



October 28, 2020

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 Recovery Factor for November 2020

Maui Electric Company, Limited's ("Maui Electric" or "Company") November 2020 Energy Cost Recovery factor for our Maui Division is 13.830 cents per kilowatt-hour ("kWh"), an increase of 0.441 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$150.47, an increase of \$2.73 compared to rates effective October 1, 2020. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$2.20) and increase in the DSM Adjustment (+\$0.54), slightly offset by the decrease in the Purchase Power Adjustment (-\$0.01).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 58.80 cents per million BTU to 939.69 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.187 cents per kWh to 17.880 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for November 2020 is 17.881 cents per kWh, a decrease of 0.195 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$140.91, a decrease of \$0.78 compared to rates effective October 1, 2020. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor.

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 5.79 cents per million BTU to 1,516.48 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 Recovery factor for our Moloka'i Division for November 2020 is 14.096 cents per kWh, an increase of 3.219 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$132.92, an increase of \$11.89 compared to rates effective October 1, 2020. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$12.87) and termination of the Purchase Power Adjustment (-\$0.98).

The Honorable Chair and Members
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October 28, 2020
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The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 243.82 cents per million BTU to 1,141.88 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 22.48 cents per kWh.

To streamline the filing, the Company has excluded the contract prices that were previously included in Attachment 3 Page 3 of 3, Attachment 12 Page 2 of 2, and Attachment 19 Page 2 of 2 from this filing. Those values do not affect the filed Energy Cost Recovery Factors.

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, 2020.

Sincerely,

/s/ Sharon M. Suzuki _____
Sharon M. Suzuki
President
Maui County and Hawai'i Island Utilities

Attachments

cc: Division of Consumer Advocacy

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

ENERGY COST RECOVERY FACTOR

	EFFECTIVE DATES		<u>Change</u>
	<u>10-01-20</u>	<u>11-01-20</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,522.27	1,516.48	(5.79)
DG Energy, ¢/kWh	0.00	0.00	0.00
Purchased Energy, ¢/kWh	30.00	30.00	0.00
<u>Residential Schedule "R"</u>			
Energy Cost Recovery, ¢/kWh	18.076	17.881	(0.195)
<u>Others - "G,P,F"</u>			
Energy Cost Recovery, ¢/kWh	18.076	17.881	(0.195)
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	141.69	140.91	(0.78)
500 KWH Consumption, \$/Bill	175.51	174.54	(0.97)

Supersedes Sheet Effective:

October 1, 2020

MAUI ELECTRIC COMPANY, LTD.
LANAI DIVISION

ENERGY COST RECOVERY (ECR) FILING

ENERGY COST RECOVERY (ECR) FILING - November 1, 2020 (page 1 of 2)

Line

1 Effective Date November 1, 2020
2 Supercedes Factors of October 1, 2020

GENERATION COMPONENT

CENTRAL STATION						DG ENERGY COMPONENT	
FUEL PRICES, ¢/mmbtu							
3	Industrial		0.00				
4	Diesel - Miki Basin		1,495.40				
5	Diesel - Manele Bay		1,902.32				
6	Other		0.00				
BTU MIX, %							
7	Industrial		0.00%	25	COMPOSITE COST OF DG		
8	Diesel - Miki Basin		94.82%		ENERGY, ¢/kWh	0.000	
9	Diesel - Manele Bay		5.18%				
10	Other		0.00%	26	% Input to System kWh Mix	0.00%	
			100.00%				
11	COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10))		1,516.48	27	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 25 x 26)	0.00000	
12	% Input to System kWh Mix		95.44%	28	BASE DG ENERGY COMP COST	0.000	
	EFFICIENCY FACTOR, mmbtu/kWh			29	Base % Input to System kWh Mix	0.00%	
	(A)	(B)	(C)	(D)	30	WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 28 x 29)	0.00000
	Fuel Type	Eff Factor mmbtu/kWh	Percent of Centrl Stn + Other	Weighted Eff Factor	31	Cost Less Base (Line 27 - 30)	0.00000
13	Industrial	0.000000	0.00	0.000000	32	Loss Factor	1.0500
14	Diesel	0.010872	100.00	0.010872	33	Revenue Tax Req Multiplier	1.0975
15	Other	0.010872	0.00	0.000000	34	DG FACTOR, ¢/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))]		0.010872				
17	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))		15.73536				
18	BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu		-				
19	Base % Input to Sys kWh Mix		0.00%				
20	Efficiency Factor, mmbtu/kWh		0.010872				
21	WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))		-				
22	COST LESS BASE (line(17 - 21))		15.73536				
23	Revenue Tax Req Multiplier		1.0975				
24	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))		17.26956				
					SUMMARY OF		
					TOTAL GENERATION FACTOR, ¢/kWh		
				35	CNTRL STN + OTHER (line 24)	17.26956	
				36	DG (line 34)	-	
				37	TOTAL GENERATION FACTOR, ¢/kWh (lines 35 + 36)	17.26956	

