

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

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

Line	<u>PURCHASED ENERGY COMPONENT</u>		
	PURCHASED ENERGY PRICE, ¢/kWh		
36			
37			
38			
39			
40	Kaheawa Wind I	- On Peak	13.572
41		- Off Peak	12.749
42	Kaheawa Wind II		19.245
43	Sempra Wind		21.546
44	Hydro & Other	- On Peak	15.047
45		- Off Peak	14.154
46	FIT		20.397
	PURCHASED ENERGY KWH MIX, %		
47			
48			
49			
50			
51	Kaheawa Wind I	- On Peak	22.82%
52		- Off Peak	17.22%
53	Kaheawa Wind II	- On Peak	30.10%
54	Sempra Wind	- On Peak	27.31%
55	Hydro & Other	- On Peak	0.19%
56		- Off Peak	0.14%
57	FIT		2.22%
			<u>100.00%</u>
58	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh		17.471
	(Lines (36 x 49) + (37 x 50) + (38 x 51) + (39 x 52) + (40 x 53) + (41 x 54) + (42 x 55) + (43 x 54) + (44 x 55) + (45 x 56) + (46 x 57))		
59	% Input to System kWh Mix		27.25%
60	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (58 x 59))		4.76085
61	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh		15.847
62	Base % Input to Sys kWh Mix		21.90
63	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (61 x 62))		3.47049
64	COST LESS BASE (lines (60 - 63))		1.29036
65	Loss Factor		1.063
66	Revenue Tax Req Multiplier		1.0975
67	PURCHASED ENERGY FACTOR, ¢/kWh (lines (64 x 65 x 66))		1.50539

Line	<u>SYSTEM COMPOSITE CALCULATIONS</u>	
68	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 67))	(4.91056)
69	ADJUSTMENT, ¢/kWh	
70	ECA Reconciliation Adjustment	(0.394)
71	ECA FACTOR, ¢/kWh (lines (68 + 69 + 70))	(5.305)

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

Fuel Oil Inventory Prices for November 2017

<u>TYPE OF OIL BURNED</u>	<u>PRICES \$/BBL</u>	<u>CONVERSION FACTORS</u>		<u>PRICES ¢/MBTU</u>
INDUSTRIAL	54.8998	6.30	MBTU/BBL	871.43
DIESEL/ULSD	95.8817	5.86	MBTU/BBL	1,637.36

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

Month End Fuel Oil Estimate

<u>Kahului</u>	<u>Barrels</u>	<u>MBTU</u>	<u>(\$)</u>
10/20/2017	30,440.14	191,184.84	1,628,838.80
Estimated Use	11,164.21	70,227.39	556,379.28
Estimated Received	6,000.00	37,800.00	331,538.87
Estimated Additional	<u>6,661.52</u>	<u>41,967.55</u>	<u>349,360.09</u>
Estimated End	<u><u>31,937.45</u></u>	<u><u>200,725.00</u></u>	<u><u>1,753,358.48</u></u>

Next month's expense (\$/bbl) = \$ 54.8998

<u>Maalaea</u>	<u>Barrels</u>	<u>MBTU</u>	<u>(\$)</u>
10/20/2017	94,656.01	554,294.20	8,785,922.98
Estimated Use	30,954.60	181,266.44	2,464,460.14
Estimated Received	6,500.00	38,063.22	588,187.02
Estimated Additional	<u>21,270.56</u>	<u>124,645.51</u>	<u>1,860,833.67</u>
Estimated End	<u><u>91,471.96</u></u>	<u><u>535,736.49</u></u>	<u><u>8,770,483.53</u></u>

Next month's expense (\$/bbl) = \$ 95.8817

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

Contract Prices effective October 1, 2017

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
INDUSTRIAL		
Tax *	3.3535	53.23
Ocean Transportation	1.6828	26.11
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.3400	4.60
DIESEL		
Tax *	5.4052	92.24
Ocean Transportation	1.6828	28.07
Land Transportation	0.8817	15.05
Storage	3.0781	52.53
Wharfage	0.3400	4.95

