

February 24, 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 March 2023

Maui Electric Company, Limited's ("Maui Electric" or "Company") March 2023 Energy Cost Recovery factor for our Maui Division is 25.455 cents per kilowatt-hour ("kWh"), an increase of 0.954 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$216.98, an increase of \$4.77 compared to rates effective February 1, 2023. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor.

The Company's Maui Division fuel composite cost of generation, central station and other increased 128.850 cents per million BTU to 2,209.99 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.588 cents per kWh to 19.716 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for March 2023 is 34.661 cents per kWh, a decrease of 1.351 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$214.59, a decrease of \$5.41 compared to rates effective February 1, 2023. 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 126.15 cents per million BTU to 3,011.41 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 March 2023 is 33.972 cents per kWh, an increase of 2.741 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$218.99, an increase of \$10.97 compared to rates effective February 1, 2023. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery.

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 228.35 cents per million BTU to 2,780.39 cents per million BTU. The composite cost

The Honorable Chair and Members of the Hawai'i Public Utilities Commission February 24, 2023 Page 2

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 March 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>2/01/2023</u>	3/01/2023	<u>Change</u>
COMPOSITE COSTS Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh Purchased Energy, ¢/kWh	2,552.04 0.00 21.80	2,780.39 0.00 21.80	228.35 0.00 0.00
Residential Schedule "R"			
Energy Cost Recovery, ¢/kWh	31.231	33.972	2.741
Others - "G,J,P,F"			
Energy Cost Recovery, ¢/kWh	31.231	33.972	2.741
Residential Customer with			
400 KWH Consumption, \$/Bill 500 KWH Consumption, \$/Bill	208.02 258.50	218.99 272.20	10.97 13.70

Supersedes Sheet Effective: 2/01/2023

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

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

Line
1 Effective Date
2 Supercedes Factors March 1, 2023 February 1, 2023

#### **GENERATION COMPONENT**

	CENTRAL STATION		
	FUEL PRICES, ¢/mmbtu		
3	Industrial	0.00	
_	Diesel	2,780.39	
	Other	0.00	
3	Other	0.00	
	BTU MIX, %		DG ENERGY COMPONENT
6	Industrial	0.00	23 COMPOSITE COST OF DG
7	Diesel	100.00	ENERGY, ¢/kWh 0.000
8	Other	0.00	24 % Input to System kWh Mix 0.00
		100.00	
			25 WEIGHTED COMPOSITE DG ENERGY COST,
9	COMPOSITE COST OF GENERATION,		¢/kWh (Lines 23 x 24) 0.00000
	CENTRAL STATION + OTHER ¢/mmbtu	2,780.39	
	(Lines (3 x 6) + (4 x 7) + (5 x 8))		
10	% Input to System kWh Mix	99.98	26 BASE DG ENERGY COMP COST 0.000
			27 Base % Input to System kWh Mix 0.00
	EFFICIENCY FACTOR, mmbtu/kWh		28 WEIGHTED BASE DG ENERGY COST,
	(A) (B) (C)	(D)	¢/kWh (Line 26 x 27) 0.00000
	Percent of		
	Eff Factor Centrl Stn +	Weighted	29 Cost Less Base (Line 25 - 28) 0.00000
	Fuel Type mmbtu/kwh Other	Eff Factor	30 Loss Factor 1.098
11		0.000000	31 Revenue Tax Req Multiplier 1.0975
12		0.011127	32 DG FACTOR,
13		0.000000	¢/kWh (Line 29 x 30 x 31) 0.00000
٠.,	(Lines 11, 12, 13): Col(B) x Col(C) = Col(D)		
14	Weighted Efficiency Factor, mmbtu/kWh	0.011107	
	[lines 11(D) + 12(D) + 13(D)]	0.011127	
15	WEIGHTED COMPOSITE CENTRAL STATION	N +	
	OTHER GENERATION COST, ¢/kWh		
	(lines (9 x 10 x 14))	30.93176	
	, , , , , , , , , , , , , , , , , , , ,		
16	BASE CENTRAL STATION + OTHER		
	GENERATION COST, ¢/mmbtu	0.00	
17	Base % Input to Sys kWh Mix	0.00	
	Efficiency Factor, mmbtu/kwh	0.011127	
19	WEIGHTED BASE CENTRAL STATION + OTH	HER	
	GENERATION COST ¢/kWh		
	(lines (16 x 17 x 18))	0.00000	0.0000000000000000000000000000000000000
00	000T LE00 BADE (II: - /45 - 40))	00 00470	SUMMARY OF
	COST LESS BASE (line(15 - 19))	30.93176	TOTAL GENERATION FACTOR, ¢/kWh
	Revenue Tax Req Multiplier CENTRAL STATION + OTHER GENERATION	1.0975	33 CNTRL STN + OTHER (line 22) 33.94761 34 DG (line 32) 0.00000
22	FACTOR, ¢/kWh (line (20 x 21))	33.94761	34 DG (line 32) 0.00000 35 TOTAL GENERATION FACTOR.
	1 ACTON, \$/KVVII (IIIIE (20 X 21))	33.34101	¢/kWh (lines 33 + 34) 33.94761
			φ/πννιι (ιιπού ου τ οπ) 55.54701

