

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 of the Hawai'i Public Utilities Commission October 27, 2023 Page 2

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,

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

Attachments

cc: Division of Consumer Advocacy

## ENERGY COST RECOVERY FACTOR

	EFFECTI		
	<u>10/01/2023</u>	<u>11/01/2023</u>	<u>Change</u>
<u>COMPOSITE COSTS</u> Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh Purchased Energy, ¢/kWh	3,245.18 0.00 30.00	3,190.01 0.00 30.00	(55.17) 0.00 0.00
Residential Schedule "R"			
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
Residential Customer with			
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

### ENERGY COST RECOVERY (ECR) FILING

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

ne		

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

### **GENERATION COMPONENT**

	CENTRAL STATION			
	FUEL PRICES, ¢/mmbtu			
3	Industrial	0.00		
4	Diesel - Miki Basin	3,190.01		
5				
6	Other	0.00		
	BTU MIX, %		DG ENERGY COMPONENT	
	Industrial	0.00%	25 COMPOSITE COST OF DG	
8	Diesel - Miki Basin	100.00%	ENERGY, ¢/kWh	0.000
9				
10	Other	0.00%	26 % Input to System kWh Mix	0.00%
		100.00%		
			27 WEIGHTED COMPOSITE DG ENERGY	
11	COMPOSITE COST OF GENERATION,		COST, ¢/kWh (Lines 25 x 26)	0.00000
	CENTRAL STATION + OTHER ¢/mmbtu	3,190.01		
	(Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10))			
12	% Input to System kWh Mix	98.75%		0.000
			29 Base % Input to System kWh Mix	0.00%
	EFFICIENCY FACTOR, mmbtu/kWh		30 WEIGHTED BASE DG ENERGY COST,	
	(A) (B) (C)	(D)	¢/kWh (Line 28 x 29)	0.00000
	Percent of			
	Eff Factor Centrl Stn +	Weighted	31 Cost Less Base (Line 27 - 30)	0.00000
	Fuel Type mmbtu/kwh Other	Eff Factor	32 Loss Factor	1.0500
13		0.000000	33 Revenue Tax Req Multiplier	1.0975
14		0.010722	34 DG FACTOR,	
15		0.000000	¢/kWh (Line 31 x 32 x 33)	0.00000
10	(Lines 13, 14, 15): Col(B) x Col(C) = Col(D)			
16	Weighted Efficiency Factor, mmbtu/kWh	0.040700		
	[lines 13(D) + 14(D) + 15(D)]	0.010722		
17	WEIGHTED COMPOSITE CENTRAL STATION	1.4		
	OTHER GEN COST, ¢/kWh			
	(lines (11 x 12 x 16))	33.77575		
		33.11313		
18	BASE CENTRAL STATION + OTHER GENERA			
10	COST, ¢/mmbtu	-		
19	Base % Input to Sys kWh Mix	0.00%		
	Efficiency Factor, mmbtu/kwh	0.010722		
	WEIGHTED BASE CENTRAL STATION +	0.010722		
	OTHER GENERATION COST ¢/kWh			
	(lines (18 x 19 x 20))	-		
	(		SUMMARY OF	
22	COST LESS BASE (line(17 - 21))	33.77575	TOTAL GENERATION FACTOR, ¢/kWh	
	Revenue Tax Reg Multiplier	1.0975	35 CNTRL STN + OTHER (line 24)	37.06889
	CENTRAL STATION + OTHER GENERATION		36 DG (line 34)	-
l	FACTOR, ¢/kWh (line (22 x 23))	37.06889	37 TOTAL GENERATION FACTOR.	
	, , ,		¢/kWh (lines 35 + 36)	37.06889
L			, , , , , , , , , , , , , , , , , , , ,	

