



December 28, 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 January 2022

Maui Electric Company, Limited's ("Maui Electric" or "Company") January 2022 Energy Cost Recovery factor for our Maui Division is 20.790 cents per kilowatt-hour ("kWh"), an increase of 3.681 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$193.72, an increase of \$23.20 compared to rates effective December 1, 2021. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$18.40), increase in the RBA rate adjustment (+\$4.74) and increase in the Green Infrastructure Fee (+\$0.06).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 50.680 cents per million BTU to 1,697.22 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 10.847 cents per kWh to 20.037 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for January 2022 is 28.241 cents per kWh, a decrease of 1.013 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$189.19, a decrease of \$0.21 compared to rates effective December 1, 2021. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor (-\$4.06), substantially offset by an increase in the RBA rate adjustment (+\$3.79) and increase in the Green Infrastructure Fee (+\$0.06).

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 98.74 cents per million BTU to 2,430.88 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 2022 is 21.781 cents per kWh, an increase of 1.595 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$170.50, an increase of \$10.23 compared to rates effective December 1, 2021. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$6.38), increase in the RBA rate adjustment (+\$3.79) and increase in the Green Infrastructure Fee (+\$0.06).

The Honorable Chair and Members
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The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 120.67 cents per million BTU to 1,809.87 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, 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.
LANAI DIVISION**

ENERGY COST RECOVERY FACTOR

	EFFECTIVE DATES		<u>Change</u>
	<u>12-01-21</u>	<u>01-01-22</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	2,529.62	2,430.88	(98.74)
DG Energy, ¢/kWh	0.00	0.00	0.00
Purchased Energy, ¢/kWh	30.00	30.00	0.00
<u>Residential Schedule "R"</u>			
Energy Cost Recovery, ¢/kWh	29.254	28.241	(1.013)
<u>Others - "G,P,F"</u>			
Energy Cost Recovery, ¢/kWh	29.254	28.241	(1.013)
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	189.40	189.19	(0.21)
500 KWH Consumption, \$/Bill	235.13	234.87	(0.26)

Supersedes Sheet Effective:

December 1, 2021

MAUI ELECTRIC COMPANY, LTD.
LANAI DIVISION

ENERGY COST RECOVERY (ECR) FILING

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

Line

1 Effective Date January 1, 2022
2 Supercedes Factors of December 1, 2021

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>	
	PURCHASED ENERGY PRICE, ¢/kWh - FOSSIL	
	PURCHASED ENERGY PRICE, ¢/kWh - RENEWABLE	
38	LANAI SOLAR RESEARCH - On Peak	30.000
39	- Off Peak	30.000
40	Sch Q	0.000
	PURCHASED ENERGY KWH MIX, %, FOSSIL	
	PURCHASED ENERGY KWH MIX, %, RENEWABLE	
41	LANAI SOLAR RESEARCH - On Peak	100.00%
42	- Off Peak	0.00%
43	Sch Q	0.00%
43A	Total Fossil %	0.00%
43B	Total Renewable %	100.00%
43C	Comp. cost of purch. energy, fossil ¢/kWh	N/A
43D	Comp. cost of purch. energy, renewable ¢/kWh	30.00
44	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (38 x 41) + (39 x 42) + (40 x 43))	30.000
45	% Input to System kWh Mix	3.30%
46	WEIGHTED COMP. PURCH. ENERGY COST, ¢/kWh (lines (44 x 45))	0.99000
47	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh	0.000
48	Base % Input to Sys kWh Mix	0.00
49	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (47 x 48))	0.00000
50	COST LESS BASE (lines (46 - 49))	0.99000
51	Loss Factor	1.050
52	Revenue Tax Req Multiplier	1.0975
53	PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	1.14085

