



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
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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,

/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>05-01-20</u>	<u>06-01-20</u>	<u>Change</u>
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,487.98	1,033.71	(454.27)
DG Energy, ¢/kWh	0.00	0.00	0.00
Purchased Energy, ¢/kWh	22.46	22.46	0.00
<u>Residential Schedule "R"</u>			
Energy Cost Recovery, ¢/kWh	18.231	12.810	(5.421)
<u>Others - "G,P,F"</u>			
Energy Cost Recovery, ¢/kWh	18.231	12.810	(5.421)
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	151.00	127.13	(23.87)
500 KWH Consumption, \$/Bill	187.24	157.40	(29.84)

Supersedes Sheet Effective: May 1, 2020

**MAUI ELECTRIC COMPANY, LTD.
MOLOKAI DIVISION
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 May 1, 2020

GENERATION COMPONENT

CENTRAL STATION						DG ENERGY COMPONENT		
FUEL PRICES, ¢/mmbtu								
3	Industrial							
4	Diesel							
5	Other							
BTU MIX, %								
6	Industrial			23	COMPOSITE COST OF DG			
7	Diesel				ENERGY, ¢/kWh	0.000		
8	Other			24	% Input to System kWh Mix	0.00		
9	COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 6) + (4 x 7) + (5 x 8))		1,033.71	25	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 23 x 24)		0.00000	
10	% Input to System kWh Mix		99.70	26	BASE DG ENERGY COMP COST		0.000	
EFFICIENCY FACTOR, mmbtu/kWh				27	Base % Input to System kWh Mix		0.00	
	(A)	(B)	(C)	(D)	28	WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 26 x 27)		0.00000
			Percent of		29	Cost Less Base (Line 25 - 28)		0.00000
			Centrl Stn +	Weighted	30	Loss Factor		1.098
	Fuel Type	Eff Factor	Other	Eff Factor	31	Revenue Tax Req Multiplier		1.0975
11	Industrial	0.000000	0.00	0.000000	32	DG FACTOR, ¢/kWh (Line 29 x 30 x 31)		0.00000
12	Diesel	0.011127	100.00	0.011127				
13	Other	0.011127	0.00	0.000000				
(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 + OTHER GENERATION COST, ¢/kWh (lines (9 x 10 x 14))		11.46708					
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 + OTHER GENERATION COST ¢/kWh (lines (16 x 17 x 18))		0.00000					
20	COST LESS BASE (line(15 - 19))		11.46708					
21	Revenue Tax Req Multiplier		1.0975					
22	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))		12.58512					
				SUMMARY OF				
				TOTAL GENERATION FACTOR, ¢/kWh				
				33	CNTRL STN + OTHER (line 22)		12.58512	
				34	DG (line 32)		0.00000	
				35	TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)		12.58512	

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

<u>Line</u>		
1	Effective Date	June 1, 2020
2	Supercedes Factors	May 1, 2020

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>	
	PURCHASED ENERGY PRICE, ¢/kWh - Fossil	
	PURCHASED ENERGY PRICE, ¢/kWh - Renewable	
36	Unused	0.000
37	CBRE	22.500
38	FIT	21.800
39		
40	Sch Q	0.000
	PURCHASED ENERGY KWH MIX, % - Fossil	
	PURCHASED ENERGY KWH MIX, % - Renewable	
41	Unused	0.00%
42	CBRE	93.67%
43	FIT	6.33%
44		
45	Sch Q	0.00%
45A	Fossil Purch. Energy %	0.00%
45B	Renewable Purch. Energy %	100.00%
45C	Comp. Cost, Fossil Purch. Energy, ¢/kWh	N/A
45D	Comp. Cost, Renewable Purch. Energy, ¢/kWh	22.456
46	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh	22.456
	(Lines (36 x 41) + (37 x 42) + (38 x 43) + (39 x 44))	
47	% Input to System kWh Mix	0.30
48	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (46 x 47))	0.06835
49	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh	0.000
50	Base % Input to Sys kWh Mix	0.00
51	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (49 x 50))	0.00000
52	COST LESS BASE (lines (48 - 51))	0.06835
53	Loss Factor	1.098
54	Revenue Tax Req Multiplier	1.0975
55	PURCHASED ENERGY FACTOR, ¢/kWh (lines (52 x 53 x 54))	0.08237

