

November 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 December 2022

Maui Electric Company, Limited's ("Maui Electric" or "Company") December 2022 Energy Cost Recovery factor for our Maui Division is 24.119 cents per kilowatt-hour ("kWh"), a decrease of 0.369 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$208.25, a decrease of \$1.83 compared to rates effective November 1, 2022. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor (-\$1.84), partially offset by an increase in the Purchase Power Adjustment (+\$0.01).

The Company's Maui Division fuel composite cost of generation, central station and other increased 147.310 cents per million BTU to 2,354.99 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 6.181 cents per kWh to 12.434 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for December 2022 is 38.346 cents per kWh, an increase of 0.386 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$228.13, an increase of \$1.54 compared to rates effective November 1, 2022. 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 31.88 cents per million BTU to 3,301.75 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 December 2022 is 33.316 cents per kWh, an increase of 1.363 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$215.16, an increase of \$5.45 compared to rates effective November 1, 2022. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor.

The Honorable Chair and Members of the Hawai'i Public Utilities Commission November 28, 2022 Page 2

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 110.90 cents per million BTU to 2,772.67 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 December 1, 2022.

Sincerely,

<u>/s/ Dean K. Matsuura</u> 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**

	EFFECTI	VE DATES	
	<u>11/01/2022</u>	<u>12/01/2022</u>	<u>Change</u>
<u>COMPOSITE COSTS</u> Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh Purchased Energy, ¢/kWh	3,269.87 0.00 30.00	3,301.75 0.00 30.00	31.88 0.00 0.00
Residential Schedule "R"			
Energy Cost Recovery, ¢/kWh	37.960	38.346	0.386
<u>Others - "G,J,P,F"</u>			
Energy Cost Recovery, ¢/kWh	37.960	38.346	0.386
Residential Customer with			
400 KWH Consumption, \$/Bill	226.59	228.13	1.54
500 KWH Consumption, \$/Bill	281.62	283.55	1.93

Supersedes Sheet Effective:

11/01/2022

# MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION

#### ENERGY COST RECOVERY (ECR) FILING

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

Line		
1	Effective Date	December 1, 2022
2	Supercedes Factors of	November 1, 2022