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

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.
MAUI DIVISION**

PURCHASED POWER PRICE CALCULATIONS

KAHEAWA WIND POWER ENERGY RATE:

Kaheawa Wind - On Peak, ¢/kWh	13.572
- Off Peak, ¢/kWh	12.749

Kaheawa Wind Energy Rate Calculations:

Percent of Energy Payment Rate:

Fixed energy payment rate	70%
Flat payment rate	<u>30%</u>
	<u>100%</u>

Fixed Energy Payment Rate (Table D-1) for 2017:

On-peak,	9.960
Off-peak, ¢/kwh	8.784

Flat Payment Rate Per Docket No. 2011-0192 D&O 30331:

On-peak, ¢/kwh	22.000
Off-peak, ¢/kwh	22.000

On-Peak Rate = $9.960 \times 0.7 + 22.000 \times 0.3 = 13.572$

Off-Peak Rate = $8.784 \text{ ¢/kwh} \times 0.7 + 22.000 \text{ ¢/kwh} \times 0.3 = 12.7488 \text{ ¢/kwh}$

MAUI ELECTRIC COMPANY, LTD.
Maui Division
ECA Reconciliation Adjustment
November 2017

1. Amount to be Refunded	(\$969,500)
2. Monthly amount (1 / 3 X Line 1)	(\$323,167)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$354,680)
5. Estimated Sales (November 2017)	90,006 mwh
6. Adjustment (Line 4 ÷ Line 5)	(0.394) ¢/kwh

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

<u>Line</u>	W/O Deadband 3rd Quarter <u>YTD Total</u>	collection by company*	Basis for Recon With Deadband 3rd Quarter <u>YTD Total</u>	collection by company*
ACTUAL COSTS:				
1	Generation	\$75,289.0	\$75,289.0	
2	Distributed Generation	\$18.2	\$18.2	
3	Purch Power	<u>\$36,284.4</u>	<u>\$36,284.4</u>	
4	TOTAL	\$111,591.6	\$111,591.6	
FUEL FILING COST				
5	Generation	\$75,352.2	\$74,945.8	
6	Distributed Generation	\$0.0	\$0.0	
7	Purch Power	<u>\$36,284.4</u>	<u>\$36,284.4</u>	
8	TOTAL	\$111,636.6	\$111,230.2	
BASE FUEL COST				
9	Generation	\$125,093.2	\$125,093.2	
10	Distributed Generation	\$17.5	\$17.5	
11	Purch Power	<u>\$37,961.6</u>	<u>\$37,961.6</u>	
12	TOTAL	\$163,072.2	\$163,072.2	
13	FUEL-BASE COST (Line 8-12)	-\$51,435.6	-\$51,842.1	
14	ACTUAL FOA LESS TAX	-\$51,720.9	-\$51,720.9	
15	FOA reconciliation adj for prior year	<u>-\$1,408.1</u>	<u>-\$1,408.1</u>	
16	ADJUSTED FOA LESS TAX	-\$50,312.8	-\$50,312.8	
17	FOA-(FUEL-BASE) (Line 16-13)	\$1,122.8 Over	\$1,529.3 Over	
ADJUSTMENTS				
18	Current year FOA accrual reversal	\$1,334.4	\$1,334.4	
19	Other prior year FOA	\$0.0	\$0.0	
20	Other	<u>\$0.0</u>	<u>\$0.0</u>	
21	3rd QUARTER FOA RECONCILIATION (Lines 17+18+19+20)	\$2,457.2 Over	\$2,863.7 Over	
22	2nd QUARTERLY YTD 2017 FOA Reconciliation Recognized in FOA Rates		<u>\$1,894.2</u> Over	
23	FOA Reconciliation to be Refunded November 2017 to January 2018 (Line 22- 21)		<u><u>-\$969.5</u></u> To Be Refunded	

* Over means an over-collection by the company.
Under means an under-collection by the company.

