



August 29, 2022

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 September 2022

Maui Electric Company, Limited's ("Maui Electric" or "Company") September 2022 Energy Cost Recovery factor for our Maui Division is 27.993 cents per kilowatt-hour ("kWh"), a decrease of 2.209 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$228.34, a decrease of \$11.11 compared to rates effective August 1, 2022. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor (-\$11.05) and a decrease in the Purchase Power Adjustment (-\$0.06).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 402.240 cents per million BTU to 2,541.13 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 0.002 cents per kWh to 20.566 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for September 2022 is 37.630 cents per kWh, a decrease of 5.453 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$225.27, a decrease of \$21.81 compared to rates effective August 1, 2022. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor.

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 484.54 cents per million BTU to 3,235.49 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 September 2022 is 32.195 cents per kWh, a decrease of 8.492 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$210.68, a decrease of \$33.97 compared to rates effective August 1, 2022. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor.

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The Honorable Chair and Members
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The Company's Moloka'i Division fuel composite cost of generation, central station and other decreased 712.52 cents per million BTU to 2,700.24 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 September 1, 2022.

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.
MOLOKAI DIVISION**

ENERGY COST RECOVERY FACTOR

	EFFECTIVE DATES		<u>Change</u>
	<u>08/01/2022</u>	<u>09/01/2022</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	3,412.76	2,700.24	(712.52)
DG Energy, ¢/kWh	0.00	0.00	0.00
Purchased Energy, ¢/kWh	21.80	21.80	0.00
<u>Residential Schedule "R"</u>			
Energy Cost Recovery, ¢/kWh	40.687	32.195	(8.492)
<u>Others - "G,J,P,F"</u>			
Energy Cost Recovery, ¢/kWh	40.687	32.195	(8.492)
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	244.65	210.68	(33.97)
500 KWH Consumption, \$/Bill	304.30	261.84	(42.46)

Supersedes Sheet Effective: 08/01/2022

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

ENERGY COST RECOVERY (ECR) FILING - September 1, 2022 (page 1 of 2)

Line

1 Effective Date September 1, 2022
2 Supercedes Factors August 1, 2022

GENERATION COMPONENT

CENTRAL STATION				DG ENERGY COMPONENT	
FUEL PRICES, ¢/mmbtu					
3	Industrial		0.00	23	COMPOSITE COST OF DG ENERGY, ¢/kWh
4	Diesel		2,700.24	24	% Input to System kWh Mix
5	Other		0.00	25	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 23 x 24)
BTU MIX, %				26	BASE DG ENERGY COMP COST
6	Industrial		0.00	27	Base % Input to System kWh Mix
7	Diesel		100.00	28	WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 26 x 27)
8	Other		0.00	29	Cost Less Base (Line 25 - 28)
			<u>100.00</u>	30	Loss Factor
9	COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 6) + (4 x 7) + (5 x 8))		2,700.24	31	Revenue Tax Req Multiplier
10	% Input to System kWh Mix		99.98	32	DG FACTOR, ¢/kWh (Line 29 x 30 x 31)
EFFICIENCY FACTOR, mmbtu/kWh					
	(A)	(B)	(C)	(D)	
			Percent of		
			Centrl Stn +		
			Other		
	Fuel Type	Eff Factor	Centrl Stn +	Weighted	
		mmbtu/kWh	Other	Eff Factor	
11	Industrial	0.000000	0.00	0.000000	
12	Diesel	0.011127	100.00	0.011127	
13	Other	0.011127	0.00	0.000000	
	(Lines 11, 12, 13): Col(B) x Col(C) = Col(D)				
14	Weighted Efficiency Factor, mmbtu/kWh [(lines 11(D) + 12(D) + 13(D))]		0.011127		
15	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh (lines (9 x 10 x 14))		30.04069		
16	BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu		0.00		
17	Base % Input to Sys kWh Mix		0.00		
18	Efficiency Factor, mmbtu/kWh		0.011127		
19	WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (16 x 17 x 18))		0.00000		
20	COST LESS BASE (line(15 - 19))		30.04069		
21	Revenue Tax Req Multiplier		1.0975		
22	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))		32.96966		
				SUMMARY OF	
				TOTAL GENERATION FACTOR, ¢/kWh	
				33	CNTRL STN + OTHER (line 22)
				34	DG (line 32)
				35	TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)