#### **GENERATION COMPONENT**

FUEL PRICES, e/mmbu     0.00       3 Industrial     0.00       6 Other     0.00       BTU MIX, %     0.00%       7 Industrial     0.00%       8 Dissel - Miki Basin     100.00%       9     0 Other     0.00%       10 Other     0.00%       11 COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER e/mmbtu     3.301.75       12 % Input to System kWh Mix     0.00%       12 % Input to System kWh Mix     97.42%       28 BASE DG ENERGY COMP COST     0.0000       12 % Input to System kWh Mix     97.42%       29 Base % Input to System kWh Mix     0.00%       13 Industrial     0.00000     0.00000       14 Diseel 0.010809     0.000     0.00000       15 Other     0.010809     0.00000     0.010809       16 Weighted Efficiency Factor, mmbtu/kWh (lines 114, 15; Coll8) × CollC; Coll0]     0.010809     0.010809       17 WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION +		CENTRAL STATION			
4     Diesel - Miki Basin     3,301.75       5     Other     0.00       BTU MIX, %     0.00%       7     Industrial     0.00%       8     Diesel - Miki Basin     100.00%       9     0.01     0.01       10     Other     0.00%       11     COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu     3,301.75       (Lines (3 x 7) + (4 x 8) + (5 x 19) + (6 x 10))     3,301.75       12     % input to System KWh Mix     0.00%       26 FIFICIENCY FACTOR, mmbtu/kWh     28 BASE DG ENERGY COMP COST     0.0000       12     % input to System KWh Mix     0.000%       13     Industrial     0.00000     28 BASE DG ENERGY COMP COST     0.00000       14     Diesel     0.010809     0.00     0.000000     22 Loss Factor     1.0500       15     Other     0.010809     0.00     0.000000     22 Loss Factor     1.0501       16     Weighted Efficiency Factor, mmbtu/kWh     0.010809     0.010809     0.00000       16     Weighted Efficiency Factor, mmbtu/kWh     0.010809		FUEL PRICES, ¢/mmbtu			
5     Other     0.00       BTU MIX, %     0.00%       7     Industrial     0.00%       8     Diesel - Miki Basin     100.00%       9     10     Other     0.00%       10     Other     0.00%       10     Other     0.00%       11     COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER e/mmblu     3.301.75       (Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10))     3.301.75       (Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10))     28       12     % Input to System kWh Mix     97.42%       28     BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     0.00%       13     Industrial     0.000000     0.00       14     Diseel     0.010809     0.00     0.000000       15     Other     0.010809     0.00     0.000000     34 DG FACTOR,       11     Unes 13, 14, 15; Col(B) × Col(C) = Col(D)     e/kWh (Line 31 x 32 x 33)     0.000000       14     Diseel     0.010809     0.00     0.000000       15	3	Industrial	0.00		
6     Other     0.00       BTU MIX, %     0.00%       7     Industrial     0.00%       8     Diesel - Miki Basin     100.00%       9     10     Other     0.00%       11     COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER g/mmbtu     3.301.75       12     % Input to System kWh Mix     0.000%       12     % Input to System kWh Mix     0.0000       28     BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     0.00%       28     BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     0.00%       28     BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     0.00%       13     Industrial     0.00000     0.00       14     Diesel     0.010809     100.00     0.010809       15     Other     0.010809     0.00     0.00000       16     Weighted Efficiency Factor, mmbtu/kWh     0.010809     1.0278       17     WEIGHTED COMPOSITE CENTRAL STATION + OT	4	Diesel - Miki Basin	3,301.75		
BTU MIX, %     Doesel - Miki Basin     Doesel - Miki Mikin     Doesel - Mikin     Doesel - Mikin     Mikin Basin     Doesel - Mikin     Doesel - Mikin     Doesel - Mikin	5				
7   Industrial   0.00%   25   COMPOSITE COST OF DG     8   Diesel - Miki Basin   100.00%   ENERGY, c/kWh   0.000     9   10   Other   0.00%   26 % Input to System kWh Mix   0.00%     11   COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER c/mmbtu   3.301.75   COST, c/kWh (Lines 25 x 26)   0.00000     12   % Input to System kWh Mix   97.42%   28 BASE DG ENERGY COMP COST   0.000     12   % Input to System kWh Mix   97.42%   28 BASE DG ENERGY COMP COST   0.00000     13   industrial   0.00000   0.00   29 Base % Input to System kWh Mix   0.00%     13   Industrial   0.00000   0.00   0.00000   31 Cost Less Base (Line 27 - 30)   0.00000     14   Diesel   0.010809   0.00   0.00000   32 Loss Factor   1.0500     13   Industrial   0.00000   0.00   0.000000   20 Loss Factor   1.0500     14   Diesel   0.010809   0.00   0.00000   20 Loss Factor   1.0500     15   Other   0.010809   0.00   0.010809   24 CoST, c/kWh <td>6</td> <td>Other</td> <td>0.00</td> <td></td> <td></td>	6	Other	0.00		
7   Industrial   0.00%   25   COMPOSITE COST OF DG     8   Diesel - Miki Basin   100.00%   ENERGY, c/kWh   0.000     9   10   Other   0.00%   26 % Input to System kWh Mix   0.00%     11   COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER c/mmbtu   3.301.75   COST, c/kWh (Lines 25 x 26)   0.00000     12   % Input to System kWh Mix   97.42%   28 BASE DG ENERGY COMP COST   0.000     12   % Input to System kWh Mix   97.42%   28 BASE DG ENERGY COMP COST   0.00000     13   industrial   0.00000   0.00   29 Base % Input to System kWh Mix   0.00%     13   Industrial   0.00000   0.00   0.00000   31 Cost Less Base (Line 27 - 30)   0.00000     14   Diesel   0.010809   0.00   0.00000   32 Loss Factor   1.0500     13   Industrial   0.00000   0.00   0.000000   20 Loss Factor   1.0500     14   Diesel   0.010809   0.00   0.00000   20 Loss Factor   1.0500     15   Other   0.010809   0.00   0.010809   24 CoST, c/kWh <td></td> <td></td> <td></td> <td></td> <td></td>					
