

September 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 October 2023

Maui Electric Company, Limited's ("Maui Electric" or "Company") October 2023 Energy Cost Recovery factor for our Maui Division is 24.296 cents per kilowatt-hour ("kWh"), an increase of 1.632 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$211.95, an increase of \$8.18 compared to rates effective September 1, 2023. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$8.16), the increase in the impact of the RBA Rate Adjustment (+\$0.01) and the increase in the Purchase Power Adjustment (+\$0.01).

The Company's Maui Division fuel composite cost of generation, central station and other increased 188.040 cents per million BTU to 2,096.78 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.052 cents per kWh to 20.162 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for October 2023 is 36.424 cents per kWh, an increase of 3.667 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$222.40, an increase of \$14.67 compared to rates effective September 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 increased 323.79 cents per million BTU to 3,245.18 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 October 2023 is 28.348 cents per kWh, an increase of 0.934 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$198.09, an increase of \$3.73 compared to rates effective September 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 September 27, 2023 Page 2

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 75.74 cents per million BTU to 2,367.86 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 October 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		
	9/01/2023	<u>10/01/2023</u>	<u>Change</u>
COMPOSITE COSTS  Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh Purchased Energy, ¢/kWh	2,921.39 0.00 30.00	3,245.18 0.00 30.00	323.79 0.00 0.00
Residential Schedule "R"			
Energy Cost Recovery, ¢/kWh	32.757	36.424	3.667
Others - "G,J,P,F"			
Energy Cost Recovery, ¢/kWh	32.757	36.424	3.667
Residential Customer with			
400 KWH Consumption, \$/Bill	207.73	222.40	14.67
500 KWH Consumption, \$/Bill	257.87	276.20	18.33

Supersedes Sheet Effective: 9/01/2023

### MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION

#### ENERGY COST RECOVERY (ECR) FILING

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

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

#### **GENERATION COMPONENT**

			1	
	CENTRAL STATION			
3	FUEL PRICES, ¢/mmbtu Industrial	0.00		
	Diesel - Miki Basin	3,245.18		
5	2.000 2.0	0,2.00		
6	Other	0.00		
	DTHANK 0/		DO ENERGY COMPONENT	
7	BTU MIX, % Industrial	0.00%	DG ENERGY COMPONENT 25 COMPOSITE COST OF DG	
8	Diesel - Miki Basin	100.00%		0.000
9	Dieser - Milki Basiii	100.0070	ENEROT, WINVIII	0.000
-	Other	0.00%	26 % Input to System kWh Mix	0.00%
	<del>-</del>	100.00%	•	
			27 WEIGHTED COMPOSITE DG ENERGY	
11	COMPOSITE COST OF GENERATION,	0.045.40	COST, ¢/kWh (Lines 25 x 26)	0.00000
	CENTRAL STATION + OTHER ¢/mmbtu	3,245.18		
12	(Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10)) % Input to System kWh Mix	98.69%	28 BASE DG ENERGY COMP COST	0.000
'-	70 Input to Cyclom KVVII WIIX	00.0070	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
13	Fuel Type mmbtu/kwh Other Industrial 0.000000 0.00	Eff Factor 0.000000	32 Loss Factor 33 Revenue Tax Reg Multiplier	1.0500 1.0975
14	Diesel 0.010722 100.00	0.000000	34 DG FACTOR,	1.0975
15	Other 0.010722 0.00	0.000000	¢/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			
17	OTHER GEN COST, ¢/kWh	1 +		
	(lines (11 x 12 x 16))	34.33901		
	( (,)			
18	BASE CENTRAL STATION + OTHER GENERA	NOITA		
	COST, ¢/mmbtu	-		
	Base % Input to Sys kWh Mix	0.00%		
	Efficiency Factor, mmbtu/kwh WEIGHTED BASE CENTRAL STATION +	0.010722		
21	OTHER GENERATION COST ¢/kWh			
	(lines (18 x 19 x 20))	-		
	(		SUMMARY OF	
	COST LESS BASE (line(17 - 21))	34.33901	TOTAL GENERATION FACTOR, ¢/kWh	
	Revenue Tax Req Multiplier	1.0975	35 CNTRL STN + OTHER (line 24)	37.68706
24	CENTRAL STATION + OTHER GENERATION	07.00700	36 DG (line 34)	-
	FACTOR, ¢/kWh (line (22 x 23))	37.68706	37 TOTAL GENERATION FACTOR,	27 60706
			¢/kWh (lines 35 + 36)	37.68706

### MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION

#### ENERGY COST RECOVERY (ECR) FILING

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

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

<u>Line</u>	PURCHASED ENERGY COMPON	<u>ENT</u>
	PURCHASED ENERGY PRICE, ¢/kWh - FOSS PURCHASED ENERGY PRICE, ¢/kWh - RENE	
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 ¢/kWt	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 1.31% 0.39300
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))	0.39300 1.050 1.0975 0.45288

Calculatio	n of Monthly Fossil Fuel Cost Risk Sharing Component	
	Baseline Diesel	
54	Diesel \$, baseline month	\$936,167
55	Diesel mmbtu, baseline	30,062
56	Baseline Diesel, c/mmbtu	3,114.12
	Month Diesel	
57	Diesel mmbtu, budget	31,202
58	Diesel Cost, ¢/mmbtu	3,245.18
59	Diesel ECRC Fossil Cost	\$1,012,549
60	Diesel Base ECRC Recovery Target	\$971,655
61	Diesel differential	\$40,894
62	Total Fossil	\$40,894
63	2% of above	\$818
64	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	-\$16,650
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	\$818
70	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$15,832
71	Fossil Cost Risk Sharing before taxes	\$818
72	Revenue Tax Adjustment	1.097514
73	Fossil Cost Risk Sharing w/revenue tax	\$898
74	Forecasted Month MWh Sales	2,966
75	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	-0.0303

<u>Line</u>	SYSTEM COMPOSITE CALCULATIONS	
76	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (37 + 53))	38.13994
77	Adjustment, ¢/kWh	0.000
78	Fossil Fuel Cost Risk Sharing Component	(0.030)
79	ECR Reconciliation Adjustment	(1.686)
80	ECR FACTOR, ¢/kWh (lines (76 + 77 + 78 + 79))	36.424

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

#### MONTH END FUEL OIL ESTIMATE

Miki Basin - ULSD	Barrels	MBTU	\$
9/20/2023	4,876.45	27,942.11	852,841.50
Estimated Use	1,758.26	10,074.83	294,325.07
Estimated Received	428.57	2,455.71	78,891.81
Estimated Additional	1,898.61	10,879.01	375,150.69
Estimated End	5,445.37	31,202.00	1,012,558.93
Next Month's Combined Miki Exp	ense (\$/bbl)	\$ 185.9486 /bbl	

#### **FUEL OIL INVENTORY PRICE USED FOR FILING**

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel - Miki Basin	\$ 185.9486	5.73 BTU/BBL	3,245.18

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

#### October 2023

1. Amount to be refunded	(\$136,700)
2. Monthly amount (1 / 3 X Line 1)	(\$45,567)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$50,010)
5. Estimated Sales (October 2023)	2,966 mwh
6. Adjustment (Line 4 ÷ Line 5)	-1.686 ¢/kwh

# 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 Qtr	-	<u>Variance</u>	<u>Collect</u>	<u>Collect</u>	<u>Balance</u>
				()	()	
December '2'	1			(22,367)	(20,800)	27,810
January '22	FF COO (4)	E 454	50.440	(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	00 500 (4)	4 400	04.044	(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	== 000 (0)	400	= 4 0 4 0	(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)		
October				(45,567)		
NOTES:						
Col(1):	Quarterly FOA rec	conciliation a	amounts. (Ref	er to Attachm	ent 13)	
	A positive number			-		
Col(2):	FOA reconciliation	•			•	
	starting with the fo	•				
sales used to derive the \$/kwh adjustment and the actual recorded sales.						
0.1(0)	(Col(5) - Col(4))					
Col(3):	FOA reconciliation generated in the current quarter. The YTD FOA reconciliation					
Cal(4):	difference minus t	=				1/4 \ * 4/2 \
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))						
ου(υ <i>)</i> .	Ournalive paidill			on (i revious i	Jaiai IUE + UU	)(J) ( COI(J))

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

Base Rates Base Fuel/Energy Charge Non-fuel Energy Charge First 250 kWhr per month Next 500 kWhr per month Customer Charge Total Base Charges
IRP Refund
Revenue Balancing Rate Adjustment
PBF Surcharge Renewable Energy Infrastructure Cost Recovery Provision SolarSaver Adjustment Energy Cost Recovery