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

ENERGY COST RECOVERY (ECR) FILING - September 1, 2022 (page 2 of 2)

<u>Line</u>		
1	Effective Date	September 1, 2022
2	Supersedes Factors	August 1, 2022

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>	
	PURCHASED ENERGY PRICE, ¢/kWh - Fossil	
	PURCHASED ENERGY PRICE, ¢/kWh - Renewable	
36	Unused	0.000
37	CBRE	22.500
38	FIT	21.800
39		
40	Sch Q	0.000
	PURCHASED ENERGY KWH MIX, % - Fossil	
	PURCHASED ENERGY KWH MIX, % - Renewable	
41	Unused	0.00%
42	CBRE	0.00%
43	FIT	100.00%
44		
45	Sch Q	0.00%
45A	Fossil Purch. Energy %	0.00%
45B	Renewable Purch. Energy %	100.00%
45C	Comp. Cost, Fossil Purch. Energy, ¢/kWh	N/A
45D	Comp. Cost, Renewable Purch. Energy, ¢/kWh	21.800
46	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (36 x 41) + (37 x 42) + (38 x 43) + (39 x 44))	21.800
47	% Input to System kWh Mix	0.02
48	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (46 x 47))	0.00354
49	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh	0.000
50	Base % Input to Sys kWh Mix	0.00
51	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (49 x 50))	0.00000
52	COST LESS BASE (lines (48 - 51))	0.00354
53	Loss Factor	1.098
54	Revenue Tax Req Multiplier	1.0975
55	PURCHASED ENERGY FACTOR, ¢/kWh (lines (52 x 53 x 54))	0.00427

<u>Line</u>	<u>Calculation of Monthly Fossil Fuel Cost Risk Sharing Component</u>	
	Baseline Diesel	
56	Diesel \$, baseline month	\$457,657
57	Diesel mmbtu, baseline	24,780
58	Baseline Diesel, ¢/mmbtu	1,846.89
	Month Diesel	
59	Diesel mmbtu, budget	27,678
60	Diesel Cost, ¢/mmbtu	2,700.24
61	Diesel ECRC Fossil Cost	\$747,379
62	Diesel Base ECRC Recovery Target	\$511,188
63	Diesel differential	\$236,191
64	Total Fossil	\$236,191
65	2% of above	\$4,724
66	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$27,478
67	Maximum Annual Cap (bi-directional)	\$31,500
68	Number of Days in year from implementation	365
69	Fossil Risk % Proration (based on 365 day year)	100.00%
70	Maximum Annual Cap (bi-directional) prorated	\$31,500
71	Applicable Monthly Fossil Fuel Cost Risk Sharing	\$4,022
72	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	\$31,500
73	Fossil Cost Risk Sharing before taxes	\$4,022
74	Revenue Tax Adjustment	1.097514
75	Fossil Cost Risk Sharing w/revenue tax	\$4,415
76	Forecasted Month MWh Sales	2,486
77	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	(0.1776)

<u>Line</u>	<u>SYSTEM COMPOSITE CALCULATIONS</u>	
78	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 55))	32.97393
79	Adjustment, ¢/kWh	0.000
80	Fossil Fuel Cost Risk Sharing Component	(0.178)
81	ECR Reconciliation Adjustment	(0.601)
82	ECR FACTOR, ¢/kWh (lines (78 + 79 + 80 + 81))	32.195

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

MONTH END FUEL OIL ESTIMATE

	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
8/18/2022	5,084.83	29,136.10	879,913.75
Estimated Use	2,161.17	12,383.51	422,619.02
Estimated Received	-	-	-
Estimated Additional	<u>1,906.70</u>	<u>10,925.41</u>	<u>290,076.19</u>
Estimated End	4,830.36	27,678.00	747,370.92