8     Diesel - Miki Basin     100.00%     ENERGY, ¢/kWh     0.000       9     10     Other     0.00%     26 % Input to System kWh Mix     0.00%       11     COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu     3.301.75 (Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10))     27     WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 25 x 26)     0.00000       12     % Input to System kWh Mix     97.42%     28     BASE DG ENERGY COMP COST     0.000       12     % Input to System kWh Mix     97.42%     28     BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     0.00%     30     WEIGHTED DASE DG ENERGY COST, ¢/kWh (Line 28 x 29)     0.00000       13     Industrial     0.000000     0.00     0.000000     32 Revenue Tax Req Multiplier     1.0975       14     Diesel     0.010809     100.00     0.010809     34 DG FACTOR,     0.000000       15     Other     0.010809     0.00     0.00000     e/kWh (Line 31 x 32 x 33)     0.00000       16     Weighted Efficiency Factor, mmbtu/kWh     EINERGY (MWh (Lines (11 x 12 x 16))     34.76785     34.76785 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
9     1000     1000%     26 % Input to System kWh Mix     0.00%       11     COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu     3.301.75     27 WEIGHTED COMPOSITE DG ENERGY     0.00000       12     % Input to System kWh Mix     97.42%     28 BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     97.42%     28 BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     97.42%     28 BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     0.00%     29 Base % Input to System kWh Mix     0.00%       13     Industrial     0.000000     0.00     0.000000     31 Cost Less Base (Line 27 - 30)     0.000000       14     Diesel     0.010809     0.00     0.000000     22 Loss Factor     1.0500       16     Weighted Efficiency Factor, mmbtu/kWh [lines 13.14, 15): Col(B) x Col(C) = Col(D)     0.010809     e/kWh (Line 31 x 32 x 33)     0.00000       17     WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION COST e/kWh (lines (11 x 12 x 16))     34.76785     SUMMARY OF       18     BASE CENTRAL STATION + OTHER GENERATION COST, e/kWh     0.010809	-				
10     Other     0.00% 100.00%     26 % Input to System kWh Mix     0.00%       11     COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER q/mmbtu     3,301.75     27     WEIGHTED COMPOSITE DG ENERGY COST, q/kWh (Lines 25 x 26)     0.00000       12     % Input to System kWh Mix     97.42%     28     BASE DG ENERGY COMP COST     0.00%       12     % Input to System kWh Mix     97.42%     28     Base % Input to System kWh Mix     0.00%       12     % Input to System kWh Mix     97.42%     28     Base DG ENERGY COMP COST     0.0000       10     Methods     (C)     (D)     29     Base % Input to System kWh Mix     0.00%       10     Methods     (Ef Factor     Centrl Stn +     Weighted     31     Cost Less Base (Line 27 - 30)     0.00000       13     Industrial     0.00000     0.000000     32     Loss Factor     1.0570       14     Diesel     0.010809     0.00     0.000000     33     Revenue Tax Req Multiplier     1.0975       14     Diesel     0.010809     0.00     0.010809     .0.00       17 <td>-</td> <td>Diesel - Miki Basin</td> <td>100.00%</td> <td>ENERGY, ¢/kWh</td> <td>0.000</td>	-	Diesel - Miki Basin	100.00%	ENERGY, ¢/kWh	0.000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	-				
11     COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu     3,301.75 (Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10))     27     WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 25 x 25)     0.00000       12     % Input to System kWh Mix     97.42%     28     BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     97.42%     28     BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     97.42%     28     BASE DG ENERGY COMP COST     0.0000       12     % Input to System kWh Mix     97.42%     28     BASE DG ENERGY COMP COST     0.0000       14     0     (B)     (C)     (D)     Percent of     31     Cost Less Base (Line 27 - 30)     0.00000       13     Industrial     0.00000     0.00     0.00000     32     Loss Factor     1.0550       14     Diesel     0.010809     100.00     0.00000     34     DG FACTOR,     \$2     Loss Factor     1.0975     34     DG FACTOR,     \$2 KWh (Line 31 x 43 2 x 33)     0.00000       14     Diesel     0.010809     0.010809     0.010809	10	Other		26 % Input to System kWh Mix	0.00%
11   COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER g/mmbtu   3,301.75     12   % Input to System kWh Mix   97.42%     28   BASE DG ENERGY COMP COST   0.0000     29   Base % Input to System kWh Mix   0.00%     20   Mix   97.42%     28   BASE DG ENERGY COMP COST   0.0000     29   Base % Input to System kWh Mix   0.00%     30   MEIGHTED BASE DG ENERGY COST,   0.00000     4   Dised   0.010809   0.000000     13   Industrial   0.000000   0.00   0.000000     14   Dised   0.010809   10.00   0.010809     15   Other   0.010809   0.00   0.010809     16   WeiGHTED COMPOSITE CENTRAL STATION +   010809   0.010809     17   WEIGHTED COMPOSITE CENTRAL STATION +   0.010809     18   BASE CENTRAL STATION + OTHER GENERATION   0.010809     20   Efficiency Factor, mmbtu/kWh   0.010809     19   Base % Input to System Mix   0.00%     20   Efficiency Factor, mmbtu/kWh   0.010809     19   Base %			100.00%		
