



January 29, 2024

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 February 2024

Maui Electric Company, Limited's ("Maui Electric" or "Company") February 2024 Energy Cost Recovery Factor for Maui Division is 23.673 cents per kilowatt-hour ("kWh"), an increase of 0.500 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$209.57, an increase of \$0.06 compared to rates effective January 1, 2024. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery Factor (+\$2.50) and an increase in the DSM Adjustment (+\$0.56), partially offset by the decrease in the impact of the RBA Rate Adjustment (-\$0.33) and decrease in the Purchase Power Adjustment Rate (-\$2.67).

In accordance with Order No. 40278 filed in Docket No. 2019-0323 on September 22, 2023, Maui Division Schedules ARD TOU R, ARD TOU G, and ARD TOU J will become effective February 1, 2024. The February 2024 ECRC rates applicable to customers on Maui Division Schedules ARD TOU R, ARD TOU G, and ARD TOU J will be -0.3243 cents/kWh in the Daytime 9 a.m to 5 p.m. period, -0.6486 cents/kWh in the Overnight 9 p.m. to 9 a.m. period, and -0.9729 cents/kWh in the Evening Peak 5 p.m. to 9 p.m. period, as shown in Attachments 1 and 2.

The Company's Maui Division fuel composite cost of generation, central station and other decreased 17.500 cents per million BTU to 2,032.67 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.004 cents per kWh to 20.963 cents per kWh.

There are no changes to the target heat rate for Maui Division. In accordance with Order No. 40477 filed in Docket No. 2018-0088 on December 28, 2023, the target heat rates for Maui Division are suspended from August 8, 2023 to June 30, 2024. There is no annual adjustment to the Maui Division target heat rates while the target heat rates are suspended.<sup>1</sup> The Maui Division heat rate results in Attachment 5, pages 3 and 4, reflect performance and the impact of the target heat rates and deadbands from January 1, 2023 through August 7, 2023.

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<sup>1</sup> See Maui ECRC tariff, Revised Sheet No. 69B.1.

The February 2024 Energy Cost Recovery Factor for Lāna'i Division is 32.115 cents per kWh, a decrease of 1.165 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$207.81, a decrease of \$4.66 compared to rates effective January 1, 2024. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery Factor.

In accordance with Order No. 40278 filed in Docket No. 2019-0323 on September 22, 2023, Lanai Division Schedules ARD TOU R, ARD TOU G, and ARD TOU J will become effective February 1, 2024. The February 2024 ECRC rates applicable to customers on Lanai Division Schedules ARD TOU R, ARD TOU G, and ARD TOU J will be -2.3385 cents/kWh in the Daytime 9 a.m to 5 p.m. period, -4.6770 cents/kWh in the Overnight 9 p.m. to 9 a.m. period, and -7.0155 cents/kWh in the Evening Peak 5 p.m. to 9 p.m. period, as shown in Attachments 10 and 11.

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 105.99 cents per million BTU to 2,775.45 cents per million BTU. The composite cost DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 0.00 cents per kWh.

The Company has determined that the target sales heat rates for Lāna'i Division's diesel fuel source will remain unchanged from the target sales heat rate of 0.010722 million BTU per kilowatt-hour for diesel fuel that was in effect at the end of 2023. As shown in Attachment 24, the actual sales heat rate for diesel fuel in 2023 was higher than the target sales heat rate in 2023, resulting in no adjustments to the Lāna'i Division target heat rate for diesel fuel that was in effect at the end of 2023.

The February 2024 Energy Cost Recovery Factor for Moloka'i Division is 28.461 cents per kWh, an increase of 0.359 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$201.46, an increase of \$1.43 compared to rates effective January 1, 2024. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery Factor.

In accordance with Order No. 40278 filed in Docket No. 2019-0323 on September 22, 2023, Molokai Division Schedules ARD TOU R, ARD TOU G, and ARD TOU J will become effective February 1, 2024. The February 2024 ECRC rates applicable to customers Molokai Division Schedules ARD TOU R, ARD TOU G, and ARD TOU J will be 0.0589 cents/kWh in the Daytime 9 a.m to 5 p.m. period, 0.1178 cents/kWh in the Overnight 9 p.m. to 9 a.m. period, and 0.1767 cents/kWh in the Evening Peak 5 p.m. to 9 p.m. period, as shown in Attachments 17 and 18.

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 8.42 cents per million BTU to 2,343.46 cents per million BTU. The composite cost of

The Honorable Chair and Members  
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January 29, 2024  
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DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 21.80 cents per kWh.

The Company has determined that the target sales heat rates for Moloka'i Division's diesel fuel source will remain unchanged from the target sales heat rate of 0.011127 million BTU per kilowatt-hour for diesel fuel that was in effect at the end of 2023. As shown in Attachment 24, the actual sales heat rate for diesel fuel in 2023 was higher than the target sales heat rate in 2023, resulting in no adjustments to the Moloka'i Division target heat rate for diesel fuel that was in effect at the end of 2023.