### ENERGY COST RECOVERY (ECR) FILING

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

Line

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

Line	PURCHASED ENERGY COMPON	<u>ENT</u>
	PURCHASED ENERGY PRICE, ¢/kWh - FOSSI PURCHASED ENERGY PRICE, ¢/kWh - RENEV	
38 39	LANAI SOLAR RESEARCH- On Peak - Off Peak	30.000 30.000
40	Sch Q	0.000
41 42	PURCHASED ENERGY KWH MIX, %, FOSSIL PURCHASED ENERGY KWH MIX, %, RENEW, LANAI SOLAR RESEARCH- On Peak - Off Peak	ABLE 100.00% 0.00%
43A 43B 43C	Sch Q Total Fossil % Total Renewable % Comp. cost of purch. energy, fossil ¢/kWh Comp. cost of purch. energy, renewable ¢/kWh	0.00% 0.00% 100.00% N/A 30.00
45	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (38 x 41) + (39 x 42) + (40 x 43)) % Input to System kWh Mix WEIGHTED COMP. PURCH. ENERGY COST, ¢/kWh (lines (44 x 45))	30.000 1.25% 0.37500
48	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh Base % Input to Sys kWh Mix WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (47 x 48))	0.000 0.00 0.00000
51 52	COST LESS BASE(lines (46 - 49)) Loss Factor Revenue Tax Req Multiplier PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	0.37500 1.050 1.0975 0.43214

aiculatio	n of Monthly Fossil Fuel Cost Risk Sharing Component	
	Baseline Diesel	
54	Diesel \$, baseline month	\$936,16
55	Diesel mmbtu, baseline	30,062
56	Baseline Diesel, c/mmbtu	3,114.12
	Month Diesel	
57	Diesel mmbtu, budget	30,724
58	Diesel Cost, ¢/mmbtu	3,190.01
59	Diesel ECRC Fossil Cost	\$980,08
60	Diesel Base ECRC Recovery Target	\$956,768
61	Diesel differential	\$23,31
62	Total Fossil	\$23,31
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	\$460
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	37.50103
(lines (37 + 53))	
77 Adjustment, ¢/kWh	0.000
78 Fossil Fuel Cost Risk Sharing Component	(0.018)
79 ECR Reconciliation Adjustment	(0.619)
80 ECR FACTOR, ¢/kWh	36.864
(lines (76 + 77 + 78 + 79))	

### Maui Electric Company, Ltd. Lanai Division

## MONTH END FUEL OIL ESTIMATE

<u>Miki Basin - ULSD</u>	Barrels	MBTU	\$
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	3,500.00	20,055.02	620,600.59
Estimated End	5,361.95	30,724.00	980,099.19
Next Month's Combined Miki Exp	ense (\$/bbl)	\$ 182.7878 /bbl	

## FUEL OIL INVENTORY PRICE USED FOR FILING

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
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 \$)

(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	\$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	
	FUEL FILING COST				
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	
	BASE FUEL COST				
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
	ADJUSTMENTS				
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
	YTD Fossil Fuel Cost Risk Sharing Adjustment	-\$17.6		-\$17.6	
	Quarterly FOA Recon w/Fossil Risk Adj (Line 21 + Line 21A)	\$273.4		\$238.7	
210		ψ210.4		φ200.7	
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
* 0.4	ar means on over collection by the company				

\* 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

	Notes	<u>YTD</u>
Diesel		
Diesel Efficiency Factor, BTU/kWh	f	10,722
Diesel Deadband Definition, +/- BTU/kWh	d	50
Diesel Portion of Recorded Sales, MWh	а	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	10,772
· ·		

## GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST, WITHOUT and WITH DEADBAND

	2023	
	Without	With
	Deadband	Deadband
		AS FILED
	<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

#### ATTACHMENT 13 PAGE 5 OF 5

	Fossil Fuel Cost Risk Sharing Mechanism, September 2023, Lanai	Jan-23, Baseline	YTD Subject to Fossil Risk
AA BB CC = BB / AA (Baseline Column) DD EE FF GG = (DD / EE) x FF	Diesel Fossil Fuel Cost Risk Sharing MMBtu \$ cost, actuals Jan 2023 baseline \$/mmbtu Diesel Gen kWh Total kWh, Gen, Purch Pwr, DG Sales kWh Diesel kWh-sales	30,062 \$936,167 31.1411734	269,732 \$7,481,897 31.1411734 26,180,177 26,201,115 25,038,043 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>		-\$17,562
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