$\begin{array}{c} \mbox{CENTRAL STATION + OTHER $\end{tabular}{lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10))} \\ \mbox{CENTRAL STATION + (4 x 8) + (5 x 9) + (6 x 10))} \\ \mbox{12 } \% \mbox{ Input to System kWh Mix } 97.42\% \\ \mbox{CEFFICIENCY FACTOR, mmbtu/kWh } \\ \mbox{(A) (B) (C) (D) } \\ \mbox{Percent of } \\ \mbox{Eff Factor Centrl Stn + Weighted } \\ \mbox{Fuel Type mmbtu/kwh Other Eff Factor } \\ \mbox{Eff Factor Centrl Stn + Weighted } \\ \mbox{Fuel Type mmbtu/kwh Other on 0.00 0.000000 } \\ \mbox{Control 13 Industrial 0.00000 0 0.00 0.000000 } \\ \mbox{Control 13 Industrial 0.00000 0 0.00 0.000000 } \\ \mbox{(Lines 13, 14, 15): Col(B) x Col(C) = Col(D) } \\ \mbox{15 Other 0.010809 0 0.00 0.000000 } \\ \mbox{(Lines 13, 14, 15): Col(B) x Col(C) = Col(D) } \\ \mbox{16 Weighted Efficiency Factor, mmbtu/kWh } \\ \mbox{[lines 13(D) + 14(D) + 15(D)] 0.010809 } \\ \mbox{17 WEIGHTED DASP factor, mmbtu/kWh } \\ \mbox{[lines (11 x 12 x 16)] 34.76785 } \\ \mbox{18 BASE CENTRAL STATION + OTHER GENERATION } \\ \mbox{COST, $\end{symbul{k}} Mix 0.00\% } \\ \mbox{20 Efficiency Factor, mmbtu/kWh } \\ \mbox{[lines (18 x 19 x 20)] } \\ \mbox{22 COST LESS BASE (line(17 - 21)) 34.76785 } \\ \mbox{23 Revenue Tax Req Multiplier 1.0975 } \\ \mbox{24 CENTRAL STATION + OTHER GENERATION } \\ \mbox{26 CENTRAL STATION + OTHER GENERATION } \\ \mbox{26 CENTRAL STATION + OTHER GENERATION } \\ \mbox{27 CENTRAL STATION + OTHER GENERATION } \\ \mbox{28 BASE DG ENERGY COST $\end{symbul{k}} \\ \mbox{33 WEIGHTED BASE 0 (ine (17 - 21)) } \\ \mbox{34.76785 } \\ \mbox{35 CNTRL STN + OTHER (line 24) } \\ \mbox{38.15772 } \\ \mbox{36 DG (line 34) } \\ \mbox{37 TOTAL GENERATION FACTOR, $\end{symbol{k}} \\ \mbox{38.15772 } \\ \mbox{36 DG (line 34) } \\ \mbox{37 TOTAL GENERATION FACTOR, } \\ \mbox{38.15772 } \\ \mbox{36 DG (line 34) } \\ \mbox{37 TOTAL GENERATION FACTOR, } \\ \mbox{38.15772 } \\$					
(Lines $(3 \times 7) + (4 \times 8) + (5 \times 9) + (6 \times 10)$ )12 % Input to System kWh Mix97.42%28 BASE DG ENERGY COMP COST0.000EFFICIENCY FACTOR, mmbtu/kWh00(A)(B)(C)(D)Percent ofEff FactorCentrl Stn +13 Industrial0.000000.000000.0014 Disel0.01080915 Other0.01080915 Other0.01080916 Weighted Efficiency Factor, mmbtu/kWh(lines 13, 14, 15): Col(B) × Col(C) = Col(D)16 Weighted Efficiency Factor, mmbtu/kWh(lines 13(L) + 14(D) + 15(D)]17 WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))18 BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu19 Base % Input to Sys kWh Mix0.00%20 Efficiency Factor, mmbtu/kwh0.1080910 WEIGHTED BASE CENTRAL STATION + OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))11 WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))22 COST LESS BASE (line(17 - 21))34.7678523 Revenue Tax Req Multiplier24 CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))38.1577226 COST A (kWh (line (22 x 23)))38.1577236 DG (line 34)57 TOTAL GENERATION FACTOR,	11			COST, ¢/kWh (Lines 25 x 26)	0.00000
12 % Input to System kWh Mix   97.42%   28 BASE DG ENERGY COMP COST   0.000     EFFICIENCY FACTOR, mmbtu/kWh   0   0.00%   30 WEIGHTED BASE DG ENERGY COST,   0.00%     (A)   (B)   (C)   (D)   9 Base % Input to System kWh Mix   0.00%     13 Industrial   0.000000   0.00   0.000000   31 Cost Less Base (Line 27 - 30)   0.00000     13 Industrial   0.010809   100.00   0.000000   33 Revenue Tax Req Multiplier   1.0975     14 Diesel   0.010809   0.00   0.000000   34 DG FACTOR,   0.00000     15 Other   0.010809   0.00   0.000000   34 DG FACTOR,   0.00000     16 Weighted Efficiency Factor, mmbtu/kWh   0.010809   0.010809   0.000000   0.010809     17 WEIGHTED COMPOSITE CENTRAL STATION +   0.010809   0.010809   0.00000   0.010809     18 BASE CENTRAL STATION + OTHER GENERATION   0.010809   0.010809   0.010809   0.010809     21 WEIGHTED DASE CENTRAL STATION +   0.010809   0.010809   0.010809   0.010809     22 COST LESS BASE (line(17 - 21))   34.76785   SUMMARY OF   TOTAL GENERATION FACTOR, ¢/kWh			3,301.75		
29 Base % Input to System kWh Mix     0.00%       EFFICIENCY FACTOR, mmbtu/kWh     (C)     (D)       (A)     (B)     (C)     (D)       Percent of     Eff Factor     Centrl Stn +     Weighted       1     Industrial     0.00000     0.00     0.000000       1     Industrial     0.00000     0.00     0.000000       1     Dissel     0.010809     100.00     0.000000       (Lines 13, 14, 15): Col(B) x Col(C) = Col(D)     6000000     0.010809     34.76785       18     BASE CENTRAL STATION + COTHER GENERATION COST, ¢/kWh     0.010809     0.000%       19     Base % Input to Sys kWh Mix     0.00%     0.010809       21     WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh     0.010809     0.010809       19     Base % Input to Sys kWh Mix     0.00%     0.010809       21     WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh     0.010809       21     WEIGHTED BASE CENTRAL STATION + OTHER GENERATION     0.010809       22     COST LESS BASE (line(17 - 21))     34.76785     35 CNTRL STN + OTHER (line 24)     38.157	10		07 400/		0.000