MAUI ELECTRIC COMPANY, LTD.
LANAI DIVISION

ENERGY COST RECOVERY (ECR) FILING

ENERGY COST RECOVERY (ECR) FILING - November 1, 2020 (page 2 of 2)

Line

- 1 Effective Date November 1, 2020
- 2 Supercedes Factors of October 1, 2020

<u>Line</u>	PURCHASED ENERGY COMPONENT	
	PURCHASED ENERGY PRICE, ¢/kWh - FOSSIL	
	PURCHASED ENERGY PRICE, ¢/kWh - RENEWABLE	
38	LANAI SOLAR RESEARCH - On Peak	30.000
39	- Off Peak	30.000
40	Sch Q	0.000
	PURCHASED ENERGY KWH MIX, %, FOSSIL	
	PURCHASED ENERGY KWH MIX, %, RENEWABLE	
41	LANAI SOLAR RESEARCH - On Peak	100.00%
42	- Off Peak	0.00%
43	Sch Q	0.00%
43A	Total Fossil %	0.00%
43B	Total Renewable %	100.00%
43C	Comp. cost of purch. energy, fossil ¢/kWh	N/A
43D	Comp. cost of purch. energy, renewable ¢/kWh	30.00
44	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (38 x 41) + (39 x 42) + (40 x 43))	30.000
45	% Input to System kWh Mix	4.56%
46	WEIGHTED COMP. PURCH. ENERGY COST, ¢/kWh (lines (44 x 45))	1.36800
47	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh	0.000
48	Base % Input to Sys kWh Mix	0.00
49	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (47 x 48))	0.00000
50	COST LESS BASE(lines (46 - 49))	1.36800
51	Loss Factor	1.050
52	Revenue Tax Req Multiplier	1.0975
53	PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	1.57645

Calculation of Monthly Fossil Fuel Cost Risk Sharing Component

Baseline Diesel		
54	Diesel \$, baseline month	\$616,461
55	Diesel mmbtu, baseline	30,215
56	Baseline Diesel, ¢/mmbtu	2,040.28
Month Diesel		
57	Diesel mmbtu, budget	30,092
58	Diesel Cost, ¢/mmbtu	1,516.48
59	Diesel ECRC Fossil Cost	\$456,341
60	Diesel Base ECRC Recovery Target	\$613,965
61	Diesel differential	-\$157,624
62	Total Fossil	-\$157,624
63	2% of above	-\$3,152
64	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	-\$23,324
65	Maximum Annual Cap (bi-directional)	\$31,500
66	Number of Days in year from implementation	366
67	Fossil Risk % Proration (based on 366 day year)	100.00%
68	Maximum Annual Cap (bi-directional) prorated	\$31,500
69	Applicable Monthly Fossil Fuel Cost Risk Sharing	-\$3,152
70	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$26,476
71	Fossil Cost Risk Sharing before taxes	-\$3,152
72	Revenue Tax Adjustment	1.097514
73	Fossil Cost Risk Sharing w/revenue tax	-\$3,460
74	Forecasted Month MWh Sales	2,871
75	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.1205

