

January 27, 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 February 2022

Maui Electric Company, Limited's ("Maui Electric" or "Company") February 2022 Energy Cost Recovery factor for our Maui Division is 20.593 cents per kilowatt-hour ("kWh"), a decrease of 0.197 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$192.83, a decrease of \$0.89 compared to rates effective January 1, 2022. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor (-\$0.99), partially offset by an increase in the Demand-Side Management Adjustment rate (+\$0.05) and increase in the Purchase Power Adjustment (+\$0.05).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 60.690 cents per million BTU to 1,636.53 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.487 cents per kWh to 19.550 cents per kWh.

Maui Electric has determined that the target sales heat rates for Maui Division's industrial fuel and diesel fuel sources will remain unchanged from the target sales heat rates of 0.015786 million BTU per kilowatt-hour for industrial fuel and 0.009938 million BTU per kilowatt-hour for diesel fuel that were in effect at the end of 2021. Attachment 24 provides a calculation of the applicable target sales heat rates for 2022 for each division. As shown in Attachment 24, the Maui Division actual sales heat rates for industrial and diesel fuel in 2021 were higher than the respective target sales heat rates in 2021, resulting in no adjustments to the respective target heat rates that were in effect at the end of 2021.

The Energy Cost Recovery factor for our Lāna'i Division for February 2022 is 28.361 cents per kWh, an increase of 0.120 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$189.67, an increase of \$0.48 compared to rates effective January 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 decreased 0.28 cents per million BTU to 2,430.60 cents per million BTU. The composite cost

The Honorable Chair and Members of the Hawai'i Public Utilities Commission January 27, 2022 Page 2

DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 30.00 cents per kWh.

Maui Electric has determined that the target sales heat rate will change from the target sales heat rates of 0.010810 million BTU per kilowatt-hour to 0.010809 million BTU per kilowatt-hour for Lāna'i Division's diesel fuel. As shown in Attachment 24, the actual sales heat rate for Lāna'i Division's diesel in 2021 was lower than the target sales heat rate for Lāna'i Division's diesel fuel in 2021, resulting in an adjustment to the target heat rate for Lāna'i Division's diesel fuel that was in effect at the end of 2021 to establish the target heat rate for 2022 for diesel fuel. A revised Lāna'i Division ECRC tariff reflecting the revised target sales heat rate for 2022 is included as Attachment 25. A blackline of the Lāna'i Division ECRC tariff is included as Attachment 26. The Company files the Lāna'i Division ECRC tariff sheets in accordance with the Lāna'i Division ECRC tariff, which states:

2. The target heat rates for diesel may be reestablished each calendar year, beginning at January 1, 2020. If the prior year's actual sales heat rate for a fuel type is greater than or equal to the target sales heat rate applicable in that year, the target sales heat rate for that fuel type remains unchanged. If the prior year's actual sales heat rate for a fuel type is less than the target sales heat rate applicable in that year, the target sales heat rate for that fuel type shall be reduced by one-half of the difference between the prior year's actual sales heat rate and the target sales heat rate applicable in that year.¹

The Energy Cost Recovery factor for our Moloka'i Division for February 2022 is 23.569 cents per kWh, an increase of 1.788 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$177.66, an increase of \$7.16 compared to rates effective January 1, 2022. 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 139.20 cents per million BTU to 1,949.07 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.

Maui Electric has determined that the target sales heat rates for Moloka'i Division's diesel fuel source will remain unchanged from the target sales heat rate of 0.011127 million BTU per kilowatt-hour for diesel fuel that was in effect at the end of 2021. As shown in Attachment 24, the actual sales heat rate for diesel fuel in 2021 was higher than the target sales heat rate in 2021, resulting in no adjustments to the Moloka'i Division target heat rate for diesel fuel that was in effect at the end of 2021.

¹ See Maui Electric Lāna'i Division ECRC tariff, Revised Sheet No. 88B.

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The attached sheets set forth the fuel adjustment in cents per kWh for each rate schedule that is applicable for pro rata use beginning February 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		
	01/01/2022	02/01/2022	<u>Change</u>
COMPOSITE COSTS Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh Purchased Energy, ¢/kWh	2,430.88 0.00 30.00	2,430.60 0.00 30.00	(0.28) 0.00 0.00
Residential Schedule "R"			
Energy Cost Recovery, ¢/kWh	28.241	28.361	0.120
Others - "G,J,P,F"			
Energy Cost Recovery, ¢/kWh	28.241	28.361	0.120
Residential Customer with			
400 KWH Consumption, \$/Bill	189.19	189.67	0.48
500 KWH Consumption, \$/Bill	234.87	235.47	0.60

