



FILED

January 27, 2017

2017 JAN 27 P 4: 14

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 February 2017

Maui Electric Company, Limited's ("Maui Electric" or "Company") February 2017 energy cost adjustment factor for our Maui Division is -8.247 cents per kilowatt-hour ("kWh"), a decrease of 0.588 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$143.65, a decrease of \$2.94 compared to rates effective January 1, 2017.

The Company's Maui Division fuel composite cost of generation, central station and other decreased 58.93 cents per million BTU to 1,186.79 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 1.017 cents per kWh to 20.057 cents per kWh.

The energy cost adjustment factor for our Lāna'i Division for February 2017 is -11.218 cents per kWh, an increase of 0.643 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$142.24, an increase of \$2.57 compared to rates effective January 1, 2017.

The Company's Lāna'i Division fuel composite cost of generation, central station and other increased 64.04 cents per million BTU to 1,659.13 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.

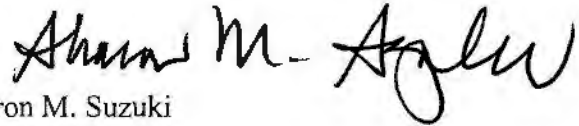
The energy cost adjustment factor for our Moloka'i Division for February 2017 is -8.792 cents per kWh, an increase of 0.148 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$137.70, an increase of \$0.59 compared to rates effective January 1, 2017.

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 28.12 cents per million BTU to 1,406.21 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 Honorable Chair and Members
of the Hawai'i Public Utilities Commission
January 27, 2017
Page 2

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

Sincerely,

A handwritten signature in black ink, appearing to read "Sharon M. Suzuki". The signature is written in a cursive style with a large, stylized "S" at the beginning.

Sharon M. Suzuki
President

Attachments

cc: Division of Consumer Advocacy

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

ENERGY COST ADJUSTMENT FACTOR

	EFFECTIVE DATES		
	<u>01/01/2017</u>	<u>02/01/2017</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,245.72	1,186.79	(58.93)
DG Energy, ¢/kWh	0.00	0.00	0.000
Purchased Energy, ¢/kWh	19.040	20.057	1.017
 <u>Residential Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	(7.659)	(8.247)	(0.588)
 <u>Others - "G,H,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(7.659)	(8.247)	(0.588)
 <u>Residential Customer with</u>			
500 KWH Consumption, \$/Bill	146.59	143.65	(2.94)
600 KWH Consumption, \$/Bill	175.55	172.02	(3.53)

Supersedes Sheet Effective:

January 1, 2017

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

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

Line

1 Effective Date February 1, 2017
2 Supercedes Factors of January 1, 2017

GENERATION COMPONENT

<u>CENTRAL STATION</u>						<u>DG ENERGY COMPONENT</u>	
FUEL PRICES, ¢/mmbtu							
3	Industrial			797.64			
4	Diesel			1,333.14			
5	Other						
BTU MIX, %							
6	Industrial			27.33%	23	COMPOSITE COST OF DG ENERGY, ¢/kWh	0.000
7	Diesel			72.67%	24	% Input to System kWh Mix	0.00%
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))			1,186.79	25	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 23 x 24)	-
10	% Input to System kWh Mix			90.14%	26	BASE DG ENERGY COMP COST	0.000
EFFICIENCY FACTOR, mmbtu/kWh					27	Base % Input to System kWh Mix	0.01
	(A)	(B)	(C)	(D)	28	WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 26 x 27)	0.00000
			Percent of	Weighted	29	Cost Less Base (Line 25 - 28)	0.00000
	Fuel Type	Eff Factor	Centrl Stn + Other	Eff Factor	30	Loss Factor	1.063
11	Industrial	0.015126	19.37	0.002930	31	Revenue Tax Req Multiplier	1.0975
12	Diesel	0.010026	80.63	0.008084	32	DG FACTOR, ¢/kWh (Line 29 x 30 x 31)	0.00000
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)]			0.011014			
15	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh (lines (9 x 10 x 14))			11.78247			
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))			(5.48662)			
21	Revenue Tax Req Multiplier			1.0975			
22	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))			(6.02157)			
					SUMMARY OF		
					TOTAL GENERATION FACTOR, ¢/kWh		
					33	CNTRL STN + OTHER (line 22)	(6.02157)
					34	DG (line 32)	-
					35	TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)	(6.02157)