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

Determination of Efficiency Factor to use for Cost-Recovery Purposes

Period: January 1, 2017 through September 30, 2017

	<u>Notes</u>	<u>Jan 1 - Sep 30</u>
<u>Industrial Fuel Oil</u>		
Industrial Fuel Oil Efficiency Factor (TY2012), BTU/kWh	f	15,126
Industrial Fuel Oil Deadband Definition, +/- BTU/kWh	d	100
Industrial Fuel Oil Portion of Recorded Sales, MWh	a	108,930
Industrial Fuel Oil Consumption (Recorded), MMBTU	b	1,703,497
Industrial Fuel Oil Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	15,638
Lower limit of Industrial Fuel Oil Deadband, BTU/kWh	e = f-d	15,026
Higher limit of Industrial Fuel Oil Deadband, BTU/kWh	g = f+d	15,226
Industrial Fuel Oil Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	15,226
<u>Diesel</u>		
Diesel Efficiency Factor (TY2012), BTU/kWh	f	10,026
Diesel Deadband Definition, +/- BTU/kWh	d	100
Diesel Portion of Recorded Sales, MWh	a	487,940
Diesel Consumption (Recorded), MMBTU	b	4,854,015
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	9,948
Lower limit of Diesel Deadband, BTU/kWh	e = f-d	9,926
Higher limit of Diesel Deadband, BTU/kWh	g = f+d	10,126
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	9,948

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

	<u>Without Deadband</u> <u>Jan 1 - Sep 30</u>	<u>With Deadband - AS FILED</u> <u>Jan 1 - Sep 30</u>
<u>INDUSTRIAL</u>		
Industrial Portion of Recorded Sales , MWH	108,930	108,930
Industrial Sales Efficiency Factor (mmbtu/kwh)	0.015126	0.015226
Mmbtu adjusted for Sales Efficiency Factor	1,647,674	1,658,567
\$/mmbtu	<u>\$7,5820</u>	<u>\$7,5820</u>
TOTAL Industrial \$000s TO BE RECOVERED	\$12,492.7	\$12,575.3
<u>DIESEL FUEL FILING COST</u>		
Diesel Portion of Recorded Sales, MWH	487,940	487,940
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.010026	0.009948
Mmbtu adjusted for Sales Efficiency Factor	4,892,091	4,854,032
\$/mmbtu	<u>\$12,8492</u>	<u>\$12,8492</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$62,859.6	\$62,370.5
TOTAL GENERATION FUEL FILING COST, \$000s	\$75,352.2	\$74,945.8
TOTAL GENERATION BASE FUEL COST , \$000s YTD	\$125,093.2	\$125,093.2
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$75,352.2	\$74,945.8
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$125,093.2	\$125,093.2

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

<u>Month</u>	(1) <u>YTD FOA Reconciliation</u>	<u>Qtr</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</u>
December '16					(340,033)	(338,730)	359,058
January '17					(340,033)	(313,303)	45,755
February	1,068,200	(4)	19,017	1,049,183	(356,067)	(333,496)	761,442
March					(356,067)	(353,056)	408,386
April					(356,067)	(362,325)	46,061
May	214,700	(1)	52,312	162,388	(71,567)	(71,347)	137,102
June					(71,567)	(72,876)	64,226
July					(71,567)	(74,042)	(9,816)
August	1,679,500	(2)	(7,347)	1,686,847	(559,833)	(569,839)	1,107,192
September					(559,833)	(567,239)	539,953
October					(559,833)		
November	969,500	(3)	(19,887)	989,387	(323,167)		

NOTES:

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 5)
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.
Maui Division
Calculations of the Average Residential Customer Bill**

	Rate		Charge (\$) at 500 Kwh			
	10/01/17	11/01/17	10/01/17	11/01/17	Difference	
Base Rates	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	23.0016	23.0016	115.01	115.01	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	9.3393	9.3393	32.69	32.69	0.00
Next 850 kWhr per month	¢/kWh	11.5993	11.5993	17.40	17.40	0.00
Customer Charge	\$	8.50	8.50	8.50	8.50	0.00
Total Base Charges				173.60	173.60	0.00
RBA Rate Adjustment	¢/kWh	1.5654	1.5654	7.83	7.83	0.00
PBF Surcharge	¢/kWh	0.4244	0.4244	2.12	2.12	0.00
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Purchased Power Adjustment	¢/kWh	-0.0275	-0.0058	-0.14	-0.03	0.11
Energy Cost Adjustment	¢/kWh	-7.391	-5.305	-36.95	-26.52	10.43
Green Infrastructure Fee	\$	1.18	1.18	1.18	1.18	0.00
Avg Residential Bill at 500 kwh				147.64	158.18	
				147.64	176.8	
				Increase (Decrease -)	10.54	
				% Change	7.14%	