Next Months Expense = \$ 154.7237 /bbl

FUEL OIL INVENTORY PRICE USED FOR FILING

<u>Type of Oil Burned</u>	<u>Price</u>	<u>Conversion Factor</u>	<u>Prices ¢/MBTU</u>
Diesel	\$ 154.7237	5.73 BTU/BBL	2700.24

MAUI ELECTRIC COMPANY, LTD.
Molokai Division
ECR Reconciliation Adjustment

September 2022

1. Amount to be refunded	(\$40,800)
2. Monthly amount (1/3 x Line 1)	(\$13,600)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$14,926)
5. Estimated Sales (September 2022)	2,486 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.601 ¢/kwh

**MAUI ELECTRIC COMPANY, LTD.
MOLOKAI DIVISION
2022 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 '20					(233)	(252)	(32)
January '21					(233)	(241)	(273)
February	4,000	(4)	(258)	4,258	(1,333)	(1,290)	2,695
March					(1,333)	(1,302)	1,393
April					(1,333)	(1,311)	82
May	7,600	(1)	66	7,534	(2,533)	(2,667)	4,949
June					(2,533)	(2,707)	2,242
July					(2,533)	(2,630)	(388)
August	22,600	(2)	(286)	22,886	(7,533)	(7,735)	14,763
September					(7,533)	(7,613)	7,150
October					(7,533)	(7,699)	(549)
November	20,200	(3)	(379)	20,579	(6,733)	(7,024)	13,006
December					(6,733)	(6,702)	6,304
January '22					(6,733)	(6,879)	(575)
February	11,500	(4)	(426)	11,926	(3,833)	(3,909)	7,442
March					(3,833)	(3,831)	3,611
April					(3,833)	(3,991)	(380)
May	16,100	(1)	(220)	16,320	(5,367)	(6,014)	9,926
June					(5,367)	(5,428)	4,498
July					(5,367)	(5,680)	(1,182)
August	40,800	(2)	(866)	41,666	(13,600)		
September					(13,600)		

NOTES:

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 20)
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.
Molokai Division
Calculations of the Average Residential Customer Bill**

	Rate			Charge (\$) at 400 Kwh		
		08/01/22	09/01/22	08/01/22	09/01/22	Difference
Base Rates	effective date:	09/01/19	09/01/19			
Base Fuel/Energy Charge	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Non-fuel Energy Charge						
First 250 kWh per month	¢/kWh	14.0459	14.0459	35.11	35.11	0.00
Next 500 kWh per month	¢/kWh	16.6959	16.6959	25.04	25.04	0.00
Customer Charge	\$	11.50	11.50	11.50	11.50	0.00
Total Base Charges				71.65	71.65	0.00
IRP Refund	% on base	0.000	0.000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment	¢/kWh	1.6175	1.6175	6.47	6.47	0.00
PBF Surcharge	¢/kWh	0.6488	0.6488	2.60	2.60	0.00
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Refund of 2018 Interim	% on base	0.00	0.00	0.00	0.00	0.00
Purchased Power Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Energy Cost Recovery	¢/kWh	40.687	32.195	162.75	128.78	-33.97
Green Infrastructure Fee	\$	1.18	1.18	1.18	1.18	0.00
Avg Residential Bill at 400 kwh				244.65	210.68	

Increase (Decrease -)	-33.97
% Change	-13.89%

	Rate			Charge (\$) at 500 Kwh		
		08/01/22	09/01/22	08/01/22	09/01/22	Difference
Base Rates	effective date:	09/01/19	09/01/19			
Base Fuel/Energy Charge	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Non-fuel Energy Charge						
First 250 kWh per month	¢/kWh	14.0459	14.0459	35.11	35.11	0.00
Next 500 kWh per month	¢/kWh	16.6959	16.6959	41.74	41.74	0.00
Customer Charge	\$	11.50	11.50	11.50	11.50	0.00
Total Base Charges				88.35	88.35	0.00
IRP Refund	% on base	0.000	0.000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment	¢/kWh	1.6175	1.6175	8.09	8.09	0.00
PBF Surcharge	¢/kWh	0.6488	0.6488	3.24	3.24	0.00
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Refund of 2018 Interim	% on base	0.00	0.00	0.00	0.00	0.00
Purchased Power Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Energy Cost Recovery	¢/kWh	40.687	32.195	203.44	160.98	-42.46
Green Infrastructure Fee	\$	1.18	1.18	1.18	1.18	0.00
Avg Residential Bill at 500 kwh				304.30	261.84	

