

January 27, 2021

The Honorable Chair and Members of the Hawai'i Public Utilities Commission Kekuanao'a Building, First Floor 465 South King Street Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Maui Electric Energy Cost Recovery Factor for February 2021

Maui Electric Company, Limited's ("Maui Electric" or "Company") February 2021 Energy Cost Recovery factor for our Maui Division is 14.338 cents per kilowatt-hour ("kWh"), a decrease of 0.629 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$153.34, a decrease of \$2.87 compared to rates effective January 1, 2021. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor (-\$3.15) and decrease in the Purchase Power Adjustment (-\$0.01), partially offset by an increase in the Demand-Side Management Adjustment rate (+\$0.29).

The Company's Maui Division fuel composite cost of generation, central station and other increased 93.130 cents per million BTU to 1,074.61 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 0.341 cents per kWh to 20.285 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 2020. Attachment 24 provides a calculation of the applicable target sales heat rates for 2021 for each division. As shown in Attachment 24, the Maui Division actual sales heat rates for industrial and diesel fuel in 2020 were higher than the respective target sales heat rates in 2020, resulting in no adjustments to the respective target heat rates that were in effect at the end of 2020.

The Energy Cost Recovery factor for our Lāna'i Division for February 2021 is 20.640 cents per kWh, an increase of 1.142 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$152.01, an increase of \$4.57 compared to rates effective January 1, 2021. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor.

The Company's Lāna'i Division fuel composite cost of generation, central station and other increased 91.27 cents per million BTU to 1,768.88 cents per million BTU. The composite cost

The Honorable Chair and Members of the Hawai'i Public Utilities Commission January 27, 2021 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 0.010872 million BTU per kilowatt-hour to 0.010810 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 2020 was lower than the target sales heat rate for Lāna'i Division's diesel fuel in 2020, resulting in an adjustment to the target heat rate for Lāna'i Division's diesel fuel that was in effect at the end of 2020 to establish the target heat rate for 2021 for diesel fuel. A revised Lāna'i Division ECRC tariff reflecting the revised target sales heat rate for 2021 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 2021 is 16.108 cents per kWh, an increase of 1.992 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$141.03, an increase of \$7.97 compared to rates effective January 1, 2021. 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 171.29 cents per million BTU to 1,327.99 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 2020. As shown in Attachment 24, the actual sales heat rate for diesel fuel in 2020 was higher than the target sales heat rate in 2020, resulting in no adjustments to the Moloka'i Division target heat rate for diesel fuel that was in effect at the end of 2020.

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

The Honorable Chair and Members of the Hawai'i Public Utilities Commission January 27, 2021 Page 3

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, 2021.

Sincerely,

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

Attachments

cc: Division of Consumer Advocacy

MAUI ELECTRIC COMPANY, LTD. MOLOKAI DIVISION

ENERGY COST RECOVERY FACTOR

	EFFECTIVE DATES		
	<u>01-01-21</u>	<u>02-01-21</u>	<u>Change</u>
COMPOSITE COSTS			
Generation, Central Station & Other, ¢/mbtu	1,156.70	1,327.99	171.29
DG Energy, ¢/kWh	0.00	0.00	0.00
Purchased Energy, ¢/kWh	21.80	21.80	0.00
Residential Schedule "R"			
Energy Cost Recovery, ¢/kWh	14.116	16.108	1.992
Others - "G,P,F"			
Energy Cost Recovery, ¢/kWh	14.116	16.108	1.992
Residential Customer with			
400 KWH Consumption, \$/Bill	133.06	141.03	7.97
500 KWH Consumption, \$/Bill	164.81	174.77	9.96
• • • • • • • • • • • • • • • • • • • •			