Supersedes Sheet Effective: January 1, 2022

MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION

ENERGY COST RECOVERY (ECR) FILING

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

Line
1 Effective Date
2 Supercedes Factors of February 1, 2022 January 1, 2022

GENERATION COMPONENT

	CENTRAL STATION		1	
1	FUEL PRICES, ¢/mmbtu			
	Industrial	0.00		
	Diesel - Miki Basin	2,430.60		
5				
6	Other	0.00		
1	BTU MIX, %		DG ENERGY COMPONENT	
7	Industrial	0.00%	25 COMPOSITE COST OF DG	
8	Diesel - Miki Basin	100.00%	ENERGY, ¢/kWh	0.000
9	2.000 2.0	.00.0070	2.1.2.1.0.1, \$7.1.1.1.	0.000
10	Other	0.00%	26 % Input to System kWh Mix	0.00%
1	-	100.00%		
1			27 WEIGHTED COMPOSITE DG ENERGY	
11	COMPOSITE COST OF GENERATION,		COST, ¢/kWh (Lines 25 x 26)	0.00000
1	CENTRAL STATION + OTHER ¢/mmbtu	2,430.60		
1 12	(Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10)) % Input to System kWh Mix	95.70%	28 BASE DG ENERGY COMP COST	0.000
12	76 Input to System KWII WIIX	95.7076	29 Base % Input to System kWh Mix	0.00%
1	EFFICIENCY FACTOR, mmbtu/kWh		30 WEIGHTED BASE DG ENERGY COST.	0.0070
1	(A) (B) (C)	(D)	¢/kWh (Line 28 x 29)	0.00000
1	Percent of	` ′	, , ,	
1	Eff Factor Centrl Stn +	Weighted	31 Cost Less Base (Line 27 - 30)	0.00000
l	Fuel Type mmbtu/kwh Other	Eff Factor	32 Loss Factor	1.0500
13	Industrial 0.000000 0.00	0.000000	33 Revenue Tax Req Multiplier	1.0975
14	Diesel 0.010809 100.00 Other 0.010809 0.00	0.010809	34 DG FACTOR,	0.00000
15	Other 0.010809 0.00 (Lines 13, 14, 15): Col(B) x Col(C) = Col(D)	0.000000	¢/kWh (Line 31 x 32 x 33)	0.00000
16	Weighted Efficiency Factor, mmbtu/kWh			
I '	[lines 13(D) + 14(D) + 15(D)]	0.010809		
1	[
17	WEIGHTED COMPOSITE CENTRAL STATION	+		
1	OTHER GEN COST, ¢/kWh			
1	(lines (11 x 12 x 16))	25.14264		
1 40	DAGE OFNITRAL OTATION : OTHER OFNERA	TION		
18	BASE CENTRAL STATION + OTHER GENERA COST, ¢/mmbtu	HON		
10	Base % Input to Sys kWh Mix	0.00%		
	Efficiency Factor, mmbtu/kwh	0.00%		
	WEIGHTED BASE CENTRAL STATION +	0.0.000		
1	OTHER GENERATION COST ¢/kWh			
1	(lines (18 x 19 x 20))	-		
			SUMMARY OF	
	COST LESS BASE (line(17 - 21))	25.14264	TOTAL GENERATION FACTOR, ¢/kWh	07 50 46 5
	Revenue Tax Req Multiplier CENTRAL STATION + OTHER GENERATION	1.0975	35 CNTRL STN + OTHER (line 24)	27.59405
24	FACTOR, ¢/kWh (line (22 x 23))	27.59405	36 DG (line 34) 37 TOTAL GENERATION FACTOR,	-
I	1 AO 1 Ort, \$/KWII (IIII6 (22 x 20))	21.00400	¢/kWh (lines 35 + 36)	27.59405
			,	

MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION

ENERGY COST RECOVERY (ECR) FILING

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

Line
1 Effective Date
2 Supercedes Factors of February 1, 2022 January 1, 2022

<u>Line</u>	PURCHASED ENERGY COMPONI	<u>ENT</u>
	PURCHASED ENERGY PRICE, ϕ/kWh - FOSSIL PURCHASED ENERGY PRICE, ϕ/kWh - RENEV	
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	ABLE 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
45	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (38 x 41) + (39 x 42) + (40 x 43)) % Input to System kWh Mix WEIGHTED COMP. PURCH. ENERGY COST, ¢/kWh (lines (44 x 45))	30.000 4.30% 1.29000
48	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh Base % Input to Sys kWh Mix WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (47 x 48))	0.000 0.00 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))	1.29000 1.050 1.0975 1.48656

	Baseline Diesel	
54	Diesel \$, baseline month	\$803,9
55	Diesel mmbtu, baseline	33,07
56	Baseline Diesel, c/mmbtu	2,430.8
	Month Diesel	
57	Diesel mmbtu, budget	32,19
58	Diesel Cost, ¢/mmbtu	2,430.6
59	Diesel ECRC Fossil Cost	\$782,4
60	Diesel Base ECRC Recovery Target	\$782,5
61	Diesel differential	-\$
62	Total Fossil	-\$
63	2% of above	-
64	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	
65	Maximum Annual Cap (bi-directional)	\$31,5
66	Number of Days in year from implementation	36
67	Fossil Risk % Proration (based on 365 day year)	100.00
68	Maximum Annual Cap (bi-directional) prorated	\$31,5
69	Applicable Monthly Fossil Fuel Cost Risk Sharing	-
70	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-
71	Fossil Cost Risk Sharing before taxes	-
72	Revenue Tax Adjustment	1.0975
73	Fossil Cost Risk Sharing w/revenue tax	-
74	Forecasted Month MWh Sales	2,82
75	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.000

<u>Line</u>	SYSTEM COMPOSITE CALCULATIONS	
76	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (37 + 53))	29.08061
77	Adjustment, ¢/kWh	0.000
78	Fossil Fuel Cost Risk Sharing Component	0.000
79	ECR Reconciliation Adjustment	(0.720)
80	ECR FACTOR, ¢/kWh (lines (76 + 77 + 78 + 79))	28.361

Maui Electric Company, Ltd. Lanai Division

MONTH END FUEL OIL ESTIMATE

Miki Basin - ULSD	Barrels	MBTU	\$
1/20/2022	3,385.26	19,397.54	478,623.67
Estimated Use	1,811.26	10,378.52	252,289.36
Estimated Received	2,142.86	12,278.59	283,883.74
Estimated Additional	973.37	5,577.39	143,007.07
Estimated End	4,690.23	26,875.00	653,225.12

Next Month's Combined Miki Expense (\$/bbl) = \$ 139.2736 /bbl

FUEL OIL INVENTORY PRICE USED FOR FILING

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel - Miki Basin	\$ 139.2736	5.73 BTU/BBL	2,430.60

MAUI ELECTRIC COMPANY, LTD. Lanai Division ECR Reconciliation Adjustment

February 2022

1. An	nount to be refunded	(\$55,600)	
2. Mo	onthly amount (1 / 3 X Line 1)	(\$18,533)	
3. Re	evenue Tax Divisor	0.91115	
4. To	tal (Line 2 / Line 3)	(\$20,340)	
5. Es	timated Sales (February 2022)	2,826	mwh
6. Ad	justment (Line 4 ÷ Line 5)	-0.720	¢/kwh

MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION 2021 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY (Thousand \$)

