

February 24, 2021

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 2021

Maui Electric Company, Limited's ("Maui Electric" or "Company") March 2021 Energy Cost Recovery factor for our Maui Division is 16.168 cents per kilowatt-hour ("kWh"), an increase of 1.830 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$162.49, an increase of \$9.15 compared to rates effective February 1, 2021. 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 75.580 cents per million BTU to 1,150.19 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.399 cents per kWh to 19.886 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for March 2021 is 22.103 cents per kWh, an increase of 1.463 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$157.86, an increase of \$5.85 compared to rates effective February 1, 2021. 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 114.40 cents per million BTU to 1,883.28 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 2021 is 15.163 cents per kWh, a decrease of 0.945 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$137.25, a decrease of \$3.78 compared to rates effective February 1, 2021. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery.

The Company's Moloka'i Division fuel composite cost of generation, central station and other decreased 79.31 cents per million BTU to 1,248.68 cents per million BTU. The composite cost

The Honorable Chair and Members of the Hawai'i Public Utilities Commission February 24, 2021 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, 2021.

Sincerely,

/s/ Sharon M. Suzuki
Sharon M. Suzuki
President
Maui County and Hawai'i Island Utilities

Attachments

cc: Division of Consumer Advocacy

MAUI ELECTRIC COMPANY, LTD. MOLOKAI DIVISION

ENERGY COST RECOVERY FACTOR

	EFFECTIVE DATES		
	02-01-21	03-01-21	<u>Change</u>
COMPOSITE COSTS Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh	1,327.99 0.00	1,248.68 0.00	(79.31) 0.00
Purchased Energy, ¢/kWh	21.80	21.80	0.00
Residential Schedule "R"			
Energy Cost Recovery, ¢/kWh	16.108	15.163	(0.945)
Others - "G,P,F"			
Energy Cost Recovery, ¢/kWh	16.108	15.163	(0.945)
Residential Customer with			
400 KWH Consumption, \$/Bill	141.03	137.25	(3.78)
500 KWH Consumption, \$/Bill	174.77	170.05	(4.72)

Supersedes Sheet Effective: February 1, 2021

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

ENERGY COST RECOVERY (ECR) FILING - March 1, 2021 (page 1 of 2)

Line 1 Effective Date March 1, 2021 2 Supercedes Factors February 1, 2021

GENERATION COMPONENT

	CENTRAL STATION]
	FUEL PRICES, ¢/mmbtu		
2	Industrial	0.00	
_			
	Diesel	1,248.68	
5	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	21 /0 mput to Gyotom term min
		100100	25 WEIGHTED COMPOSITE DG ENERGY COST.
9	COMPOSITE COST OF GENERATION,		¢/kWh (Lines 23 x 24) 0.00000
ľ	CENTRAL STATION + OTHER ¢/mmbtu	1,248.68	\$, (2
	(Lines (3 x 6) + (4 x 7) + (5 x 8))	1,2 10.00	
10	% Input to System kWh Mix	99.98	26 BASE DG ENERGY COMP COST 0.000
	, a mparte eyetem term mix	00.00	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	(D)	φ/κνντι (Line 20 x 21) 0.00000
	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 Reg Multiplier 1.0975
12		0.000000	32 DG FACTOR,
13		0.000000	¢/kWh (Line 29 x 30 x 31) 0.00000
13		0.000000	ψ/κννιι (Line 29 x 30 x 31) 0.00000
	(Lines 11, 12, 13): $Col(B) \times Col(C) = Col(D)$		
14	Weighted Efficiency Factor, mmbtu/kWh	0.044407	
	[lines 11(D) + 12(D) + 13(D)]	0.011127	
15	WEIGHTED COMPOSITE CENTRAL STATION	+	
	OTHER GENERATION COST, ¢/kWh	•	
	(lines (9 x 10 x 14))	13.89160	
	(IIIC3 (3 X 10 X 1 4))	10.00100	
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	
	WEIGHTED BASE CENTRAL STATION + OTHI		
	GENERATION COST ¢/kWh		
	(lines (16 x 17 x 18))	0.00000	
	(mico (10 x 17 x 10))	0.00000	SUMMARY OF
20	COST LESS BASE (line(15 - 19))	13.89160	TOTAL GENERATION FACTOR, ¢/kWh
	Revenue Tax Reg Multiplier	1.0975	33 CNTRL STN + OTHER (line 22) 15.24603
	CENTRAL STATION + OTHER GENERATION	1.0070	34 DG (line 32) 0.00000
	FACTOR, ¢/kWh (line (20 x 21))	15.24603	35 TOTAL GENERATION FACTOR.
		10.24000	¢/kWh (lines 33 + 34) 15.24603
			φ/λ.ττι (iii.los σσ 1 σ τ) 10.24000

ENERGY COST RECOVERY (ECR) FILING - March 1, 2021 (page 2 of 2)