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	12	% Input to System KWN MIX	97.42%		
(A) (B) (C) (D) Percent of Perc					0.00%
Percent of Eff FactorEff Factor Fuel TypeCentrl Stn + OtherWeighted Eff Factor31 Cost Less Base (Line 27 - 30)0.0000013Industrial Dissel0.0000000.000.00000033 Revenue Tax Req Multiplier1.097514Diesel0.0108090.000.00000034 DG FACTOR, $\ell/kWh$ (Line 31, 14, 15): Col(B) x Col(C) = Col(D)40 G FACTOR, $\ell/kWh$ (Line 31, 14, 15): Col(B) x Col(C) = Col(D)40 G FACTOR, $\ell/kWh$ (Line 31, 14, 15): Col(B) x Col(C) = Col(D)16Weighted Efficiency Factor, mmbtu/kWh (lines 13(D) + 14(D) + 15(D)]0.0108090.0000017WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, $e/kWh$ (lines (11 x 12 x 16))34.767850.000%18BASE CENTRAL STATION + OTHER GENERATION COST, $e/mbtu$ 0.0108090.000%21WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST $e/kWh$ (lines (18 x 19 x 20))0.0108095UMMARY OF TOTAL GENERATION FACTOR, $e/kWh$ 22COST LESS BASE (line(17 - 21))34.7678535 CNTRL STN + OTHER (line 24)38.1577224CENTRAL STATION + OTHER GENERATION FACTOR, $e/kWh$ (line (22 x 23))38.1577236 DG (line 34)37 TOTAL GENERATION FACTOR,					0.00000
Eff Factor     Centrl Stn +     Weighted     31 Cost Less Base (Line 27 - 30)     0.00000       13     Industrial     0.000000     0.00     0.000000     32 Loss Factor     1.0500       14     Diesel     0.010809     100.00     0.010 809     33 Revenue Tax Req Multiplier     1.0975       15     Other     0.010809     100.00     0.00000     0.00000       (Lines 13, 14, 15): Col(B) x Col(C) = Col(D)     16     Weighted Efficiency Factor, mmbtu/kWh     0.010809     0.010809     0.00000       16     Weighted Efficiency Factor, mmbtu/kWh     0.010809     0.010809     0.00000       17     WEIGHTED COMPOSITE CENTRAL STATION +     0.010809     0.010809     0.000%       18     BASE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh     0.000%     0.010809     0.010809       19     Base % Input to Sys kWh Mix     0.000%     0.010809     0.010809     0.010809       21     WEIGHTED BASE CENTRAL STATION + OTHER GENERATION     0.010809     0.010809     0.010809       21     WEIGHTED BASE CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh     0.010809     0.010809     <			(D)	¢/kwn (Line 28 x 29)	0.00000
Euel Typemmbtu/kwhOtherEff Factor32 Loss Factor1.050013Industrial $0.000000$ $0.00$ $0.000000$ $33$ Revenue Tax Req Multiplier $1.0975$ 14Diesel $0.010809$ $100.00$ $0.000000$ $34$ DG FACTOR, $1000000$ 15Other $0.010809$ $0.00$ $0.000000$ $e/kWh$ (Line 31 x 32 x 33) $0.000000$ (Lines 13, 14, 15): Col(B) x Col(C) = Col(D) $0.010809$ $e/kWh$ (Line 31 x 32 x 33) $0.000000$ 16Weighted Efficiency Factor, mmbtu/kWh $0.010809$ $e/kWh$ (Line 31 x 32 x 33) $0.000000$ 17WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, $e/kWh$ (lines (11 x 12 x 16)) $34.76785$ $34.76785$ 18BASE CENTRAL STATION + OTHER GENERATION COST, $e/mmbtu$ $0.000\%$ $0.000\%$ 20Efficiency Factor, mmbtu/kwh (lines (18 x 19 x 20)) $0.010809$ 21WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST $e/kWh$ (lines (18 x 19 x 20)) $34.76785$ 22COST LESS BASE (line(17 - 21)) $34.76785$ $35$ CNTRL STN + OTHER (line 24) $35$ CNTRL STN + OTHER (line 24) $36.15772$ 24CENTRAL STATION + OTHER GENERATION FACTOR, $e/kWh$ (line (22 x 23)) $38.15772$ $37$ TOTAL GENERATION FACTOR,			Waightad	21 Cost Loss Boss (Line 27, 20)	0.00000
13   Industrial   0.00000   0.00   0.000000   33 Revenue Tax Req Multiplier   1.0975     14   Diesel   0.010809   100.00   0.010809   34 DG FACTOR,   1.0975     15   Other   0.010809   0.00   0.000000   g/kWh (Line 31 x 32 x 33)   0.000000     (Lines 13, 14, 15): Col(B) x Col(C) = Col(D)   6   Weighted Efficiency Factor, mmbtu/kWh   0.010809   0.010809     17   WEIGHTED COMPOSITE CENTRAL STATION +   0.010809   0.010809   0.000%     17   WEIGHTED COMPOSITE CENTRAL STATION +   0.010809   0.000%     18   BASE CENTRAL STATION + OTHER GENERATION COST, c/kWh   0.010809   0.010809     21   WEIGHTED BASE CENTRAL STATION +   0.010809   0.010809     21   WEIGHTED BASE CENTRAL STATION +   0.010809   0.010809     21   WEIGHTED BASE CENTRAL STATION +   0.010809   0.010809     22   COST LESS BASE (line(17 - 21))   34.76785   35 CNTRL STN + OTHER (kWh     33   Sevenue Tax Req Multiplier   1.975   35 CNTRL STN + OTHER (kWh     33   Revenue Tax Req Multiplier   1.975   36 DG (line 34)   -			0		
14   Diesel   0.010809   100.00   0.010809   34 DG FACTOR,     15   Other   0.010809   0.00   0.000000   \$	13				
15   Other   0.010809   0.00   0.00000   ¢/kWh (Line 31 x 32 x 33)   0.00000     (Lines 13, 14, 15): Col(B) x Col(C) = Col(D)   16   Weighted Efficiency Factor, mmbtu/kWh [lines 13(D) + 14(D) + 15(D)]   0.010809     17   WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))   34.76785     18   BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu   -     19   Base % Input to Sys kWh Mix   0.00%     20   Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   -     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     36   DG (line 34)   -	-				1.0975
(Lines 13, 14, 15): Col(B) x Col(C) = Col(D)     16   Weighted Efficiency Factor, mmbtu/kWh [lines 13(D) + 14(D) + 15(D)]     17   WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))     18   BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu     19   Base % Input to Sys kWh Mix     0.00%   20     Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     36   D6 (line 34)   38.15772					0,00000
