



December 28, 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 January 2023

Maui Electric Company, Limited's ("Maui Electric" or "Company") January 2023 Energy Cost Recovery factor for our Maui Division is 25.334 cents per kilowatt-hour ("kWh"), an increase of 1.215 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$215.82, an increase of \$7.57 compared to rates effective December 1, 2022. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$6.07), increase in the RBA Rate Adjustment (+\$1.43), increase in the Green Infrastructure Fee (+\$0.05) and increase in the Purchase Power Adjustment (+\$0.02).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 193.280 cents per million BTU to 2,161.71 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 7.712 cents per kWh to 20.146 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for January 2023 is 36.114 cents per kWh, a decrease of 2.232 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$220.41, a decrease of \$7.72 compared to rates effective December 1, 2022. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor (-\$8.92), partially offset by an increase in the RBA Rate Adjustment (+\$1.15) and increase in the Green Infrastructure Fee (+\$0.05).

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 187.63 cents per million BTU to 3,114.12 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 January 2023 is 32.969 cents per kWh, a decrease of 0.347 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$214.98, a decrease of \$0.18 compared to rates effective December 1, 2022. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor (-\$1.38), partially offset by an increase in the RBA Rate Adjustment (+\$1.15) and increase in the Green Infrastructure Fee (+\$0.05).

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The Company's Moloka'i Division fuel composite cost of generation, central station and other decreased 27.29 cents per million BTU to 2,745.38 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 January 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.
MOLOKAI DIVISION**

ENERGY COST RECOVERY FACTOR

	EFFECTIVE DATES		<u>Change</u>
	<u>12/01/2022</u>	<u>1/01/2023</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	2,772.67	2,745.38	(27.29)
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	33.316	32.969	(0.347)
<u>Others - "G,J,P,F"</u>			
Energy Cost Recovery, ¢/kWh	33.316	32.969	(0.347)
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	215.16	214.98	(0.18)
500 KWH Consumption, \$/Bill	267.44	267.19	(0.25)

Supersedes Sheet Effective: 12/01/2022

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

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

Line	Effective Date	January 1, 2023
2	Supercedes Factors	December 1, 2022

Line	PURCHASED ENERGY COMPONENT	
	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	0.01
48	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (46 x 47))	0.00316
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))	0.00316
53	Loss Factor	1.098
54	Revenue Tax Req Multiplier	1.0975
55	PURCHASED ENERGY FACTOR, ¢/kWh (lines (52 x 53 x 54))	0.00381

Line	Calculation of Monthly Fossil Fuel Cost Risk Sharing Component	
	Baseline Diesel	
56	Diesel \$, baseline month	\$695,230
57	Diesel mmbtu, baseline	25,324
58	Baseline Diesel, c/mmbtu	2,745.38
	Month Diesel	
59	Diesel mmbtu, budget	25,324
60	Diesel Cost, ¢/mmbtu	2,745.38
61	Diesel ECRC Fossil Cost	\$695,230
62	Diesel Base ECRC Recovery Target	\$695,230
63	Diesel differential	\$0
64	Total Fossil	\$0
65	2% of above	\$0
66	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$0
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	\$0
72	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	\$0
73	Fossil Cost Risk Sharing before taxes	\$0
74	Revenue Tax Adjustment	1.097514
75	Fossil Cost Risk Sharing w/revenue tax	\$0
76	Forecasted Month MWh Sales	2,268
77	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.0000

Line	SYSTEM COMPOSITE CALCULATIONS	
78	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 55))	33.52521
79	Adjustment, ¢/kWh	0.000
80	Fossil Fuel Cost Risk Sharing Component	0.000
81	ECR Reconciliation Adjustment	(0.556)
82	ECR FACTOR, ¢/kWh (lines (78 + 79 + 80 + 81))	32.969

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

MONTH END FUEL OIL ESTIMATE

	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
12/19/2022	4,694.45	26,899.21	784,835.02
Estimated Use	1,762.82	10,100.96	280,065.91
Estimated Received	4,558.14	26,118.14	673,450.24
Estimated Additional	-	-	-
Estimated End	<u>7,489.77</u>	<u>42,916.39</u>	<u>1,178,219.35</u>

Next Months Expense = \$ 157.3105 /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	\$ 157.3105	5.73 BTU/BBL	2745.38

