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January 29, 2019

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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

PUBLIC UTILITIES
COMMISSION

Dear Commissioners:

Subject: Maui Electric Energy Cost Adjustment Factor for February 2019

Maui Electric Company, Limited's ("Maui Electric" or "Company") February 2019 Energy Cost Adjustment factor for our Maui Division is -5.987 cents per kilowatt-hour ("kWh"), a decrease of 2.582 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$161.69, a decrease of \$13.08 compared to rates effective January 1, 2019. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor (-\$12.91) and Purchase Power Adjustment (-\$0.17).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 243.25 cents per million BTU to 1,351.67 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.483 cents per kWh to 19.264 cents per kWh.

The Energy Cost Adjustment factor for our Lāna'i Division for February 2019 is -8.789 cents per kWh, a decrease of 1.839 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$158.45, a decrease of \$7.36 compared to rates effective January 1, 2019. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor.

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 190.60 cents per million BTU to 1,872.13 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 30.00 cents per kWh.

The Energy Cost Adjustment factor for our Moloka'i Division for February 2019 is -7.208 cents per kWh, a decrease of 3.437 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$150.16, a decrease of \$13.75 compared to rates effective January 1, 2019. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor.

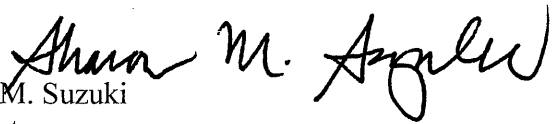
The Honorable Chair and Members
of the Hawai'i Public Utilities Commission
January 29, 2019
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The Company's Moloka'i Division fuel composite cost of generation, central station and other decreased 303.92 cents per million BTU to 1,545.41 cents per million 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 February 1, 2019.

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>01/01/2019</u>	<u>02/01/2019</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,594.92	1,351.67	(243.25)
DG Energy, ¢/kWh	0.00	0.00	0.000
Purchased Energy, ¢/kWh	19.747	19.264	(0.483)
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	(3.405)	(5.987)	(2.582)
<u>Others - "G,H,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(3.405)	(5.987)	(2.582)
<u>Residential Customer with</u>			
500 KWH Consumption, \$/Bill	174.77	161.69	(13.08)
600 KWH Consumption, \$/Bill	209.33	193.64	(15.69)

Supersedes Sheet Effective:

January 1, 2019

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

ENERGY COST ADJUSTMENT (ECA) FILING - February 1, 2019 (page 1 of 2)

Line

1 Effective Date February 1, 2019
2 Supercedes Factors of January 1, 2019

GENERATION COMPONENT

<u>CENTRAL STATION</u>						<u>DG ENERGY COMPONENT</u>	
FUEL PRICES, ¢/mmbtu							
3	Industrial			858.90			
4	Diesel			1,517.77			
5	Other						
BTU MIX, %							
6	Industrial			25.21%	23	COMPOSITE COST OF DG	
7	Diesel			74.79%		ENERGY, ¢/kWh	0.000
8	Other			0.00%	24	% Input to System kWh Mix	0.00%
				100.00%			
9	COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 6) + (4 x 7) + (5 x 8))			1,351.67	25	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 23 x 24)	-
10	% Input to System kWh Mix			72.42%	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
		Eff Factor	Percent of	Weighted	29	Cost Less Base (Line 25 - 28)	0.00000
	<u>Fuel Type</u>	<u>mmbtu/kwh</u>	Centrl Stn +	<u>Eff Factor</u>	30	Loss Factor	1.063
11	Industrial	0.015126	Other	0.002667	31	Revenue Tax Req Multiplier	1.0975
12	Diesel	0.010026	17.63	0.008258	32	DG FACTOR,	
13	Other	0.010951	82.37	-		¢/kWh (Line 29 x 30 x 31)	0.00000
			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))]			0.010925			
15	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh (lines (9 x 10 x 14))			10.69426			
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))			(6.57483)			
21	Revenue Tax Req Multiplier			1.0975			
22	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))			(7.21588)			
						SUMMARY OF	
						TOTAL GENERATION FACTOR, ¢/kWh	
					33	CNTRL STN + OTHER (line 22)	(7.21588)
					34	DG (line 32)	-
					35	TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)	(7.21588)

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

ENERGY COST ADJUSTMENT (ECA) FILING - February 1, 2019 (page 2 of 2)

<u>Line</u>		
1	Effective Date	February 1, 2019
2	Supercedes Factors of	January 1, 2019