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

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

Line
1 Effective Date
2 Supercedes Factors March 1, 2023 February 1, 2023

ı		DUDOULAGED ENERGY COMPONENT	
	Line	PURCHASED ENERGY COMPONENT	
	37	PURCHASED ENERGY PRICE, ¢/kWh - Fossil PURCHASED ENERGY PRICE, ¢/kWh - Renewab Unused CBRE FIT	0.000 22.500 21.800
	40	Sch Q	0.000
	42	PURCHASED ENERGY KWH MIX, % - Fossil PURCHASED ENERGY KWH MIX, % - Renewable Unused CBRE FIT	0.00% 0.00% 100.00%
	45	Sch Q	0.00%
	45B 45C	Fossil Purch. Energy % Renewable Purch. Energy % Comp. Cost, Fossil Purch. Energy, ¢/kWh Comp. Cost, Renewable Purch. Energy,¢/kWh	0.00% 100.00% N/A 21.800
	47	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (36 x 41) + (37 x 42) + (38 x 43) + (39 x 44) % Input to System kWh Mix WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (46 x 47))	0.02
	50	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh Base % Input to Sys kWh Mix WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (49 x 50))	0.000 0.00 0.00000
	53 54	COST LESS BASE (lines (48 - 51)) Loss Factor Revenue Tax Req Multiplier PURCHASED ENERGY FACTOR, ¢/kWh (lines (52 x 53 x 54))	0.00397 1.098 1.0975 0.00478

Line	Calculation of Monthly Fossil Fuel Cost Risk Sharing Compone	<u>nt</u>
	Baseline Diesel	
56	Diesel \$, baseline month	\$727,962
57	Diesel mmbtu, baseline	26,128
58	Baseline Diesel, c/mmbtu	2,786.15
	Month Diesel	
59	Diesel mmbtu, budget	24,921
60	Diesel Cost, ¢/mmbtu	2,780.39
61	Diesel ECRC Fossil Cost	\$692,888
62	Diesel Base ECRC Recovery Target	\$694,324
63	Diesel differential	-\$1,436
64	Total Fossil	-\$1,436
65	2% of above	-\$29
66	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	-\$895
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	-\$29
72	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$923
73	Fossil Cost Risk Sharing before taxes	-\$29
74	Revenue Tax Adjustment	1.097514
75	Fossil Cost Risk Sharing w/revenue tax	-\$32
76	Forecasted Month MWh Sales	2,229
77	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.0014

<u>Line</u>	SYSTEM COMPOSITE CALCULATIONS	
70	CENEDATION AND DUDOUAGED ENERGY	
78	GENERATION AND PURCHASED ENERGY	
	FACTOR, ¢/kWh	33.95239
	(lines (35 + 55))	
79	Adjustment, ¢/kWh	0.000
80	Fossil Fuel Cost Risk Sharing Component	0.001
81	ECR Reconciliation Adjustment	0.018
82	ECR FACTOR, ¢/kWh	33.972
	(lines (78 + 79 + 80 + 81))	