MAUI ELECTRIC COMPANY, LTD.
Molokai Division
ECR Reconciliation Adjustment

January 2023

1. Amount to be refunded	(\$34,500)
2. Monthly amount (1/3 x Line 1)	(\$11,500)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$12,621)
5. Estimated Sales (January 2023)	2,268 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.556 ¢/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)	(14,372)	26,112
September					(13,600)	(13,983)	12,129
October					(13,600)	(14,488)	(2,359)
November	34,500	(3)	(1,468)	35,968	(11,500)	(11,296)	22,313
December					(11,500)		
January '23					(11,500)		

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		
		12/01/22	1/01/23	12/01/22	1/01/23	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 kWhr per month	¢/kWh	14.0459	14.0459	35.11	35.11	0.00
Next 500 kWhr 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	1.9048	6.47	7.62	1.15
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	33.316	32.969	133.26	131.88	-1.38
Green Infrastructure Fee	\$	1.18	1.23	1.18	1.23	0.05
Avg Residential Bill at 400 kwh				215.16	214.98	

Increase (Decrease -) -0.18
 % Change -0.08%

	Rate			Charge (\$) at 500 Kwh		
		12/01/22	1/01/23	12/01/22	1/01/23	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 kWhr per month	¢/kWh	14.0459	14.0459	35.11	35.11	0.00
Next 500 kWhr 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	1.9048	8.09	9.52	1.43
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	33.316	32.969	166.58	164.85	-1.73
Green Infrastructure Fee	\$	1.18	1.23	1.18	1.23	0.05
Avg Residential Bill at 500 kwh				267.44	267.19	

Increase (Decrease -) -0.25
 % Change -0.09%

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

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR CENTS / KWH</u>		<u>RESIDENTIAL BILL (\$)</u>	
	<u>RESIDENTIAL & COMMERCIAL</u>		<u>@ 400 KWH</u>	<u>@ 500 KWH</u>
January 1, 2020	18.533		153.75	190.67
February 1, 2020	21.165		164.02	203.51
March 1, 2020	21.967		167.23	207.52
April 1, 2020	19.555		157.34	195.16
May 1, 2020	18.231		151.00	187.24
June 1, 2020	12.810		127.13	157.40
July 1, 2020	10.471		118.42	146.53
August 1, 2020	12.013		125.55	155.44
September 1, 2020	14.463		135.41	167.76
October 1, 2020	10.877		121.03	149.78
November 1, 2020	14.096		132.92	164.65
December 1, 2020	13.337		129.89	160.86
January 1, 2021	14.116		133.06	164.81
February 1, 2021	16.108		141.03	174.77
March 1, 2021	15.163		137.25	170.05
April 1, 2021	17.823		147.71	183.13
May 1, 2021	18.313		149.85	185.80
June 1, 2021	17.544		149.53	185.38
July 1, 2021	18.749		154.53	191.65
August 1, 2021	21.572		165.82	205.76
September 1, 2021	19.433		157.26	195.07
October 1, 2021	20.326		160.83	199.53
November 1, 2021	20.133		160.06	198.57
December 1, 2021	20.186		160.27	198.83
January 1, 2022	21.781		170.50	211.61
February 1, 2022	23.569		177.66	220.55
March 1, 2022	24.300		180.58	224.20
April 1, 2022	25.193		184.02	228.51
May 1, 2022	30.431		205.10	254.86
June 1, 2022	34.241		218.92	272.14
July 1, 2022	39.900		241.50	300.36
August 1, 2022	40.687		244.65	304.30
September 1, 2022	32.195		210.68	261.84
October 1, 2022	36.404		227.52	282.88
November 1, 2022	31.953		209.71	260.63
December 1, 2022	33.316		215.16	267.44
January 1, 2023	32.969		214.98	267.19

**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 - 12/31/22	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.6175 CENTS/KWH
07/01/22	RESID. PBF SURCHARGE ADJUSTMENT	0.6488 CENTS/KWH
07/01/22 - 12/31/22	GREEN INFRASTRUCTURE FEE	1.18 DOLLARS/MONTH
01/01/23	GREEN INFRASTRUCTURE FEE	1.23 DOLLARS/MONTH
01/01/23	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.9048 CENTS/KWH

~ Surcharges currently in effect are in bold.

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