Calculation of Monthly Fossil Fuel Cost Risk Sharing Component

<u>Baseline Diesel</u>		
54	Diesel \$, baseline month	\$803,944
55	Diesel mmbtu, baseline	33,072
56	Baseline Diesel, ¢/mmbtu	2,430.88
<u>Month Diesel</u>		
57	Diesel mmbtu, budget	33,072
58	Diesel Cost, ¢/mmbtu	2,430.88
59	Diesel ECRC Fossil Cost	\$803,944
60	Diesel Base ECRC Recovery Target	\$803,944
61	Diesel differential	\$0
62	Total Fossil	\$0
63	2% of above	\$0
64	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$0
65	Maximum Annual Cap (bi-directional)	\$31,500
66	Number of Days in year from implementation	365
67	Fossil Risk % Proration (based on 365 day year)	100.00%
68	Maximum Annual Cap (bi-directional) prorated	\$31,500
69	Applicable Monthly Fossil Fuel Cost Risk Sharing	\$0
70	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	\$0
71	Fossil Cost Risk Sharing before taxes	\$0
72	Revenue Tax Adjustment	1.097514
73	Fossil Cost Risk Sharing w/revenue tax	\$0
74	Forecasted Month MWh Sales	3,117
75	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.0000

Line SYSTEM COMPOSITE CALCULATIONS

76	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (37 + 53))	29.02903
77	Adjustment, ¢/kWh	0.000
78	Fossil Fuel Cost Risk Sharing Component	0.000
79	ECR Reconciliation Adjustment	(0.788)
80	ECR FACTOR, ¢/kWh (lines (76 + 77 + 78 + 79))	28.241

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

MONTH END FUEL OIL ESTIMATE

<u>Miki Basin - ULSD</u>	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
12/17/2021	4,188.40	23,999.53	615,431.99
Estimated Use	2,456.88	14,077.92	356,117.94
Estimated Received	1,714.29	9,822.88	244,293.35
Estimated Additional	1,962.74	11,246.51	249,747.87
Estimated End	5,408.55	30,991.00	753,355.27

Next Month's Combined Miki Expense (\$/bbl) = \$ 139.2897 /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 - Miki Basin	\$ 139.2897	5.73 BTU/BBL	2,430.88

MAUI ELECTRIC COMPANY, LTD.
Lanai Division
ECR Reconciliation Adjustment

January 2022

1. Amount to be refunded	(\$67,100)
2. Monthly amount (1 / 3 X Line 1)	(\$22,367)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$24,548)
5. Estimated Sales (January 2022)	3,117 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.788 ¢/kwh

**MAUI ELECTRIC COMPANY, LTD.
LANAI DIVISION
2021 Cumulative Reconciliation Balance**

<u>Month</u>	(1) <u>YTD FOA Reconciliation</u>	<u>Qtr</u>	(2) <u>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					(28,400)	(28,503)	32,466
January '21					(28,400)	(25,647)	6,819
February	70,000	(4)	4,076	65,924	(23,333)	(20,929)	51,814
March					(23,333)	(21,960)	29,854
April					(23,333)	(21,452)	8,402
May	80,200	(1)	6,530	73,670	(26,733)	(25,485)	56,587
June					(26,733)	(25,141)	31,446
July					(26,733)	(25,403)	6,043
August	69,700	(2)	4,721	64,979	(23,233)	(22,228)	48,794
September					(23,233)	(20,522)	28,272
October					(23,233)	(21,136)	7,136
November	67,100	(3)	5,046	62,054	(22,367)	(20,580)	48,610
December					(22,367)		
January '22					(22,367)		

NOTES:

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 13)
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.
Lanai Division
Calculations of the Average Residential Customer Bill

	Rate		Charge (\$) at 400 Kwh		
	12-01-21	01-01-22	12-01-21	01-01-22	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	12.3123	12.3123	30.78	30.78	0.00
Next 500 kWh per month ¢/kWh	14.8123	14.8123	22.22	22.22	0.00
Customer Charge \$	11.50	11.50	11.50	11.50	0.00
Total Base Charges			64.50	64.50	0.00
IRP Refund					
% on base	0.0000	0.0000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment ¢/kWh	1.0242	1.9714	4.10	7.89	3.79
PBF Surcharge ¢/kWh	0.6478	0.6478	2.59	2.59	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
Energy Cost Recovery ¢/kWh	29.254	28.241	117.02	112.96	-4.06
Green Infrastructure Fee \$	1.19	1.25	1.19	1.25	0.06
Avg Residential Bill at 400 kwh			189.40	189.19	