**Green Infrastructure Fee** 

Avg Residential Bill at 400 kwh

	Rate	
	9/01/23	10/01/23
	00/04/40	00/04/40
effective date:	09/01/19	09/01/19
¢/kWh	0.0000	0.0000
¢/kWh	12.3123	12.3123
¢/kWh	14.8123	14.8123
\$	11.50	11.50
% on base	0.0000	0.0000
% of bill	11.88%	11.88%
excluding		
ECRC		
¢/kWh	0.7195	0.7195
¢/kWh	0.0000	0.0000
¢/kWh	0.0000	0.0000
¢/kWh	32.757	36.424
\$	1.18	1.18

Charge (\$) at 400 Kwh				
9/01/23				
0.00	0.00	0.00		
00 -0	00 70			
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		
0.00	0.00	0.00		
8.14	8.14	0.00		
0.14	0.14	0.00		
2.88	2.88	0.00		
0.00	0.00	0.00		
0.00	0.00	0.00		
131.03	145.70	14.67		
1.18	1.18	0.00		
007	000 15			
207.73	222.40			

Increase (Decrease -) % Change

14.67 7.06%

Base Rates Base Fuel/Energy Charge Non-fuel Energy Charge First 250 kWhr per month Next 500 kWhr per month Customer Charge Total Base Charges
IRP Refund
PBF Surcharge Renewable Energy Infrastructure Cost Recovery Provision SolarSaver Adjustment Energy Cost Recovery Green Infrastructure Fee

Avg Residential Bill at 500 kwh

	Rate	
	9/01/23	10/01/23
effective date:	09/01/19	09/01/19
¢/kWh	0.0000	0.0000
¢/kWh	12.3123	12.3123
¢/kWh	14.8123	14.8123
\$	11.50	11.50
% on base	0.0000	0.0000
% of bill excluding ECRC	11.88%	11.88%
¢/kWh	0.7195	0.7195
¢/kWh	0.0000	0.0000
¢/kWh	0.0000	0.0000
¢/kWh	32.757	36.424
\$	1.18	1.18

Charge (\$) at 500 Kwh				
9/01/23	10/01/23	Difference		
0.00	0.00	0.00		
30.78	30.78	0.00		
37.03	37.03	0.00		
11.50	11.50	0.00		
79.31	79.31	0.00		
0.00	0.00	0.00		
9.99	9.99	0.00		
3.60	3.60	0.00		
0.00	0.00	0.00		
0.00	0.00	0.00		
163.79	182.12	18.33		
1.18	1.18	0.00		
257.87	276.20			

Increase (Decrease -) % Change

18.33 7.11%

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

FUEL FACTOR CENTS / KWH

	CENTS / KWH		
	RESIDENTIAL &		IAL BILL (\$)
EFFECTIVE DATE	<u>COMMERCIAL</u>	<u>@ 400 KWH</u>	<u>@ 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
I 4 0004	40.400	447.44	400.00
January 1, 2021	19.498 20.640	147.44 152.01	182.68 188.39
February 1, 2021 March 1, 2021	22.103	152.01	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
	00.444	000.44	070.07
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 August 1, 2023	28.448	190.49 188.67	236.32
September 1, 2023	27.992 32.757	188.67 207.73	234.04 257.87
	32.757		
October 1, 2023	36.424	222.40	276.20

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE		RATE
06/01/11 08/17/17	IRP RECOVERY REFUND RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION		PERCENT ON BASE CENTS/KWH
06/01/19	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (	2018 TEST Y	FΔR'
05/01/20 - 03/31/21	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
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	_	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	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
01/01/23 - 05/31/23	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
04/01/23 - 04/30/23	SOLARSAVER ADJUSTMENT		CENTS/KWH
05/01/23	SOLARSAVER ADJUSTMENT		CENTS/KWH
06/01/23	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		PERCENT OF ALL
			RATE SCHEDULE
			CHARGES,
			EXCLUDING ECRC
			and RBA
07/01/23	RESID. PBF SURCHARGE ADJUSTMENT		CENTS/KWH
07/01/23	GREEN INFRASTRUCTURE FEE	1.18	DOLLARS/MONTH

<sup>~</sup> Surcharges currently in effect are in bold.
~ Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount and minimum charge.