	Rate		Charge (\$) at 600 Kwh			
	10/01/17	11/01/17	10/01/17	11/01/17	Difference	
Base Rates	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	23.0016	23.0016	138.01	138.01	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	9.3393	9.3393	32.69	32.69	0.00
Next 850 kWhr per month	¢/kWh	11.5993	11.5993	29.00	29.00	0.00
Customer Charge	\$	8.50	8.50	8.50	8.50	0.00
Total Base Charges				208.20	208.20	0.00
RBA Rate Adjustment	¢/kWh	1.5654	1.5654	9.39	9.39	0.00
PBF Surcharge	¢/kWh	0.4244	0.4244	2.55	2.55	0.00
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Purchased Power Adjustment	¢/kWh	-0.0275	-0.0058	-0.17	-0.03	0.14
Energy Cost Adjustment	¢/kWh	-7.391	-5.305	-44.35	-31.83	12.52
Green Infrastructure Fee	\$	1.18	1.18	1.18	1.18	0.00
Avg Residential Bill at 600 kwh				176.80	189.46	
				176.80	189.46	
				Increase (Decrease -)	12.66	
				% Change	7.16%	

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

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR</u> <u>CENTS / KWH</u>		<u>RESIDENTIAL BILL (\$)</u>	
	<u>RESIDENTIAL & COMMERCIAL</u>		<u>@ 500 KWH</u>	<u>@ 600 KWH</u>
January 1, 2015	-0.702		183.85	220.24
February 1, 2015	-4.255		165.96	198.78
March 1, 2015	-7.740		148.62	177.96
April 1, 2015	-6.921		151.30	181.18
May 1, 2015	-6.092		157.06	188.10
June 8, 2015	-4.794		163.43	195.74
July 1, 2015	-4.336		164.44	196.93
August 1, 2015	-4.415		164.11	196.54
September 1, 2015	-5.820		157.12	188.14
October 1, 2015	-7.471		148.88	178.26
November 1, 2015	-8.651		141.57	169.49
December 1, 2015	-8.557		142.07	170.10
January 1, 2016	-8.649		141.54	169.48
February 1, 2016	-10.511		132.58	158.73
March 1, 2016	-9.196		139.17	166.62
April 1, 2016	-8.768		140.37	168.08
May 1, 2016	-10.483		132.89	159.10
June 1, 2016	-8.170		143.47	171.79
July 1, 2016	-7.334		148.08	177.36
August 1, 2016	-6.973		149.89	179.52
September 1, 2016	-7.866		145.42	174.16
October 1, 2016	-8.162		143.94	172.39
November 1, 2016	-9.782		135.84	162.67
December 1, 2016	-9.069		139.41	166.95
January 1, 2017	-7.659		146.59	175.55
February 1, 2017	-8.247		143.65	172.02
March 1, 2017	-7.314		148.32	177.61
April 1, 2017	-5.770		155.35	186.05
May 1, 2017	-7.998		144.79	173.38
June 1, 2017	-5.191		159.61	191.16
July 1, 2017	-5.635		157.32	188.42
August 1, 2017	-7.867		145.30	174.01
September 1, 2017	-9.278		138.19	165.47
October 1, 2017	-7.391		147.64	176.80
November 1, 2017	-5.305		158.18	189.46

