



October 27, 2023

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 2023

Maui Electric Company, Limited's ("Maui Electric" or "Company") November 2023 Energy Cost Recovery factor for our Maui Division is 25.685 cents per kilowatt-hour ("kWh"), an increase of 1.389 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$218.94, an increase of \$6.99 compared to rates effective October 1, 2023. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$6.95) and the increase in the Residential DSM Adjustment (+\$0.05) partially 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 increased 175.070 cents per million BTU to 2,271.85 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 0.593 cents per kWh to 20.755 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for November 2023 is 36.864 cents per kWh, an increase of 0.440 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$224.16, an increase of \$1.76 compared to rates effective October 1, 2023. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor.

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 55.17 cents per million BTU to 3,190.01 cents per million BTU. The composite cost 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 2023 is 30.861 cents per kWh, an increase of 2.513 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$208.14, an increase of \$10.05 compared to rates effective October 1, 2023. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor.

The Honorable Chair and Members  
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The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 187.77 cents per million BTU to 2,555.63 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, 2023.

Sincerely,

/s/ Dean K. Matsuura  
Dean K. Matsuura  
Director, Regulatory Rate Proceedings  
Hawaiian Electric Company, Inc.

Attachments

cc: Division of Consumer Advocacy

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

**ENERGY COST RECOVERY FACTOR**

	EFFECTIVE DATES		<u>Change</u>
	<u>10/01/2023</u>	<u>11/01/2023</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	3,245.18	3,190.01	(55.17)
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	36.424	36.864	0.440
<u>Others - "G,J,P,F"</u>			
Energy Cost Recovery, ¢/kWh	36.424	36.864	0.440
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	222.40	224.16	1.76
500 KWH Consumption, \$/Bill	276.20	278.40	2.20

Supersedes Sheet Effective: 10/01/2023

MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION

ENERGY COST RECOVERY (ECR) FILING

ENERGY COST RECOVERY (ECR) FILING - November 1, 2023 (page 1 of 2)

Line	Effective Date	November 1, 2023
2	Supercedes Factors of	October 1, 2023

**GENERATION COMPONENT**

CENTRAL STATION				DG ENERGY COMPONENT	
FUEL PRICES, \$/mmbtu					
3	Industrial		0.00		
4	Diesel - Miki Basin		3,190.01		
5					
6	Other		0.00		
BTU MIX, %					
7	Industrial		0.00%	25 COMPOSITE COST OF DG ENERGY, \$/kWh	
8	Diesel - Miki Basin		100.00%		0.000
9					
10	Other		0.00%	26 % Input to System kWh Mix	
			100.00%		0.00%
11 COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER \$/mmbtu (Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10))				27 WEIGHTED COMPOSITE DG ENERGY COST, \$/kWh (Lines 25 x 26)	
			3,190.01		0.00000
12	% Input to System kWh Mix		98.75%	28 BASE DG ENERGY COMP COST	
EFFICIENCY FACTOR, mmbtu/kWh				29 Base % Input to System kWh Mix	
	(A)	(B)	(C)	(D)	30 WEIGHTED BASE DG ENERGY COST, \$/kWh (Line 28 x 29)
			Percent of		0.00000
			Centrl Stn +		
	Fuel Type	Eff Factor	Other	Weighted	31 Cost Less Base (Line 27 - 30)
		mmbtu/kWh		Eff Factor	0.00000
13	Industrial	0.000000	0.00	32 Loss Factor	1.0500
14	Diesel	0.010722	100.00	33 Revenue Tax Req Multiplier	1.0975
15	Other	0.010722	0.00	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)]		0.010722		
17 WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, \$/kWh (lines (11 x 12 x 16))					
			33.77575		
18 BASE CENTRAL STATION + OTHER GENERATION COST, \$/mmbtu					
			-		
19	Base % Input to Sys kWh Mix		0.00%		
20	Efficiency Factor, mmbtu/kWh		0.010722		
21 WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST \$/kWh (lines (18 x 19 x 20))					
			-		
22	COST LESS BASE (line(17 - 21))		33.77575	SUMMARY OF TOTAL GENERATION FACTOR, \$/kWh	
23	Revenue Tax Req Multiplier		1.0975	35 CNTRL STN + OTHER (line 24)	37.06889
24 CENTRAL STATION + OTHER GENERATION FACTOR, \$/kWh (line (22 x 23))				37.06889	36 DG (line 34)
					-
				37 TOTAL GENERATION FACTOR, \$/kWh (lines 35 + 36)	37.06889

MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION

ENERGY COST RECOVERY (ECR) FILING

ENERGY COST RECOVERY (ECR) FILING - November 1, 2023 (page 2 of 2)