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

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

Line

- 1 Effective Date February 1, 2017
- 2 Supercedes Factors of January 1, 2017

<u>Line</u>	<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		24.931
43	Sempra Wind		21.546
44	Hydro & Other	- On Peak	12.454
45		- Off Peak	11.691
46	FIT		20.397
	PURCHASED ENERGY KWH MIX, %		
47			
48			
49			
50			
51	Kaheawa Wind I	- On Peak	12.04%
52		- Off Peak	13.07%
53	Kaheawa Wind II	- On Peak	23.66%
54	Sempra Wind	- On Peak	42.28%
55	Hydro & Other	- On Peak	0.55%
56		- Off Peak	0.39%
57	FIT		8.01%
			<u>100.00%</u>
58	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh		20.057
	(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		9.86%
60	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (58 x 59))		1.97762
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))		(1.49287)
65	Loss Factor		1.063
66	Revenue Tax Req Multiplier		1.0975
67	PURCHASED ENERGY FACTOR, ¢/kWh (lines (64 x 65 x 66))		(1.74165)

Line

SYSTEM COMPOSITE CALCULATIONS

68	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 67))	(7.76322)
69	ADJUSTMENT, ¢/kWh	
70	ECA Reconciliation Adjustment	(0.484)
71	ECA FACTOR, ¢/kWh (lines (68 + 69 + 70))	(8.247)

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

Fuel Oil Inventory Prices for February 2017

<u>TYPE OF OIL BURNED</u>	<u>PRICES \$/BBL</u>	<u>CONVERSION FACTORS</u>		<u>PRICES ¢/MBTU</u>
INDUSTRIAL	50.2516	6.30	MBTU/BBL	797.64
DIESEL/ULSD	78.1222	5.86	MBTU/BBL	1,333.14

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

Month End Fuel Oil Estimate

<u>Kahului</u>	<u>Barrels</u>	<u>MBTU</u>	<u>(\$)</u>
1/19/2017	40,511.35	254,891.51	2,051,674.38
Estimated Use	15,266.70	96,094.19	788,086.84
Estimated Received	0.00	0.00	0.00
Estimated Additional	8,889.79	56,005.68	451,721.34
Estimated End	<u>34,134.44</u>	<u>214,803.00</u>	<u>1,715,308.89</u>

Next month's expense (\$/bbl) = \$ 50.2516

<u>Maalaea</u>	<u>Barrels</u>	<u>MBTU</u>	<u>(\$)</u>
1/19/2017	108,673.64	636,416.73	8,513,526.31
Estimated Use	36,586.63	214,259.35	2,862,344.09
Estimated Received	38,614.29	226,133.74	2,997,049.27
Estimated Additional	0.00	0.00	0.00
Estimated End	<u>110,701.30</u>	<u>648,291.12</u>	<u>8,648,231.49</u>

Next month's expense (\$/bbl) = \$ 78.1222

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

Contract Prices effective January 1, 2017

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
INDUSTRIAL		
Tax *	3.3171	52.65
Ocean Transportation	1.7199	27.30
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.2500	3.97
DIESEL		
Tax *	4.8357	82.52
Ocean Transportation	1.7199	29.35
Land Transportation	0.8817	15.05
Storage	2.0417	34.84
Wharfage	0.2500	4.27

* 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, ¢/kwh	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 = $9.960 \text{ ¢/kwh} \times 0.7 + 22.000 \text{ ¢/kwh} \times 0.3 = 13.572 \text{ ¢/kwh}$

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
February 2017

1. Amount to be Refunded	(\$1,068,200)
2. Monthly amount (1 / 3 X Line 1)	(\$356,067)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$390,789)
5. Estimated Sales (February 2017)	80,706 mwh
6. Adjustment (Line 4 ÷ Line 5)	(0.484) ¢/kwh

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
2016 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
(Thousand \$)