Supersedes Sheet Effective: January 1, 2021

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

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

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

GENERATION COMPONENT

	CENTRAL STATION		1
	FUEL PRICES, ¢/mmbtu		
3	Industrial	0.00	
-	Diesel	1.327.99	
	Other	0.00	
	BTU MIX, %		DG ENERGY COMPONENT
_	Industrial	0.00	23 COMPOSITE COST OF DG
7	Diesel	100.00	ENERGY, ¢/kWh 0.000
8	Other	0.00	24 % Input to System kWh Mix 0.00
		<u>100.00</u>	
			25 WEIGHTED COMPOSITE DG ENERGY COST,
9	COMPOSITE COST OF GENERATION,		¢/kWh (Lines 23 x 24) 0.00000
	CENTRAL STATION + OTHER ¢/mmbtu	1,327.99	
	(Lines $(3 \times 6) + (4 \times 7) + (5 \times 8)$)		
10	% Input to System kWh Mix	99.98	26 BASE DG ENERGY COMP COST 0.000
			27 Base % Input to System kWh Mix 0.00
	EFFICIENCY FACTOR, mmbtu/kWh		28 WEIGHTED BASE DG ENERGY COST,
	(A) (B) (C)	(D)	¢/kWh (Line 26 x 27) 0.00000
	Percent of		
	Eff Factor Centrl Stn +	Weighted	29 Cost Less Base (Line 25 - 28) 0.00000
	Fuel Type mmbtu/kwh Other	Eff Factor	30 Loss Factor 1.098
11		0.000000	31 Revenue Tax Req Multiplier 1.0975
12		0.011127	32 DG FACTOR,
13		0.000000	¢/kWh (Line 29 x 30 x 31) 0.00000
	(Lines 11, 12, 13): Col(B) x Col(C) = Col(D)		
14	Weighted Efficiency Factor, mmbtu/kWh		
	[lines 11(D) + 12(D) + 13(D)]	0.011127	
15	WEIGHTED COMPOSITE CENTRAL STATION	+	
.0	OTHER GENERATION COST, ¢/kWh		
	(lines (9 x 10 x 14))	14.77427	
	(
16	BASE CENTRAL STATION + OTHER		
	GENERATION COST, ¢/mmbtu	0.00	
17	Base % Input to Sys kWh Mix	0.00	
18	Efficiency Factor, mmbtu/kwh	0.011127	
19	WEIGHTED BASE CENTRAL STATION + OTH	ER	
	GENERATION COST ¢/kWh		
	(lines (16 x 17 x 18))	0.00000	
			SUMMARY OF
20	COST LESS BASE (line(15 - 19))	14.77427	TOTAL GENERATION FACTOR, ¢/kWh
21	Revenue Tax Req Multiplier	1.0975	33 CNTRL STN + OTHER (line 22) 16.21476
22	CENTRAL STATION + OTHER GENERATION		34 DG (line 32) 0.00000
	FACTOR, ¢/kWh (line (20 x 21))	16.21476	35 TOTAL GENERATION FACTOR,
			¢/kWh (lines 33 + 34) 16.21476

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

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

Line	PURCHASED ENERGY COMPONENT	
37	PURCHASED ENERGY PRICE, ¢/kWh - Fossil PURCHASED ENERGY PRICE, ¢/kWh - Renewab Unused CBRE FIT	0.000 22.500 21.800
40	Sch Q	0.000
42	PURCHASED ENERGY KWH MIX, % - Fossil PURCHASED ENERGY KWH MIX, % - Renewable Unused CBRE FIT	0.00% 0.00% 100.00%
45	Sch Q	0.00%
45B 45C	Fossil Purch. Energy % Renewable Purch. Energy % Comp. Cost, Fossil Purch. Energy, ¢/kWh Comp. Cost, Renewable Purch. Energy,¢/kWh	0.00% 100.00% N/A 21.800
47	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (36 x 41) + (37 x 42) + (38 x 43) + (39 x 44) % Input to System kWh Mix WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (46 x 47))	0.02
	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh Base % Input to Sys kWh Mix WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (49 x 50))	0.000 0.00
53 54	COST LESS BASE (lines (48 - 51)) Loss Factor Revenue Tax Req Multiplier PURCHASED ENERGY FACTOR, ¢/kWh (lines (52 x 53 x 54))	0.00336 1.098 1.0975 0.00405