The attached sheets set forth the fuel adjustment in cents per kWh for each rate schedule that applies for pro rata use beginning February 1, 2024.

Very truly yours,

/s/ Dean K. Matsuura

Dean K. Matsuura  
Director, Regulatory Rate Proceedings

Attachments

cc: Division of Consumer Advocacy

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

**ENERGY COST RECOVERY FACTOR**

	EFFECTIVE DATES		<u>Change</u>
	<u>1/01/2024</u>	<u>2/01/2024</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	2,050.17	2,032.67	(17.500)
DG Energy, ¢/kWh	0.00	0.00	0.000
Purchased Energy, ¢/kWh	20.967	20.963	(0.004)
<u>Residential Schedule "R"</u>			
Energy Cost Recovery Factor, ¢/kWh	23.173	23.673	0.500
<u>Others - "G,J,P,F"</u>			
Energy Cost Recovery Factor, ¢/kWh	23.173	23.673	0.500
<u>Residential Customer with</u>			
500 KWH Consumption, \$/Bill	209.51	209.57	0.06
600 KWH Consumption, \$/Bill	250.30	250.36	0.06
<u>Schedules ARD TOU R, ARD TOU G, ARD TOU J</u>			
Daytime (9a-5p) Energy Cost Recovery Factor, ¢/kWh	N/A	(0.3243)	N/A
Overnight (9p-9a) Energy Cost Recovery Factor, ¢/kWh	N/A	(0.6486)	N/A
Evening Peak (5p-9p) Energy Cost Recovery Factor, ¢/kWh	N/A	(0.9729)	N/A
Supersedes Sheet Effective:	1/01/2024		



**MAUI ELECTRIC COMPANY, LTD.  
MAUI DIVISION  
ENERGY COST RECOVERY (ECR) FILING**

ENERGY COST RECOVERY (ECR) FILING - February 1, 2024 (page 2 of 2)

Line		
1	Effective Date	February 1, 2024
2	Supercedes Factors of	January 1, 2024

Line	<b>PURCHASED ENERGY COMPONENT</b>	
	PURCHASED ENERGY PRICE - FOSSIL $\phi$ /kWh	
	PURCHASED ENERGY PRICE - RENEWABLE, $\phi$ /kWh	
36	Kaheawa Wind I - On Peak	14.000
37	- Off Peak	13.126
38	Kaheawa Wind II	26.595
39	Sempra Wind	23.912
40	Unused - On Peak	0.000
41	- Off Peak	0.000
42	South Maui RR	11.060
43	Ku'ia Solar	11.060
44	Unused	0.000
45	Unused	0.000
46	CBRE PV	16.500
47		
48	FIT	21.934
	PURCHASED ENERGY KWH MIX- FOSSIL, %	
48A	Subtotal Fossil %	0%
	PURCHASED ENERGY KWH MIX - RENEWABLE, %	
49	Kaheawa Wind I - On Peak	14.13%
50	- Off Peak	14.53%
51	Kaheawa Wind II	26.51%
52	Sempra Wind	35.24%
53	Unused - On Peak	0.00%
54	- Off Peak	0.00%
55	South Maui RR	2.14%
56	Ku'ia Solar	2.48%
57	Unused	0.00%
58	Unused	0.00%
59	CBRE PV	0.00%
60		
61	FIT	4.97%
61A	Subtotal Renewable %	100.00%
61B	Total Purchased Energy %	100.00%
61C	Composite Cost of Purchased Energy, Fossil	N/A
61D	Composite Cost of Purchased Energy, Renewable	20.963
62	COMPOSITE COST OF PURCHASED ENERGY, $\phi$ /kWh	20.963
	(Lines (36 x 49) + (37 x 50) + (38 x 51) + (39 x 52) + (40 x 53) + (41 x 54) + (42 x 55) + (43 x 56) + (44 x 57) + (45 x 58) + (46 x 59) + (48 x 61))	
63	% Input to System kWh Mix	21.18%
64	WEIGHTED COMPOSITE PURCHASED ENERGY COST, $\phi$ /kWh (lines (62 x 63))	4.43996
65	BASE PURCHASED ENERGY COMPOSITE COST, $\phi$ /kWh	0.000
66	Base % Input to Sys kWh Mix	0.00
67	WEIGHTED BASE PURCHASED ENERGY COST, $\phi$ /kWh (lines (65 x 66))	0.00000
68	COST LESS BASE (lines (64 - 67))	4.43996
69	Loss Factor	1.057
70	Revenue Tax Req Multiplier	1.0975
71	PURCHASED ENERGY FACTOR, $\phi$ /kWh (lines (68 x 69 x 70))	5.15061