Line		W/O Deadband 4th Quarter YTD Total	collection by company*	Basis for Recon With Deadband 4th Quarter YTD Total	collection by company*
	ACTUAL COSTS:				
1	Generation	\$85,616.6		\$85,616.6	
2	Distributed Generation	\$15.0		\$15.0	
3	Purch Power	\$50,079.0		\$50,079.0	
4	TOTAL	\$135,710.6		\$135,710.6	
	FUEL FILING COST				
5	Generation	\$87,239.5		\$86,544.8	
6	Distributed Generation	\$0.0		\$0.0	
7	Purch Power	\$50,079.0		\$50,079.0	
8	TOTAL	\$137,318.5		\$136,623.8	
	BASE FUEL COST				
9	Generation	\$164,465.8		\$164,465.8	
10	Distributed Generation	\$14.4		\$14.4	
11	Purch Power	\$57,587.5		\$57,587.5	
12	TOTAL	\$222,067.7		\$222,067.7	
13	FUEL-BASE COST (Line 8-12)	-\$84,749.2		-\$85,443.9	
14	ACTUAL FOA LESS TAX	-\$84,753.7		-\$84,753.7	
15	FOA reconciliation adj for prior year	-\$718.1		-\$718.1	
16	ADJUSTED FOA LESS TAX	-\$84,035.6		-\$84,035.6	
17	FOA-(FUEL-BASE) (Line 16-13)	\$713.6	Over	\$1,408.3	Over
	ADJUSTMENTS				
18	Current year FOA accrual reversal	\$2,014.9		\$2,014.9	
19	Other prior year FOA	\$0.0		\$0.0	
20	Other	\$0.0		\$0.0	
21	4th QUARTER FOA RECONCILIATION (Lines 17+18+19+20)	\$2,728.5	Over	\$3,423.2	Over
22	3rd QUARTERLY YTD 2016 YTD FOA Reconciliation Recognized in FOA Rates			\$2,355.0	Over
23	FOA Reconciliation to be Refunded February 2017 to April 2017 (Line 22- 21)			-\$1,068.2	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, 2016 through December 31, 2016

	<u>Notes</u>	<u>Jan 1 - Dec 31</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	117,122
Industrial Fuel Oil Consumption (Recorded), MMBTU	b	1,852,901
Industrial Fuel Oil Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	15,820
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 (TY2009), BTU/kWh	f	10,026
Diesel Deadband Definition, +/- BTU/kWh	d	100
Diesel Portion of Recorded Sales, MWh	a	667,611
Diesel Consumption (Recorded), MMBTU	b	6,507,328
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	9,747
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	9,926

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST, WITHOUT and WITH DEADBAND
2016

	<u>Without Deadband</u>	<u>With Deadband - AS FILED</u>
	<u>Jan 1 - Dec 31</u>	<u>Jan 1 - Dec 31</u>
<u>INDUSTRIAL</u>		
Industrial Portion of Recorded Sales , MWH	117,122	117,122
Industrial Sales Efficiency Factor (mmbtu/kwh)	0.015126	0.015226
Mmbtu adjusted for Sales Efficiency Factor	1,771,588	1,783,301
\$/mmbtu	<u>\$5.9698</u>	<u>\$5.9698</u>
TOTAL Industrial \$000s TO BE RECOVERED	\$10,576.1	\$10,646.0
<u>DIESEL FUEL FILING COST</u>		
Diesel Portion of Recorded Sales, MWH	667,611	667,611
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.010026	0.009926
Mmbtu adjusted for Sales Efficiency Factor	6,693,471	6,626,710
\$/mmbtu	<u>\$11.4535</u>	<u>\$11.4535</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$76,663.4	\$75,898.8
TOTAL GENERATION FUEL FILING COST, \$000s	\$87,239.5	\$86,544.8
TOTAL GENERATION BASE FUEL COST , \$000s YTD	\$164,465.8	\$164,465.8
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$87,239.5	\$86,544.8
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$164,465.8	\$164,465.8

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
2016 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)		
February	1,068,200	(4)	19,017	1,049,183	(356,067)		