Line

1 Effective Date November 1, 2023  
2 Supercedes Factors of October 1, 2023

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>	
	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	1.25%
46	WEIGHTED COMP. PURCH. ENERGY COST, ¢/kWh (lines (44 x 45))	0.37500
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))	0.37500
51	Loss Factor	1.050
52	Revenue Tax Req Multiplier	1.0975
53	PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	0.43214

Calculation of Monthly Fossil Fuel Cost Risk Sharing Component

<b>Baseline Diesel</b>		
54	Diesel \$, baseline month	\$936,167
55	Diesel mmbtu, baseline	30,062
56	Baseline Diesel, c/mmbtu	3,114.12
<b>Month Diesel</b>		
57	Diesel mmbtu, budget	30,724
58	Diesel Cost, ¢/mmbtu	3,190.01
59	Diesel ECRC Fossil Cost	\$980,085
60	Diesel Base ECRC Recovery Target	\$956,768
61	Diesel differential	\$23,317
62	Total Fossil	\$23,317
63	2% of above	\$466
64	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	-\$15,832
65	Maximum Annual Cap (bi-directional)	\$31,500
66	Number of Days in year from implementation	365
67	Fossil Risk % Proration (based on 365 day year)	100.00%
68	Maximum Annual Cap (bi-directional) prorated	\$31,500
69	Applicable Monthly Fossil Fuel Cost Risk Sharing	\$466
70	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$15,366
71	Fossil Cost Risk Sharing before taxes	\$466
72	Revenue Tax Adjustment	1.097514
73	Fossil Cost Risk Sharing w/revenue tax	\$512
74	Forecasted Month MWh Sales	2,901
75	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	-0.0176

Line SYSTEM COMPOSITE CALCULATIONS

76	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (37 + 53))	37.50103
77	Adjustment, ¢/kWh	0.000
78	Fossil Fuel Cost Risk Sharing Component	(0.018)
79	ECR Reconciliation Adjustment	(0.619)
80	ECR FACTOR, ¢/kWh (lines (76 + 77 + 78 + 79))	36.864

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

**MONTH END FUEL OIL ESTIMATE**

<b><u>Miki Basin - ULSD</u></b>	<b><u>Barrels</u></b>	<b><u>MBTU</u></b>	<b><u>\$</u></b>
10/20/2023	2,539.00	14,548.47	470,423.81
Estimated Use	1,962.76	11,246.61	364,972.89
Estimated Received	1,285.71	7,367.12	254,047.68
Estimated Additional	<u>3,500.00</u>	<u>20,055.02</u>	<u>620,600.59</u>
Estimated End	5,361.95	30,724.00	980,099.19

Next Month's Combined Miki Expense (\$/bbl)                      \$ 182.7878 /bbl

**FUEL OIL INVENTORY PRICE USED FOR FILING**

<b><u>Type of Oil Burned</u></b>	<b><u>Price</u></b>	<b><u>Conversion Factor</u></b>	<b><u>Prices ¢/MBTU</u></b>
Diesel - Miki Basin	\$ 182.7878	5.73 BTU/BBL	3,190.01

**MAUI ELECTRIC COMPANY, LTD.**  
**Lanai Division**  
**ECR Reconciliation Adjustment**

**November 2023**

1. Amount to be refunded	(\$49,100)
2. Monthly amount (1 / 3 X Line 1)	(\$16,367)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$17,963)
5. Estimated Sales (November 2023)	2,901 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.619 ¢/kwh

**MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION  
2023 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY  
(Thousand \$)**

