

May 29, 2020

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 June 2020 Revised Attachments Reflecting RBA Rate Adjustment

Enclosed for filing are revised Attachments 1, 7, 8A, 8B, 9, 10, 15, 16A, 16B, 17, 22, 23A, and 23B of Maui Electric Company, Limited 's ("Maui Electric" or "Company") June 2020 energy cost adjustment factor filing, reflecting the impact of the Company's Revenue Balancing Account ("RBA") rate adjustment, as approved by the Commission in Order No. 37150 issued on May 28, 2020.

On May 27, 2020, Maui Electric filed its energy cost adjustment factors for June 2020 and indicated that it would file the enclosed revised attachments after the Commission issued its decision on the Company's RBA rate adjustment proposal submitted in Transmittal No. 20-03 and incorporate the impact in the customer bill analysis. There is no change to the energy cost adjustment factors as filed May 27, 2020.

For our Maui Division, a residential customer consuming 500 kWh of electricity will be paying \$157.82, a decrease of \$8.24 compared to rates effective May 1, 2020. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery Factor (-\$5.57) and the decrease in the RBA rate adjustment (-\$2.67).

For our Lāna'i Division, a residential customer consuming 400 kWh of electricity will be paying \$131.79, a decrease of \$16.25 compared to rates effective May 1, 2020. The decrease in the typical residential bill is due to the decrease of the Energy Cost Recovery Factor (-\$14.11) and the decrease in the RBA rate adjustment (-\$2.14).

For our Moloka'i Division, a residential customer consuming 400 kWh of electricity will be paying \$127.13, a decrease of \$23.87 compared to rates effective May 1, 2020. The decrease in the typical residential bill is due to the decrease of the Energy Cost Recovery Factor (-\$21.68), decrease in the Purchase Power Adjustment (-\$0.05) and the decrease in the RBA rate adjustment (-\$2.14).

The Honorable Chair and Members of the Hawai'i Public Utilities Commission May 29, 2020 Page 2

For the Commission's convenience, Maui Electric is refiling all of the attachments included in the May 27, 2020 filing. The revised attachments are notated with "Revised 05/29/2020" in the headers; the other attachments are unchanged.

Sincerely,

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

Attachments

cc: Division of Consumer Advocacy

## ENERGY COST RECOVERY FACTOR

	EFFECTIVE DATES		
	<u>05-01-20</u>	<u>06-01-20</u>	<u>Change</u>
COMPOSITE COSTS Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh Purchased Energy, ¢/kWh	1,598.71 0.00 30.00	1,285.50 0.00 30.00	(313.21) 0.00 0.00
Residential Schedule "R"			
Energy Cost Recovery, ¢/kWh	18.958	15.429	(3.529)
<u>Others - "G,P,F"</u> Energy Cost Recovery, ¢/kWh	18.958	15.429	(3.529)
Residential Customer with			
400 KWH Consumption, \$/Bill	148.04	131.79	(16.25)
500 KWH Consumption, \$/Bill	183.43	163.12	(20.31)

Supersedes Sheet Effective:

May 1, 2020

#### ENERGY COST RECOVERY (ECR) FILING

ENERGY COST RECOVERY (ECR) FILING - June 1, 2020 (page 1 of 2)