Line	<b>Calculation of Monthly Fossil Fuel Cost Risk Sharing Component</b>	
	<b>Baseline IFO</b>	
72	IFO \$, baseline month	\$2,392,939
73	IFO mmbtu, baseline	148,858
74	Baseline IFO, $\phi$ /mmbtu	1607.53
	<b>Baseline Diesel</b>	
75	Diesel \$, baseline month	\$12,870,238
76	Diesel mmbtu, baseline	595,615
77	Baseline Diesel, $\phi$ /mmbtu	2160.83
	<b>Month IFO</b>	
78	IFO mmbtu, budget	132,064
79	IFO Cost, $\phi$ /mmbtu	1,572.59
80	IFO ECRC Fossil Cost	\$2,076,822
81	IFO Base ECRC Recovery Target	\$2,122,965
82	IFO differential	-\$46,143
	<b>Month Diesel</b>	
83	Diesel mmbtu, budget	507,673
84	Diesel Cost, $\phi$ /mmbtu	2,152.33
85	Diesel ECRC Fossil Cost	\$10,926,792
86	Diesel Base ECRC Recovery Target	\$10,969,944
87	Diesel differential	-\$43,152
88	Total Fossil	-\$89,295
89	2% of above	-\$1,786
90	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$0
91	Maximum Annual Cap (bi-directional)	\$570,000
92	Number of Days in year from implementation	365
93	Fossil Risk % Proration (based on 365 day year)	100.00%
94	Maximum Annual Cap (bi-directional) prorated	\$570,000
95	Applicable Monthly Fossil Fuel Cost Risk Sharing	-\$1,786
96	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$1,786
97	Fossil Cost Risk Sharing before taxes	-\$1,786
98	Revenue Tax Adjustment	1.097514
99	Fossil Cost Risk Sharing w/revenue tax	-\$1,960
100	Forecasted Month MWh Sales	75,804
101	Fossil Fuel Cost Risk Sharing Component, $\phi$ /kWh	0.0026

<b>Derivation of Non-Adjustable Component:</b>		
102	Maalaea Biodiesel (\$000s)	\$511.3
103	Hana (\$000s)	\$19.2
104	Ignition Startup (\$000s)	\$37.6
	Total	\$568.1
	Final Settlement, MECO-602, p1 and MECO-603, p1	
105	Revenue Tax Adjustment	1.097514
106	Non-Adj Revenues, \$000	\$623.5
107	2018 TY Sales, MWh	1,017,968
	Final Tariffs submitted 4/17/2019, Docket No. 2017-0150, Exhibit 2, Att 1, p361	
108	Non-Adj Revenues, $\phi$ /kWh	0.06125

109	Generation and Purchased Energy Factors	23.99144
110	ECR Reconciliation Adjustment	(0.382)
111	Non-Adjustable Component	0.0612
112	Fossil Fuel Cost Risk Sharing Component	0.0026
113	ECR FACTOR, $\phi$ /kWh (lines (109 + 110 + 111 + 112))	23.673

114	Baseline ECRC Component	24.296
115	Monthly Energy Cost Recovery Factor Less Baseline ECRC Component (Line 113 - Line 114)	(0.623)
116	Daytime System Load	30.386%
117	Overnight System Load	47.044%
118	Evening Peak System Load	22.570%
119	Daytime Time-of-Use Monthly Energy Cost Recovery Factor	(0.3243)
120	Overnight Time-of-Use Monthly Energy Cost Recovery Factor (Line 119 x 2)	(0.6486)
121	Evening Peak Time-of-Use Monthly Energy Cost Recovery Factor (Line 119 x 3)	(0.9729)
122	Composite (Line 116 x Line 119 + Line 117 x Line 120 + Line 118 x Line 121)	(0.623)

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

**Fuel Oil Inventory Prices for February 2024**

<u>TYPE OF OIL BURNED</u>	<u>PRICES \$/BBL</u>	<u>CONVERSION FACTORS</u>		<u>PRICES ¢/MBTU</u>
INDUSTRIAL	99.0733	6.30	MBTU/BBL	1,572.59
DIESEL/ULSD	126.0077	5.85	MBTU/BBL	2,152.33

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

**Month End Fuel Oil Estimate**

<b><u>Kahului</u></b>	<u>Barrels</u>	<u>MBTU</u>	<u>(\$)</u>
1/19/2024	63,148.71	397,836.87	6,303,219.42
Estimated Use	11,765.79	74,124.45	1,176,011.65
Estimated Received	14,400.00	90,720.00	1,390,125.87
Estimated Additional	0.00	0.00	0.00
Estimated End	<u>65,782.92</u>	<u>414,432.42</u>	<u>6,517,333.64</u>
<b>Next month's expense (\$/bbl) =</b>		<b>\$ 99.0733</b>	

<b><u>Maalaea</u></b>	<u>Barrels</u>	<u>MBTU</u>	<u>(\$)</u>
1/19/2024	116,978.28	684,847.50	14,905,088.19
Estimated Use	35,950.63	210,472.42	4,547,212.18
Estimated Received	42,000.00	245,888.34	5,144,557.55
Estimated Additional	0.00	0.00	0.00
Estimated End	<u>123,027.65</u>	<u>720,263.42</u>	<u>15,502,433.56</u>
<b>Next month's expense (\$/bbl) =</b>		<b>\$ 126.0077</b>	