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			
	01/01/17	02/01/17	01/01/17	02/01/17	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	1.4082	1.4082	7.04	7.04	0.00
PBF Surcharge	¢/kWh	0.5865	0.5865	2.93	2.93	0.00
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	0.0099	0.0099	0.05	0.05	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Purchased Power Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Energy Cost Adjustment	¢/kWh	-7.659	-8.247	-38.30	-41.24	-2.94
Green Infrastructure Fee	\$	1.27	1.27	1.27	1.27	0.00
Avg Residential Bill at 500 kwh				146.59	143.65	
				Increase (Decrease -)		-2.94
				% Change		-2.01%

	Rate		Charge (\$) at 600 Kwh			
	01/01/17	02/01/17	01/01/17	02/01/17	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	1.4082	1.4082	8.45	8.45	0.00
PBF Surcharge	¢/kWh	0.5865	0.5865	3.52	3.52	0.00
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	0.0099	0.0099	0.06	0.06	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Purchased Power Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Energy Cost Adjustment	¢/kWh	-7.659	-8.247	-45.95	-49.48	-3.53
Green Infrastructure Fee	\$	1.27	1.27	1.27	1.27	0.00
Avg Residential Bill at 600 kwh				175.55	172.02	
				Increase (Decrease -)		-3.53
				% Change		-2.01%

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

<u>EFFECTIVE DATE</u>	FUEL FACTOR CENTS / KWH		RESIDENTIAL BILL (\$)	
	<u>RESIDENTIAL & COMMERCIAL</u>		<u>@ 500 KWH</u>	<u>@ 600 KWH</u>
January 1, 2014	1.733		190.94	229.00
February 1, 2014	2.238		193.25	231.77
March 1, 2014	1.978		192.02	230.29
April 1, 2014	1.754		189.62	227.42
May 1, 2014	2.175		193.66	232.25
June 1, 2014	1.675		195.24	234.15
July 1, 2014	1.679		196.18	235.28
August 1, 2014	1.134		193.54	232.12
September 1, 2014	0.855		192.16	230.46
October 1, 2014	0.880		192.27	230.60
November 1, 2014	1.135		193.01	231.48
December 1, 2014	0.325		188.98	226.39
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