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>		
	PURCHASED ENERGY PRICE, ¢/kWh		
36	Kaheawa Wind I	- On Peak	13.783
37		- Off Peak	12.935
38	Kaheawa Wind II		25.684
39	Sempra Wind		22.197
40	Hydro & Other	- On Peak	14.049
41		- Off Peak	13.346
42	South Maui RR		11.060
43	Ku'ia Solar		11.060
44	CBRE PV		16.500
45			
46	FIT		21.458
	PURCHASED ENERGY KWH MIX, %		
47	Kaheawa Wind I	- On Peak	23.32%
48		- Off Peak	16.58%
49	Kaheawa Wind II		32.02%
50	Sempra Wind	- On Peak	19.37%
51	Hydro & Other	- On Peak	0.27%
52		- Off Peak	0.14%
53	South Maui RR		2.06%
54	Ku'ia Solar		2.05%
55	CBRE PV		0.57%
56			
57	FIT		3.62%
			<u>100.00%</u>
58	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh		19.264
	(Lines (36 x 47) + (37 x 48) + (38 x 49) + (39 x 50) + (40 x 51) + (41 x 52) + (42 x 53) + (43 x 54) + (44 x 55) + (46 x 57))		
59	% Input to System kWh Mix		27.58%
60	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (58 x 59))		5.31301
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))		1.84252
65	Loss Factor		1.063
66	Revenue Tax Req Multiplier		1.0975
67	PURCHASED ENERGY FACTOR, ¢/kWh (lines (64 x 65 x 66))		2.14956

<u>Line</u>	<u>SYSTEM COMPOSITE CALCULATIONS</u>		
68	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 67))		(5.06632)
69	ADJUSTMENT, ¢/kWh		
70	ECA Reconciliation Adjustment		(0.921)
71	ECA FACTOR, ¢/kWh (lines (68 + 69 + 70))		(5.987)

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

Fuel Oil Inventory Prices for February 2019

<u>TYPE OF OIL BURNED</u>	<u>PRICES \$/BBL</u>	<u>CONVERSION FACTORS</u>		<u>PRICES ¢/MBTU</u>
INDUSTRIAL	54.1106	6.30	MBTU/BBL	858.90
DIESEL/ULSD	88.9073	5.86	MBTU/BBL	1,517.77

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

Month End Fuel Oil Estimate

<u>Kahului</u>	<u>Barrels</u>	<u>MBTU</u>	<u>(\$)</u>
1/18/2019	42,694.71	268,976.67	2,499,582.55
Estimated Use	16,873.27	106,301.61	1,136,678.50
Estimated Received	18,000.00	113,400.00	1,008,298.19
Estimated Additional	0.00	0.00	0.00
Estimated End	<u>43,821.44</u>	<u>276,075.06</u>	<u>2,371,202.24</u>
Next month's expense (\$/bbl) =		\$ 54.1106	

<u>Maalaea</u>	<u>Barrels</u>	<u>MBTU</u>	<u>(\$)</u>
1/18/2019	99,829.11	584,776.49	9,077,634.04
Estimated Use	42,763.36	250,498.18	3,781,525.66
Estimated Received	62,278.36	364,812.65	5,314,449.37
Estimated Additional	0.00	0.00	0.00
Estimated End	<u>119,344.10</u>	<u>699,090.96</u>	<u>10,610,557.75</u>
Next month's expense (\$/bbl) =		\$ 88.9073	

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

Contract Prices effective January 1, 2019

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
INDUSTRIAL		
Tax *	3.5601	56.51
Ocean Transportation	1.7883	28.39
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.3900	6.19
DIESEL		
Tax *	5.2524	89.63
Ocean Transportation	1.7883	30.52
Land Transportation	0.9782	16.69
Storage	2.8489	48.62
Wharfage	0.3900	6.66

* 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	13.783
- Off Peak, ¢/kWh	12.935

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 2019:

On-peak, ¢/kwh	10.261
Off-peak, ¢/kwh	9.050

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

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

On-Peak Rate = $10.2610 \text{ ¢/kwh} \times 0.7 + 22.000 \text{ ¢/kwh} \times 0.3 = 13.783 \text{ ¢/kwh}$

Off-Peak Rate = $9.05 \text{ ¢/kwh} \times 0.7 + 22.000 \text{ ¢/kwh} \times 0.3 = 12.935 \text{ ¢/kwh}$