Line **SYSTEM COMPOSITE CALCULATIONS**

76	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (37 + 53))	18.84599
77	Adjustment, ¢/kWh	0.000
78	Fossil Fuel Cost Risk Sharing Component	0.121
79	ECR Reconciliation Adjustment	(1.086)
80	ECR FACTOR, ¢/kWh (lines (76 + 77 + 78 + 79))	17.881

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

MONTH END FUEL OIL ESTIMATE

<u>Miki Basin - ULSD</u>	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
10/20/2020	3,443.02	19,728.56	300,685.65
Estimated Use	1,758.86	10,078.27	153,418.45
Estimated Received	2,142.86	12,278.59	182,504.81
Estimated Additional	1,152.73	6,605.12	96,924.85
Estimated End	4,979.75	28,534.00	426,696.86

Next Month's Combined Miki Expense (\$/bbl) = \$ 85.6864 /bbl

<u>Manele CHP</u>	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
10/20/2020	160.67	920.64	19,525.58
Estimated Use	(0.02)	(0.11)	(2.26)
Estimated Received	-	-	-
Estimated Additional	111.21	637.25	10,110.42
Estimated End	271.90	1,558.00	29,638.26

Next Month's Manele Expense (\$/bbl) = \$ 109.0031 /bbl

FUEL OIL INVENTORY PRICE USED FOR FILING

<u>Type of Oil Burned</u>	<u>Price</u>	<u>Conversion Factor</u>	<u>Prices ¢/MBTU</u>
Diesel - Miki Basin	\$ 85.6864	5.73 BTU/BBL	1,495.40
Diesel - Manele Bay	\$ 109.0031	5.73 BTU/BBL	1,902.32

MAUI ELECTRIC COMPANY, LTD.
Lanai Division
ECR Reconciliation Adjustment

November 2020

1. Amount to be refunded	(\$85,200)
2. Monthly amount (1 / 3 X Line 1)	(\$28,400)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$31,169)
5. Estimated Sales (November 2020)	2,871 mwh
6. Adjustment (Line 4 ÷ Line 5)	-1.086 ¢/kwh

**MAUI ELECTRIC COMPANY, LTD.
LANAI DIVISION
2020 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
(Thousand \$)**

<u>Line</u>	Without Deadband 3rd Quarter <u>YTD Total</u>	collection by <u>company*</u>	Basis for Recon With Deadband 3rd Quarter <u>YTD Total</u>	collection by <u>company*</u>
ACTUAL COSTS:				
1	Generation	\$4,027.2	\$4,027.2	
2	Distributed Generation	\$0.0	\$0.0	
3	Purch Power	<u>\$81.1</u>	<u>\$81.1</u>	
4	TOTAL	\$4,108.3	\$4,108.3	
FUEL FILING COST				
5	Generation	\$4,098.2	\$4,079.4	
6	Distributed Generation	\$0.0	\$0.0	
7	Purch Power	<u>\$81.1</u>	<u>\$81.1</u>	
8	TOTAL	\$4,179.3	\$4,160.5	
BASE FUEL COST				
9	Generation	\$0.0	\$0.0	
10	Distributed Generation	\$0.0	\$0.0	
11	Purch Power	<u>\$0.0</u>	<u>\$0.0</u>	
12	TOTAL	\$0.0	\$0.0	
13	FUEL-BASE COST (Line 8-12)	\$4,179.3	\$4,160.5	
14	ACTUAL FOA LESS TAX	\$4,210.6	\$4,210.6	
15	FOA reconciliation adj for prior year	<u>-\$76.1</u>	<u>-\$76.1</u>	
16	ADJUSTED FOA LESS TAX	\$4,286.7	\$4,286.7	
17	FOA-(FUEL-BASE) (Line 16-13)	\$107.4 Over	\$126.2 Over	
ADJUSTMENTS				
18	Current year FOA accrual reversal	\$125.0	\$125.0	
19	Other prior year FOA	\$0.0	\$0.0	
20	Other	<u>\$0.0</u>	<u>\$0.0</u>	
21	QUARTERLY FOA RECONCILIATION (Line 17+18+19+20)	\$232.4 Over	\$251.2 Over	
21A	Fossil Fuel YTD Cost Risk Sharing Adjustment	<u>-\$17.7</u>	<u>-\$17.7</u>	
21B	YTD QUARTERLY FOA RECON w/Fossil Risk Adj (Line 21+Line 21A)	<u><u>\$214.7</u></u>	<u><u>\$233.6</u></u>	
22	2nd Quarter Reconciliation YTD		<u>\$148.4</u> Over	
23	FOA Reconciliation to be Refunded November 2020 to January 2021 (Line 22- 21B)		<u><u>-\$85.2</u></u> Refunded	