Increase (Decrease -) % Change	-0.21 -0.11%
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	Rate		Charge (\$) at 500 Kwh		
	12-01-21	01-01-22	12-01-21	01-01-22	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	12.3123	12.3123	30.78	30.78	0.00
Next 500 kWh per month ¢/kWh	14.8123	14.8123	37.03	37.03	0.00
Customer Charge \$	11.50	11.50	11.50	11.50	0.00
Total Base Charges			79.31	79.31	0.00
IRP Refund					
% on base	0.0000	0.0000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment ¢/kWh	1.0242	1.9714	5.12	9.86	4.74
PBF Surcharge ¢/kWh	0.6478	0.6478	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
Energy Cost Recovery ¢/kWh	29.254	28.241	146.27	141.21	-5.06
Green Infrastructure Fee \$	1.19	1.25	1.19	1.25	0.06
Avg Residential Bill at 500 kwh			235.13	234.87	

Increase (Decrease -) % Change	-0.26 -0.11%
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**MAUI ELECTRIC COMPANY, LTD. -- Lanai Division
FUEL OIL ADJUSTMENT FACTOR DATA**

<u>EFFECTIVE DATE</u>	FUEL FACTOR CENTS / KWH		
	<u>RESIDENTIAL & COMMERCIAL</u>	<u>RESIDENTIAL BILL (\$) @ 400 KWH</u>	<u>RESIDENTIAL BILL (\$) @ 500 KWH</u>
January 1, 2020	25.369	173.69	215.49
February 1, 2020	24.109	168.65	209.19
March 1, 2020	23.379	165.73	205.54
April 1, 2020	19.794	151.15	187.31
May 1, 2020	18.958	148.04	183.43
June 1, 2020	15.429	131.79	163.12
July 1, 2020	16.335	134.73	166.81
August 1, 2020	17.755	140.41	173.91
September 1, 2020	18.135	141.93	175.81
October 1, 2020	18.076	141.69	175.51
November 1, 2020	17.881	140.91	174.54
December 1, 2020	17.874	140.89	174.50
January 1, 2021	19.498	147.44	182.68
February 1, 2021	20.640	152.01	188.39
March 1, 2021	22.103	157.86	195.71
April 1, 2021	24.018	165.34	205.06
May 1, 2021	24.354	166.87	206.96
June 1, 2021	23.796	167.38	207.60
July 1, 2021	24.680	171.10	212.26
August 1, 2021	25.269	173.46	215.21
September 1, 2021	25.345	173.76	215.59
October 1, 2021	24.342	169.75	210.57
November 1, 2021	29.191	189.14	234.82
December 1, 2021	29.254	189.40	235.13
January 1, 2022	28.241	189.19	234.87

**MAUI ELECTRIC COMPANY, LTD. -- Lanai 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
01/01/18 - 06/30/18	GREEN INFRASTRUCTURE FEE	1.34 DOLLARS/MONTH
04/01/18 - 04/30/18	SOLARSAVER ADJUSTMENT	1.3400 CENTS/KWH
05/01/18 - 03/31/19	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/18 - 08/22/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.8954 CENTS/KWH
07/01/18 - 06/30/19	RESID. PBF SURCHARGE ADJUSTMENT	0.4658 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	6.36 PERCENT ON BASE
08/23/18 - 05/31/19	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.3183 CENTS/KWH
01/01/19 - 06/30/19	GREEN INFRASTRUCTURE FEE	1.35 DOLLARS/MONTH
04/01/19 - 04/30/19	SOLARSAVER ADJUSTMENT	-0.0855 CENTS/KWH
05/01/19 - 03/31/20	SOLARSAVER ADJUSTMENT	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	-2.03 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
01/01/20 - 06/30/20	RESID. PBF SURCHARGE ADJUSTMENT	0.7437 CENTS/KWH
01/01/20 - 06/30/20	GREEN INFRASTRUCTURE FEE	1.2500 DOLLARS/MONTH
04/01/20 - 04/30/20	SOLARSAVER ADJUSTMENT	-0.0592 CENTS/KWH
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
07/01/20 - 12/31/20	GREEN INFRASTRUCTURE FEE	1.19 DOLLARS/MONTH
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	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/21 - 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	RESID. PBF SURCHARGE ADJUSTMENT	0.6478 CENTS/KWH
01/01/22	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.9714 CENTS/KWH
01/01/22	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.