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

**PURCHASED POWER PRICE CALCULATIONS**

KAHEAWA WIND POWER ENERGY RATE:

Kaheawa Wind - On Peak, ¢/kWh	14.000
- Off Peak, ¢/kWh	13.126

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 2024:

On-peak, ¢/kwh	10.571
Off-peak, ¢/kwh	9.323

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

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

On-Peak Rate =  $10.5710 \text{ ¢/kwh} \times 0.7 + 22.000 \text{ ¢/kwh} \times 0.3 = 14 \text{ ¢/kwh}$

Off-Peak Rate =  $9.323 \text{ ¢/kwh} \times 0.7 + 22.000 \text{ ¢/kwh} \times 0.3 = 13.126 \text{ ¢/kwh}$

**MAUI ELECTRIC COMPANY, LTD.**  
**Maui Division**  
**ECR Reconciliation Adjustment**  
**February 2024**

1. Amount to be Refunded	(\$792,200)
2. Monthly amount (1 / 3 X Line 1)	(\$264,067)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$289,817)
5. Estimated Sales (February 2024)	75,804 mwh
6. Adjustment (Line 4 ÷ Line 5)	(0.382) ¢/kwh

**MAUI ELECTRIC COMPANY, LTD.**  
**MAUI DIVISION**  
**2023 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	\$174,177.8		\$174,177.8	
2	\$42.9		\$42.9	
3	<u>\$44,039.4</u>		<u>\$44,039.4</u>	
4	\$218,260.1		\$218,260.1	
FUEL FILING COST				
5	\$173,469.6		\$173,999.7	
6	\$0.0		\$0.0	
7	<u>\$44,039.4</u>		<u>\$44,039.4</u>	
8	\$217,509.0		\$218,039.1	
BASE FUEL COST				
9	\$0.0		\$0.0	
10	\$0.0		\$0.0	
11	<u>\$0.0</u>		<u>\$0.0</u>	
12	\$0.0		\$0.0	
13	\$217,509.0		\$218,039.1	
14	\$219,585.5		\$219,585.5	
15	-\$733.3		-\$733.3	
15A	<u>\$548.7</u>		<u>\$548.7</u>	
16	\$219,770.1		\$219,770.1	
17	\$2,261.1	Over	\$1,731.0	Over
ADJUSTMENTS				
18	\$2,799.8		\$2,799.8	
19	\$0.0		\$0.0	
20	<u>\$0.0</u>		<u>\$0.0</u>	
21	\$5,060.9	Over	\$4,530.8	Over
21A	-\$193.7		-\$193.7	
21B	<u>\$4,867.1</u>		<u>\$4,337.0</u>	
22			<u>\$3,544.8</u>	Over
23			<u>-\$792.2</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, 2023 Through August 7, 2023

	<u>Notes</u>	<u>YTD</u>
<b><u>Industrial Fuel Oil</u></b>		
Industrial Fuel Oil Efficiency Factor, BTU/kWh	f	15,786
Industrial Fuel Oil Deadband Definition, - BTU/kWh	d	<b>100</b>
Industrial Fuel Oil Portion of Recorded Sales, MWh	a	85,080
Industrial Fuel Oil Consumption (Recorded), MMBTU	b	1,365,433
Industrial Fuel Oil Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	16,049
Lower limit of Industrial Fuel Oil Deadband, BTU/kWh	e = f-d	15,686
Higher limit of Industrial Fuel Oil Deadband, BTU/kWh	g = f+d	15,886
Industrial Fuel Oil Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	<b>15,886</b>
<b><u>Diesel</u></b>		
Diesel Efficiency Factor, BTU/kWh	f	9,938
Diesel Deadband Definition, - BTU/kWh	d	<b>100</b>
Diesel Portion of Recorded Sales, MWh	a	378,339
Diesel Consumption (Recorded), MMBTU	b	3,778,262
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	9,986
Lower limit of Diesel Deadband, BTU/kWh	e = f-d	9,838
Higher limit of Diesel Deadband, BTU/kWh	g = f+d	10,038
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	<b>9,986</b>

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

2023

	<b>Without Deadband</b>	<b>With Deadband AS FILED</b>
	<u>Jan 1 - Aug 7</u>	<u>Jan 1 - Aug 7</u>
<b><u>INDUSTRIAL</u></b>		
Industrial Portion of Recorded Sales , MWH	85,080	85,080
Industrial Sales Efficiency Factor (mmbtu/kwh)	0.015786	0.015886
Mmbtu adjusted for Sales Efficiency Factor	1,343,078	1,351,586
\$/mmbtu	<u>\$14.1970</u>	<u>\$14.1970</u>
TOTAL Industrial \$000s TO BE RECOVERED	\$19,067.6	\$19,188.4
<b><u>DIESEL FUEL FILING COST</u></b>		
Diesel Portion of Recorded Sales, MWH	378,339	378,339
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.009938	0.009986
Mmbtu adjusted for Sales Efficiency Factor	3,759,937	3,778,097
\$/mmbtu	<u>\$22.5392</u>	<u>\$22.5392</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$84,746.1	\$85,155.4
TOTAL GENERATION FUEL FILING COST, \$000s	\$103,813.7	\$104,343.8
TOTAL GENERATION BASE FUEL COST , \$000s	\$0.0	\$0.0
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$103,813.7	\$104,343.8
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$0.0	\$0.0