* 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, 2020 through September 30, 2020

	<u>Notes</u>	<u>YTD</u>
<u>Diesel</u>		
Diesel Efficiency Factor, BTU/kWh	f	10,872
Diesel Deadband Definition, +/- BTU/kWh	d	50
Diesel Portion of Recorded Sales, MWh	a	22,362
Diesel Consumption (Recorded), MMBTU	b	239,037
Diesel Efficiency Factor (Recorded), BTU/kWh	b	10,689
Lower limit of Diesel Deadband, BTU/kWh	e = f-d	10,822
Higher limit of Diesel Deadband, BTU/kWh	g = f+d	10,922
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	10,822

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

	2020	
	Without	With
	Deadband	Deadband
		AS FILED
	<u>Jan 1 - Sep 30</u>	<u>Jan 1 - Sep 30</u>
Diesel Portion of Recorded Sales, MWH	22,362	22,362
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.010872	0.010822
Mmbtu adjusted for Sales Efficiency Factor	243,119	242,001
\$/mmbtu	<u>\$16.8569</u>	<u>\$16.8569</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$4,098.2	\$4,079.4
TOTAL GENERATION FUEL FILING COST, \$000s	\$4,098.2	\$4,079.4
TOTAL GENERATION BASE FUEL COST , \$000s	\$0.0	\$0.0
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$4,098.2	\$4,079.4
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$0.0	\$0.0

Fossil Fuel Cost Risk Sharing Mechanism, September 2020, Lanai

		Jan-20, Baseline	YTD Subject to Fossil Risk
	Diesel Fossil Fuel Cost Risk Sharing		
AA	MMBtu	30,215	239,037
BB	\$ cost, actuals	616,461	4,027,158
CC = BB / AA (Baseline Column)	Jan 2020 baseline \$/mmbtu	20.4028093	20.4028093
DD	Diesel Gen kWh		23,586,663
EE	Total kWh, Gen, Purch Pwr, DG		24,312,721
FF	Sales kWh		23,050,588
GG = (DD / EE) x FF	Diesel kWh-sales		22,362,221
HH	Target Heat Rate		10,872
II1	Upper limit w/deadband		10,922
II2	Lower limit w/deadband		10,822
II3	Calculated Heat Rate (YTD subject to fossil risk, before deadband)		10,689
II	Recovery Heat Rate (YTD subject to fossil risk, after deadband)		10,822
JJ = BB/AA (YTD Column)	Actual Cost \$/MMbtu		16.8474201
KK = CC x HH x GG / 1,000,000	Base Cost Recovery w/Target Heat Rate		\$4,960,373
LL = II x JJ x GG / 1,000,000	Fuel Filing Cost Recovery		\$4,077,142
MM = 2% x (LL-KK)	Diesel Cost Risk Sharing		-\$17,665
NN	Annual Cap (non-prorated)		\$31,500
OO	# Days		366
PP	Annual Cap (pro-rated)		\$31,500
QQ = MM, up to cap	Total Fossil Fuel Cost Risk Sharing Adjustment, subject to ±\$31500 cap		-\$17,665