16   Weighted Efficiency Factor, mmbtu/kWh [lines 13(D) + 14(D) + 15(D)]   0.010809     17   WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))   34.76785     18   BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu   0.00%     19   Base % Input to Sys kWh Mix   0.00%     20   Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   SUMMARY OF     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     36   D6 (line 34)   38.15772	15		0.000000	¢/kwii (Elile 51 x 52 x 55)	0.00000
[lines 13(D) + 14(D) + 15(D)]   0.010809     17   WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))   34.76785     18   BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu   0.00%     19   Base % Input to Sys kWh Mix   0.00%     20   Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   SUMMARY OF     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     36   D6 (line 34)   -	16				
17   WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))     18   BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu     19   Base % Input to Sys kWh Mix     0.00%     20   Efficiency Factor, mmbtu/kwh     0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))     22   COST LESS BASE (line(17 - 21))     34.76785     23   Revenue Tax Req Multiplier     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))     38.15772   37     37   TOTAL GENERATION FACTOR,	10		0.010809		
OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))   34.76785     18   BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu   0.00%     19   Base % Input to Sys kWh Mix   0.00%     20   Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   SUMMARY OF     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     37   TOTAL GENERATION FACTOR,			0.010000		
OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))   34.76785     18   BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu   0.00%     19   Base % Input to Sys kWh Mix   0.00%     20   Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   SUMMARY OF     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     37   TOTAL GENERATION FACTOR,	17	WEIGHTED COMPOSITE CENTRAL STATIO	N +		
(lines (11 x 12 x 16))   34.76785     18   BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu					
18   BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu     19   Base % Input to Sys kWh Mix   0.00%     20   Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   SUMMARY OF     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     37   TOTAL GENERATION FACTOR,			34,76785		
COST, ¢/mmbtu   -     19   Base % Input to Sys kWh Mix   0.00%     20   Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   SUMMARY OF     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     36   DG (line 34)   -     37   TOTAL GENERATION FACTOR,			0		
COST, ¢/mmbtu   -     19   Base % Input to Sys kWh Mix   0.00%     20   Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   SUMMARY OF     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     36   DG (line 34)   -     37   TOTAL GENERATION FACTOR,	18	BASE CENTRAL STATION + OTHER GENER	ATION		
19   Base % Input to Sys kWh Mix   0.00%     20   Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   SUMMARY OF     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     36   DG (line 34)   38.15772			-		
20   Efficiency Factor, mmbtu/kwh   0.010809     21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   SUMMARY OF     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     37   TOTAL GENERATION FACTOR,	19		0.00%		
21   WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))   SUMMARY OF     22   COST LESS BASE (line(17 - 21))   34.76785     23   Revenue Tax Req Multiplier   1.0975     24   CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))   38.15772     36   DG (line 34)			0.010809		
(lines (18 x 19 x 20))     SUMMARY OF       22     COST LESS BASE (line(17 - 21))     34.76785     TOTAL GENERATION FACTOR, ¢/kWh       23     Revenue Tax Req Multiplier     1.0975     35 CNTRL STN + OTHER (line 24)     38.15772       24     CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))     38.15772     37 TOTAL GENERATION FACTOR,					
22 COST LESS BASE (line(17 - 21)) 34.76785 TOTAL GENERATION FACTOR, ¢/kWh   23 Revenue Tax Req Multiplier 1.0975 35 CNTRL STN + OTHER (line 24) 38.15772   24 CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23)) 38.15772 37 TOTAL GENERATION FACTOR,		OTHER GENERATION COST ¢/kWh			
22COST LESS BASE (line(17 - 21))34.76785TOTAL GENERATION FACTOR, ¢/kWh23Revenue Tax Req Multiplier1.097535 CNTRL STN + OTHER (line 24)38.1577224CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))38.1577236 DG (line 34)-37TOTAL GENERATION FACTOR,		(lines (18 x 19 x 20))	-		
23Revenue Tax Req Multiplier1.097535 CNTRL STN + OTHER (line 24)38.1577224CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))38.1577236 DG (line 34)34577237 TOTAL GENERATION FACTOR,				SUMMARY OF	
24 CENTRAL STATION + OTHER GENERATION 36 DG (line 34) -   FACTOR, ¢/kWh (line (22 x 23)) 38.15772 37 TOTAL GENERATION FACTOR,	22	COST LESS BASE (line(17 - 21))	34.76785	TOTAL GENERATION FACTOR, ¢/kWh	
FACTOR, ¢/kWh (line (22 x 23)) 38.15772 37 TOTAL GENERATION FACTOR,	23	Revenue Tax Req Multiplier	1.0975	35 CNTRL STN + OTHER (line 24)	38.15772
	24	<b>CENTRAL STATION + OTHER GENERATION</b>	1	36 DG (line 34)	-
¢/kWh (lines 35 + 36) 38.15772		FACTOR, ¢/kWh (line (22 x 23))	38.15772	,	
				¢/kWh (lines 35 + 36)	38.15772

#### MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION

#### ENERGY COST RECOVERY (ECR) FILING

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

Line 1 Effective Date December 1, 2022 2 Supercedes Factors of November 1, 2022

Line	PURCHASED ENERGY COMPONE	ENT
	PURCHASED ENERGY PRICE, ¢/kWh - FOSSIL PURCHASED ENERGY PRICE, ¢/kWh - RENEW	
38 39	LANAI SOLAR RESEARCH - On Peak - Off Peak	30.000 30.000
40	Sch Q	0.000
41 42	PURCHASED ENERGY KWH MIX, %, FOSSIL PURCHASED ENERGY KWH MIX, %, RENEWA LANAI SOLAR RESEARCH - On Peak - Off Peak	BLE 100.00% 0.00%
43A 43B 43C	Sch Q Total Fossil % Total Renewable % Comp. cost of purch. energy, fossil ¢/kWh Comp. cost of purch. energy, renewable ¢/kWh	0.00% 0.00% 100.00% N/A 30.00
44	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (38 x 41) + (39 x 42) + (40 x 43))	30.000
	% Input to System kWh Mix WEIGHTED COMP. PURCH. ENERGY	2.58%
40	COST, ¢/kWh (lines (44 x 45))	0.77400
48	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh Base % Input to Sys kWh Mix WEIGHTED BASE PURCHASED ENERGY	0.000 0.00
10	COST, ¢/kWh (lines (47 x 48))	0.00000
51 52	COST LESS BASE(lines (46 - 49)) Loss Factor Revenue Tax Req Multiplier PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	0.77400 1.050 1.0975 0.89194

Calculatio	n of Monthly Fossil Fuel Cost Risk Sharing Component	
	Baseline Diesel	
54	Diesel \$, baseline month	\$708,879
55	Diesel mmbtu, baseline	29,161
56	Baseline Diesel, c/mmbtu	2,430.88
	Month Diesel	
57	Diesel mmbtu, budget	31,691
58	Diesel Cost, ¢/mmbtu	3,301.75
59	Diesel ECRC Fossil Cost	\$1,046,37
60	Diesel Base ECRC Recovery Target	\$770,38
61	Diesel differential	\$275,99
62	Total Fossil	\$275,99
63	2% of above	\$5,52
64	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$31,50
65	Maximum Annual Cap (bi-directional)	\$31,50
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	\$31,50
69	Applicable Monthly Fossil Fuel Cost Risk Sharing	\$
70	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	\$31,50
71	Fossil Cost Risk Sharing before taxes	\$
72	Revenue Tax Adjustment	1.097514
73	Fossil Cost Risk Sharing w/revenue tax	\$
74	Forecasted Month MWh Sales	3,062
75	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.0000

#### Line SYSTEM COMPOSITE CALCULATIONS

76 GENERATION AND PURCHASED ENERGY	
FACTOR, ¢/kWh	39.04966
(lines (37 + 53))	
77 Adjustment, ¢/kWh	0.000
78 Fossil Fuel Cost Risk Sharing Component	0.000
79 ECR Reconciliation Adjustment	(0.704)
80 ECR FACTOR, ¢/kWh	38.346
(lines (76 + 77 + 78 + 79))	

## Maui Electric Company, Ltd. Lanai Division

## MONTH END FUEL OIL ESTIMATE

<u>Miki Basin - ULSD</u>	Barrels		MBTU	\$
11/18/2022	4,053.14		23,224.55	776,313.13
Estimated Use	2,109.38		12,086.75	395,220.93
Estimated Received	2,571.43		14,734.29	483,752.58
Estimated Additional	1,015.52		5,818.91	181,511.01
Estimated End	5,530.71		31,691.00	1,046,355.79
Next Month's Combined Miki Expe	ense (\$/bbl)	=	\$ 189.1901 /bbl	

## FUEL OIL INVENTORY PRICE USED FOR FILING

Type of Oil Burned	Price	Conversion Factor	Prices ¢/MBTU
Diesel - Miki Basin	\$ 189.1901	5.73 BTU/BBL	3,301.75

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

# December 2022

1. Amount to be refunded	(\$58,900)
2. Monthly amount (1 / 3 X Line 1)	(\$19,633)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$21,547)
5. Estimated Sales (December 2022)	3,062 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.704 ¢/kwh

## MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION 2022 Cumulative Reconciliation Balance

	(1)	(2)	(3) FOA Rec	(4)	(5)	(6) Month-end
	YTD FOA	Adjust	Less	Try to	Actual	Cumulative
<u>Month</u>	Reconciliation Qt	r <u>Variance</u>	<u>Variance</u>	Collect	Collect	<u>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
Мау	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)	(20,800)	27,810
January '22				(22,367)	(20,722)	7,088
February	55,600 (4	5,451	50,149	(18,533)	(16,329)	40,908
March				(18,533)	(18,196)	22,712
April				(18,533)	(17,076)	5,636
May	68,500 (1	4,186	64,314	(22,833)	(23,687)	46,263
June				(22,833)	(22,948)	23,315
July				(22,833)	(22,368)	947
August	55,300 (2	488	54,812	(18,433)	(17,864)	37,895
September				(18,433)	(17,494)	20,401
October				(18,433)	(18,331)	2,070
November	58,900 (3	1,973	56,927	(19,633)		
December	·			(19,633)		