<u>Line</u>	Without Deadband 3rd Quarter YTD Total	collection by company*	Basis for Recon With Deadband 3rd Quarter YTD Total	collection by company*
<b>ACTUAL COSTS:</b>				
1	Generation		\$7,481.9	\$7,481.9
2	Distributed Generation		\$0.0	\$0.0
3	Purch Power		-\$135.0	-\$135.0
4	TOTAL		\$7,346.9	\$7,346.9
<b>FUEL FILING COST</b>				
5	Generation		\$7,442.1	\$7,476.8
6	Distributed Generation		\$0.0	\$0.0
7	Purch Power		-\$135.0	-\$135.0
8	TOTAL		\$7,307.1	\$7,341.8
<b>BASE FUEL COST</b>				
9	Generation		\$0.0	\$0.0
10	Distributed Generation		\$0.0	\$0.0
11	Purch Power		\$0.0	\$0.0
12	TOTAL		\$0.0	\$0.0
13	FUEL-BASE COST (Line 8-12)		\$7,307.1	\$7,341.8
14	ACTUAL FOA LESS TAX		\$7,376.3	\$7,376.3
15	FOA reconciliation adj for prior year		-\$77.8	-\$77.8
16	ADJUSTED FOA LESS TAX		\$7,454.1	\$7,454.1
17	FOA-(FUEL-BASE) (Line 16-13)	\$147.0 Over		\$112.3 Over
<b>ADJUSTMENTS</b>				
18	Current year FOA accrual reversal		\$144.0	\$144.0
19	Other prior year FOA		\$0.0	\$0.0
20	Other		\$0.0	\$0.0
21	3rd QUARTER FOA RECONCILIATION (Lines 17+18+19+20)	\$291.0 Over		\$256.3 Over
21A	YTD Fossil Fuel Cost Risk Sharing Adjustment		-\$17.6	-\$17.6
21B	Quarterly FOA Recon w/Fossil Risk Adj (Line 21 + Line 21A)		\$273.4	\$238.7
22	2nd Quarter Reconciliation YTD			\$189.6 Over
23	FOA Reconciliation to be Refunded November 2023 to January 2024 (Line 22- 21B)			-\$49.1 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, 2023 Through September 30, 2023

	<u>Notes</u>	<u>YTD</u>
<b><u>Diesel</u></b>		
Diesel Efficiency Factor, BTU/kWh	f	10,722
Diesel Deadband Definition, +/- BTU/kWh	d	<b>50</b>
Diesel Portion of Recorded Sales, MWh	a	25,018
Diesel Consumption (Recorded), MMBTU	b	269,732
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	10,781
Lower limit of Diesel Deadband, BTU/kWh	e = f-d	10,672
Higher limit of Diesel Deadband, BTU/kWh	g = f+d	10,772
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	<b>10,772</b>

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

	<b>2023</b>	
	<b>Without Deadband</b>	<b>With Deadband AS FILED</b>
	<u>Jan 1 - Sep 30</u>	<u>Jan 1 - Sep 30</u>
Diesel Portion of Recorded Sales, MWH	25,018	25,018
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.010722	0.010772
Mmbtu adjusted for Sales Efficiency Factor	268,244	269,495
\$/mmbtu	<u>\$27.7438</u>	<u>\$27.7438</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$7,442.1	\$7,476.8
TOTAL GENERATION FUEL FILING COST, \$000s	\$7,442.1	\$7,476.8
TOTAL GENERATION BASE FUEL COST , \$000s	\$0.0	\$0.0
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$7,442.1	\$7,476.8
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$0.0	\$0.0

**Fossil Fuel Cost Risk Sharing Mechanism, September 2023, Lanai**

Jan-23, Baseline YTD Subject to Fossil Risk

<b>Diesel Fossil Fuel Cost Risk Sharing</b>			
AA	MMBtu	30,062	269,732
BB	\$ cost, actuals	\$936,167	\$7,481,897
CC = BB / AA (Baseline Column)	Jan 2023 baseline \$/mmbtu	31.1411734	31.1411734
DD	Diesel Gen kWh		26,180,177
EE	Total kWh, Gen, Purch Pwr, DG		26,201,115
FF	Sales kWh		25,038,043
GG = (DD / EE) x FF	Diesel kWh-sales		25,018,034
HH	Target Heat Rate		10,722
II1	Upper limit w/deadband		10,772
II2	Lower limit w/deadband		10,672
II3	Calculated Heat Rate (YTD subject to fossil risk, before deadband)		10,781
II	Recovery Heat Rate (YTD subject to fossil risk, after deadband)		10,772
JJ = BB/AA (YTD Column)	Actual Cost \$/MMbtu		27.7382927
KK = CC x HH x GG / 1,000,000	Base Cost Recovery w/Target Heat Rate		\$8,353,413
LL = II x JJ x GG / 1,000,000	Fuel Filing Cost Recovery		\$7,475,311
<b>MM = 2% x (LL-KK)</b>	<b>Diesel Cost Risk Sharing</b>		<b>-\$17,562</b>
NN	Annual Cap (non-prorated)		\$31,500
OO	# Days		365
PP	Annual Cap (pro-rated)		\$31,500
QQ = MM, up to cap	Total Fossil Fuel Cost Risk Sharing Adjustment, subject to ±\$31500 cap		-\$17,562

**MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION  
2023 Cumulative Reconciliation Balance**

<u>Month</u>	(1) <u>YTD FOA Reconciliation</u>	<u>Qtr</u>	(2) <u>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 '21					(22,367)	(20,800)	27,810
January '22					(22,367)	(20,722)	7,088
February	55,600	(4)	5,451	50,149	(18,533)	(16,329)	40,908
March					(18,533)	(18,196)	22,712
April					(18,533)	(17,076)	5,636
May	68,500	(1)	4,186	64,314	(22,833)	(23,687)	46,263
June					(22,833)	(22,948)	23,315
July					(22,833)	(22,368)	947
August	55,300	(2)	488	54,812	(18,433)	(17,864)	37,895
September					(18,433)	(17,494)	20,401
October					(18,433)	(18,331)	2,070
November	58,900	(3)	1,973	56,927	(19,633)	(18,575)	40,422
December					(19,633)	(18,053)	22,369
January '23					(19,633)	(20,368)	2,001
February	58,300	(4)	2,740	55,560	(19,433)	(19,178)	38,383
March					(19,433)	(19,777)	18,606
April					(19,433)	(19,028)	(422)
May	52,900	(1)	(824)	53,724	(17,633)	(17,785)	35,517
June					(17,633)	(16,509)	19,008
July					(17,633)	(17,259)	1,749
August	136,700	(2)	1,377	135,323	(45,567)	(42,628)	94,444
September					(45,567)	(43,190)	51,254
October					(45,567)		
November	49,100	(3)	5,690	43,410	(45,567)		

## NOTES:

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 13)  
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.**  
**Lanai Division**  
**Calculations of the Average Residential Customer Bill**

	Rate		Charge (\$) at 400 Kwh		
	10/01/23	11/01/23	10/01/23	11/01/23	Difference
<b>Base Rates</b>	effective date:	09/01/19	09/01/19		
Base Fuel/Energy Charge	¢/kWh	0.0000	0.0000	0.00	0.00
Non-fuel Energy Charge					
First 250 kWhr per month	¢/kWh	12.3123	12.3123	30.78	30.78
Next 500 kWhr per month	¢/kWh	14.8123	14.8123	22.22	22.22
Customer Charge	\$	11.50	11.50	11.50	11.50
<b>Total Base Charges</b>			64.50	64.50	0.00
<b>IRP Refund</b>	% on base	0.0000	0.0000	0.00	0.00
<b>Revenue Balancing Rate Adjustment</b>	% of bill excluding ECRC	11.88%	11.88%	8.14	8.14
<b>PBF Surcharge</b>	¢/kWh	0.7195	0.7195	2.88	2.88
<b>Renewable Energy Infrastructure Cost Recovery Provision</b>	¢/kWh	0.0000	0.0000	0.00	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00
<b>Energy Cost Recovery</b>	¢/kWh	36.424	36.864	145.70	147.46
<b>Green Infrastructure Fee</b>	\$	1.18	1.18	1.18	1.18
<b>Avg Residential Bill at 400 kwh</b>			222.40	224.16	
					Increase (Decrease -) % Change
					1.76 0.79%

	Rate		Charge (\$) at 500 Kwh		
	10/01/23	11/01/23	10/01/23	11/01/23	Difference
<b>Base Rates</b>	effective date:	09/01/19	09/01/19		
Base Fuel/Energy Charge	¢/kWh	0.0000	0.0000	0.00	0.00
Non-fuel Energy Charge					
First 250 kWhr per month	¢/kWh	12.3123	12.3123	30.78	30.78
Next 500 kWhr per month	¢/kWh	14.8123	14.8123	37.03	37.03
Customer Charge	\$	11.50	11.50	11.50	11.50
<b>Total Base Charges</b>			79.31	79.31	0.00
<b>IRP Refund</b>	% on base	0.0000	0.0000	0.00	0.00
<b>Revenue Balancing Rate Adjustment</b>	% of bill excluding ECRC	11.88%	11.88%	9.99	9.99
<b>PBF Surcharge</b>	¢/kWh	0.7195	0.7195	3.60	3.60
<b>Renewable Energy Infrastructure Cost Recovery Provision</b>	¢/kWh	0.0000	0.0000	0.00	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00
<b>Energy Cost Recovery</b>	¢/kWh	36.424	36.864	182.12	184.32
<b>Green Infrastructure Fee</b>	\$	1.18	1.18	1.18	1.18
<b>Avg Residential Bill at 500 kwh</b>			276.20	278.40	
					Increase (Decrease -) % Change
					2.20 0.80%

Note: Effective June 1, 2023, the RBA Rate Adjustment is billed based on the total billed amount before the RBA rate adjustment excluding the Energy Cost Recovery.