57 Diesel mmbtu, baseline 25,79: 58 Baseline Diesel, c/mmbtu 1,156.76 Month Diesel 59 Diesel mmbtu, budget 23,74: 60 Diesel Cost, ¢/mmbtu 1,327.9: 61 Diesel ECRC Fossil Cost \$315,36: 62 Diesel Base ECRC Recovery Target \$274,66: 63 Diesel differential \$40,67: 64 Total Fossil \$40,67: 65 2% of above \$81 66 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year 67: 67 Maximum Annual Cap (bi-directional) \$31,50: 68 Number of Days in year from implementation 36: 69 Fossil Risk % Proration (based on 365 day year) 100.00: 70 Maximum Annual Cap (bi-directional) prorated \$31,50: 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment 1.09751- 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales 2,110	<u>Line</u>	Calculation of Monthly Fossil Fuel Cost Risk Sharing Component		
57 Diesel mmbtu, baseline 25,79 58 Baseline Diesel, c/mmbtu 1,156.76 Month Diesel 59 Diesel mmbtu, budget 23,74 60 Diesel Cost, c/mmbtu 1,327.9 61 Diesel ECRC Fossil Cost \$315,36 62 Diesel Base ECRC Recovery Target \$274,66 63 Diesel differential \$40,67 64 Total Fossil \$40,67 65 2% of above \$81 66 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year 67 Maximum Annual Cap (bi-directional) \$31,50 68 Number of Days in year from implementation 36 69 Fossil Risk % Proration (based on 365 day year) 100.00 70 Maximum Annual Cap (bi-directional) prorated \$31,50 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment 1.09751. 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales		Baseline Diesel		
Month Diesel 1,156.70 Month Diesel 1,156.70 Month Diesel 23,74 60 Diesel mmbtu, budget 23,74 60 Diesel ECRC Fossil Cost \$315,36 61 Diesel ECRC Fossil Cost \$274,66 62 Diesel Base ECRC Recovery Target \$274,66 63 Diesel differential \$40,67 64 Total Fossil \$40,67 65 2% of above \$81 66 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year \$31,50 67 Maximum Annual Cap (bi-directional) \$31,50 68 Number of Days in year from implementation 36 69 Fossil Risk % Proration (based on 365 day year) 100.00 70 Maximum Annual Cap (bi-directional) prorated \$31,50 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue	56	Diesel \$, baseline month	\$298,406	
Month Diesel 59 Diesel mmbtu, budget 60 Diesel Cost, ¢/mmbtu 61 Diesel Cost, ¢/mmbtu 62 Diesel Base ECRC Fossil Cost 63 Diesel differential 64 Total Fossil 65 2% of above 66 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year 67 Maximum Annual Cap (bi-directional) 68 Number of Days in year from implementation 69 Fossil Risk % Proration (based on 365 day year) 70 Maximum Annual Cap (bi-directional) prorated 71 Applicable Monthly Fossil Fuel Cost Risk Sharing 72 Total Monthly Fossil Fuel Cost Risk Sharing 73 Fossil Cost Risk Sharing before taxes 74 Revenue Tax Adjustment 75 Fossil Cost Risk Sharing w/revenue tax 76 Forecasted Month MWh Sales 23,74 23,74 24,32 25,74 26,74 26,74 27,74 27,74 28,75 29,74 20	57	Diesel mmbtu, baseline	25,798	
59 Diesel mmbtu, budget 23,74 60 Diesel Cost, ¢/mmbtu 1,327.9 61 Diesel ECRC Fossil Cost \$315,36 62 Diesel Base ECRC Recovery Target \$274,66 63 Diesel differential \$40,67 64 Total Fossil \$40,67 65 2% of above \$81 66 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year \$315,06 67 Maximum Annual Cap (bi-directional) \$31,50 68 Number of Days in year from implementation 36 69 Fossil Risk % Proration (based on 365 day year) 100.00 70 Maximum Annual Cap (bi-directional) prorated \$31,50 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment \$1.09751 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales	58	Baseline Diesel, c/mmbtu	1,156.70	
Diesel Cost, ¢/mmbtu 1,327.9 Diesel ECRC Fossil Cost \$315,36 Diesel Base ECRC Recovery Target \$274,66 Diesel differential \$40,67 Total Fossil \$40,67 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year \$81,50 Maximum Annual Cap (bi-directional) \$31,50 Number of Days in year from implementation 360 Fossil Risk % Proration (based on 365 day year) 100.00 Maximum Annual Cap (bi-directional) prorated \$31,50 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 Total Monthly Fossil Fuel Cost Risk Sharing \$81 Fossil Cost Risk Sharing before taxes \$81 Revenue Tax Adjustment 1.09751. Fossil Cost Risk Sharing w/revenue tax \$85 Forecasted Month MWh Sales 2,110		Month Diesel		
61 Diesel ECRC Fossil Cost \$315,36 62 Diesel Base ECRC Recovery Target \$274,66 63 Diesel differential \$40,67 64 Total Fossil \$40,67 65 2% of above \$81 66 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year 67 Maximum Annual Cap (bi-directional) \$31,50 68 Number of Days in year from implementation 36 69 Fossil Risk % Proration (based on 365 day year) 100.00 70 Maximum Annual Cap (bi-directional) prorated \$31,50 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment \$1.09751 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales	59	Diesel mmbtu, budget	23,748	