MAUI ELECTRIC COMPANY, LTD.
LANAI DIVISION
2020 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					(11,867)	(11,797)	11,475
January '19					(11,867)	(11,150)	325
February	8,600	(4)	(386)	8,986	(2,867)	(2,721)	6,590
March					(2,867)	(2,728)	3,862
April					(2,867)	(2,599)	1,263
May	91,900	(1)	1,002	90,898	(30,633)	(28,551)	63,610
June					(30,633)	(30,812)	32,798
July					(30,633)	(30,931)	1,867
August	(13,000)	(2)	2,171	(15,171)	4,333	4,372	(8,932)
September					4,333	4,343	(4,589)
October					4,333	4,291	(298)
November	(23,800)	(3)	(249)	(23,551)	7,933	8,219	(15,630)
December '19					7,933	8,627	(7,003)
January '20					7,933	8,106	1,103
February	83,900	(4)	938	82,962	(27,967)	(28,222)	55,843
March					(27,967)	(27,038)	28,805
April					(27,967)	(21,694)	7,111
May	78,000	(1)	847	77,153	(26,000)	(28,250)	56,014
June					(26,000)	(27,227)	28,787
July					(26,000)	(29,208)	(421)
August	70,400	(2)	2,796	67,604	(23,467)	(22,814)	44,369
September					(23,467)	(18,781)	25,588
October					(23,467)		
November	85,200	(3)	2,131	83,069	(28,400)		

NOTES:

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

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

	Rate		Charge (\$) at 400 Kwh		
	10-01-20	11-01-20	10-01-20	11-01-20	Difference
Base Rates					
effective date:	09/01/19	09/01/19			
Base Fuel/Energy Charge ¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Non-fuel Energy Charge					
First 250 kWh per month ¢/kWh	12.3123	12.3123	30.78	30.78	0.00
Next 500 kWh per month ¢/kWh	14.8123	14.8123	22.22	22.22	0.00
Customer Charge \$	11.50	11.50	11.50	11.50	0.00
Total Base Charges			64.50	64.50	0.00
IRP Refund					
% on base	0.0000	0.0000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment ¢/kWh	0.3383	0.3383	1.35	1.35	0.00
PBF Surcharge ¢/kWh	0.5882	0.5882	2.35	2.35	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
Refund of 2018 Interim 0.00	0.00	0.00	0.00	0.00	0.00
Energy Cost Recovery ¢/kWh	18.076	17.881	72.30	71.52	-0.78
Green Infrastructure Fee \$	1.19	1.19	1.19	1.19	0.00
Avg Residential Bill at 400 kwh			141.69	140.91	
			Increase (Decrease -)		-0.78
			% Change		-0.55%

	Rate		Charge (\$) at 500 Kwh		
	10-01-20	11-01-20	10-01-20	11-01-20	Difference
Base Rates					
effective date:	09/01/19	09/01/19			
Base Fuel/Energy Charge ¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Non-fuel Energy Charge					
First 250 kWh per month ¢/kWh	12.3123	12.3123	30.78	30.78	0.00
Next 500 kWh per month ¢/kWh	14.8123	14.8123	37.03	37.03	0.00
Customer Charge \$	11.50	11.50	11.50	11.50	0.00
Total Base Charges			79.31	79.31	0.00
IRP Refund					
% on base	0.0000	0.0000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment ¢/kWh	0.3383	0.3383	1.69	1.69	0.00
PBF Surcharge ¢/kWh	0.5882	0.5882	2.94	2.94	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
Refund of 2018 Interim 0.00	0.00	0.00	0.00	0.00	0.00
Energy Cost Recovery ¢/kWh	18.076	17.881	90.38	89.41	-0.97
Green Infrastructure Fee \$	1.19	1.19	1.19	1.19	0.00
Avg Residential Bill at 500 kwh			175.51	174.54	
			Increase (Decrease -)		-0.97
			% Change		-0.55%