<u>Line</u>	· · · ·	Without Deadband 4th Quarter <u>YTD Total</u>	collection by company*	Basis for Recon With Deadband 4th Quarter YTD Total	collection by <u>company*</u>
1 2 3	ACTUAL COSTS: Generation Distributed Generation Purch Power	\$7,726.8 \$0.0 \$64.0		\$7,726.8 \$0.0 \$64.0	
4	TOTAL	\$7,790.8		\$7,790.8	
5 6 7	FUEL FILING COST Generation Distributed Generation Purch Power	\$7,726.0 \$0.0 \$64.0		\$7,725.3 \$0.0 \$64.0	
8	TOTAL	\$7,790.1		\$7,789.4	
9 10 11	BASE FUEL COST Generation Distributed Generation Purch Power	\$0.0 \$0.0 \$0.0		\$0.0 \$0.0 \$0.0	
12	TOTAL	\$0.0		\$0.0	
13	FUEL-BASE COST (Line 8-12)	\$7,790.1		\$7,789.4	
14 15	ACTUAL FOA LESS TAX FOA reconciliation adj for prior year	\$7,737.7 -\$98.3		\$7,737.7 	
16	ADJUSTED FOA LESS TAX	\$7,836.0		\$7,836.0	
17	FOA-(FUEL-BASE) (Line 16-13)	\$45.9	Over	\$46.6	Over
18 19 20	ADJUSTMENTS Current year FOA accrual reversal Other prior year FOA Other	\$194.5 \$0.0 \$0.0		\$194.5 \$0.0 \$0.0	
	QUARTERLY FOA RECONCILIATION (Lines 17+18+19+20) YTD Fossil Fuel Cost Risk Sharing Adjustment Quarterly FOA Recon w/Fossil Risk Adj (Line 21 + Line 21A)	\$240.4 \$31.5 \$271.9	Over	\$241.1 \$31.5 \$272.6	Over
22	3rd Quarter FOA Reconciliation YTD			\$217.0	Over
23	FOA Reconciliation to be Refunded February 2022 to April 202	2 (Line 22- 21B)		-\$55.6	Refunded

^{*} Over means an over-collection by the company.
Under means an under-collection by the company.

MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION DEADBAND CALCULATION

Determination of Efficiency Factor to use for Cost-Recovery Purposes Period: January 1, 2021 through December 31, 2021

	Notes	<u>YTD</u>
Diesel		
Diesel Efficiency Factor, BTU/kWh	f	10,810
Diesel Deadband Definition, +/- BTU/kWh	d	50
Diesel Portion of Recorded Sales, MWh	а	33,906
Diesel Consumption (Recorded), MMBTU	b	366,484
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	10,809
Lower limit of Diesel Deadband, BTU/kWh	e = f-d	10,760
Higher limit of Diesel Deadband, BTU/kWh	g = f+d	10,860
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	10,809

MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION

GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST, WITHOUT and WITH DEADBAND

	2021	1800
	Without	With
	Deadband	Deadband
		AS FILED
	Jan 1 - Dec 31	Jan 1 - Dec 31
Diesel Portion of Recorded Sales, MWH	33,906	33,906
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.01081	0.010809
Mmbtu adjusted for Sales Efficiency Factor	366,523	366,489
\$/mmbtu	<u>\$21.0793</u>	<u>\$21.0793</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$7,726.0	\$7,725.3
TOTAL GENERATION FUEL FILING COST, \$000s	\$7,726.0	\$7,725.3
TOTAL GENERATION BASE FUEL COST , \$000s	\$0.0	\$0.0
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$7,726.0	\$7,725.3
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$0.0	\$0.0

Fossil Fuel Cost Risk Sharing Mechanism, December 2021, Lanai

Jan-21, Baseline YTD Subject to Fossil Risk

AA BB CC = BB / AA (Baseline Column) DD EE FF GG = (DD / EE) x FF	Diesel Fossil Fuel Cost Risk Sharing MMBtu \$ cost, actuals Jan 2021 baseline \$/mmbtu Diesel Gen kWh Total kWh, Gen, Purch Pwr, DG Sales kWh Diesel kWh-sales	29,347 \$492,321 16.7760712	366,484 \$7,726,758 16,7760712 35,632,176 36,464,333 34,698,858 33,906,991
HH II1 II2 II3 II JJ = BB/AA (YTD Column) KK = CC x HH x GG / 1,000,000 LL = II x JJ x GG / 1,000,000 MM = 2% x (LL-KK)	Target Heat Rate Upper limit w/deadband Lower limit w/deadband Calculated Heat Rate (YTD subject to fossil risk, before deadband) Recovery Heat Rate (YTD subject to fossil risk, after deadband) Actual Cost \$/MMbtu Base Cost Recovery w/Target Heat Rate Fuel Filing Cost Recovery Diesel Cost Risk Sharing		10,810 10,860 10,760 10,809 10,809 21,0835076 \$6,149,010 \$7,727,120 \$31,562
NN OO PP QQ = MM, up to cap	Annual Cap (non-prorated) # Days Annual Cap (pro-rated) Total Fossil Fuel Cost Risk Sharing Adjustment, subject to ±\$31500 cap		\$31,500 365 \$31,500 \$31,500

MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION 2021 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 Qtr	<u>Variance</u>	<u>Variance</u>	<u>Collect</u>	<u>Collect</u>	<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
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)	(20,800)	27,810
January '22				(22,367)		
February	55,600 (4)	5,451	50,149	(18,533)		
NOTES:						
Col(1):	Quarterly FOA red		•		,	on collection
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):						
Col(4):						
Col(5): Actual collected amount. (recorded sales * \$/kwh adjustment/1.09751)						
Col(6):	Cumulative balan	ce of the FC	A reconciliation	on (Previous b	palance + Co	I(3) + CoI(5))

Maui Electric Company, Ltd. **Lanai 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
3
IRP Refund
Revenue Balancing Rate Adjustment
PBF Surcharge
Renewable Energy Infrastructure Cost
Recovery Provision
SolarSaver Adjustment
Energy Cost Recovery
Green Infrastructure Fee

Avg Residential Bill at 400 kwh

Rate					
01/01/22	02/01/22				
09/01/19	09/01/19				
0.0000	0.0000				
12.3123	12.3123				
14.8123	14.8123				
11.50	11.50				
0.0000	0.0000				
1.9714	1.9714				
0.6478	0.6478				
0.000	0.0000				
	0.0000				
	28.361				
_	1.25				
	01/01/22 09/01/19 0.0000 12.3123 14.8123 11.50 0.0000 1.9714				

Ob 2002 (\$) 24 400 Krish					
Charge (\$) at 400 Kwh					
01/01/22	02/01/22	Difference			
0.00	0.00	0.00			
30.78	30.78	0.00			
22.22	22.22	0.00			
11.50	11.50	0.00			
64.50	64.50	0.00			
0.00	0.00	0.00			
7.89	7.89	0.00			
2.59	2.59	0.00			
0.00	0.00	0.00			
0.00	0.00	0.00			
112.96	113.44	0.48			
1.25	1.25	0.00			
189.19	189.67				