62 Diesel Base ECRC Recovery Target \$274,66 63 Diesel differential \$40,67 64 Total Fossil \$40,67 65 2% of above \$81 66 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year 67 Maximum Annual Cap (bi-directional) \$31,50 68 Number of Days in year from implementation 36. 69 Fossil Risk % Proration (based on 365 day year) 100.00 70 Maximum Annual Cap (bi-directional) prorated \$31,50 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment \$1.09751 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales \$2,110	60	Diesel Cost, ¢/mmbtu	1,327.99	
Diesel differential \$40,67 64 Total Fossil \$40,67 65 2% of above \$81 66 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year \$81,50 67 Maximum Annual Cap (bi-directional) \$31,50 68 Number of Days in year from implementation 36 69 Fossil Risk % Proration (based on 365 day year) 100.00 70 Maximum Annual Cap (bi-directional) prorated \$31,50 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment \$1.09751 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales \$2,110	61	Diesel ECRC Fossil Cost	\$315,365	
Total Fossil \$40,67 65 2% of above \$81 66 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year \$81 67 Maximum Annual Cap (bi-directional) \$31,50 68 Number of Days in year from implementation 36 69 Fossil Risk % Proration (based on 365 day year) 100.00 70 Maximum Annual Cap (bi-directional) prorated \$31,50 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment 1.09751 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales \$2,110	62	Diesel Base ECRC Recovery Target	\$274,688	
65 2% of above \$81 66 Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year 67 Maximum Annual Cap (bi-directional) \$31,50 68 Number of Days in year from implementation 36 69 Fossil Risk % Proration (based on 365 day year) 100.00 70 Maximum Annual Cap (bi-directional) prorated \$31,50 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment 1.09751 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales \$2,110	63	Diesel differential	\$40,677	
Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year Maximum Annual Cap (bi-directional) Number of Days in year from implementation Fossil Risk % Proration (based on 365 day year) Maximum Annual Cap (bi-directional) prorated Maximum Annual Cap (bi-directional) prorated Applicable Monthly Fossil Fuel Cost Risk Sharing Total Monthly Fossil Fuel Cost Risk Sharing Fossil Cost Risk Sharing before taxes Revenue Tax Adjustment Fossil Cost Risk Sharing w/revenue tax Fossil Cost Risk Sharing w/revenue tax Forecasted Month MWh Sales	64	Total Fossil	\$40,677	
67 Maximum Annual Cap (bi-directional) \$31,50 68 Number of Days in year from implementation 36: 69 Fossil Risk % Proration (based on 365 day year) 100.00 70 Maximum Annual Cap (bi-directional) prorated \$31,50 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment 1.09751- 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales 2,110	65	2% of above	\$814	
Number of Days in year from implementation Fossil Risk % Proration (based on 365 day year) Maximum Annual Cap (bi-directional) prorated Maximum Annual Cap (66	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$0	
Fossil Risk % Proration (based on 365 day year) Maximum Annual Cap (bi-directional) prorated Sal, 50 Applicable Monthly Fossil Fuel Cost Risk Sharing Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month Fossil Cost Risk Sharing before taxes Revenue Tax Adjustment Fossil Cost Risk Sharing w/revenue tax Fossil Cost Risk Sharing w/revenue tax Forecasted Month MWh Sales Fossil Cost Risk Sharing w/revenue tax Forecasted Month MWh Sales	67	Maximum Annual Cap (bi-directional)	\$31,500	
70 Maximum Annual Cap (bi-directional) prorated \$31,50 71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment \$1.09751. 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales \$2,110	68	Number of Days in year from implementation	365	
71 Applicable Monthly Fossil Fuel Cost Risk Sharing \$81 72 Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment 1.09751 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales 2,111	69	Fossil Risk % Proration (based on 365 day year)	100.00%	
Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month \$81 73 Fossil Cost Risk Sharing before taxes 74 Revenue Tax Adjustment 75 Fossil Cost Risk Sharing w/revenue tax \$88 76 Forecasted Month MWh Sales 2,110	70	Maximum Annual Cap (bi-directional) prorated	\$31,500	
73 Fossil Cost Risk Sharing before taxes \$81 74 Revenue Tax Adjustment 1.09751 75 Fossil Cost Risk Sharing w/revenue tax \$85 76 Forecasted Month MWh Sales 2,110	71	Applicable Monthly Fossil Fuel Cost Risk Sharing	\$814	
74 Revenue Tax Adjustment 1.09751 75 Fossil Cost Risk Sharing w/revenue tax \$88 76 Forecasted Month MWh Sales 2,110	72	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	\$814	
75 Fossil Cost Risk Sharing w/revenue tax \$88 76 Forecasted Month MWh Sales 2,110	73	Fossil Cost Risk Sharing before taxes	\$814	
76 Forecasted Month MWh Sales 2,110	74	Revenue Tax Adjustment	1.097514	
,	75	Fossil Cost Risk Sharing w/revenue tax	\$893	
77 Fossil Fuel Cost Risk Sharing Component, ¢/kWh (0.042)	76	Forecasted Month MWh Sales	2,116	
(600.00)	77	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	(0.0422)	