Line

1	Effective Date	June 1, 2020
2	Supercedes Factors of	May 1, 2020

### **GENERATION COMPONENT**

	CENTRAL STATION			
	FUEL PRICES, ¢/mmbtu			
-	Industrial	0.00		
4	Diesel - Miki Basin	1,285.50		
	Diesel - Manele Bay	1,998.25		
6	Other	0.00		
	DTH MIX W			
7	BTU MIX, % Industrial	0.00%	DG ENERGY COMPONENT 25 COMPOSITE COST OF DG	
				0.000
-	Diesel - Miki Basin	100.00%	ENERGY, ¢/kWh	0.000
	Diesel - Manele Bay	0.00%	00 M Law 112 O at a UNU M	0.000/
10	Other	0.00%	26 % Input to System kWh Mix	0.00%
		100.00%	27 WEIGHTED COMPOSITE DG ENERGY	
11	COMPOSITE COST OF GENERATION.		COST, ¢/kWh (Lines 25 x 26)	0.00000
	CENTRAL STATION + OTHER ¢/mmbtu	1,285.50		0.00000
	(Lines $(3 \times 7) + (4 \times 8) + (5 \times 9) + (6 \times 10)$ )	1,200.00		
12	% Input to System kWh Mix	94.32%	28 BASE DG ENERGY COMP COST	0.000
	,	•	29 Base % Input to System kWh Mix	0.00%
	EFFICIENCY FACTOR, mmbtu/kWh		30 WEIGHTED BASE DG ENERGY COST,	0.0070
	(A) (B) (C)	(D)	¢/kWh (Line 28 x 29)	0.00000
	Percent of	(-)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Eff Factor Centrl Stn +	Weighted	31 Cost Less Base (Line 27 - 30)	0.00000
	Fuel Type mmbtu/kwh Other	Eff Factor	32 Loss Factor	1.0500
13	Industrial 0.000000 0.	0.000000 00	33 Revenue Tax Req Multiplier	1.0975
14	Diesel 0.010872 100.	00 0.010872	34 DG FACTOR,	
15	Other 0.010872 0.	0.000000 00	¢/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)]	0.010872		
47				
17	WEIGHTED COMPOSITE CENTRAL STAT OTHER GEN COST, ¢/kWh	ION +		
	(lines (11 x 12 x 16))	13,18212		
	(IIIIes (11 x 12 x 16))	13.10212		
18	BASE CENTRAL STATION + OTHER GEN	FRATION		
	COST. ¢/mmbtu	-		
19	Base % Input to Sys kWh Mix	0.00%		
	Efficiency Factor, mmbtu/kwh	0.010872		
	WEIGHTED BASE CENTRAL STATION +			
	OTHER GENERATION COST ¢/kWh			
	(lines (18 x 19 x 20))	-		
			SUMMARY OF	
	COST LESS BASE (line(17 - 21))	13.18212	TOTAL GENERATION FACTOR, ¢/kWh	
	Revenue Tax Req Multiplier	1.0975	35 CNTRL STN + OTHER (line 24)	14.46738
24	CENTRAL STATION + OTHER GENERATI	ON	36 DG (line 34)	-
	FACTOR, ¢/kWh (line (22 x 23))	14.46738	37 TOTAL GENERATION FACTOR,	
			¢/kWh (lines 35 + 36)	14.46738

#### ENERGY COST RECOVERY (ECR) FILING

ENERGY COST RECOVERY (ECR) FILING - June 1, 2020 (page 2 of 2)

Line 1 Effective Date

1	Effective Date	June 1, 2020
2	Supercedes Factors of	May 1, 2020

Line	PURCHASED ENERGY COMPON	ENT
	PURCHASED ENERGY PRICE, ¢/kWh - FOSS PURCHASED ENERGY PRICE, ¢/kWh - RENE	
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, %, RENEW 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	30.000 5.68%
	COST, ¢/kWh (lines (44 x 45))	1.70400
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))	1.70400 1.050 1.0975 1.96365

Calculation of Monthly Fossil Fuel Cost Risk Sharing Component			
	Baseline Diesel		
54	Diesel \$, baseline month	\$616,461	
55	Diesel mmbtu, baseline	30,215	
56	Baseline Diesel, c/mmbtu	2,040.28	
	Month Diesel		
57	Diesel mmbtu, budget	29,816	
58	Diesel Cost, ¢/mmbtu	1,285.50	
59	Diesel ECRC Fossil Cost	\$383,282	
60	Diesel Base ECRC Recovery Target	\$608,325	
61	Diesel differential	-\$225,044	
62	Total Fossil	-\$225,044	
63	2% of above	-\$4,501	
64	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	-\$4,655	
65	Maximum Annual Cap (bi-directional)	\$31,500	
66	Number of Days in year from implementation	366	
67	Fossil Risk % Proration (based on 366 day year)	100.00%	
68	Maximum Annual Cap (bi-directional) prorated	\$31,500	
69	Applicable Monthly Fossil Fuel Cost Risk Sharing	-\$4,501	
70	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$9,156	
71	Fossil Cost Risk Sharing before taxes	-\$4,501	
72	Revenue Tax Adjustment	1.097514	
73	Fossil Cost Risk Sharing w/revenue tax	-\$4,940	
74	Forecasted Month MWh Sales	2,355	
75	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.2097	

#### Line SYSTEM COMPOSITE CALCULATIONS

76 GENERATION AND PURCHASED ENERGY	
FACTOR, ¢/kWh 16.43	3103
(lines (37 + 53))	
77 Adjustment, ¢/kWh 0	.000
78 Fossil Fuel Cost Risk Sharing Component 0	.210
79 ECR Reconciliation Adjustment (1	.212)
80 ECR FACTOR, ¢/kWh 15	.429
(lines (76 + 77 + 78 + 79))	