MAUI ELECTRIC COMPANY, LTD.
Maui Division
ECA Reconciliation Adjustment
February 2019

1. Amount to be Refunded	(\$1,886,900)
2. Monthly amount (1 / 3 X Line 1)	(\$628,967)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$690,300)
5. Estimated Sales (February 2019)	74,940 mwh
6. Adjustment (Line 4 ÷ Line 5)	(0.921) ¢/kwh

**MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
2018 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
(Thousand \$)**

<u>Line</u>	W/O Deadband 4th Quarter <u>YTD Total</u>	collection by <u>company*</u>	Basis for Recon With Deadband 4th Quarter <u>YTD Total</u>	collection by <u>company*</u>
ACTUAL COSTS:				
1	Generation	\$133,532.9	\$133,532.9	
2	Distributed Generation	\$11.0	\$11.0	
3	Purch Power	<u>\$48,776.6</u>	<u>\$48,776.6</u>	
4	TOTAL	\$182,320.5	\$182,320.5	
FUEL FILING COST				
5	Generation	\$133,849.7	\$133,436.6	
6	Distributed Generation	\$0.0	\$0.0	
7	Purch Power	<u>\$48,776.6</u>	<u>\$48,776.6</u>	
8	TOTAL	\$182,626.3	\$182,213.2	
BASE FUEL COST				
9	Generation	\$164,977.0	\$164,977.0	
10	Distributed Generation	\$9.7	\$9.7	
11	Purch Power	<u>\$53,134.0</u>	<u>\$53,134.0</u>	
12	TOTAL	\$218,120.7	\$218,120.7	
13	FUEL-BASE COST (Line 8-12)	-\$35,494.4	-\$35,907.5	
14	ACTUAL FOA LESS TAX	-\$35,012.7	-\$35,012.7	
15	FOA reconciliation adj for prior year	<u>-\$1,318.3</u>	<u>-\$1,318.3</u>	
16	ADJUSTED FOA LESS TAX	-\$33,694.4	-\$33,694.4	
17	FOA-(FUEL-BASE) (Line 16-13)	\$1,800.0 Over	\$2,213.1 Over	
ADJUSTMENTS				
18	Current year FOA accrual reversal	\$2,066.2	\$2,066.2	
19	Other prior year FOA	\$0.0	\$0.0	
20	Other	<u>\$0.0</u>	<u>\$0.0</u>	
21	4th QUARTER FOA RECONCILIATION (Lines 17+18+19+20)	\$3,866.2 Over	\$4,279.3 Over	
22	3rd QUARTERLY YTD 2018 FOA Reconciliation Recognized in FOA Rates		<u>\$2,392.4</u> Over	
23	FOA Reconciliation to be Refunded February 2019 to April 2019 (Line 22- 21)		<u><u>-\$1,886.9</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, 2018 through August 22, 2018

	<u>Notes</u>	<u>YTD</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	92,505
Industrial Fuel Oil Consumption (Recorded), MMBTU	b	1,418,993
Industrial Fuel Oil Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	15,340
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	402,165
Diesel Consumption (Recorded), MMBTU	b	4,005,425
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	9,960
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	9,960

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION

Determination of Efficiency Factor to use for Cost-Recovery Purposes

Period: August 23, 2018 through December 31, 2018

	<u>Notes</u>	<u>YTD</u>
<u>Industrial Fuel Oil</u>		
Industrial Fuel Oil Efficiency Factor (TY2018), BTU/kWh	f	15,892
Industrial Fuel Oil Deadband Definition, - BTU/kWh	d	100
Industrial Fuel Oil Portion of Recorded Sales, MWh	a	53,735
Industrial Fuel Oil Consumption (Recorded), MMBTU	b	839,735
Industrial Fuel Oil Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	15,627
Lower limit of Industrial Fuel Oil Deadband, BTU/kWh	e = f-d	15,792
Higher limit of Industrial Fuel Oil Deadband, BTU/kWh	g = f	15,892
Industrial Fuel Oil Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	15,792
<u>Diesel</u>		
Diesel Efficiency Factor (TY2018), BTU/kWh	f	9,950
Diesel Deadband Definition, - BTU/kWh	d	100
Diesel Portion of Recorded Sales, MWh	a	238,768
Diesel Consumption (Recorded), MMBTU	b	2,376,513
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	9,953
Lower limit of Diesel Deadband, BTU/kWh	e = f-d	9,850
Higher limit of Diesel Deadband, BTU/kWh	g = f	9,950
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	9,950