Line	SYSTEM COMPOSITE CALCULATIONS	
78	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh	16.21881
70	(lines (35 + 55)) Adjustment, ¢/kWh	0.000
	Fossil Fuel Cost Risk Sharing Component	(0.042)
81	ECR Reconciliation Adjustment	(0.069)
82	ECR FACTOR, ¢/kWh	16.108
	(lines (78 + 79 + 80 + 81))	

Maui Electric Company, Ltd. Molokai Division

MONTH END FUEL OIL ESTIMATE

	Barrels	MBTU	\$
1/20/2021	5,087.10	29,149.06	370,941.07
Estimated Use	1,674.36	9,594.08	110,974.57
Estimated Received	-	-	-
Estimated Additional	731.77	4,193.02	55,404.89
Estimated End	4,144.51	23,748.00	315,371.39

Next Months Expense = \$ 76.0938 /bbl

FUEL OIL INVENTORY PRICE USED FOR FILING

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel	\$ 76.0938	5.73 BTU/BBL	1327.99

MAUI ELECTRIC COMPANY, LTD. Molokai Division ECR Reconciliation Adjustment

February 2021

1.	Amount to be refunded	(\$4,000)	
2.	Monthly amount (1/3 x Line 1)	(\$1,333)	
3.	Revenue Tax Divisor	0.91115	
4.	Total (Line 2 / Line 3)	(\$1,463)	
5.	Estimated Sales (February 2021)	2,116	mwh
6.	Adjustment (Line 4 ÷ Line 5)	-0.069	¢/kwh

MAUI ELECTRIC COMPANY, LTD. MOLOKAI DIVISION 2020 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY (Thousand \$)

Line	<u>Description</u>	Without Deadband 4th Quarter <u>YTD Total</u>	collection by company*	Basis for Recon With Deadband 4th Quarter <u>YTD Total</u>	collection by company*
1 2 3	Actual Costs Generation Distributed Generation Purch Power	\$4,089.6 \$0.0 \$1.2		\$4,089.6 \$0.0 \$1.2	
4	Total	\$4,090.8		\$4,090.8	
5 6 7	Fuel Filing Cost Generation Distributed Generation Purch Power	\$4,063.8 \$0.0 \$1.2		\$4,082.1 \$0.0 \$1.2	
8	Total	\$4,065.0		\$4,083.3	
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)	\$4,065.0		\$4,083.3	
14 15	ACTUAL FOA REVENUE LESS TAX FOA reconciliation adj for prior years	\$4,129.5 \$21.2		\$4,129.5 \$21.2	
16	ADJUSTED FOA LESS TAX	\$4,108.3		\$4,108.3	
17	FOA-(FUEL-BASE) (Line 16-13)	\$43.3		\$25.0	
18 19 20	ADJUSTMENTS Current year FOA accrual reversal Other prior year FOA Other	\$23.2 \$0.0 \$0.0		\$23.2 \$0.0 \$0.0	
	QUARTERLY FOA RECONCILIATION (Line 17+18+19+20) Fossil Fuel YTD Cost Risk Sharing Adjustment YTD QUARTERLY FOA RECON w/Fossil Risk Adj (Line 21+Line 21A)	\$66.5 -\$20.9 \$45.6	Over	\$48.2 (-\$20.9 \$27.3	Over
22	3rd Quarter Reconciliation YTD			\$23.3	Over
23	FOA Reconciliation to be Refunded February 2021 to April 2021 (Li	ne 22- 21B)		-\$4.0 T	o Be Refunded

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

MAUI ELECTRIC COMPANY, LTD. MOLOKAI DIVISION DEADBAND CALCULATION

Determination of Efficiency Factor to use for Cost-Recovery Purposes Period: January 1, 2020 through December 31, 2020

	<u>Notes</u>	YTD
Palaau Diesel		
	f	11,127
Palaau Diesel Deadband Definition, +/- BTU/kWh	d	50
Palaau Diesel Portion of Recorded Sales, MWh	a	28,988
Palaau Diesel Consumption (Recorded), MMBTU	b	325,350
Palaau Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	11,224
Lower limit of Palaau Diesel Deadband, BTU/kWh	e = f-d	11,077
Higher limit of Palaau Diesel Deadband, BTU/kWh	g = f+d	11,177
Palaau Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	11,177