Increase (Decrease -) % Change

0.48 0.25%

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 **Energy Cost Recovery Green Infrastructure Fee**

Avg Residential Bill at 500 kwh

Rate					
	01/01/22	02/01/22			
effective date:	09/01/19	09/01/19			
¢/kWh	0.0000	0.0000			
¢/kWh	12.3123	12.3123			
¢/kWh	14.8123	14.8123			
\$	11.50	11.50			
% on base	0.0000	0.0000			
¢/kWh	1.9714	1.9714			
¢/kWh	0.6478	0.6478			
¢/kWh	0.0000	0.0000			
¢/kWh	0.0000	0.0000			
¢/kWh	28.241	28.361			
\$	1.25	1.25			

Charge (\$) at 500 Kwh					
01/01/22					
0.00	0.00	0.00			
30.78	30.78	0.00			
37.03	37.03	0.00			
11.50	11.50	0.00			
79.31	79.31	0.00			
0.00	0.00	0.00			
0.00	0.00	0.00			
9.86	9.86	0.00			
3.24	3.24	0.00			
0.00	0.00	0.00			
0.00	0.00	0.00			
141.21	141.81	0.60			
1.25	1.25	0.00			
234.87	235.47				

Increase (Decrease -) % Change

0.60
0.26%

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

FUEL FACTOR CENTS / KWH

RESIDENTIAL & RESIDENTIAL BILL (\$)						
EFFECTIVE DATE	RESIDENTIAL & COMMERCIAL	@ 400 KWH	` ,			
EFFECTIVE DATE	COMMERCIAL	<u>@ 400 RVVII</u>	<u>@ 500 KVVH</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	167.38 171.10	207.60 212.26			
July 1, 2021 August 1, 2021	24.680 25.269	171.10	212.20			
September 1, 2021	25.345	173.46	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			
February 1, 2022	28.361	189.67	235.47			
, -, = -==						

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	0.000	PERCENT ON BASE CENTS/KWH
00/1//1/	RECOVERY PROVISION	0.0000	CEN13/KWH
06/01/19	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (20	018 TEST YE	AR)
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.

Maui Annual ECRC Adjustment, Based on Recorded Statistics for: 2021

		Industrial A	Diesel B	Notes
1	Target Heat Rate, 2021	0.015786	0.009938	MBTU/kWh Sales
2	Fuel consumed during 2021	2,032,900	5,916,063	MBTU
3 4	Allocated Sales during 2021 2021 Sales Heat Rate, Recorded	125,190,964 0.016238	0.010105	kWh MBTU/kWh Sales
5 6	Difference: 2021 Recorded less Start of Year Adjustment: One-half the difference, downward only	0.000452 0.000000	0.000167 0.000000	MBTU/kWh Sales MBTU/kWh Sales
7	Target Heat Rate, Start of 2022	0.015786	0.009938	MBTU/kWh Sales

Lanai Annual ECRC Adjustment, Based on Recorded Statistics for: 2021

		Industrial	Diesel	Notes
		Α	В	
1	Target Heat Rate, 2021	N/A	0.010810	MBTU/kWh Sales
2				
3	Fuel consumed during 2021	N/A	366,484	MBTU
4	Allocated Sales during 2021	N/A	33,905,897	kWh
5	2021 Sales Heat Rate, Recorded	N/A	0.010809	MBTU/kWh Sales
6				
7	Difference: 2021 Recorded less Start of Year	N/A	(0.000001)	MBTU/kWh Sales
8	Adjustment: One-half the difference, downward	N/A	(0.000001)	MBTU/kWh Sales
9				
10	Target Heat Rate, Start of 2022	N/A	0.010809	MBTU/kWh Sales

Molokai Annual ECRC Adjustment, Based on Recorded Statistics for: 2021

		Industrial	Diesel	Notes
		Α	В	
1	Target Heat Rate, 2021	N/A	0.011127	MBTU/kWh Sales
2				
3	Fuel consumed during 2021	N/A	323,547	MBTU
4	Allocated Sales during 2021	N/A	28,899,456	kWh
5	2021 Sales Heat Rate, Recorded	N/A	0.011196	MBTU/kWh Sales
6				
7	Difference: 2021 Recorded less Start of Year	N/A	0.000069	MBTU/kWh Sales
8	Adjustment: One-half the difference, downward	N/A	0.000000	MBTU/kWh Sales
9				
10	Target Heat Rate, Start of 2022	N/A	0.011127	MBTU/kWh Sales

Superseding Revised Sheet No. 88 REVISED SHEET NO. 88 Effective June 1, 2019

Effective September 1, 2019

LANAI DIVISION

ENERGY COST RECOVERY CLAUSE

Applicable To

Schedule "R" - Residential Service Schedule "G" - General Service Non-Demand - General Service - Demand Schedule "J" Schedule "P" - Large Power Service Schedule "F" - Public Street Lighting Schedule "TOU EV" - Residential Time-of-Use Service with Electric Vehicle Schedule "TOU-R" - Residential Time-of-Use Service Schedule "TOU-G" - Small Commercial Time-of-Use Service Schedule "TOU-J" - Medium Commercial Time-of-Use Service Schedule "TOU-P" - Large Power Time-of-Use Service - Standby Service Schedule "SS" Schedule EV-F - Commercial Public Electric Vehicle Charging Facility Service Pilot

All terms and provisions of the above listed rate schedules are applicable, except that the Monthly Energy Cost Recovery Factor described below will be multiplied by the billed kWh and added to the customer bill.

Schedule TOU-RI - Residential Interim Time-of-Use Service

All base rate schedule discounts, surcharges, and all other adjustments will not apply to the Energy Cost Recovery Clause.

The Energy Cost Recovery Clause shall be consistent with the terms of fuel contracts, distributed generation contracts, and purchased energy contracts. Changes to the Energy Cost Recovery Clause may be proposed by application to the Commission.

Monthly Energy Cost Recovery Factor

The Monthly Energy Cost Recovery Factor shall be the sum of the Company Composite Central Station With Other Generation Component, the Purchased Energy Component, the Distributed Generation Energy Component, and the Monthly Fossil Fuel Cost Risk Sharing Component.

The Monthly Energy Cost Recovery Factor shall normally be effective on the 1st day of the month. When a customer's billing period includes more than one applicable Monthly Energy Cost Recovery Factor, each Monthly Energy Cost Recovery Factor will be prorated to the customer bill for the number of days each factor was in effect.