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

<u>EFFECTIVE DATE</u>	FUEL FACTOR		RESIDENTIAL BILL (\$)
	CENTS / KWH		
	<u>RESIDENTIAL & COMMERCIAL</u>	<u>@ 400 KWH</u>	<u>@ 500 KWH</u>
January 1, 2018	-8.358	153.69	191.20
February 1, 2018	-8.395	153.54	191.01
March 1, 2018	-7.868	155.65	193.65
April 1, 2018	-9.141	150.05	186.64
May 1, 2018	-7.716	156.26	194.41
June 1, 2018	-6.144	163.86	203.92
July 1, 2018	-5.753	165.46	205.95
August 1, 2018	-7.005	160.45	199.69
September 1, 2018	-6.735	166.53	207.25
October 1, 2018	-6.372	167.98	209.07
November 1, 2018	-6.037	169.32	210.74
December 1, 2018	-5.396	171.89	213.95
January 1, 2019	-6.950	165.81	206.32
February 1, 2019	-8.789	158.45	197.12
March 1, 2019	-6.041	169.45	210.86
April 1, 2019	-6.801	166.07	206.63
May 1, 2019	-7.864	162.15	201.75
June 1, 2019	4.196	172.73	214.30
July 1, 2019	3.088	171.26	212.48
August 1, 2019	3.232	171.84	213.20
September 1, 2019	24.278	168.18	208.62
October 1, 2019	24.957	170.90	212.02
November 1, 2019	26.088	175.42	217.67
December 1, 2019	26.449	176.87	219.48
January 1, 2020	25.369	173.69	215.49
February 1, 2020	24.109	168.65	209.19
March 1, 2020	23.379	165.73	205.54
April 1, 2020	19.794	151.15	187.31
May 1, 2020	18.958	148.04	183.43
June 1, 2020	15.429	131.79	163.12
July 1, 2020	16.335	134.73	166.81
August 1, 2020	17.755	140.41	173.91
September 1, 2020	18.135	141.93	175.81
October 1, 2020	18.076	141.69	175.51
November 1, 2020	17.881	140.91	174.54

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
06/01/11	IRP RECOVERY REFUND	0.000 PERCENT ON BASE
08/17/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0000 CENTS/KWH
01/01/18 - 06/30/18	GREEN INFRASTRUCTURE FEE	1.34 DOLLARS/MONTH
04/01/18 - 04/30/18	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/18 - 03/31/19	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/18 - 08/22/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.8954 CENTS/KWH
07/01/18 - 06/30/19	RESID. PBF SURCHARGE ADJUSTMENT	0.4658 CENTS/KWH
07/01/18 - 12/31/18	GREEN INFRASTRUCTURE FEE	1.21 DOLLARS/MONTH
08/23/18 - 05/31/19	INTERIM RATE INCREASE 2018 TEST YEAR	6.36 PERCENT ON BASE
08/23/18 - 05/31/19	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.0000 CENTS/KWH
01/01/19 - 06/30/19	GREEN INFRASTRUCTURE FEE	1.35 DOLLARS/MONTH
04/01/19 - 04/30/19	SOLARSAVER ADJUSTMENT	-0.0855 CENTS/KWH
05/01/19 - 03/31/20	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/19	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (2018 TEST YEAR)	
06/01/19 - 06/30/19	REFUND OF INTERIM RATE INCREASE 2018 TEST YEAR	-2.03 PERCENT ON BASE
06/01/19 - 05/31/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.8716 CENTS/KWH
07/01/19 - 12/31/19	RESID. PBF SURCHARGE ADJUSTMENT	0.4775 CENTS/KWH
07/01/19 - 12/31/19	GREEN INFRASTRUCTURE FEE	1.17 DOLLARS/MONTH
01/01/20 - 06/30/20	RESID. PBF SURCHARGE ADJUSTMENT	0.7437 CENTS/KWH
01/01/20 - 06/30/20	GREEN INFRASTRUCTURE FEE	1.2500 DOLLARS/MONTH
04/01/20 - 04/30/20	SOLARSAVER ADJUSTMENT	-0.06 CENTS/KWH
05/01/20	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.3383 CENTS/KWH
07/01/20	RESID. PBF SURCHARGE ADJUSTMENT	0.5882 CENTS/KWH
07/01/20	GREEN INFRASTRUCTURE FEE	1.19 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.