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

2018

	Without Deadband	With Deadband AS FILED	Without Deadband	With Deadband AS FILED
	Jan 1 - Aug 22	Jan 1 - Aug 22	Aug 23 - Dec 31	Aug 23 - Dec 31
INDUSTRIAL				
Industrial Portion of Recorded Sales , MWH	92,505	92,505	53,735	53,735
Industrial Sales Efficiency Factor (mmbtu/kwh)	0.015126	0.015226	0.015892	0.015792
Mmbtu adjusted for Sales Efficiency Factor	1,399,226	1,408,476	853,961	848,587
\$/mmbtu	<u>\$9.7867</u>	<u>\$9.7867</u>	<u>\$11.7135</u>	<u>\$11.7135</u>
TOTAL Industrial \$000s TO BE RECOVERED	\$13,693.7	\$13,784.3	\$10,002.8	\$9,939.9
DIESEL FUEL FILING COST				
Diesel Portion of Recorded Sales, MWH	402,165	402,165	238,768	238,768
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.010026	0.00996	0.00995	0.00995
Mmbtu adjusted for Sales Efficiency Factor	4,032,103	4,005,560	2,375,739	2,375,739
\$/mmbtu	<u>\$16.6031</u>	<u>\$16.6031</u>	<u>\$18.1871</u>	<u>\$18.1871</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$66,945.4	\$66,504.7	\$43,207.8	\$43,207.8
TOTAL GENERATION FUEL FILING COST, \$000s	\$80,639.1	\$80,288.9	\$53,210.6	\$53,147.7
TOTAL GENERATION BASE FUEL COST , \$000s YTD	\$103,673.7	\$103,673.7	\$61,303.3	\$61,303.3
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$80,639.1	\$80,288.9	\$53,210.6	\$53,147.7
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$103,673.7	\$103,673.7	\$61,303.3	\$61,303.3

**MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
2019 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 '18					(327,700)	(323,073)	279,528
January '19					(327,700)		
February	1,886,900	(4)	(48,178)	1,935,078	(628,967)		

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		
	01/01/19	02/01/19	01/01/19	02/01/19	Difference
Base Rates					
effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	23.0016	23.0016	23.0016	0.00
Non-fuel Fuel Energy Charge					
First 350 kWhr per month	¢/kWh	9.3393	9.3393	9.3393	0.00
Next 850 kWhr per month	¢/kWh	11.5993	11.5993	11.5993	0.00
Customer Charge	\$	8.50	8.50	8.50	0.00
Total Base Charges			173.60	173.60	0.00
RBA Rate Adjustment	¢/kWh	0.3183	0.3183	0.3183	0.00
PBF Surcharge	¢/kWh	0.4658	0.4658	0.4658	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.0000	0.00
Interim Rate Increase (Test Year 2018)	% on Base	7.42	7.42	7.42	0.00
Purchased Power Adjustment	¢/kWh	0.0094	-0.0241	0.0094	-0.17
Energy Cost Adjustment	¢/kWh	-3.405	-5.987	-3.405	-12.91
Green Infrastructure Fee	\$	1.35	1.35	1.35	0.00
Avg Residential Bill at 500 kwh			174.77	161.69	
					Increase (Decrease -)
					% Change
					-13.08
					-7.48%

	Rate		Charge (\$) at 600 Kwh		
	01/01/19	02/01/19	01/01/19	02/01/19	Difference
Base Rates					
effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	23.0016	23.0016	23.0016	0.00
Non-fuel Fuel Energy Charge					
First 350 kWhr per month	¢/kWh	9.3393	9.3393	9.3393	0.00
Next 850 kWhr per month	¢/kWh	11.5993	11.5993	11.5993	0.00
Customer Charge	\$	8.50	8.50	8.50	0.00
Total Base Charges			208.20	208.20	0.00
RBA Rate Adjustment	¢/kWh	0.3183	0.3183	0.3183	0.00
PBF Surcharge	¢/kWh	0.4658	0.4658	0.4658	0.00
Renewable Energy Infrastructure Cost					
Recovery Provision	¢/kWh	0.0000	0.0000	0.0000	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.0000	0.00
Interim Rate Increase (Test Year 2018)	% on Base	7.42	7.42	7.42	0.00
Purchased Power Adjustment	¢/kWh	0.0094	-0.0241	0.0094	-0.20
Energy Cost Adjustment	¢/kWh	-3.405	-5.987	-3.405	-15.49
Green Infrastructure Fee	\$	1.35	1.35	1.35	0.00
Avg Residential Bill at 600 kwh			209.33	193.64	
					Increase (Decrease -)
					% Change
					-15.69
					-7.50%