MAUI ELECTRIC COMPANY, LIMITED

Docket No. 2017-0150; Decision and Order No. 36219, issued March 18, 2019.

Superseding Revised Sheet No. 88A Effective February 1, 2021

REVISED SHEET NO. 88A Effective February 1, 2022

LANAI DIVISION

Energy Cost Recovery Clause (Continued)

COMPANY COMPOSITE CENTRAL STATION WITH OTHER GENERATION COMPONENT - The Company Composite Central Station With Other Generation Component shall be the current Weighted Composite Central Station + Other Generation Cost, weighted by the proportion of current company-owned central station + Other generation to total system net energy, multiplied by the 2022 efficiency factors of 0.000000 million BTU per kilowatthour for industrial fuel, 0.010809 million BTU per kilowatthour for diesel fuel, and 0.010809 million BTU per kilowatthour for other company generation sources, weighted by the current proportion of generation produced by each generation source to the total company-owned generation, and adjusted for revenue taxes.

PURCHASED ENERGY COMPONENT - The Purchased Energy Component shall be the current Composite Cost of Purchased Energy, in cents per kWh, weighted by the proportion of current purchased energy to total system net energy, adjusted to the sales delivery level, and adjusted for revenue taxes. The Company shall also show the composite cost of fossil fuel purchased energy and the composite cost of renewable purchased energy that comprise the composite cost of purchased energy.

DISTRIBUTED GENERATION ENERGY COMPONENT - The Distributed Generation Energy Component shall be the current Composite Cost of DG Energy weighted by the proportion of current DG energy to total system net energy, adjusted to the sales delivery level, and adjusted for revenue taxes.

MONTHLY FOSSIL FUEL COST RISK SHARING COMPONENT - The Monthly Fossil Fuel Cost Risk Sharing Component shall equal 2% of the difference of the Monthly Fossil Cost for all fossil fuel types less the Monthly Base Fossil Recovery Target for all fossil fuel types, divided by the forecast sales for the month, multiplied by negative one (-1), and adjusted for revenue taxes. The year-to-date sum of the Monthly Fossil Fuel Cost Risk Sharing Components shall be subject to a calendar year maximum of $\pm \$31,500$, provided that if this provision first becomes effective on a day other than January 1, the above maximum shall be pro-rated for the remainder of the initial calendar year based on the number of days remaining in the calendar year from the date this section becomes effective.

The Monthly Fossil Cost for each fossil fuel type shall equal the forecasted million Btu for that fossil fuel type for the month multiplied by the forecasted cost per million Btu for that fossil fuel type.

The Monthly Base Fossil Recovery Target for each fossil fuel type shall equal the forecasted million Btu for that fossil fuel type for the month multiplied by the Fossil Fuel Baseline Cost for that fossil fuel type.

MAUI ELECTRIC COMPANY, LIMITED

Transmittal Letter Dated January 27, 2022.

Superseding Revised Sheet No. 88B REVISED SHEET NO. 88B Effective February 1, 2021

Effective February 1, 2022

LANAI DIVISION

Energy Cost Recovery Clause (Continued)

The Fossil Fuel Baseline Cost for each fossil fuel type for the year shall equal the actual fossil fuel costs for the fossil fuel type in the first applicable month of the year divided by the actual million Btu for the fossil fuel type in the first applicable month of the year, provided that if actual fossil fuel costs in the first applicable month of the year are not yet known, forecasted fossil fuel costs may be used in the above calculation, and provided that if actual million Btu in the first applicable month of the year are not yet known, forecasted million Btu may be used in the above calculation. The first applicable month shall be January of each year, provided that when this provision first becomes effective, the month this provision becomes effective shall be used as the first applicable month for the calculation of the Fossil Fuel Baseline Cost for the initial calendar year.

Revenue taxes shall be calculated using current rates of the Franchise Tax, Public Service Company Tax, and Public Utility Commission Fee.

TARGET HEAT RATES AND DEADBANDS

Target Heat Rates:

- The target heat rates shall be the 2022 efficiency factors of 0.000000 million BTU per kWh for industrial fuel, 0.010809 million BTU per kWh for diesel fuel, and 0.010809 million BTU per kWh for other company generation sources. The overall target heat rate shall be the weighted average efficiency factor of all sources.
- 2. The target heat rates for diesel may be reestablished each calendar year, beginning at January 1, 2020. If the prior year's actual sales heat rate for a fuel type is greater than or equal to the target sales heat rate applicable in that year, the target sales heat rate for that fuel type remains unchanged. If the prior year's actual sales heat rate for a fuel type is less than the target sales heat rate applicable in that year, the target sales heat rate for that fuel type shall be reduced by one-half of the difference between the prior year's actual sales heat rate and the target sales heat rate applicable in that year.

MAUI ELECTRIC COMPANY, LIMITED

Superseding Revised SHEET NO.88C REVISED SHEET NO. 88C Effective June 1, 2019

Effective September 1, 2019

LANAI DIVISION

Energy Cost Recovery Clause - (Continued)

Deadbands:

- Application of the Deadbands
 - The deadbands shall be applied around its respective target heat rate beginning with the implementation of the interim decision and order in Docket No. 2017-0150. The deadband shall be ±50 Btu/kWh-sales. This deadband will apply to all fuel types used by the Company.
 - If target heat rates are modified, the deadband levels described in Sections 3.a above shall apply around the modified target heat rate.

Modifications to Target Heat Rates and Deadbands:

- 4. Modifications to target heat rates and/or deadbands may be determined in a rate case.
- 5. Modifications to target heat rates and/or deadbands may be made outside of a rate case proceeding by application by the Company or the Consumer Advocate, or by an investigation by the Commission on its own motion.
 - a. An applicant must make a separate request to the Commission, and provide appropriate justification and support.
 - 1. Sufficient basis for justification of a change in target heat rate and/or deadband may include but not be limited to the following:
 - a. Addition or retirement of non-utility firm or non-utility non-firm renewable resources (such as wind or photovoltaics) from which the utility will purchase capacity and/or energy under a Power Purchase Agreement that exceed 500 kW;

MAUI ELECTRIC COMPANY, LIMITED

Docket No. 2017-0150; Decision and Order No. 36219, issued March 18, 2019.