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

#### MONTH END FUEL OIL ESTIMATE

	Barrels	MBTU	\$
2/17/2023	6,720.52	38,508.60	1,049,768.50
Estimated Use	1,598.80	9,161.12	233,795.40
Estimated Received	-	-	-
Estimated Additional	<u> </u>	<u> </u>	<u> </u>
Estimated End	5,121.72	29,347.48	815,973.10

Next Months Expense = \$ 159.3162 /bbl

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

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel	\$ 159.3162	5.73 BTU/BBL	2780.39

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

#### March 2023

Amount to be collected	\$1,100	
2. Monthly amount (1/3 x Line 1)	\$367	
3. Revenue Tax Divisor	0.91115	
4. Total (Line 2 / Line 3)	\$403	
5. Estimated Sales (March 2023)	2,229	mwh
6. Adjustment (Line 4 ÷ Line 5)	0.018	¢/kwh

# MAUI ELECTRIC COMPANY, LTD. MOLOKAI DIVISION 2023 Cumulative Reconciliation Balance

<u>Month</u>	(1) YTD FOA Reconciliation	<u>Qtr</u>	(2) FOA Rec Adjust <u>Variance</u>	(3) FOA Rec Less Variance	(4) Try to Collect	(5) Actual Collect	(6) Month-end Cumulative <u>Balance</u>
December '20 January '21					(233) (233)	(252) (241)	(32) (273)
February March	4,000	(4)	(258)	4,258	(1,333) (1,333)	(1,290) (1,302)	2,695 1,393
April May June	7,600	(1)	66	7,534	(1,333) (2,533) (2,533)	(1,311) (2,667) (2,707)	82 4,949 2,242
July August September	22,600	(2)	(286)	22,886	(2,533) (7,533) (7,533)	(2,630) (7,735) (7,613)	(388) 14,763 7,150
October November December	20,200	(3)	(379)	20,579	(7,533) (6,733) (6,733)	(7,699) (7,024) (6,702)	(549) 13,006 6,304
January '22 February March	11,500	(4)	(426)	11,926	(6,733) (3,833) (3,833)	(6,879) (3,909) (3,831)	(575) 7,442 3,611
April May June	16,100	(1)	(220)	16,320	(3,833) (5,367) (5,367)	(3,991) (6,014) (5,428)	(380) 9,926 4,498
July August September	40,800	(2)	(866)	41,666	(5,367) (13,600) (13,600)	(5,680) (14,372) (13,983)	(1,182) 26,112 12,129
October November December	34,500	(3)	(1,468)	35,968	(13,600) (11,500) (11,500)	(14,488) (11,296) (11,026)	(2,359) 22,313 11,287
January '23 February March	(1,100)	(4)	(210)	(890)	(11,500) 367 367	(11,414)	(127)
NOTES:							
Col(1):	Quarterly FOA re A positive numb			•			ection.
Col(2):	FOA reconciliati starting with the sales used to de	fourth p	orior month; t	he difference	between the e	estimated rec	
Col(3):	(Col(5) - Col(4)) FOA reconciliati difference minus	-		•		OA reconcili	ation
Col(4): Col(5): Col(6):	difference minus the adjustment variance. Col(1) - Col(2) Amount that the FOA reconciliation adjustment is trying to collect. (Col(1) * 1/3) Actual collected amount. (recorded sales * \$/kwh adjustment/1.09751) 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

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 Refund of 2018 Interim Purchased Power Adjustment Energy Cost Recovery