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

<u>EFFECTIVE DATE</u>	FUEL FACTOR	RESIDENTIAL BILL (\$)	
	CENTS / KWH <u>RESIDENTIAL & COMMERCIAL</u>	<u>@ 500 KWH</u>	<u>@ 600 KWH</u>
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
December 1, 2017	-7.839	145.51	174.26
January 1, 2018	-6.115	154.28	184.75
February 1, 2018	-5.747	156.16	187.00
March 1, 2018	-4.402	162.88	195.07
April 1, 2018	-4.914	159.68	191.23
May 1, 2018	-4.510	162.34	194.42
June 1, 2018	-2.402	174.53	209.05
July 1, 2018	-1.259	180.32	216.01
August 1, 2018	-3.848	167.07	200.11
September 1, 2018	-3.445	174.06	208.51
October 1, 2018	-3.282	174.90	209.51
November 1, 2018	-2.358	179.87	215.47
December 1, 2018	-2.401	179.65	215.21
January 1, 2019	-3.405	174.77	209.33
February 1, 2019	-5.987	161.69	193.64

**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
04/01/13 - 04/30/13	SOLARSAVER ADJUSTMENT	-0.2053 CENTS/KWH
08/01/13	FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2012 TEST YEAR)	
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 - 08/16/17	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 - 3/31/18	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
6/1/2017 - 05/31/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.5654 CENTS/KWH
07/01/17 - 12/31/17	GREEN INFRASTRUCTURE FEE	1.18 DOLLARS/MONTH
07/01/17 - 07/31/17	PURCHASED POWER ADJUSTMENT	-0.0202 CENTS/KWH
07/01/17 - 06/30/18	RESID. PBF SURCHARGE ADJUSTMENT	0.4244 CENTS/KWH
08/01/17 - 08/31/17	PURCHASED POWER ADJUSTMENT	-0.0286 CENTS/KWH
08/17/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0000 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 - 11/30/17	PURCHASED POWER ADJUSTMENT	-0.0058 CENTS/KWH
12/01/17 - 12/31/17	PURCHASED POWER ADJUSTMENT	-0.0054 CENTS/KWH
01/01/18 - 01/31/18	PURCHASED POWER ADJUSTMENT	-0.0060 CENTS/KWH
01/01/18 - 06/30/18	GREEN INFRASTRUCTURE FEE	1.3400 DOLLARS/MONTH
02/01/18 - 04/30/18	PURCHASED POWER ADJUSTMENT	0.0003 CENTS/KWH
04/01/18 - 04/30/18	SOLARSAVER ADJUSTMENT	-0.1278 CENTS/KWH
05/01/18	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/18 - 06/30/18	PURCHASED POWER ADJUSTMENT	0.0004 CENTS/KWH
06/01/18 - 08/22/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.8954 CENTS/KWH
07/01/18 - 07/31/18	PURCHASED POWER ADJUSTMENT	0.0003 CENTS/KWH
07/01/18	RESID. PBF SURCHARGE ADJUSTMENT	0.4658 CENTS/KWH
07/01/18 - 12/31/18	GREEN INFRASTRUCTURE FEE	1.2100 DOLLARS/MONTH
08/01/18 - 08/31/18	PURCHASED POWER ADJUSTMENT	-0.0618 CENTS/KWH
09/01/18 - 09/30/18	PURCHASED POWER ADJUSTMENT	-0.0635 CENTS/KWH
08/23/18	INTERIM RATE INCREASE 2018 TEST YEAR	7.42 PERCENT ON BASE
08/23/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.3183 CENTS/KWH
10/01/18 - 10/31/18	PURCHASED POWER ADJUSTMENT	-0.0602 CENTS/KWH
11/01/18 - 11/30/19	PURCHASED POWER ADJUSTMENT	0.0108 CENTS/KWH
12/01/18 - 12/31/18	PURCHASED POWER ADJUSTMENT	0.0099 CENTS/KWH
01/01/19 - 01/31/19	PURCHASED POWER ADJUSTMENT	0.0094 CENTS/KWH
01/01/19	GREEN INFRASTRUCTURE FEE	1.35 DOLLARS/MONTH
02/01/19	PURCHASED POWER ADJUSTMENT	-0.0241 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