		Baseline	YTD Subject to Fossil Risk
<b>Fossil Fuel Cost Risk Sharing Mechanism and Non-Adjustable Component, Maui</b>			
<b>LSFO/IFO with target heat rate Fossil Fuel Cost Risk Sharing</b>			
A	MMBtu	211787.1453	1,365,433
B	\$ cost, actuals	\$2,734,780	\$19,393,974
C = B / A (Baseline Column)	Baseline \$/mmbtu	12.912872	12.912872
D	IFO Gen kWh		89,571,339
E	Total kWh, Gen, Purch Pwr, DG		626,377,542
F	Sales kWh		595,411,395
G = (D / E) x F	IFO kWh-sales		85,143,212
H	Target Heat Rate		15,786
I1	Calculated Heat Rate (YTD subject to fossil risk, before deadband)		16,049
I	Recovery Heat Rate (YTD subject to fossil risk, after deadband)		15,886
J = B / A ytd	Actual Cost \$/MMBtu		14.2035357
K = C x H x G / 1,000,000	Base Cost Recovery w/Target Heat Rate		\$17,355,813
L = I x J x G / 1,000,000	Fuel Filing Cost Recovery		\$19,211,490
<b>M = 0.02 x (L-K)</b>	<b>IFO Cost Risk Sharing</b>		<b>\$37,114</b>
<b>Diesel with target heat rate Fossil Fuel Cost Risk Sharing</b>			
AA	MMBtu	629,682	3,778,262
BB	\$ cost, actuals	\$15,546,536	\$85,127,917
CC = BB / AA (Baseline Column)	Baseline \$/mmbtu	24.6894989	24.6894989
DD	Diesel Gen kWh		398,215,286
EE	Total kWh, Gen, Purch Pwr, DG		626,377,542
FF	Sales kWh		595,411,395
GG = (DD / EE) x FF	Diesel kWh-sales		378,528,768
HH	Target Heat Rate		9,938
II1	Calculated Heat Rate (YTD subject to fossil risk, before deadband)		9,986
II	Recovery Heat Rate (YTD subject to fossil risk, after deadband)		9,986
JJ = BB/AA (YTD Column)	Actual Cost \$/MMBtu		22.5309733
KK = CC x HH x GG / 1,000,000	Base Cost Recovery w/Target Heat Rate		\$92,877,424
LL = II x JJ x GG / 1,000,000	Fuel Filing Cost Recovery		\$85,166,815
<b>MM = 0.02 x (LL-KK)</b>	<b>Diesel Cost Risk Sharing (with target heat rate)</b>		<b>-\$154,212</b>
<b>LSFO/IFO without target heat rate</b>			
NN	mmbtu	211787.1453	760,517
OO	Fuel filing cost recovery (without heat rate)	2734780.255	\$11,712,491
PP = OO / NN (Jan Column)	Jan 2023 baseline \$/mmbtu	12.9128718	\$12.9128718
QQ = NN x PP	Base Cost Recovery		\$9,820,459
RR = (OO - QQ) x 0.02	IFO Cost Risk Sharing (without target heat rate)		<b>\$37,841</b>
<b>Diesel W/o Target Heat Rate Fossil Fuel Cost Risk Sharing</b>			
AAA	MMBtu	629,682 mmbtu	2,578,682 mmbtu
BBB	Fuel Filing Cost Recovery (no heat rate)	\$15,546,536	\$57,943,439
CCC = BBB/AAA (Jan Column)	Baseline \$/MMBtu	24.689499	24.689499
DDD = AAA x CCC	Base Cost Recovery		\$63,666,369
EEE = (BBB - DDD) x 0.02	<b>Diesel Cost Risk Sharing (with no heat rate)</b>		<b>-\$114,459</b>
FFF	Annual Cap (non-prorated)		\$570,000
GGG	# Days		365
HHH	Annual Cap (pro-rated, if applicable)		\$570,000
III = M + MM + RR + EEE, up to cap	<b>Total Fossil Fuel Cost Risk Sharing Adjustment, subject to cap</b>		<b>-\$193,717</b>
<b>Non-Adjustable Component</b>			
AAAA	YTD kWh under ECRC		983,211,045
BBBB	Non-Adjustable Component, cents/kWh		0.06125
CCCC	Non-Adjustable Component Revenues w/tax		\$602,217
DDDD	Non-Adjustable Component Revenues less tax		\$548,710