Line
1 Effective Date
2 Supercedes Factors March 1, 2021 February 1, 2021

_		DUDOUA OED ENEDOV COMPONENT	
L	ine	PURCHASED ENERGY COMPONENT	
		PURCHASED ENERGY PRICE, ¢/kWh - Fossil PURCHASED ENERGY PRICE, ¢/kWh - Renewab	le
	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		0.00%
		CBRE	0.00%
		FIT	100.00%
	44		
	45	Sch Q	0.00%
	45A	Fossil Purch. Energy %	0.00%
		Renewable Purch. Energy %	100.00%
		Comp. Cost, Fossil Purch. Energy, ¢/kWh	N/A
1 '	45D	Comp. Cost, Renewable Purch. Energy,¢/kWh	21.800
	46	COMPOSITE COST OF PURCHASED	
		ENERGY, ¢/kWh	21.800
		(Lines (36 x 41) + (37 x 42) + (38 x 43) + (39 x 44)	•
		% Input to System kWh Mix	0.02
	48	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (46 x 47))	0.00386
		COST, ¢/kvvii (lines (40 x 47))	0.00366
	49	BASE PURCHASED ENERGY	
		COMPOSITE COST, ¢/kWh	0.000
		Base % Input to Sys kWh Mix	0.00
	51		
		COST, ¢/kWh (lines (49 x 50))	0.00000
	52	COST LESS BASE (lines (48 - 51))	0.00386
		Loss Factor	1.098
		Revenue Tax Req Multiplier	1.0975
	55	PURCHASED ENERGY FACTOR, ¢/kWh	0.00465
		(lines (52 x 53 x 54))	

<u>Line</u>	Calculation of Monthly Fossil Fuel Cost Risk Sharing Compone	<u>nt</u>
	Baseline Diesel	
56	Diesel \$, baseline month	\$312,097
57	Diesel mmbtu, baseline	27,102
58	Baseline Diesel, c/mmbtu	1,151.57
	Month Diesel	
59	Diesel mmbtu, budget	25,849
60	Diesel Cost, ¢/mmbtu	1,248.68
61	Diesel ECRC Fossil Cost	\$322,775
62	Diesel Base ECRC Recovery Target	\$297,674
63	Diesel differential	\$25,102
64	Total Fossil	\$25,102
65	2% of above	\$502
66	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$814
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	\$502
72	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	\$1,316
73	Fossil Cost Risk Sharing before taxes	\$502
74	Revenue Tax Adjustment	1.097514
75	Fossil Cost Risk Sharing w/revenue tax	\$551
76	Forecasted Month MWh Sales	2,297
77	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	(0.0240)

<u>Line</u>	SYSTEM COMPOSITE CALCULATIONS	
78	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 55))	15.25068
79	Adjustment, ¢/kWh	0.000
80	Fossil Fuel Cost Risk Sharing Component	(0.024)
81	ECR Reconciliation Adjustment	(0.064)
82	ECR FACTOR, ¢/kWh	15.163
	(lines (78 + 79 + 80 + 81))	

Maui Electric Company, Ltd. Molokai Division

MONTH END FUEL OIL ESTIMATE

	Barrels	MBTU	\$
2/18/2021	6,642.76	38,063.03	481,949.17
Estimated Use	1,466.47	8,402.87	111,589.27
Estimated Received	-	-	-
Estimated Additional			
Estimated End	5,176.29	29,660.16	370,359.90

Next Months Expense = \$ 71.5493 /bbl

FUEL OIL INVENTORY PRICE USED FOR FILING

Type of Oil Burned	<u> </u>	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel	\$	71.5493	5.73 BTU/BBL	1248.68

MAUI ELECTRIC COMPANY, LTD. Molokai Division ECR Reconciliation Adjustment

March 2021

1. Amount to be refunded	(\$4,000)
2. Monthly amount (1/3 x Line 1)	(\$1,333)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$1,463)
5. Estimated Sales (March 2021)	2,297 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.064 ¢/kwh

MAUI ELECTRIC COMPANY, LTD. MOLOKAI DIVISION 2020 Cumulative Reconciliation Balance

	(1) YTD FOA		(2) FOA Rec Adjust	(3) FOA Rec Less	(4) Try to	(5) Actual	(6) Month-end Cumulative
<u>Month</u>	Reconciliation	<u>Qtr</u>	<u>Variance</u>	<u>Variance</u>	<u>Collect</u>	<u>Collect</u>	<u>Balance</u>
December '19 January '20 February March	(31,000)	(4)	(1,752)	(29,248)	(9,667) (9,667) 10,333 10,333	(10,289) (10,240) 9,207 10,125	7,910 (2,330) (22,371) (12,246)
April May June July	(400)	(1)	(1,907)	1,507	10,333 133 133 133	9,676 156 132 140	(2,570) (907) (775) (635)
August September October	23,000	(2)	(635)	23,635	(7,667) (7,667) (7,667)	(7,490) (7,964) (7,901)	15,510 7,546 (355)
November December January '21	700	(3)	(113)	813	(233) (233) (233)	(238) (252) (241)	220 (32) (273)
February March	4,000	(4)	(258)	4,258	(1,333) (1,333)	, ,	, ,