MAUI ELECTRIC COMPANY, LTD. MOLOKAI DIVISION

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

	2020 Without Deadband	With Deadband AS FILED
	<u>Jan 1 - Dec 31</u>	<u>Jan 1 - Dec 31</u>
DIESEL FUEL FILING COST Diesel Portion of Recorded Sales, MWH Diesel Sales Efficiency Factor (mmbtu/kwh) Mmbtu adjusted for Sales Efficiency Factor \$/mmbtu TOTAL DIESEL \$000s TO BE RECOVERED	28,988 0.011127 322,545 <u>\$12.5992</u> \$4,063.8	28,988 0.011177 323,994 <u>\$12.5992</u> \$4,082.1
TOTAL GENERATION FUEL FILING COST, \$000s	\$4,063.8	\$4,082.1
TOTAL GENERATION BASE FUEL COST , \$000s	\$0.0	\$0.0
TOTAL GENERATION FUEL FILING COST, \$000s YTD TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$4,063.8 \$0.0	\$4,082.1 \$0.0

Fossil Fuel Cost Risk Sharing Mechanism, December 2020, Molokai

Jan-20, Baseline YTD Subject to Fossil Risk

	Diesel Fossil Fuel Cost Risk Sharing		
AA	MMBtu	26,195	325,350
BB	\$ cost, actuals	415,672	4,089,633
CC = BB / AA (Baseline Column)	Jan 2020 baseline \$/mmbtu	15.8684499	15.8684499
DD	Diesel Gen kWh		32,006,695
EE	Total kWh, Gen, Purch Pwr, DG		32,079,018
FF	Sales kWh		29,053,075
$GG = (DD / EE) \times FF$	Diesel kWh-sales		28,987,574
НН	Target Heat Rate		11,127
II1	Upper limit w/deadband		11,177
II2	Lower limit w/deadband		11,077
II3	Calculated Heat Rate (YTD subject to fossil risk, before	e deadhand)	11,224
II	Recovery Heat Rate (YTD subject to fossil risk, after d	,	11,177
JJ = BB/AA (YTD Column)	Actual Cost \$/MMbtu	cadband)	12.5699491
KK = CC x HH x GG / 1,000,000	Base Cost Recovery w/Target Heat Rate		\$5,118,285
LL = II x JJ x GG / 1,000,000	Fuel Filing Cost Recovery		\$4,072,590
MM = 2% x (LL-KK)	Diesel Cost Risk Sharing		-\$20,914
,	• • • • • • • • • • • • • • • • • • •		¥ -7-
NN	Annual Cap (non-prorated)		\$31,500
00	# Days		366
PP	Annual Cap (pro-rated)		\$31,500
QQ = MM, up to cap	Total Fossil Fuel Cost Risk Sharing Adjustment, subject	ct to ±\$31500 cap	-\$20,914

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

<u>Month</u>	(1) YTD FOA Reconciliation	<u>Qtr</u>	(2) FOA Rec Adjust <u>Variance</u>	(3) FOA Rec Less <u>Variance</u>	(4) Try to Collect	(5) Actual Collect	(6) Month-end Cumulative <u>Balance</u>
December '19 January '20 February March April	(31,000)	(4)	(1,752)	(29,248)	(9,667) (9,667) 10,333 10,333 10,333	(10,289) (10,240) 9,207 10,125 9,676	7,910 (2,330) (22,371) (12,246) (2,570)
May June July	(400)	(1)	(1,907)	1,507	133 133 133	156 132 140	(907) (775) (635)
August September October	23,000	(2)	(635)	23,635	(7,667) (7,667) (7,667)	(7,490) (7,964) (7,901)	15,510 7,546 (355)
November December January '21	700	(3)	(113)	813	(233) (233) (233)	(238) (252)	220 (32)
February	4,000	(4)	(258)	4,258	(1,333)		
NOTES:							
Col(1):	Quarterly FOA r A positive numb			•	-		ection.
Col(2):	FOA reconciliati starting with the	on adju	stment variar	nce accumulat	ted during the	last three mo	onths,

(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)

sales used to derive the \$/kwh adjustment and the actual recorded sales.

Col(6): Cumulative balance of the FOA reconciliation (Previous balance + Col(3) + Col(5))

Maui Electric Company, Ltd. Molokai Division Calculations of the Average Residential Customer Bill

Base Rates Base Fuel/Energy Charge Non-fuel Energy Charge First 250 kWhr per month Next 500 kWhr per month Customer Charge Total Base Charges
IRP Refund
Revenue Balancing Rate Adjustment PBF Surcharge Renewable Energy Infrastructure Cost Recovery Provision SolarSaver Adjustment Refund of 2018 Interim Purchased Power Adjustment Energy Cost Recovery Green Infrastructure Fee