Superseding Revised SHEET NO. 88D REVISED SHEET NO. 88D Effective June 1, 2019

Effective September 1, 2019

LANAI DIVISION

Energy Cost Recovery Clause - (Continued)

- b. Addition or retirement of utility firm and non-firm renewable resources (such as wind or photovoltaics) that exceed 500 kW. Modifications to the target heat rate and/or deadband may be determined as part of the application for approval to expend funds (in accordance with General Order No. 7) for the resource that would cause the change;
- c. Additions, retirements or modifications to the generating systems, or modifications to the generating system operating procedures, that are expected to increase or decrease the target heat rates by more than the deadband amount; or
- d. The recorded heat rate is outside of the deadband around the target heat rate and is expected to remain outside of the deadband.
- b. Any proposed modification to target heat rates and/or deadbands under this provision shall not take effect until approved by the Commission.

YEAR-TO-DATE FOSSIL FUEL COST RISK SHARING ADJUSTMENT

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be subject to an annual maximum of \pm \$31,500 in aggregate across all Lanai Division company-generation fossil fuel types subject to fossil fuel cost risk sharing. This section shall take effect as of September 1, 2019, and the Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be included in the Reconciliation Adjustment, beginning with the Reconciliation Adjustment for the Third Quarter of 2019. The annual maximum sharing for the initial year shall be pro-rated based on the number of days remaining in the calendar year from the date this section becomes effective in the initial calendar year. The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be excluded from the determination of Earnings Sharing Revenue Credits provided for in the Rate Adjustment Mechanism Provision.

MAUI ELECTRIC COMPANY, LIMITED

Docket No. 2017-0150; Decision and Order No. 36219, issued March 18, 2019.

Superseding Revised Sheet No. 88E Revised Sheet No. 88E Effective June 1, 2019

Effective September 1, 2019

LANAI DIVISION Energy Cost Recovery Clause - (Continued)

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall equal 2% of the difference between the sum of the Year-To-Date Fuel Filing Cost Recovery Amount across all fossil fuel types and the sum of the Year-To-Date Base Cost Recovery Target across all fossil fuel types.

The Year-To-Date Fuel Filing Cost Recovery Amount for a fossil fuel type shall be the sum of the Eligible Revenue for fuel for that fossil fuel type for all months, as determined in the Reconciliation Adjustment section below.

The Year-To-Date Base Cost Recovery Target for a fossil fuel type shall equal the applicable target heat rate, multiplied by the sales kWh for that fossil fuel type, multiplied by the Reconciliation Fossil Fuel Baseline Cost for that fossil fuel type. The first applicable month of the year for the initial calendar year shall be the month in which this provision takes effect.

The Reconciliation Fossil Fuel Baseline Cost for each fossil fuel type for the year shall equal the actual fossil fuel costs for the fossil fuel type in the first applicable month of the year divided by the actual million Btu for the fossil fuel type in the first applicable month of the year.

RECONCILIATION ADJUSTMENT:

In order to reconcile any differences that may occur between recorded revenue and eligible revenue from the Energy Cost Recovery Clause, the year-to-date recorded revenue from the Energy Cost Recovery Clause will be compared with the year-to-date eligible revenue from the Energy Cost Recovery Clause on a quarterly basis. If there is a variance between the year-to-date recorded revenue from the Energy Cost Recovery Clause and the year-to-date eligible revenue from the Energy Cost Recovery Clause, a reconciliation adjustment shall be added to the rate calculated under the Energy Cost Recovery Clause to reconcile the revenue variance. This reconciliation adjustment shall be applied at the beginning of the second month after the end of the guarter, and shall be set to recover the revenue variance over the estimated sales for the subsequent three months.

MAUI ELECTRIC COMPANY, LIMITED

Docket No. 2017-0150; Decision and Order No. 36219, issued March 18, 2019.

Superseding Sheet No. 88F Revised Sheet No. 88F Effective August 23, 2018 Effective September 1, 2019

LANAI DIVISION

Energy Cost Recovery Clause - (Continued)

The eligible revenue from the Energy Cost Recovery Clause shall be equal to the eligible revenue for fuel, DG, and purchased energy expenses, adjusted by the Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment.

The eligible revenue for fuel is calculated for each fuel type each month as:

The sales kWh for that fuel type multiplied by the adjusted target heat rate for that fuel type multiplied by the average fuel cost per million Btu and then summed across all fuel types.

The adjusted target heat rate for each fuel type is established by comparing the applicable target heat rate, adjusted by a plus or minus 50 BTU/kWh sales heat rate deadband versus the year-to-date actual heat rate. The year-to-date actual heat rate is derived by dividing the fuel type's year-to-date MMbtu consumption by the fuel type's share of year-to-date recorded sales. If the year-to-date actual heat rate is greater than the applicable target heat rate plus 50 BTU/kWh, then the adjusted target heat rate is the applicable target heat rate plus 50 BTU/kWh.If the year-to-date actual heat rate is less than the applicable target heat rate less 50 BTU/kWh, then the adjusted target heat rate is the applicable target heat rate less 50 BTU/kWh.If the year-to-date actual heat rate falls between the applicable target heat rate adjusted by a plus or minus 50 BTU/kWh, then the adjusted target heat rate is the year-to-date actual heat rate.

The eligible revenue for DG and purchased energy expenses is equal to the amount of their respective expenses.

Revenue from the Energy Cost Recovery Clause excludes revenue taxes for the purpose of this reconciliation.

MAUI ELECTRIC COMPANY, LIMITED

Docket No. 2017-0150; Decision and Order No. 36219, issued March 18, 2019.

Superseding Revised Sheet No. 88
Effective June 1, 2019

REVISED SHEET NO. 88
Effective September 1, 2019

LANAI DIVISION

ENERGY COST RECOVERY CLAUSE

Applicable To

- Residential Service Schedule "R" - General Service Non-Demand Schedule "G" Schedule "J" - General Service - Demand Schedule "P" - Large Power Service Schedule "F" - Public Street Lighting - Residential Time-of-Use Service with Electric Schedule "TOU EV" Schedule "TOU-R" - Residential Time-of-Use Service Schedule "TOU-G" - Small Commercial Time-of-Use Service Schedule "TOU-J" - Medium Commercial Time-of-Use Service Schedule "TOU-P" - Large Power Time-of-Use Service Schedule "SS" - Standby Service Schedule EV-F - Commercial Public Electric Vehicle Charging Facility Service Pilot Schedule TOU-RI - Residential Interim Time-of-Use Service

All terms and provisions of the above listed rate schedules are applicable, except that the Monthly Energy Cost Recovery Factor described below will be multiplied by the billed kWh and added to the customer bill.