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

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

Avg Residential Bill at 400 kwh

Rate					
02-01-21 03-01-21					
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	0.3383	0.3383			
¢/kWh	0.5882	0.5882			
¢/kWh	0.0000	0.0000			
¢/kWh	0.0000	0.0000			
% on base	0.000	0.000			
, , , , , , , , , , , , , , , , , , , ,					
¢/kWh	0.0000	0.0000			
¢/kWh	16.108	15.163			
\$	1.25	1.25			

Charge (\$) at 400 Kwh				
02-01-21	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		
4.05	4.05	0.00		
1.35	1.35	0.00		
2.35	2.35	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		
64.43	60.65	-3.78		
1.25	1.25	0.00		
141.03	137.25			

Increase (Decrease -) % Change

-3.78 -2.68%

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

Avg Residential Bill at 500 kwh

Rate			
	02-01-21	03-01-21	
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	0.3383	0.3383	
¢/kWh	0.5882	0.5882	
¢/kWh	0.0000	0.0000	
¢/kWh	0.0000	0.0000	
% on base	0.00	0.00	
¢/kWh	0.0000	0.0000	
¢/kWh	16.108	15.163	
\$	1.25	1.25	

Charge (\$) at 500 Kwh			
02-01-21	03-01-21	Difference	
V V V V V			
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	
1.69	1.69	0.00	
2.94	2.94	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	0.00	0.00	
80.54	75.82	-4.72	
1.25	1.25	0.00	
174.77	170.05		

Increase (Decrease -) % Change

-4.	72
-2.70	%

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

FUEL FACTO	R
CENTS / KWH	1

	CENTS / KWH		
	RESIDENTIAL &	RESIDENT	TAL BILL (\$)
EFFECTIVE DATE	COMMERCIAL	@ 400 KWH	@ 500 KWH
January 1, 2019	-3.771	163.91	204.03
February 1, 2019	-7.208	150.16	186.85
March 1, 2019	-4.872	159.50	198.53
April 1, 2019	-5.034	158.51	197.29
May 1, 2019	-3.503	164.98	205.37
June 1, 2019	5.096	166.63	206.77
July 1, 2019	3.171	161.65	200.57
August 1, 2019	2.259	155.00	192.25
September 1, 2019	19.349	152.49	189.11
October 1, 2019	19.071	151.51	187.89
November 1, 2019	20.907	162.13	201.16
December 1, 2019	18.365	151.94	188.43
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

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 RECOVERY PROVISION		PERCENT ON BASE CENTS/KWH
07/01/17 - 06/30/18	RESID. PBF SURCHARGE ADJUSTMENT	0 4244	CENTS/KWH
01/01/18 - 06/30/18	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
04/01/18 - 04/30/18	SOLARSAVER ADJUSTMENT	_	CENTS/KWH
05/01/18 - 03/31/19	SOLARSAVER ADJUSTMENT		CENTS/KWH
06/01/18 - 08/22/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
07/01/18 - 06/30/19	RESID. PBF SURCHARGE ADJUSTMENT		CENTS/KWH
07/01/18 - 12/31/18	GREEN INFRASTRUCTURE FEE	1.21	DOLLARS/MONTH
08/23/18 - 05/31/19	INTERIM RATE INCREASE 2018 TEST YEAR	6.68	PERCENT ON BASE
08/23/18 - 05/31/19	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
01/01/19 / 06/30/19	GREEN INFRASTRUCTURE FEE	1.35	DOLLARS/MONTH
04/01/19 - 04/30/19	SOLARSAVER ADJUSTMENT		CENTS/KWH
5/1/2019 - 03/31/20	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
06/01/19	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (2018 TEST YEAI	₹)
06/01/19 - 06/30/19	REFUND OF INTERIM RATE INCREASE 2018 TEST YEAR		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	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
06/01/20 - 06/30/20	PURCHASED POWER ADJUSTMENT	-0.3325	CENTS/KWH
06/01/20	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	RESID. PBF SURCHARGE ADJUSTMENT	0.5882	CENTS/KWH
07/01/20 - 12/31/20	GREEN INFRASTRUCTURE FEE	1.1900	DOLLARS/MONTH
08/01/20 - 08/31/20	PURCHASED POWER ADJUSTMENT		CENTS/KWH
09/01/20 - 09/30/20	PURCHASED POWER ADJUSTMENT		CENTS/KWH
10/01/20 -10/31/20	PURCHASED POWER ADJUSTMENT	0.2449	CENTS/KWH
11/01/20	PURCHASED POWER ADJUSTMENT		CENTS/KWH
01/01/21	GREEN INFRASTRUCTURE FEE	1.25	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.