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
06/01/11	IRP RECOVERY REFUND	0.000 PERCENT ON BASE
08/01/13	FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2012 TEST YEAR)	
01/01/15 - 01/31/15	PURCHASED POWER ADJUSTMENT	0.1117 CENTS/KWH
02/01/15 - 02/28/15	PURCHASED POWER ADJUSTMENT	0.0875 CENTS/KWH
03/01/15 - 03/31/15	PURCHASED POWER ADJUSTMENT	0.1036 CENTS/KWH
04/01/15 - 04/30/15	PURCHASED POWER ADJUSTMENT	0.0963 CENTS/KWH
04/01/15 - 04/30/15	SOLARSAVER ADJUSTMENT	-0.2744 CENTS/KWH
05/01/15 - 05/31/15	PURCHASED POWER ADJUSTMENT	0.1444 CENTS/KWH
05/01/15 - 03/31/16	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/15 - 06/30/15	PURCHASED POWER ADJUSTMENT	0.1453 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 - 07/31/15	PURCHASED POWER ADJUSTMENT	0.1482 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
08/01/15 - 08/31/15	PURCHASED POWER ADJUSTMENT	0.1613 CENTS/KWH
08/17/15 - 02/29/16	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0103 CENTS/KWH
09/01/15 - 09/30/15	PURCHASED POWER ADJUSTMENT	0.1573 CENTS/KWH
10/01/15 - 10/31/15	PURCHASED POWER ADJUSTMENT	0.1612 CENTS/KWH
11/01/15 - 11/30/15	PURCHASED POWER ADJUSTMENT	-0.1207 CENTS/KWH
12/01/15 - 12/31/15	PURCHASED POWER ADJUSTMENT	-0.1139 CENTS/KWH
01/01/16 - 01/31/16	PURCHASED POWER ADJUSTMENT	-0.1055 CENTS/KWH
01/01/16 - 06/30/16	GREEN INFRASTRUCTURE FEE	1.30 DOLLARS/MONTH
02/01/16 - 02/29/16	PURCHASED POWER ADJUSTMENT	-0.0338 CENTS/KWH
03/01/16 - 03/31/16	PURCHASED POWER ADJUSTMENT	-0.0325 CENTS/KWH
03/01/16 - 02/28/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0099 CENTS/KWH
04/01/16 - 04/30/16	PURCHASED POWER ADJUSTMENT	-0.0355 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
05/01/16 - 05/31/16	PURCHASED POWER ADJUSTMENT	0.0000 CENTS/KWH
06/01/16 - 06/30/16	PURCHASED POWER ADJUSTMENT	-0.0081 CENTS/KWH
06/01/16 - 05/31/17	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.4082 CENTS/KWH
07/01/16 - 04/30/17	PURCHASED POWER ADJUSTMENT	0.0000 CENTS/KWH
07/01/16 - 12/31/16	GREEN INFRASTRUCTURE FEE	1.13 DOLLARS/MONTH
07/01/16 - 06/30/17	RESID. PBF SURCHARGE ADJUSTMENT	0.5865 CENTS/KWH
01/01/17 - 06/30/17	GREEN INFRASTRUCTURE FEE	1.27 DOLLARS/MONTH
03/01/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0098 CENTS/KWH
04/01/17 - 04/30/17	SOLARSAVER ADJUSTMENT	-0.1378 CENTS/KWH
05/01/17	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/17 - 05/31/17	PURCHASED POWER ADJUSTMENT	-0.0224 CENTS/KWH
06/01/17 - 06/30/17	PURCHASED POWER ADJUSTMENT	-0.0218 CENTS/KWH
06/01/17	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.5654 CENTS/KWH
07/01/17	GREEN INFRASTRUCTURE FEE	1.18 DOLLARS/MONTH
07/01/17 - 07/31/17	PURCHASED POWER ADJUSTMENT	-0.0202 CENTS/KWH
07/01/17	RESID. PBF SURCHARGE ADJUSTMENT	0.4244 CENTS/KWH
08/01/17 - 08/31/17	PURCHASED POWER ADJUSTMENT	-0.0286 CENTS/KWH
09/01/17 - 09/30/17	PURCHASED POWER ADJUSTMENT	-0.0307 CENTS/KWH
10/01/17 - 10/31/17	PURCHASED POWER ADJUSTMENT	-0.0275 CENTS/KWH
11/01/17	PURCHASED POWER ADJUSTMENT	-0.0058 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.

**Maui Electric Company, Ltd. - Maui Division
Residential Bill at 500 kWh/Month Consumption**