### Maui Electric Company, Ltd. Lanai Division

### MONTH END FUEL OIL ESTIMATE

Miki Basin - ULSD 5/20/2020 Estimated Use Estimated Received Estimated Additional Estimated End Next Month's Combined Miki Exp	Barrels 4,559.98 1,424.57 2,285.71 - 5,421.12 ense (\$/bbl) =	MBTU 26,128.62 8,162.79 13,097.12 - 31,062.95 \$ 73.6592 /bbl	\$ 377,460.96 130,499.28 152,353.54 - 399,315.22
Manele CHP	Barrels	MBTU	\$
5/20/2020	160.67	920.64	19,525.62
Estimated Use	(0.02)	(0.11)	(2.30)
Estimated Received	-	-	-
Estimated Additional	33.55	192.25	2,712.65
Estimated End	194.24	1,113.00	22,240.56

Next Month's Manele Expense (\$/bbl) = \$ 114.4996 /bbl

### FUEL OIL INVENTORY PRICE USED FOR FILING

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel - Miki Basin	\$ 73.6592	5.73 BTU/BBL	1,285.50
Diesel - Manele Bay	\$ 114.4996	5.73 BTU/BBL	1,998.25

## **Contract Prices effective May 1, 2020**

TYPE OF OIL BURNED	\$/BBL	¢/MBTU
MIKI BASIN - ULTRA LOW	<u>SULFUR DIESEL</u>	<u>. (DYED)</u>
Tax *	4.2037	73.35
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
MIKI BASIN - ULTRA LOW	SULFUR DIESEL	-

Tax *	14.5453	253.84		
Ocean Transportation	0.0000	0.00		
Storage	0.0000	0.00		
Wharfage	0.0000	0.00		

### **MANELE BAY - ULTRA LOW SULFUR DIESEL**

Tax *	14.5453	253.84
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

 \* Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST tax, Environmental Response Tax, Customs Duty Fee, Fed Oil Spill Recovery Fee, Federal Oil Spill Liability Tax, and Federal Excise Tax.

Note: Since these components are not accounted for separately in inventory, contract prices for the current month are being provided. Contract prices are considered accurate pending actual delivery of the fuel.

Reference: Decision and Order No. 16134, Docket No. 96-0040.

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

# June 2020

1. Amount to be refunded	(\$78,000)
2. Monthly amount (1 / 3 X Line 1)	(\$26,000)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$28,535)
5. Estimated Sales (June 2020)	2,355 mwh
6. Adjustment (Line 4 ÷ Line 5)	-1.212 ¢/kwh

## MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION 2020 Cumulative Reconciliation Balance

Month	(1) YTD FOA	<b>0</b> 4 <i>r</i>	(2) FOA Rec Adjust	(3) FOA Rec Less	(4) Try to	(5) Actual	(6) Month-end Cumulative
<u>Month</u>	Reconciliation		<u>Variance</u>	<u>Variance</u>	<u>Collect</u>	Collect	<u>Balance</u>
December '18					(11,867)	(11,797)	11,475
January '19					(11,867)	(11,150)	325
February	8,600	(4)	(386)	8,986	(2,867)	(2,721)	6,590
March					(2,867)	(2,728)	3,862
April					(2,867)	(2,599)	1,263
May	91,900	(1)	1,002	90,898	(30,633)	(28,551)	63,610
June					(30,633)	(30,812)	32,798
July					(30,633)	(30,931)	1,867
August	(13,000)	(2)	2,171	(15,171)	4,333	4,372	(8,932)
September					4,333	4,343	(4,589)
October					4,333	4,291	(298)
November	(23,800)	(3)	(249)	(23,551)	7,933	8,219	(15,630)
December '19					7,933	8,627	(7,003)
January '20					7,933	8,106	1,103
February	83,900	(4)	938	82,962	(27,967)	(28,222)	55,843
March					(27,967)	(27,038)	28,805
April					(27,967)	(21,694)	7,111
May	78,000	(1)	847	77,153	(26,000)		
June					(26,000)		

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): Col(6):	Actual collected amount. (recorded sales * \$/kwh adjustment/1.09751) Cumulative balance of the FOA reconciliation (Previous balance + Col(3) + Col(5))

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

	Rate			Charge (\$) at 400 Kwh		
		05-01-20	06-01-20	05-01-20	06-01-20	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	0.8716	0.3383	3.49	1.35	-2.14
PBF Surcharge	¢/kWh	0.7437	0.7437	2.97	2.97	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
Refund of 2018 Interim	% on Base	0.00	0.00	0.00	0.00	0.00
Energy Cost Recovery	¢/kWh	18.958	15.429	75.83	61.72	-14.11
Green Infrastructure Fee	\$	1.25	1.25	1.25	1.25	0.00