	(1)		(2)	(3) FOA Rec	(4)	(5)	(6) Month-end
	YTD FOA		Adjust	Less	Try to	Actual	Cumulative
<u>Month</u>	Reconciliation (	<u>Qtr</u>	Variance	Variance	Collect	<u>Collect</u>	<u>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	,	( • )	0,.0.	,	(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			
		10/01/23	11/01/23	
Base Rates	effective date:	09/01/19	09/01/19	
Base Fuel/Energy Charge	¢/kWh	0.0000	0.0000	
Non-fuel Energy Charge				
First 250 kWhr per month	¢/kWh	12.3123	12.3123	
Next 500 kWhr per month	¢/kWh	14.8123	14.8123	
Customer Charge	\$	11.50	11.50	
Total Base Charges				
-				
IRP Refund	% on base	0.0000	0.0000	
Revenue Balancing Rate Adjustment	% of bill	11.88%	11.88%	
	excluding			
	ECRC			
PBF Surcharge	¢/kWh	0.7195	0.7195	
Renewable Energy Infrastructure Cost				
Recovery Provision	¢/kWh	0.0000	0.0000	
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	
Energy Cost Recovery	¢/kWh	36.424	36.864	
Green Infrastructure Fee	\$	1.18	1.18	

Charge (\$) at 400 Kwh					
10/01/23	11/01/23	Difference			
0.00	0.00	0.00			
30.78	30.78	0.00			
22.22	22.22	0.00			
11.50	11.50	0.00			
64.50	64.50	0.00			
0.00	0.00	0.00			
8.14	8.14	0.00			
2.88	2.88	0.00			
0.00 0.00 145.70 1.18	0.00 0.00 147.46 1.18	0.00 0.00 1.76 0.00			
222.40	224.16				

Increase (Decrease -) % Change

1.76
0.79%

	Rate		Char	Charge (\$) at 500 Kwh		
		10/01/23	11/01/23	10/01/23	11/01/23	Difference
Base Rates	effective date:	09/01/19	09/01/19			
Base Fuel/Energy Charge Non-fuel Energy Charge	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
First 250 kWhr per month	¢/kWh	12.3123	12.3123	30.78	30.78	0.00
Next 500 kWhr 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	% of bill excluding ECRC	11.88%	11.88%	9.99	9.99	0.00
PBF Surcharge Renewable Energy Infrastructure Cost	¢/kWh	0.7195	0.7195	3.60	3.60	0.00
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
Energy Cost Recovery	¢/kWh	36.424	36.864	182.12	184.32	2.20
Green Infrastructure Fee	\$	1.18	1.18	1.18	1.18	0.00