Avg Residential Bill at 400 kwh

Rate					
	01-01-21	02-01-21			
effective date:	09/01/19	09/01/19			
¢/kWh	0.0000	0.0000			
#/Id/Mb	14.0459	14.0450			
¢/kWh		14.0459			
¢/kWh	16.6959	16.6959			
\$	11.50	11.50			
% on base	0.000	0.000			
¢/kWh	0.3383	0.3383			
¢/kWh	0.5882	0.5882			
¢/kWh	0.0000	0.0000			
¢/kWh	0.0000	0.0000			
% on base	0.000	0.000			
, , , , , , , , , , , , , , , , , , , ,					
¢/kWh	0.0000	0.0000			
¢/kWh	14.116	16.108			
\$	1.25	1.25			

Charge (\$) at 400 Kwh					
01-01-21	Difference				
0.00	0.00	0.00			
35.11	35.11	0.00			
25.04	25.04	0.00			
11.50	11.50	0.00			
71.65	71.65	0.00			
0.00	0.00	0.00			
4.05	4.05	0.00			
1.35	1.35	0.00			
2.35	2.35	0.00			
0.00	0.00	0.00			
0.00	0.00	0.00			
0.00	0.00	0.00			
0.00	0.00	0.00			
56.46	64.43	7.97			
1.25	1.25	0.00			
133.06	141.03				

Increase (Decrease -) % Change

7.97	
5.99%	

Base Rates Base Fuel/Energy Charge Non-fuel Energy Charge First 250 kWhr per month Next 500 kWhr per month Customer Charge Total Base Charges
IRP Refund
Revenue Balancing Rate Adjustment PBF Surcharge Renewable Energy Infrastructure Cost Recovery Provision SolarSaver Adjustment Refund of 2018 Interim Purchased Power Adjustment Energy Cost Recovery Green Infrastructure Fee

Avg Residential Bill at 500 kwh

Rate					
	01-01-21	02-01-21			
effective date:	09/01/19	09/01/19			
¢/kWh	0.0000	0.0000			
¢/kWh	14.0459	14.0459			
¢/kWh	16.6959	16.6959			
\$	11.50	11.50			
% on base	0.000	0.000			
¢/kWh	0.3383	0.3383			
¢/kWh	0.5882	0.5882			
¢/kWh	0.0000	0.0000			
¢/kWh	0.0000	0.0000			
% on base	0.00	0.00			
¢/kWh	0.0000	0.0000			
¢/kWh	14.116	16.108			
\$	1.25	1.25			

Charge (\$) at 500 Kwh					
01-01-21 02-01-21 Difference					
0.0.2.	02 01 21	2			
0.00	0.00	0.00			
35.11	35.11	0.00			
41.74	41.74	0.00			
11.50	11.50	0.00			
88.35	88.35	0.00			
0.00	0.00	0.00			
1.69	1.69	0.00			
2.94	2.94	0.00			
0.00	0.00	0.00			
0.00	0.00	0.00			
0.00	0.00	0.00			
0.00	0.00	0.00			
70.58	80.54	9.96			
1.25	1.25	0.00			
164.81	174.77				

Increase (Decrease -) % Change

	9.96
6.0	9.96 04%

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

FU	IEL	FΑ	C1	OR
CE	ENT	rs/	K	WH

	CENTS / KWH		
	RESIDENTIAL &	RESIDENT	TAL BILL (\$)
EFFECTIVE DATE	<u>COMMERCIAL</u>	<u>@ 400 KWH</u>	<u>@ 500 KWH</u>
January 1, 2019	-3.771	163.91	204.03
February 1, 2019	-7.208	150.16	186.85
March 1, 2019	-4.872	159.50	198.53
April 1, 2019	-5.034	158.51	197.29
May 1, 2019	-3.503	164.98	205.37
June 1, 2019	5.096	166.63	206.77
July 1, 2019	3.171	161.65	200.57
August 1, 2019	2.259	155.00	192.25
September 1, 2019	19.349	152.49	189.11
October 1, 2019	19.071	151.51	187.89
November 1, 2019	20.907	162.13	201.16
December 1, 2019	18.365	151.94	188.43
January 1, 2020	18.533	153.75	190.67
February 1, 2020	21.165	164.02	203.51
March 1, 2020	21.967	167.23	207.52
April 1, 2020	19.555	157.34	195.16
May 1, 2020	18.231	151.00	187.24
June 1, 2020	12.810	127.13	157.40
July 1, 2020	10.471	118.42	146.53
August 1, 2020	12.013	125.55	155.44
September 1, 2020	14.463	135.41	167.76
October 1, 2020	10.877	121.03	149.78
November 1, 2020	14.096	132.92	164.65
December 1, 2020	13.337	129.89	160.86
January 1, 2021	14.116	133.06	164.81
February 1, 2021	16.108	141.03	174.77
. 35. daily 1, 2021	10.100	111.00	.,,