**MAUI ELECTRIC COMPANY, LTD.**  
**MAUI DIVISION**  
**2023 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 '21					(243,967)	(253,989)	224,074
January '22					(243,967)	(255,810)	(31,736)
February	(428,500)	(4)	(19,896)	(408,604)	142,833	139,468	(300,872)
March					142,833	163,965	(136,907)
April					142,833	157,268	20,361
May	1,081,500	(1)	5,924	1,075,576	(360,500)	(408,035)	687,902
June					(360,500)	(403,811)	284,091
July					(360,500)	(391,575)	(107,484)
August	243,600	(2)	(76,411)	320,011	(81,200)	(88,227)	124,300
September					(81,200)	(91,938)	32,362
October					(81,200)	(90,765)	(58,403)
November	238,800	(3)	(48,840)	287,640	(79,600)	(83,469)	145,768
December					(79,600)	(81,834)	63,934
January '23					(79,600)	(83,279)	(19,345)
February	653,600	(4)	(15,668)	669,268	(217,867)	(221,715)	428,208
March					(217,867)	(225,886)	202,322
April					(217,867)	(234,572)	(32,250)
May	(126,000)	(1)	(15,546)	(110,454)	42,000	44,399	(98,305)
June					42,000	44,093	(54,212)
July					42,000	43,306	(10,906)
August	1,435,900	(2)	(12,213)	1,448,113	(478,633)	(458,084)	979,123
September					(478,633)	(442,113)	537,010
October					(478,633)	(467,088)	69,922
November	2,234,900	(3)	58,375	2,176,525	(744,967)	(740,803)	1,505,644
December					(744,967)	(728,815)	776,829
January '24					(744,967)		
February	792,200	(4)	31,861	760,339	(744,967)		

## 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		
	1/01/24	2/01/24	1/01/24	2/01/24	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 350 kWh per month	¢/kWh	12.1240	12.1240	42.43	42.43
Next 850 kWh per month	¢/kWh	14.3840	14.3840	21.58	21.58
Customer Charge	\$	11.50	11.50	11.50	11.50
<b>Total Base Charges</b>				75.51	75.51
<b>RBA Rate Adjustment</b>	% of bill excluding ECRC	15.69%	15.69%	12.70	12.37
<b>PBF Surcharge</b>	¢/kWh	0.7195	0.7195	3.60	3.60
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00
<b>Refund of 2018 Interim</b>	% on Base	0.00	0.00	0.00	0.00
<b>Purchased Power Adjustment</b>	¢/kWh	0.0018	-0.5315	0.01	-2.66
<b>Energy Cost Recovery</b>	¢/kWh	23.173	23.673	115.87	118.37
<b>DSM Adjustment</b>	¢/kWh	0.1228	0.2338	0.61	1.17
<b>Green Infrastructure Fee</b>	\$	1.21	1.21	1.21	1.21
<b>Avg Residential Bill at 500 kwh</b>				209.51	209.57
				Increase (Decrease -)	0.06
				% Change	0.03%

	Rate		Charge (\$) at 600 Kwh		
	1/01/24	2/01/24	1/01/24	2/01/24	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 350 kWh per month	¢/kWh	12.1240	12.1240	42.43	42.43
Next 850 kWh per month	¢/kWh	14.3840	14.3840	35.96	35.96
Customer Charge	\$	11.50	11.50	11.50	11.50
<b>Total Base Charges</b>				89.89	89.89
<b>RBA Rate Adjustment</b>	% of bill excluding ECRC	15.69%	15.69%	15.09	14.69
<b>PBF Surcharge</b>	¢/kWh	0.7195	0.7195	4.32	4.32
<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>Refund of 2018 Interim</b>	% on Base	0.00	0.00	0.00	0.00
<b>Purchased Power Adjustment</b>	¢/kWh	0.0018	-0.5315	0.01	-3.19
<b>Energy Cost Recovery</b>	¢/kWh	23.1730	23.673	139.04	142.04
<b>DSM Adjustment</b>	¢/kWh	0.1228	0.2338	0.74	1.40
<b>Green Infrastructure Fee</b>	\$	1.21	1.21	1.21	1.21
<b>Avg Residential Bill at 600 kwh</b>				250.30	250.36
				Increase (Decrease -)	0.06
				% Change	0.02%

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. -- Maui Division  
FUEL OIL ADJUSTMENT FACTOR DATA**