Increase (Decrease -)	-42.46
% Change	-13.95%

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
06/01/11	IRP RECOVERY REFUND	0.000 PERCENT ON BASE
08/17/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0000 CENTS/KWH
06/01/19	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (2018 TEST YEAR)	
06/01/19 - 06/30/19	REFUND OF INTERIM RATE INCREASE 2018 TEST YEAR	-2.00 PERCENT ON BASE
06/01/19 - 05/31/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.8716 CENTS/KWH
07/01/19 - 12/31/19	RESID. PBF SURCHARGE ADJUSTMENT	0.4775 CENTS/KWH
07/01/19 - 12/31/19	GREEN INFRASTRUCTURE FEE	1.17 DOLLARS/MONTH
08/01/19 - 08/31/19	PURCHASED POWER ADJUSTMENT	-0.7518 CENTS/KWH
09/01/19 - 09/30/19	PURCHASED POWER ADJUSTMENT	-0.7820 CENTS/KWH
10/01/19 - 10/31/19	PURCHASED POWER ADJUSTMENT	-0.7475 CENTS/KWH
11/01/19 - 11/30/19	PURCHASED POWER ADJUSTMENT	0.0692 CENTS/KWH
12/01/19 - 12/31/19	PURCHASED POWER ADJUSTMENT	0.0655 CENTS/KWH
01/01/20 - 01/31/20	PURCHASED POWER ADJUSTMENT	0.0648 CENTS/KWH
01/01/20 - 06/30/20	RESID. PBF SURCHARGE ADJUSTMENT	0.7437 CENTS/KWH
01/01/20 - 06/30/20	GREEN INFRASTRUCTURE FEE	1.25 DOLLARS/MONTH
02/01/20 - 04/30/20	PURCHASED POWER ADJUSTMENT	0.00 CENTS/KWH
04/01/20 - 04/30/20	SOLARSAVER ADJUSTMENT	-0.0592 CENTS/KWH
05/01/20 - 05/31/20	PURCHASED POWER ADJUSTMENT	-0.3200 CENTS/KWH
05/01/20 - 03/31/21	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/20 - 06/30/20	PURCHASED POWER ADJUSTMENT	-0.3325 CENTS/KWH
06/01/20 - 05/31/21	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.3383 CENTS/KWH
07/01/20 - 07/31/20	PURCHASED POWER ADJUSTMENT	0.0000 CENTS/KWH
07/01/20 - 06/30/21	RESID. PBF SURCHARGE ADJUSTMENT	0.5882 CENTS/KWH
07/01/20 - 12/31/20	GREEN INFRASTRUCTURE FEE	1.19 DOLLARS/MONTH
08/01/20 - 08/31/20	PURCHASED POWER ADJUSTMENT	0.2408 CENTS/KWH
09/01/20 - 09/30/20	PURCHASED POWER ADJUSTMENT	0.2542 CENTS/KWH
10/01/20 - 10/31/20	PURCHASED POWER ADJUSTMENT	0.2449 CENTS/KWH
11/01/20	PURCHASED POWER ADJUSTMENT	0.0000 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 - 06/30/22	RESID. PBF SURCHARGE ADJUSTMENT	0.6478 CENTS/KWH
07/01/21 - 12/31/21	GREEN INFRASTRUCTURE FEE	1.19 DOLLARS/MONTH
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	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/22	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.6175 CENTS/KWH
07/01/22	RESID. PBF SURCHARGE ADJUSTMENT	0.6488 CENTS/KWH
07/01/22	GREEN INFRASTRUCTURE FEE	1.18 DOLLARS/MONTH

~ Surcharges currently in effect are in bold.

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