Avg Residential Bill at 500 kwh

Avg Residential Bill at 400 kwh

Increase (Decrease -) 2.20

276.20

% Change 0.80%

278.40

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

EFFECTIVE DATE	FUEL FACTOR CENTS / KWH RESIDENTIAL & <u>COMMERCIAL</u>		IAL BILL (\$) <u>@ 500 KWH</u>
January 1, 2020 February 1, 2020 March 1, 2020 April 1, 2020 May 1, 2020 June 1, 2020 July 1, 2020 August 1, 2020 September 1, 2020 October 1, 2020 November 1, 2020	25.369 24.109 23.379 19.794 18.958 15.429 16.335 17.755 18.135 18.076 17.881 17.874	$173.69 \\168.65 \\165.73 \\151.15 \\148.04 \\131.79 \\134.73 \\140.41 \\141.93 \\141.69 \\140.91 \\140.89 \\$	215.49 209.19 205.54 187.31 183.43 163.12 166.81 173.91 175.81 175.51 174.54 174.50
January 1, 2021 February 1, 2021 March 1, 2021 April 1, 2021 June 1, 2021 July 1, 2021 August 1, 2021 September 1, 2021 October 1, 2021 November 1, 2021 December 1, 2021	19.498 20.640 22.103 24.018 24.354 23.796 24.680 25.269 25.345 24.342 29.191 29.254	147.44 152.01 157.86 165.34 166.87 167.38 171.10 173.46 173.76 169.75 189.14 189.40	182.68 188.39 195.71 205.06 206.96 207.60 212.26 215.21 215.59 210.57 234.82 235.13
January 1, 2022 February 1, 2022 March 1, 2022 April 1, 2022 May 1, 2022 June 1, 2022 July 1, 2022 August 1, 2022 September 1, 2022 October 1, 2022 November 1, 2022 December 1, 2022	28.241 28.361 31.445 33.341 37.529 41.508 43.106 43.083 37.630 37.815 37.960 38.346	189.19 189.67 202.01 209.46 226.35 240.84 247.17 247.08 225.27 226.01 226.59 228.13	234.87 235.47 250.89 260.21 281.31 299.43 307.35 307.24 279.97 280.90 281.62 283.55
January 1, 2023 February 1, 2023 March 1, 2023 April 1, 2023 May 1, 2023 June 1, 2023 July 1, 2023 August 1, 2023 September 1, 2023 October 1, 2023 November 1, 2023	36.114 36.012 34.661 33.234 29.925 31.440 28.448 27.992 32.757 36.424 36.864	220.41 220.00 214.59 208.87 195.65 202.21 190.49 188.67 207.73 222.40 224.16	273.87 273.36 266.61 259.45 242.93 250.93 236.32 234.04 257.87 276.20 278.40

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	<u></u>	RATE
06/01/11 08/17/17	IRP RECOVERY REFUND RENEWABLE ENERGY INFRASTRUCTURE COST		PERCENT ON BASE CENTS/KWH
06/01/19	RECOVERY PROVISION	0040 TEST V	
05/01/20 - 03/31/21	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 ( SOLARSAVER ADJUSTMENT		CENTS/KWH
06/01/20 - 05/31/21	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
07/01/20 - 06/30/21	RESID. PBF SURCHARGE ADJUSTMENT		CENTS/KWH CENTS/KWH
			• =
01/01/21 - 06/30/21			DOLLARS/MONTH
04/01/21 - 04/30/21	SOLARSAVER ADJUSTMENT		CENTS/KWH
05/01/21 - 03/31/22	SOLARSAVER ADJUSTMENT		CENTS/KWH
06/01/21 - 12/31/21	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	-	CENTS/KWH
07/01/21 - 12/31/21			DOLLARS/MONTH
07/01/21 - 06/30/22	RESID. PBF SURCHARGE ADJUSTMENT		CENTS/KWH
01/01/22 - 05/31/22 01/01/22 - 06/30/22	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT GREEN INFRASTRUCTURE FEE	-	CENTS/KWH DOLLARS/MONTH
•••••			
04/01/22 - 04/30/22	SOLARSAVER ADJUSTMENT		CENTS/KWH
05/01/22 - 03/31/23	SOLARSAVER ADJUSTMENT		CENTS/KWH
06/01/22 - 12/31/22	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
07/01/22 - 06/30/23	RESID. PBF SURCHARGE ADJUSTMENT		CENTS/KWH
07/01/22 - 12/31/22	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
01/01/23 - 06/30/23 01/01/23 - 05/31/23	GREEN INFRASTRUCTURE FEE REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		DOLLARS/MONTH CENTS/KWH
• · · • · · = • • • • • · · = •			
04/01/23 - 04/30/23	SOLARSAVER ADJUSTMENT		CENTS/KWH
05/01/23	SOLARSAVER ADJUSTMENT		CENTS/KWH PERCENT OF ALL
06/01/23	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	11.88%	RATE SCHEDULE
			CHARGES,
			EXCLUDING ECRC
			and RBA
07/01/23	RESID. PBF SURCHARGE ADJUSTMENT	0.7195	CENTS/KWH

1.18 DOLLARS/MONTH

07/01/23RESID. PBF SURCHARGE ADJUSTMENT07/01/23GREEN INFRASTRUCTURE FEE

~ Surcharges currently in effect are in bold.

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