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR CENTS / KWH</u>		
	<u>RESIDENTIAL &amp; COMMERCIAL</u>	<u>RESIDENTIAL BILL (\$) @ 500 KWH</u>	<u>@ 600 KWH</u>
January 1, 2020	16.751	168.57	201.30
February 1, 2020	17.482	172.82	206.40
March 1, 2020	17.800	174.41	208.31
April 1, 2020	17.503	172.62	206.17
May 1, 2020	16.260	166.06	198.28
June 1, 2020	15.145	157.82	188.40
July 1, 2020	14.702	154.77	184.77
August 1, 2020	13.780	149.70	178.68
September 1, 2020	13.659	149.08	177.94
October 1, 2020	13.390	147.74	176.34
November 1, 2020	13.830	150.47	179.61
December 1, 2020	14.923	155.93	186.17
January 1, 2021	14.967	156.21	186.48
February 1, 2021	14.338	153.34	183.04
March 1, 2021	16.168	162.49	194.03
April 1, 2021	16.378	163.32	195.01
May 1, 2021	17.615	170.84	204.05
June 1, 2021	17.873	175.55	209.70
July 1, 2021	19.391	183.27	218.98
August 1, 2021	18.648	178.15	212.83
September 1, 2021	18.578	177.77	212.38
October 1, 2021	18.225	176.02	210.28
November 1, 2021	19.019	180.07	215.12
December 1, 2021	17.109	170.52	203.66
January 1, 2022	20.790	193.72	231.49
February 1, 2022	20.593	192.83	230.42
March 1, 2022	22.118	200.46	239.58
April 1, 2022	24.483	212.12	253.57
May 1, 2022	26.433	223.53	267.26
June 1, 2022	28.248	230.80	276.00
July 1, 2022	27.953	229.02	273.87
August 1, 2022	30.202	239.45	286.38
September 1, 2022	27.993	228.34	273.06
October 1, 2022	28.147	229.16	274.04
November 1, 2022	24.488	210.08	251.14
December 1, 2022	24.119	208.25	248.95
January 1, 2023	25.334	215.82	258.03
February 1, 2023	24.501	212.21	253.70
March 1, 2023	25.455	216.98	259.42
April 1, 2023	24.536	212.37	253.88
May 1, 2023	24.180	210.60	251.76
June 1, 2023	23.396	206.70	246.95
July 1, 2023	23.122	205.68	245.74
August 1, 2023	21.982	200.38	239.37
September 1, 2023	22.664	203.77	243.46
October 1, 2023	24.296	211.95	253.26
November 1, 2023	25.685	218.94	261.66
December 1, 2023	24.661	213.83	255.53
January 1, 2024	23.173	209.51	250.30
February 1, 2024	23.673	209.57	250.36