Avg Residential Bill at 400 kwh

Increase (Decrease -) % Change

148.04

131.79

-16.25 -10.98%

	Rate			Charge (\$) at 500 Kwh		
		05-01-20	06-01-20	05-01-20	06-01-20	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	37.03	37.03	0.00
Customer Charge	\$	11.50	11.50	11.50	11.50	0.00
Total Base Charges				79.31	79.31	0.00
IRP Refund	% on base	0.0000	0.0000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment	¢/kWh	0.8716	0.3383	4.36	1.69	-2.67
PBF Surcharge	¢/kWh	0.7437	0.7437	3.72	3.72	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
Refund of 2018 Interim	% on Base	0.00	0.00	0.00	0.00	0.00
Energy Cost Recovery	¢/kWh	18.958	15.429	94.79	77.15	-17.64
Green Infrastructure Fee	\$	1.25	1.25	1.25	1.25	0.00

Avg Residential Bill at 500 kwh

Increase (Decrease -) % Change

183.43

163.12

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

	FUEL FACTOR CENTS / KWH		
	<b>RESIDENTIAL &amp;</b>	RESIDENT	IAL BILL (\$)
EFFECTIVE DATE	<u>COMMERCIAL</u>		( )
January 1, 2018	-8.358	153.69	191.20
February 1, 2018	-8.395	153.54	191.01
March 1, 2018	-7.868	155.65	193.65
April 1, 2018	-9.141	150.05	186.64
May 1, 2018	-7.716	156.26	194.41
June 1, 2018	-6.144	163.86	203.92
July 1, 2018	-5.753	165.46	205.95
August 1, 2018	-7.005	160.45	199.69
September 1, 2018	-6.735	166.53	207.25
October 1, 2018	-6.372	167.98	209.07
November 1, 2018	-6.037	169.32	210.74
December 1, 2018	-5.396	171.89	213.95
January 1, 2019	-6.950	165.81	206.32
February 1, 2019	-8.789	158.45	197.12
March 1, 2019	-6.041	169.45	210.86
April 1, 2019	-6.801	166.07	206.63
May 1, 2019	-7.864	162.15	201.75
June 1, 2019	4.196	172.73	214.30
July 1, 2019	3.088	171.26	212.48
August 1, 2019	3.232	171.84	213.20
September 1, 2019	24.278	168.18	208.62
October 1, 2019	24.957	170.90	212.02
November 1, 2019	26.088	175.42	217.67
December 1, 2019	26.449	176.87	219.48
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

### 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
01/01/18 - 06/30/18 04/01/18 - 04/30/18 05/01/18 - 03/31/19 06/01/18 - 08/22/18 07/01/18 - 06/30/19 07/01/18 - 12/31/18 08/23/18 - 05/31/19 08/23/18 - 05/31/19	GREEN INFRASTRUCTURE FEE SOLARSAVER ADJUSTMENT SOLARSAVER ADJUSTMENT REVENUE BALANCING ACCOUNT RATE ADJUSTMENT RESID. PBF SURCHARGE ADJUSTMENT GREEN INFRASTRUCTURE FEE INTERIM RATE INCREASE 2018 TEST YEAR REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.3400 0.0000 1.8954 0.4658 1.21 6.36	DOLLARS/MONTH CENTS/KWH CENTS/KWH CENTS/KWH DOLLARS/MONTH PERCENT ON BASE CENTS/KWH
01/01/19 - 06/30/19 04/01/19 - 04/30/19 05/01/19 - 03/31/20 <b>06/01/19</b> 06/01/19 - 06/30/19	GREEN INFRASTRUCTURE FEE SOLARSAVER ADJUSTMENT SOLARSAVER ADJUSTMENT FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (2 REFUND OF INTERIM RATE INCREASE 2018 TEST YEAR	-0.0855 0.0000 2018 TEST Y	DOLLARS/MONTH CENTS/KWH CENTS/KWH <b>EAR</b> PERCENT ON BASE
06/01/19 - 05/31/20 07/01/19 - 12/31/19 07/01/19 - 12/31/19 01/01/20 01/01/20 04/01/20 - 04/30/20 05/01/20 06/01/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT RESID. PBF SURCHARGE ADJUSTMENT GREEN INFRASTRUCTURE FEE <b>RESID. PBF SURCHARGE ADJUSTMENT</b> <b>GREEN INFRASTRUCTURE FEE</b> SOLARSAVER ADJUSTMENT <b>SOLARSAVER ADJUSTMENT</b> <b>REVENUE BALANCING ACCOUNT RATE ADJUSTMENT</b>	0.4775 1.17 <b>0.7437</b> <b>1.25</b> -0.0592 <b>0.0000</b>	CENTS/KWH CENTS/KWH DOLLARS/MONTH CENTS/KWH CENTS/KWH CENTS/KWH CENTS/KWH

~ Surcharges currently in effect are in bold.

~ Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount and minimum charge.