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE		RATE
06/01/11 08/17/17	IRP RECOVERY REFUND RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION		PERCENT ON BASE CENTS/KWH
07/01/17 - 06/30/18	RESID. PBF SURCHARGE ADJUSTMENT	0.4244	CENTS/KWH
01/01/18 - 06/30/18	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
04/01/18 - 04/30/18	SOLARSAVER ADJUSTMENT		CENTS/KWH
05/01/18 - 03/31/19	SOLARSAVER ADJUSTMENT		CENTS/KWH
06/01/18 - 08/22/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
07/01/18 - 06/30/19	RESID. PBF SURCHARGE ADJUSTMENT		CENTS/KWH
07/01/18 - 12/31/18	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
08/23/18 - 05/31/19	INTERIM RATE INCREASE 2018 TEST YEAR		PERCENT ON BASE
08/23/18 - 05/31/19	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
01/01/19 / 06/30/19	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
04/01/19 - 04/30/19	SOLARSAVER ADJUSTMENT		CENTS/KWH
5/1/2019 - 03/31/20	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
06/01/19	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (
06/01/19 - 06/30/19	REFUND OF INTERIM RATE INCREASE 2018 TEST YEAR		PERCENT ON BASE
06/01/19 - 05/31/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
07/01/19 - 12/31/19	RESID. PBF SURCHARGE ADJUSTMENT	0.4775	CENTS/KWH
07/01/19 - 12/31/19	GREEN INFRASTRUCTURE FEE	1.17	DOLLARS/MONTH
08/01/19 - 08/31/19	PURCHASED POWER ADJUSTMENT	-0.7518	CENTS/KWH
09/01/19 - 09/30/19	PURCHASED POWER ADJUSTMENT	-0.7820	CENTS/KWH
10/01/19 - 10/31/19	PURCHASED POWER ADJUSTMENT	-0.7475	CENTS/KWH
11/01/19 - 11/30/19	PURCHASED POWER ADJUSTMENT	0.0692	CENTS/KWH
12/01/19 - 12/31/19	PURCHASED POWER ADJUSTMENT	0.0655	CENTS/KWH
01/01/20 - 01/31/20	PURCHASED POWER ADJUSTMENT	0.0648	CENTS/KWH
01/01/20 - 06/30/20	RESID. PBF SURCHARGE ADJUSTMENT	0.7437	CENTS/KWH
01/01/20 - 06/30/20	GREEN INFRASTRUCTURE FEE	1.25	DOLLARS/MONTH
02/01/20 - 04/30/20	PURCHASED POWER ADJUSTMENT	0.00	CENTS/KWH
04/01/20 - 04/30/20	SOLARSAVER ADJUSTMENT	-0.0592	CENTS/KWH
05/01/20 - 05/31/20	PURCHASED POWER ADJUSTMENT	-0.3200	CENTS/KWH
05/01/20	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
06/01/20 - 06/30/20	PURCHASED POWER ADJUSTMENT	-0.3325	CENTS/KWH
06/01/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.3383	CENTS/KWH
07/01/20 - 07/31/20	PURCHASED POWER ADJUSTMENT	0.0000	CENTS/KWH
07/01/20	RESID. PBF SURCHARGE ADJUSTMENT	0.5882	CENTS/KWH
07/01/20 - 12/31/20	GREEN INFRASTRUCTURE FEE	1.1900	DOLLARS/MONTH
08/01/20 - 08/31/20	PURCHASED POWER ADJUSTMENT	0.2408	CENTS/KWH
09/01/20 - 09/30/20	PURCHASED POWER ADJUSTMENT		CENTS/KWH
10/01/20 -10/31/20	PURCHASED POWER ADJUSTMENT		CENTS/KWH
11/01/20	PURCHASED POWER ADJUSTMENT		CENTS/KWH
01/01/21	GREEN INFRASTRUCTURE FEE	1.25	DOLLARS/MONTH

- ~ Surcharges currently in effect are in bold. ~ Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount and minimum charge.

Molokai Annual ECRC Adjustment, Based on Recorded Statistics for : $\;\;$ 2020

		Industrial	Diesel	Notes
		Α	В	
1	Target Heat Rate, 2020	N/A	0.011127	MBTU/kWh Sales
2				
3	Fuel consumed during 2020	N/A	325,350	MBTU
4	Allocated Sales during 2020	N/A	28,987,590	kWh
5	2020 Sales Heat Rate, Recorded	N/A	0.011224	MBTU/kWh Sales
6				
7	Difference: 2020 Recorded less Start of Year	N/A	0.000097	MBTU/kWh Sales
8	Adjustment: One-half the difference, downward	N/A	0.000000	MBTU/kWh Sales
9				
10	Target Heat Rate, Start of 2021	N/A	0.011127	MBTU/kWh Sales