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

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR</u> <u>CENTS / KWH</u>		<u>RESIDENTIAL BILL (\$)</u>
	<u>RESIDENTIAL &amp; COMMERCIAL</u>	<u>@ 400 KWH @ 500 KWH</u>	
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
December 1, 2020	17.874	140.89	174.50
January 1, 2021	19.498	147.44	182.68
February 1, 2021	20.640	152.01	188.39
March 1, 2021	22.103	157.86	195.71
April 1, 2021	24.018	165.34	205.06
May 1, 2021	24.354	166.87	206.96
June 1, 2021	23.796	167.38	207.60
July 1, 2021	24.680	171.10	212.26
August 1, 2021	25.269	173.46	215.21
September 1, 2021	25.345	173.76	215.59
October 1, 2021	24.342	169.75	210.57
November 1, 2021	29.191	189.14	234.82
December 1, 2021	29.254	189.40	235.13
January 1, 2022	28.241	189.19	234.87
February 1, 2022	28.361	189.67	235.47
March 1, 2022	31.445	202.01	250.89
April 1, 2022	33.341	209.46	260.21
May 1, 2022	37.529	226.35	281.31
June 1, 2022	41.508	240.84	299.43
July 1, 2022	43.106	247.17	307.35
August 1, 2022	43.083	247.08	307.24
September 1, 2022	37.630	225.27	279.97
October 1, 2022	37.815	226.01	280.90
November 1, 2022	37.960	226.59	281.62
December 1, 2022	38.346	228.13	283.55
January 1, 2023	36.114	220.41	273.87
February 1, 2023	36.012	220.00	273.36
March 1, 2023	34.661	214.59	266.61
April 1, 2023	33.234	208.87	259.45
May 1, 2023	29.925	195.65	242.93
June 1, 2023	31.440	202.21	250.93
July 1, 2023	28.448	190.49	236.32
August 1, 2023	27.992	188.67	234.04
September 1, 2023	32.757	207.73	257.87
October 1, 2023	36.424	222.40	276.20
November 1, 2023	36.864	224.16	278.40

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
<b>06/01/11</b>	<b>IRP RECOVERY REFUND</b>	<b>0.000 PERCENT ON BASE</b>
<b>08/17/17</b>	<b>RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION</b>	<b>0.0000 CENTS/KWH</b>
<b>06/01/19</b>	<b>FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (2018 TEST YEAR)</b>	
05/01/20 - 03/31/21	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/20 - 05/31/21	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.3383 CENTS/KWH
07/01/20 - 06/30/21	RESID. PBF SURCHARGE ADJUSTMENT	0.5882 CENTS/KWH
01/01/21 - 06/30/21	GREEN INFRASTRUCTURE FEE	1.25 DOLLARS/MONTH
04/01/21 - 04/30/21	SOLARSAVER ADJUSTMENT	-0.0445 CENTS/KWH
05/01/21 - 03/31/22	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/21 - 12/31/21	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.0242 CENTS/KWH
07/01/21 - 12/31/21	GREEN INFRASTRUCTURE FEE	1.19 DOLLARS/MONTH
07/01/21 - 06/30/22	RESID. PBF SURCHARGE ADJUSTMENT	0.6478 CENTS/KWH
01/01/22 - 05/31/22	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.9714 CENTS/KWH
01/01/22 - 06/30/22	GREEN INFRASTRUCTURE FEE	1.25 DOLLARS/MONTH
04/01/22 - 04/30/22	SOLARSAVER ADJUSTMENT	-0.0315 CENTS/KWH
05/01/22 - 03/31/23	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/22 - 12/31/22	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.6175 CENTS/KWH
07/01/22 - 06/30/23	RESID. PBF SURCHARGE ADJUSTMENT	0.6488 CENTS/KWH
07/01/22 - 12/31/22	GREEN INFRASTRUCTURE FEE	1.18 DOLLARS/MONTH
01/01/23 - 06/30/23	GREEN INFRASTRUCTURE FEE	1.23 DOLLARS/MONTH
01/01/23 - 05/31/23	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.9048 CENTS/KWH
04/01/23 - 04/30/23	SOLARSAVER ADJUSTMENT	-0.0038 CENTS/KWH
<b>05/01/23</b>	<b>SOLARSAVER ADJUSTMENT</b>	<b>0.0000 CENTS/KWH</b>
<b>06/01/23</b>	<b>REVENUE BALANCING ACCOUNT RATE ADJUSTMENT</b>	<b>11.88% PERCENT OF ALL RATE SCHEDULE CHARGES, EXCLUDING ECRC and RBA</b>
<b>07/01/23</b>	<b>RESID. PBF SURCHARGE ADJUSTMENT</b>	<b>0.7195 CENTS/KWH</b>
<b>07/01/23</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.18 DOLLARS/MONTH</b>

~ Surcharges currently in effect are in bold.

~ Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount and minimum charge.