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
01/01/11 - 12/31/11	RESID PBF SURCHARGE ADJUSTMENT	0.5944 CENTS/KWH
01/12/11 - 05/03/12	FINAL RATE INCREASE (3.65%), DOCKET NO. 2006-0387 (2007 TEST YEAR)	
01/12/11 - 05/03/12	INTERIM RATE INCREASE 2010 TEST YEAR	2.44 PERCENT ON BASE
01/12/11 - 01/31/11	FIRM CAP SURCHARGE	0.081 PERCENT ON BASE
02/01/11 - 04/30/11	FIRM CAP SURCHARGE	0.0515 PERCENT ON BASE
02/01/11 - 02/28/11	IRP RECOVERY REFUND	-3.630 PERCENT ON BASE
03/01/11 - 04/30/11	IRP RECOVERY REFUND	0.000 PERCENT ON BASE
04/01/11 - 04/30/11	SOLARSAVER ADJUSTMENT	-0.0888 CENTS/KWH
05/01/11 - 03/31/12	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/11 - 05/31/11	IRP RECOVERY REFUND	-0.339 PERCENT ON BASE
05/01/11 - 07/31/11	FIRM CAP SURCHARGE	-0.180 PERCENT ON BASE
06/01/11	IRP RECOVERY REFUND	0.000 PERCENT ON BASE
08/01/11 - 10/31/11	FIRM CAP SURCHARGE	-0.0056 PERCENT ON BASE
11/01/11 - 01/31/12	FIRM CAP SURCHARGE	0.0047 PERCENT ON BASE
01/01/12 - 12/31/12	RESID PBF SURCHARGE ADJUSTMENT	0.6766 CENTS/KWH
02/01/12 - 05/03/12	FIRM CAP SURCHARGE	0.0000 PERCENT ON BASE
04/01/12 - 04/30/12	SOLARSAVER ADJUSTMENT	-2.292 CENTS/KWH
05/01/12 - 03/31/13	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/04/12 - 07/31/13	FINAL RATE INCREASE (1.51%), DOCKET NO. 2009-0163 (2010 TEST YEAR)	
05/04/12 - 07/31/12	PURCHASED POWER ADJUSTMENT	0.1889 CENTS/KWH
06/12/2012 - 07/31/13	INTERIM RATE INCREASE 2012 TEST YEAR	4.14 PERCENT ON BASE
08/01/12 - 10/31/12	PURCHASED POWER ADJUSTMENT	0.1747 CENTS/KWH
11/01/2012 - 01/31/13	PURCHASED POWER ADJUSTMENT	0.1427 CENTS/KWH
01/01/13 - 06/30/13	RESID PBF SURCHARGE ADJUSTMENT	0.7850 CENTS/KWH
02/01/13 - 04/30/13	PURCHASED POWER ADJUSTMENT	0.1530 CENTS/KWH
04/01/13 - 04/30/13	SOLARSAVER ADJUSTMENT	-2.2053 CENTS/KWH
05/01/13 - 03/31/14	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/13 - 07/31/13	PURCHASED POWER ADJUSTMENT	0.1530 CENTS/KWH
06/01/13 - 05/31/14	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.8071 CENTS/KWH
07/01/13 - 06/30/14	RESID PBF SURCHARGE ADJUSTMENT	0.8312 CENTS/KWH
06/01/13	FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2012 TEST YEAR)	
08/01/13 - 08/31/13	PURCHASED POWER ADJUSTMENT	0.1892 CENTS/KWH
09/01/13 - 09/30/13	PURCHASED POWER ADJUSTMENT	0.1865 CENTS/KWH
10/01/13 - 10/31/13	PURCHASED POWER ADJUSTMENT	0.1877 CENTS/KWH
11/01/13 - 11/30/13	PURCHASED POWER ADJUSTMENT	0.0808 CENTS/KWH
12/01/13 - 12/31/13	PURCHASED POWER ADJUSTMENT	0.0861 CENTS/KWH
01/01/14 - 01/31/14	PURCHASED POWER ADJUSTMENT	0.0943 CENTS/KWH
02/01/14 - 02/28/14	PURCHASED POWER ADJUSTMENT	0.0514 CENTS/KWH
03/01/14 - 03/31/14	PURCHASED POWER ADJUSTMENT	0.0650 CENTS/KWH
04/01/14 - 04/30/14	PURCHASED POWER ADJUSTMENT	0.0560 CENTS/KWH
04/01/14 - 04/30/14	SOLARSAVER ADJUSTMENT	-2.2453 CENTS/KWH
05/01/14 - 03/31/15	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/14 - 06/30/14	PURCHASED POWER ADJUSTMENT	0.1957 CENTS/KWH
06/01/14 - 05/31/15	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.6239 CENTS/KWH
07/01/14 - 07/31/14	PURCHASED POWER ADJUSTMENT	0.1960 CENTS/KWH
07/01/14 - 11/30/14	RESID PBF SURCHARGE ADJUSTMENT	1.0157 CENTS/KWH
08/01/14 - 08/31/14	PURCHASED POWER ADJUSTMENT	0.2145 CENTS/KWH
09/01/14 - 09/30/14	PURCHASED POWER ADJUSTMENT	0.2159 CENTS/KWH
10/01/14 - 10/31/14	PURCHASED POWER ADJUSTMENT	0.2149 CENTS/KWH
11/01/14 - 11/30/14	PURCHASED POWER ADJUSTMENT	0.1066 CENTS/KWH
12/01/14 - 12/31/14	PURCHASED POWER ADJUSTMENT	0.1108 CENTS/KWH
12/01/14 - 06/30/15	RESID PBF SURCHARGE ADJUSTMENT	0.7583 CENTS/KWH
12/01/14 - 06/30/15	GREEN INFRASTRUCTURE FEE	1.29 DOLLARS/MONTH
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	-2.2744 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	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	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	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.4082 CENTS/KWH
07/01/16	PURCHASED POWER ADJUSTMENT	0.0000 CENTS/KWH
07/01/16 - 12/31/16	GREEN INFRASTRUCTURE FEE	1.13 DOLLARS/MONTH
07/01/16	RESID PBF SURCHARGE ADJUSTMENT	0.5865 CENTS/KWH
01/01/17	GREEN INFRASTRUCTURE FEE	1.27 DOLLARS/MONTH

~ 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**