Green Infrastructure Fee

**Green Infrastructure Fee** 

Avg Residential Bill at 500 kwh

Avg Residential Bill at 400 kwh

Rate				
	2/01/23	3/01/23		
effective date:	09/01/19	09/01/19		
¢/kWh	0.0000	0.0000		
¢/kWh	14.0459	14.0459		
¢/kWh	16.6959	16.6959		
, \$	11.50	11.50		
% on base	0.000	0.000		
¢/kWh	1.9048	1.9048		
¢/kWh	0.6488	0.6488		
¢/kWh	0.0000	0.0000		
¢/kWh	0.0000	0.0000		
% on base	0.00	0.00		
¢/kWh	0.0000	0.0000		
¢/kWh	31.231	33.972		
, \$	1.23	1.23		

Charge (\$) at 400 Kwh						
	2/01/23 3/01/23 Difference					
2/01/23	3/01/23	Difference				
0.00	0.00	0.00				
35.11	35.11	0.00				
25.04	25.04	0.00				
11.50	11.50	0.00				
71.65	71.65	0.00				
0.00	0.00	0.00				
7.62	7.62	0.00				
2.60	2.60	0.00				
0.00	0.00	0.00				
0.00	0.00	0.00				
0.00	0.00	0.00				
0.00	0.00	0.00				
124.92	135.89	10.97				
1.23	1.23	0.00				
208.02	218.99					

Increase (Decrease -) % Change

10.97 5.27%

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 Refund of 2018 Interim Purchased Power Adjustment Energy Cost Recovery

2/01/23	2/04/22
	3/01/23
09/01/19	09/01/19 0.0000
14.0459	14.0459
16.6959 11.50	16.6959 11.50
0.000	0.000
1.9048 0.6488	1.9048 0.6488
0.0000 0.0000 0.00	0.0000 0.0000 0.00
0.0000 31.231	0.0000 33.972 1.23
	0.0000 14.0459 16.6959 11.50 0.000 1.9048 0.6488 0.0000 0.0000 0.0000 0.0000

Charge (f) at 500 Kinds						
	Charge (\$) at 500 Kwh					
2/01/23	3/01/23	Difference				
0.00	0.00	0.00				
35.11	35.11	0.00				
41.74	41.74	0.00				
11.50	11.50	0.00				
88.35	88.35	0.00				
0.00	0.00	0.00				
9.52	9.52	0.00				
3.24	3.24	0.00				
0.00	0.00	0.00				
0.00	0.00	0.00				
0.00	0.00	0.00				
0.00	0.00	0.00				
156.16	169.86	13.70				
1.23	1.23	0.00				
258.50	272.20					

Increase (Decrease -) % Change

13.70 5.30%

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

	<b>FUEL FACTOR</b>		
	CENTS / KWH	DEOLDENIT	IAI DIII (A)
EFFECTIVE DATE	RESIDENTIAL & COMMERCIAL	@ 400 KWH	IAL BILL (\$)
EFFECTIVE DATE	COMMERCIAL	<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 10.471	127.13 118.42	157.40 146.53
July 1, 2020 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
December 1, 2022	33.310	213.10	207.44
January 1, 2023	32.969	214.98	267.19
February 1, 2023	31.231	208.02	258.50
March 1, 2023	33.972	218.99	272.20
iviaitii i, 2023	33.91Z	210.99	212.20

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE		RATE
06/01/11 08/17/17	IRP RECOVERY REFUND RENEWABLE ENERGY INFRASTRUCTURE COST	0.000	PERCENT ON BASE CENTS/KWH
00/11/11	RECOVERY PROVISION	0.0000	o Livi o niviii
06/01/19	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (2017)	<b>18 TEST YEA</b> I	₹)
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	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		CENTS/KWH
07/01/21 - 12/31/21	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
01/01/22 - 05/31/22	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		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	SOLARSAVER ADJUSTMENT		CENTS/KWH
06/01/22 - 12/31/22	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
07/01/22	RESID. PBF SURCHARGE ADJUSTMENT		CENTS/KWH
07/01/22 - 12/31/22	GREEN INFRASTRUCTURE FEE	_	DOLLARS/MONTH
01/01/23	GREEN INFRASTRUCTURE FEE	•	DOLLARS/MONTH
01/01/23	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.9048	CENTS/KWH

<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.