All base rate schedule discounts, surcharges, and all other adjustments will not apply to the Energy Cost Recovery Clause.

The Energy Cost Recovery Clause shall be consistent with the terms of fuel contracts, distributed generation contracts, and purchased energy contracts. Changes to the Energy Cost Recovery Clause may be proposed by application to the Commission.

Monthly Energy Cost Recovery Factor

The Monthly Energy Cost Recovery Factor shall be the sum of the Company Composite Central Station With Other Generation Component, the Purchased Energy Component, the Distributed Generation Energy Component, and the Monthly Fossil Fuel Cost Risk Sharing Component.

The Monthly Energy Cost Recovery Factor shall normally be effective on the $1^{\rm st}$ day of the month. When a customer's billing period includes more than one applicable Monthly Energy Cost Recovery Factor, each Monthly Energy Cost Recovery Factor will be prorated to the customer bill for the number of days each factor was in effect.

MAUI ELECTRIC COMPANY, LIMITED

Docket No. 2017-0150; Decision and Order No. 36219, issued March 18, 2019.

Superseding Revised Sheet No. 88A Effective February 1, 20202021

REVISED SHEET NO. 88A Effective February 1, 20212022

LANAI DIVISION

Energy Cost Recovery Clause (Continued)

COMPANY COMPOSITE CENTRAL STATION WITH OTHER GENERATION COMPONENT - The Company Composite Central Station With Other Generation Component shall be the current Weighted Composite Central Station + Other Generation Cost, weighted by the proportion of current company-owned central station + Other generation to total system net energy, multiplied by the 2022+ efficiency factors of 0.000000 million BTU per kilowatthour for industrial fuel, 0.010809+0 million BTU per kilowatthour for diesel fuel, and 0.010809+0 million BTU per kilowatthour for other company generation sources, weighted by the current proportion of generation produced by each generation source to the total company-owned generation, and adjusted for revenue taxes.

PURCHASED ENERGY COMPONENT - The Purchased Energy Component shall be the current Composite Cost of Purchased Energy, in cents per kWh, weighted by the proportion of current purchased energy to total system net energy, adjusted to the sales delivery level, and adjusted for revenue taxes. The Company shall also show the composite cost of fossil fuel purchased energy and the composite cost of renewable purchased energy that comprise the composite cost of purchased energy.

DISTRIBUTED GENERATION ENERGY COMPONENT - The Distributed Generation Energy Component shall be the current Composite Cost of DG Energy weighted by the proportion of current DG energy to total system net energy, adjusted to the sales delivery level, and adjusted for revenue taxes.

MONTHLY FOSSIL FUEL COST RISK SHARING COMPONENT - The Monthly Fossil Fuel Cost Risk Sharing Component shall equal 2% of the difference of the Monthly Fossil Cost for all fossil fuel types less the Monthly Base Fossil Recovery Target for all fossil fuel types, divided by the forecast sales for the month, multiplied by negative one (-1), and adjusted for revenue taxes. The year-to-date sum of the Monthly Fossil Fuel Cost Risk Sharing Components shall be subject to a calendar year maximum of $\pm \$31,500$, provided that if this provision first becomes effective on a day other than January 1, the above maximum shall be pro-rated for the remainder of the initial calendar year based on the number of days remaining in the calendar year from the date this section becomes effective.

The Monthly Fossil Cost for each fossil fuel type shall equal the forecasted million Btu for that fossil fuel type for the month multiplied by the forecasted cost per million Btu for that fossil fuel type.

The Monthly Base Fossil Recovery Target for each fossil fuel type shall equal the forecasted million Btu for that fossil fuel type for the month multiplied by the Fossil Fuel Baseline Cost for that fossil fuel type.

Superseding Revised Sheet No. 88B Effective February 1, 20202021

REVISED SHEET NO. 88B Effective February 1, 20202022

LANAI DIVISION

Energy Cost Recovery Clause (Continued)

The Fossil Fuel Baseline Cost for each fossil fuel type for the year shall equal the actual fossil fuel costs for the fossil fuel type in the first applicable month of the year divided by the actual million Btu for the fossil fuel type in the first applicable month of the year, provided that if actual fossil fuel costs in the first applicable month of the year are not yet known, forecasted fossil fuel costs may be used in the above calculation, and provided that if actual million Btu in the first applicable month of the year are not yet known, forecasted million Btu may be used in the above calculation. The first applicable month shall be January of each year, provided that when this provision first becomes effective, the month this provision becomes effective shall be used as the first applicable month for the calculation of the Fossil Fuel Baseline Cost for the initial calendar year.

Revenue taxes shall be calculated using current rates of the Franchise Tax, Public Service Company Tax, and Public Utility Commission Fee.

TARGET HEAT RATES AND DEADBANDS

Target Heat Rates:

- 1. The target heat rates shall be the $202\underline{20}$ efficiency factors of 0.000000 million BTU per kWh for industrial fuel, $0.0108\underline{0910}$ million BTU per kWh for diesel fuel, and $0.0108\underline{0910}$ _million BTU per kWh for other company generation sources.

 The overall target heat rate shall be the weighted average efficiency factor of all sources.
- 2. The target heat rates for diesel may be reestablished each calendar year, beginning at January 1, 2020. If the prior year's actual sales heat rate for a fuel type is greater than or equal to the target sales heat rate applicable in that year, the target sales heat rate for that fuel type remains unchanged. If the prior year's actual sales heat rate for a fuel type is less than the target sales heat rate applicable in that year, the target sales heat rate for that fuel type shall be reduced by one-half of the difference between the prior year's actual sales heat rate and the target sales heat rate applicable in that year.

Superseding Revised SHEET NO.88C REVISED SHEET NO. 88C Effective June 1, 2019

Effective September 1, 2019

LANAI DIVISION

Energy Cost Recovery Clause - (Continued)

Deadbands:

- Application of the Deadbands
 - The deadbands shall be applied around its respective target heat rate beginning with the implementation of the interim decision and order in Docket No. 2017-0150. The deadband shall be ±50 Btu/kWh-sales. This deadband will apply to all fuel types used by the Company.
 - If target heat rates are modified, the deadband levels described in Sections 3.a above shall apply around the modified target heat rate.