## 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			Charg	Charge (\$) at 400 Kwh		
		11/01/22	12/01/22	11/01/22	12/01/22	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 kWhr per month	¢/kWh	12.3123	12.3123	30.78	30.78	0.00	
Next 500 kWhr 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	1.6175	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	
Energy Cost Recovery	¢/kWh	37.960	38.346	151.84	153.38	1.54	
Green Infrastructure Fee	\$	1.18	1.18	1.18	1.18	0.00	

Avg Residential Bill at 400 kwh

Increase (Decrease -) % Change

228.13

226.59

1.54 0.68%

0.00

0.00 0.00 0.00 0.00

0.00

0.00 0.00

0.00 0.00 1.93 0.00

Difference

	Rate			Г	Charge (\$) at 500 Kwh		
				_			-
		11/01/22	12/01/22		11/01/22	12/01/22	Differe
Base Rates	effective date:	09/01/19	09/01/19				
Base Fuel/Energy Charge	¢/kWh	0.0000	0.0000		0.00	0.00	
Non-fuel Energy Charge							
First 250 kWhr per month	¢/kWh	12.3123	12.3123		30.78	30.78	
Next 500 kWhr per month	¢/kWh	14.8123	14.8123		37.03	37.03	
Customer Charge	\$	11.50	11.50		11.50	11.50	
Total Base Charges					79.31	79.31	
IRP Refund	% on base	0.0000	0.0000		0.00	0.00	
Revenue Balancing Rate Adjustment	¢/kWh	1.6175	1.6175		8.09	8.09	
PBF Surcharge	¢/kWh	0.6488	0.6488		3.24	3.24	
Renewable Energy Infrastructure Cost							
Recovery Provision	¢/kWh	0.0000	0.0000		0.00	0.00	
SolarSaver Adjustment	¢/kWh	0.0000	0.0000		0.00	0.00	
Energy Cost Recovery	¢/kWh	37.960	38.346		189.80	191.73	
Green Infrastructure Fee	\$	1.18	1.18		1.18	1.18	
	· · ·	_	_	-		-	

Avg Residential Bill at 500 kwh

Increase (Decrease -) % Change

283.55

281.62

#### 1.93 0.69%

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

EFFECTIVE DATE	FUEL FACTOR CENTS / KWH RESIDENTIAL & <u>COMMERCIAL</u>		IAL BILL (\$) <u>@ 500 KWH</u>
January 1, 2020 February 1, 2020 March 1, 2020 April 1, 2020 May 1, 2020 June 1, 2020 June 1, 2020 July 1, 2020 August 1, 2020 September 1, 2020 October 1, 2020 November 1, 2020	25.369 24.109 23.379 19.794 18.958 15.429 16.335 17.755 18.135 18.076 17.881	<u>400 КV/н</u> 173.69 168.65 165.73 151.15 148.04 131.79 134.73 140.41 141.93 141.69 140.91	<u>215.49</u> 209.19 205.54 187.31 183.43 163.12 166.81 173.91 175.81 175.51 174.54
December 1, 2020 January 1, 2021 February 1, 2021 March 1, 2021 April 1, 2021 June 1, 2021 June 1, 2021 July 1, 2021 August 1, 2021 September 1, 2021 November 1, 2021 December 1, 2021	17.874 19.498 20.640 22.103 24.018 24.354 23.796 24.680 25.269 25.345 24.342 29.191 29.254	140.89 147.44 152.01 157.86 165.34 166.87 167.38 171.10 173.46 173.76 169.75 189.14 189.40	174.50 182.68 188.39 195.71 205.06 206.96 207.60 212.26 215.21 215.59 210.57 234.82 235.13
January 1, 2022 February 1, 2022 March 1, 2022 April 1, 2022 May 1, 2022 June 1, 2022 July 1, 2022 August 1, 2022 September 1, 2022 October 1, 2022 November 1, 2022	28.241 28.361 31.445 33.341 37.529 41.508 43.106 43.083 37.630 37.815 37.960 38.346	189.19 189.67 202.01 209.46 226.35 240.84 247.17 247.08 225.27 226.01 226.59 228.13	234.87 235.47 250.89 260.21 281.31 299.43 307.35 307.24 279.97 280.90 281.62 283.55

## MAUI ELECTRIC COMPANY, LTD. -- Lanai 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	
06/01/19	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (	2018 TEST Y	EAR'	
06/01/19 - 06/30/19	REFUND OF INTERIM RATE INCREASE 2018 TEST YEAR			
06/01/19 - 05/31/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		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 - 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 - 12/31/21	GREEN INFRASTRUCTURE FEE	1.19	DOLLARS/MONTH	
07/01/21 - 06/30/22	RESID. PBF SURCHARGE ADJUSTMENT	0.6478	CENTS/KWH	
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 ADJUSTMEN1	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.