<u>Line</u>	<u>Calculation of Monthly Fossil Fuel Cost Risk Sharing Component</u>	
	Baseline Diesel	
56	Diesel \$, baseline month	\$415,672
57	Diesel mmbtu, baseline	26,195
58	Baseline Diesel, c/mmbtu	1,586.84
	Month Diesel	
59	Diesel mmbtu, budget	25,604
60	Diesel Cost, ¢/mmbtu	1,033.71
61	Diesel ECRC Fossil Cost	\$264,669
62	Diesel Base ECRC Recovery Target	\$406,292
63	Diesel differential	-\$141,624
64	Total Fossil	-\$141,624
65	2% of above	-\$2,832
66	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$933
67	Maximum Annual Cap (bi-directional)	\$31,500
68	Number of Days in year from implementation	366
69	Fossil Risk % Proration (based on 366 day year)	100.00%
70	Maximum Annual Cap (bi-directional) prorated	\$31,500
71	Applicable Monthly Fossil Fuel Cost Risk Sharing	-\$2,832
72	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$1,899
73	Fossil Cost Risk Sharing before taxes	-\$2,832
74	Revenue Tax Adjustment	1.097514
75	Fossil Cost Risk Sharing w/revenue tax	-\$3,109
76	Forecasted Month MWh Sales	2,285
77	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.1361

<u>Line</u>	<u>SYSTEM COMPOSITE CALCULATIONS</u>	
78	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 55))	12.66749
79	Adjustment, ¢/kWh	0.000
80	Fossil Fuel Cost Risk Sharing Component	0.136
81	ECR Reconciliation Adjustment	0.006
82	ECR FACTOR, ¢/kWh (lines (78 + 79 + 80 + 81))	12.810

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

MONTH END FUEL OIL ESTIMATE

	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
5/20/2020	6,130.86	35,129.81	413,380.25
Estimated Use	1,555.35	8,912.16	132,611.47
Estimated Received	4,000.00	22,920.00	227,172.96
Estimated Additional	-	-	-
Estimated End	<u>8,575.51</u>	<u>49,137.65</u>	<u>507,941.74</u>

Next Months Expense = \$ 59.2317 /bbl

FUEL OIL INVENTORY PRICE USED FOR FILING

<u>Type of Oil Burned</u>	<u>Price</u>	<u>Conversion Factor</u>	<u>Prices ¢/MBTU</u>
Diesel	\$ 59.2317	5.73 BTU/BBL	1033.71

**MAUI ELECTRIC COMPANY, LTD.
MOLOKAI DIVISION**

Contract Prices effective May 1, 2020

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
ULTRA LOW SULFUR DIESEL		
Tax *	3.1191	54.43
Ocean Transportation	1.5036	26.24
Storage	4.9389	86.19
Wharfage	0.4000	6.98

* Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST tax, Environmental Response Tax, Customs Duty Fee, Federal Oil Spill Recovery Fee, 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.
Molokai Division
ECR Reconciliation Adjustment

June 2020

1. Amount to be Collected	\$400
2. Monthly amount (1/3 x Line 1)	\$133
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	\$146
5. Estimated Sales (June 2020)	2,285 mwh
6. Adjustment (Line 4 ÷ Line 5)	0.006 ¢/kwh

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

<u>Month</u>	(1) <u>YTD FOA Reconciliation</u>	<u>Qtr</u>	(2) <u>FOA Rec Adjust Variance</u>	(3) <u>FOA Rec Less Variance</u>	(4) <u>Try to Collect</u>	(5) <u>Actual Collect</u>	(6) <u>Month-end Cumulative Balance</u>
December '18					(3,033)	(3,133)	2,348
January '19					(3,033)	(3,259)	(911)
February	(8,800)	(4)	(682)	(8,118)	2,933	2,637	(6,392)
March					2,933	2,879	(3,513)
April					2,933	2,976	(537)
May	(4,000)	(1)	(576)	(3,424)	1,333	1,340	(2,621)
June					1,333	1,450	(1,171)
July					1,333	1,381	210
August	42,700	(2)	167	42,533	(14,233)	(15,411)	27,332
September					(14,233)	(15,604)	11,728
October					(14,233)	(14,999)	(3,271)
November	29,000	(3)	(2,501)	31,501	(9,667)	(10,031)	18,199
December '19					(9,667)	(10,289)	7,910
January '20					(9,667)	(10,240)	(2,330)
February	(31,000)	(4)	(1,752)	(29,248)	10,333	9,207	(22,371)
March					10,333	10,125	(12,246)
April					10,333	9,676	(2,570)
May	(400)	(1)	(1,907)	1,507	133		
June					133		

NOTES:

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 20)
A positive number is an over-collection. A negative number is an under-collection.
- Col(2): FOA reconciliation adjustment variance accumulated during the last three months, starting with the fourth prior month; the difference between the estimated recorded sales used to derive the \$/kwh adjustment and the actual recorded sales.
(Col(5) - Col(4))
- Col(3): FOA reconciliation generated in the current quarter. The YTD FOA reconciliation difference minus the adjustment variance. Col(1) - Col(2)
- Col(4): Amount that the FOA reconciliation adjustment is trying to collect. (Col(1) * 1/3)
- Col(5): Actual collected amount. (recorded sales * \$/kwh adjustment/1.09751)
- Col(6): Cumulative balance of the FOA reconciliation (Previous balance + Col(3) + Col(5))

**Maui Electric Company, Ltd.
Molokai 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	14.0459	14.0459	35.11	35.11	0.00
Next 500 kWhr per month ¢/kWh	16.6959	16.6959	25.04	25.04	0.00
Customer Charge \$	11.50	11.50	11.50	11.50	0.00
Total Base Charges			71.65	71.65	0.00
IRP Refund					
% on base	0.000	0.000	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
Purchased Power Adjustment ¢/kWh	-0.3200	-0.3325	-1.28	-1.33	-0.05
Energy Cost Recovery ¢/kWh	18.231	12.810	72.92	51.24	-21.68
Green Infrastructure Fee \$	1.25	1.25	1.25	1.25	0.00
Avg Residential Bill at 400 kwh			151.00	127.13	

Increase (Decrease -) -23.87
% Change -15.81%

	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	14.0459	14.0459	35.11	35.11	0.00
Next 500 kWhr per month ¢/kWh	16.6959	16.6959	41.74	41.74	0.00
Customer Charge \$	11.50	11.50	11.50	11.50	0.00
Total Base Charges			88.35	88.35	0.00
IRP Refund					
% on base	0.000	0.000	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
Purchased Power Adjustment ¢/kWh	-0.3200	-0.3325	-1.60	-1.66	-0.06
Energy Cost Recovery ¢/kWh	18.231	12.810	91.16	64.05	-27.11
Green Infrastructure Fee \$	1.25	1.25	1.25	1.25	0.00
Avg Residential Bill at 500 kwh			187.24	157.40	

Increase (Decrease -) -29.84
% Change -15.94%

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

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR CENTS / KWH</u>		<u>RESIDENTIAL BILL (\$)</u>	
	<u>RESIDENTIAL & COMMERCIAL</u>		<u>@ 400 KWH</u>	<u>@ 500 KWH</u>
January 1, 2018	-6.300		147.68	183.78
February 1, 2018	-6.275		147.78	183.90
March 1, 2018	-4.937		153.13	190.59
April 1, 2018	-5.975		148.47	184.76
May 1, 2018	-5.031		152.76	190.12
June 1, 2018	-3.490		160.24	199.48
July 1, 2018	-1.354		168.81	210.24
August 1, 2018	-4.992		154.26	192.05
September 1, 2018	-3.443		165.08	205.53
October 1, 2018	-4.054		162.63	202.48
November 1, 2018	-3.697		164.06	204.26
December 1, 2018	-1.431		173.13	215.59
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

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
06/01/11	IRP RECOVERY REFUND	0.000 PERCENT ON BASE
08/17/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0000 CENTS/KWH
07/01/17 - 06/30/18	RESID. PBF SURCHARGE ADJUSTMENT	0.4244 CENTS/KWH
01/01/18 - 06/30/18	GREEN INFRASTRUCTURE FEE	1.34 DOLLARS/MONTH
04/01/18 - 04/30/18	SOLARSAVER ADJUSTMENT	1.3400 CENTS/KWH
05/01/18 - 03/31/19	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/18 - 08/22/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.8954 CENTS/KWH
07/01/18 - 06/30/19	RESID. PBF SURCHARGE ADJUSTMENT	0.4658 CENTS/KWH
07/01/18 - 12/31/18	GREEN INFRASTRUCTURE FEE	1.21 DOLLARS/MONTH
08/23/18 - 05/31/19	INTERIM RATE INCREASE 2018 TEST YEAR	6.68 PERCENT ON BASE
08/23/18 - 05/31/19	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.3183 CENTS/KWH
01/01/19 / 06/30/19	GREEN INFRASTRUCTURE FEE	1.35 DOLLARS/MONTH
04/01/19 - 04/30/19	SOLARSAVER ADJUSTMENT	-0.0855 CENTS/KWH
5/1/2019 - 03/31/20	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/19	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (2018 TEST YEAR)	
06/01/19 - 06/30/19	REFUND OF INTERIM RATE INCREASE 2018 TEST YEAR	-2.00 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
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	RESID. PBF SURCHARGE ADJUSTMENT	0.7437 CENTS/KWH
01/01/20	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	PURCHASED POWER ADJUSTMENT	-0.3325 CENTS/KWH
06/01/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.3383 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.