Modifications to Target Heat Rates and Deadbands:

- 4. Modifications to target heat rates and/or deadbands may be determined in a rate case.
- 5. Modifications to target heat rates and/or deadbands may be made outside of a rate case proceeding by application by the Company or the Consumer Advocate, or by an investigation by the Commission on its own motion.
 - a. An applicant must make a separate request to the Commission, and provide appropriate justification and support.
 - 1. Sufficient basis for justification of a change in target heat rate and/or deadband may include but not be limited to the following:
 - a. Addition or retirement of non-utility firm or non-utility non-firm renewable resources (such as wind or photovoltaics) from which the utility will purchase capacity and/or energy under a Power Purchase Agreement that exceed 500 kW;

MAUI ELECTRIC COMPANY, LIMITED

Docket No. 2017-0150; Decision and Order No. 36219, issued March 18, 2019.

Superseding Revised SHEET NO. 88D Effective June 1, 2019

REVISED SHEET NO. 88D Effective September 1, 2019

LANAI DIVISION

Energy Cost Recovery Clause - (Continued)

- b. Addition or retirement of utility firm and non-firm renewable resources (such as wind or photovoltaics) that exceed 500 kW. Modifications to the target heat rate and/or deadband may be determined as part of the application for approval to expend funds (in accordance with General Order No. 7) for the resource that would cause the change;
- c. Additions, retirements or modifications to the generating systems, or modifications to the generating system operating procedures, that are expected to increase or decrease the target heat rates by more than the deadband amount; or
- d. The recorded heat rate is outside of the deadband around the target heat rate and is expected to remain outside of the deadband.
- b. Any proposed modification to target heat rates and/or deadbands under this provision shall not take effect until approved by the Commission.

YEAR-TO-DATE FOSSIL FUEL COST RISK SHARING ADJUSTMENT

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be subject to an annual maximum of ±\$31,500 in aggregate across all Lanai Division company-generation fossil fuel types subject to fossil fuel cost risk sharing. This section shall take effect as of September 1, 2019, and the Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be included in the Reconciliation Adjustment, beginning with the Reconciliation Adjustment for the Third Quarter of 2019. The annual maximum sharing for the initial year shall be pro-rated based on the number of days remaining in the calendar year from the date this section becomes effective in the initial calendar year. The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be excluded from the determination of Earnings Sharing Revenue Credits provided for in the Rate Adjustment Mechanism Provision.

MAUI ELECTRIC COMPANY, LIMITED

Docket No. 2017-0150; Decision and Order No. 36219, issued March 18, 2019.

Superseding Revised Sheet No. 88E Revised Sheet No. 88E Effective June 1, 2019

Effective September 1, 2019

LANAI DIVISION Energy Cost Recovery Clause - (Continued)

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall equal 2% of the difference between the sum of the Year-To-Date Fuel Filing Cost Recovery Amount across all fossil fuel types and the sum of the Year-To-Date Base Cost Recovery Target across all fossil fuel types.

The Year-To-Date Fuel Filing Cost Recovery Amount for a fossil fuel type shall be the sum of the Eligible Revenue for fuel for that fossil fuel type for all months, as determined in the Reconciliation Adjustment section below.

The Year-To-Date Base Cost Recovery Target for a fossil fuel type shall equal the applicable target heat rate, multiplied by the sales kWh for that fossil fuel type, multiplied by the Reconciliation Fossil Fuel Baseline Cost for that fossil fuel type. The first applicable month of the year for the initial calendar year shall be the month in which this provision takes effect.

The Reconciliation Fossil Fuel Baseline Cost for each fossil fuel type for the year shall equal the actual fossil fuel costs for the fossil fuel type in the first applicable month of the year divided by the actual million Btu for the fossil fuel type in the first applicable month of the year.

RECONCILIATION ADJUSTMENT:

In order to reconcile any differences that may occur between recorded revenue and eligible revenue from the Energy Cost Recovery Clause, the year-to-date recorded revenue from the Energy Cost Recovery Clause will be compared with the year-to-date eligible revenue from the Energy Cost Recovery Clause on a quarterly basis. If there is a variance between the year-to-date recorded revenue from the Energy Cost Recovery Clause and the year-to-date eligible revenue from the Energy Cost Recovery Clause, a reconciliation adjustment shall be added to the rate calculated under the Energy Cost Recovery Clause to reconcile the revenue variance. This reconciliation adjustment shall be applied at the beginning of the second month after the end of the guarter, and shall be set to recover the revenue variance over the estimated sales for the subsequent three months.

MAUI ELECTRIC COMPANY, LIMITED

Docket No. 2017-0150; Decision and Order No. 36219, issued March 18, 2019.

Superseding Sheet No. 88F Revised Sheet No. 88F Effective August 23, 2018 Effective September 1, 2019

LANAI DIVISION

Energy Cost Recovery Clause - (Continued)

The eligible revenue from the Energy Cost Recovery Clause shall be equal to the eligible revenue for fuel, DG, and purchased energy expenses, adjusted by the Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment.

The eligible revenue for fuel is calculated for each fuel type each month as:

The sales kWh for that fuel type multiplied by the adjusted target heat rate for that fuel type multiplied by the average fuel cost per million Btu and then summed across all fuel types.

The adjusted target heat rate for each fuel type is established by comparing the applicable target heat rate, adjusted by a plus or minus 50 BTU/kWh sales heat rate deadband versus the year-to-date actual heat rate. The year-to-date actual heat rate is derived by dividing the fuel type's year-to-date MMbtu consumption by the fuel type's share of year-to-date recorded sales. If the year-to-date actual heat rate is greater than the applicable target heat rate plus 50 BTU/kWh, then the adjusted target heat rate is the applicable target heat rate plus 50 BTU/kWh.If the year-to-date actual heat rate is less than the applicable target heat rate less 50 BTU/kWh, then the adjusted target heat rate is the applicable target heat rate less 50 BTU/kWh.If the year-to-date actual heat rate falls between the applicable target heat rate adjusted by a plus or minus 50 BTU/kWh, then the adjusted target heat rate is the year-to-date actual heat rate.

The eligible revenue for DG and purchased energy expenses is equal to the amount of their respective expenses.

Revenue from the Energy Cost Recovery Clause excludes revenue taxes for the purpose of this reconciliation.

MAUI ELECTRIC COMPANY, LIMITED

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