**MAUI ELECTRIC COMPANY, LTD. -- Maui 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
11/01/20 - 01/31/21	RESID. DSM ADJUSTMENT	-0.0022 CENTS/KWH
01/01/21 - 01/31/21	PURCHASED POWER ADJUSTMENT	-0.0013 CENTS/KWH
01/01/21 - 06/30/21	GREEN INFRASTRUCTURE FEE	1.25 DOLLARS/MONTH
02/01/21	RESID. DSM ADJUSTMENT	0.0563 CENTS/KWH
02/01/21 - 02/28/21	PURCHASED POWER ADJUSTMENT	-0.0042 CENTS/KWH
03/01/21 - 03/31/21	PURCHASED POWER ADJUSTMENT	-0.0030 CENTS/KWH
04/01/21 - 04/30/21	PURCHASED POWER ADJUSTMENT	-0.0044 CENTS/KWH
04/01/21 - 04/30/21	SOLARSAVER ADJUSTMENT	-0.0445 CENTS/KWH
05/01/21 - 07/31/21	RESID. DSM ADJUSTMENT	0.0658 CENTS/KWH
05/01/21 - 03/31/22	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/21 - 05/31/21	PURCHASED POWER ADJUSTMENT	0.2109 CENTS/KWH
06/01/21 - 06/30/21	PURCHASED POWER ADJUSTMENT	0.2076 CENTS/KWH
6/1/2021 - 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
07/01/21 - 07/31/21	PURCHASED POWER ADJUSTMENT	0.1862 CENTS/KWH
08/01/21 - 08/31/21	PURCHASED POWER ADJUSTMENT	-0.0296 CENTS/KWH
08/01/21 - 10/31/21	RESID. DSM ADJUSTMENT	0.0003 CENTS/KWH
09/01/21 - 09/30/21	PURCHASED POWER ADJUSTMENT	-0.0350 CENTS/KWH
10/01/21 - 10/31/21	PURCHASED POWER ADJUSTMENT	-0.0314 CENTS/KWH
11/01/21 - 11/30/21	PURCHASED POWER ADJUSTMENT	-0.0107 CENTS/KWH
11/01/21 - 01/31/22	RESID. DSM ADJUSTMENT	-0.0084 CENTS/KWH
12/01/21 - 12/31/21	PURCHASED POWER ADJUSTMENT	-0.0096 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
01/01/22 - 01/31/22	PURCHASED POWER ADJUSTMENT	-0.0100 CENTS/KWH
02/01/22 - 02/28/22	PURCHASED POWER ADJUSTMENT	-0.0009 CENTS/KWH
02/01/22 - 04/30/22	RESID. DSM ADJUSTMENT	0.0022 CENTS/KWH
03/01/22 - 03/31/22	PURCHASED POWER ADJUSTMENT	0.0002 CENTS/KWH
04/01/22 - 04/30/22	SOLARSAVER ADJUSTMENT	-0.0315 CENTS/KWH
04/01/22 - 04/30/22	PURCHASED POWER ADJUSTMENT	-0.0011 CENTS/KWH
05/01/22 - 07/31/22	RESID. DSM ADJUSTMENT	-0.1288 CENTS/KWH
05/01/22 - 03/31/23	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/22 - 05/31/22	PURCHASED POWER ADJUSTMENT	0.4283 CENTS/KWH
06/01/22 - 06/30/22	PURCHASED POWER ADJUSTMENT	0.4226 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
07/01/22 - 07/31/22	PURCHASED POWER ADJUSTMENT	0.3747 CENTS/KWH
08/01/22 - 08/31/22	PURCHASED POWER ADJUSTMENT	-0.0742 CENTS/KWH
08/01/22 - 10/31/22	RESID. DSM ADJUSTMENT	0.1587 CENTS/KWH
09/01/22 - 09/30/22	PURCHASED POWER ADJUSTMENT	-0.0862 CENTS/KWH
10/01/22 - 10/31/22	PURCHASED POWER ADJUSTMENT	-0.0772 CENTS/KWH
11/01/22 - 01/31/23	RESID. DSM ADJUSTMENT	-0.0584 CENTS/KWH
11/01/22 - 11/30/22	PURCHASED POWER ADJUSTMENT	-0.0177 CENTS/KWH
12/01/22 - 12/31/22	PURCHASED POWER ADJUSTMENT	-0.0155 CENTS/KWH
01/01/23 - 01/31/23	PURCHASED POWER ADJUSTMENT	-0.0120 CENTS/KWH
01/01/23 - 05/31/23	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.9048 CENTS/KWH
01/01/23 - 06/30/23	GREEN INFRASTRUCTURE FEE	1.23 DOLLARS/MONTH
02/01/23 - 04/30/23	RESID. DSM ADJUSTMENT	0.0323 CENTS/KWH
02/01/23 - 02/28/23	PURCHASED POWER ADJUSTMENT	0.0092 CENTS/KWH
03/01/23 - 03/31/23	PURCHASED POWER ADJUSTMENT	0.0096 CENTS/KWH
04/01/23 - 04/30/23	PURCHASED POWER ADJUSTMENT	0.0090 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>
05/01/23 - 07/31/23	RESID. DSM ADJUSTMENT	0.0395 CENTS/KWH
05/01/23 - 05/31/23	PURCHASED POWER ADJUSTMENT	0.0006 CENTS/KWH
06/01/23 - 06/30/23	PURCHASED POWER ADJUSTMENT	0.0012 CENTS/KWH
06/01/23 - 12/31/23	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	11.88% PERCENT OF ALL RATE SCHEDULE CHARGES, EXCLUDING ECRC and RBA
<b>07/01/23</b>	<b>RESID. PBF SURCHARGE ADJUSTMENT</b>	<b>0.7195 CENTS/KWH</b>
07/01/23 - 12/31/23	GREEN INFRASTRUCTURE FEE	1.18 DOLLARS/MONTH
07/01/23 - 07/31/23	PURCHASED POWER ADJUSTMENT	0.0032 CENTS/KWH
08/01/23 - 10/31/23	RESID. DSM ADJUSTMENT	0.1119 CENTS/KWH
08/01/23 - 08/31/23	PURCHASED POWER ADJUSTMENT	0.0023 CENTS/KWH
09/01/23 - 09/30/23	PURCHASED POWER ADJUSTMENT	0.0008 CENTS/KWH
10/01/23 - 10/31/23	PURCHASED POWER ADJUSTMENT	0.0022 CENTS/KWH
11/01/23 - 01/31/24	RESID. DSM ADJUSTMENT	0.1228 CENTS/KWH
11/01/23 - 11/30/23	PURCHASED POWER ADJUSTMENT	0.0002 CENTS/KWH
12/01/23 - 12/31/23	PURCHASED POWER ADJUSTMENT	0.0010 CENTS/KWH
01/01/24 - 01/31/24	PURCHASED POWER ADJUSTMENT	0.0018 CENTS/KWH
<b>01/01/24</b>	<b>REVENUE BALANCING ACCOUNT RATE ADJUSTMENT</b>	<b>15.69% PERCENT OF ALL RATE SCHEDULE CHARGES, EXCLUDING ECRC and RBA</b>
<b>01/01/24</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.21 DOLLARS/MONTH</b>
<b>02/01/24</b>	<b>RESID. DSM ADJUSTMENT</b>	<b>0.2338 CENTS/KWH</b>
<b>02/01/24</b>	<b>PURCHASED POWER ADJUSTMENT</b>	<b>-0.5315 CENTS/KWH</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.

**Maui Electric Company, Ltd. - Maui Division  
Residential Bill at 500 kWh/Month Consumption**

