



June 26, 2019

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

FILED

2019 JUN 26 P 3:07

PUBLIC UTILITIES
COMMISSION

Dear Commissioners:

Subject: Maui Electric Energy Cost Adjustment Factor for July 2019

Maui Electric Company, Limited's ("Maui Electric" or "Company") July 2019 Energy Cost Adjustment factor for our Maui Division is 3.059 cents per kilowatt-hour ("kWh"), a decrease of 0.840 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$178.60, a decrease of \$1.16 compared to rates effective June 1, 2019. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor (-\$4.20) and the decrease in the Green Infrastructure Fee (-\$0.18), partially offset by the termination of the Refund of 2018 Interim credit (+\$3.15), increase in the Public Benefits Fund Surcharge (+\$0.06) and increase in the Purchase Power Adjustment (+\$0.01).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 63.99 cents per million BTU to 1,507.74 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.035 cents per kWh to 19.474 cents per kWh.

The Energy Cost Adjustment factor for our Lāna'i Division for July 2019 is 3.088 cents per kWh, a decrease of 1.108 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$171.26, a decrease of \$1.47 compared to rates effective June 1, 2019. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor (-\$4.43) and decrease in the Green Infrastructure Fee (-\$0.18), partially offset by the termination of the Refund of 2018 Interim credit (+\$3.09) and increase in the Public Benefits Fund Surcharge (+\$0.05).

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 96.62 cents per million BTU to 2,124.33 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 30.00 cents per kWh.

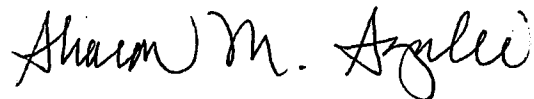
The Honorable Chair and Members
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The Energy Cost Adjustment factor for our Moloka'i Division for July 2019 is 3.171 cents per kWh, a decrease of 1.925 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$161.65, a decrease of \$4.98 compared to rates effective June 1, 2019. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor (-\$7.70) and decrease in the Green Infrastructure Fee (-\$0.18), partially offset by the termination of the Refund of 2018 Interim credit (+\$2.85) and increase in the Public Benefits Fund Surcharge (+\$0.05).

The Company's Moloka'i Division fuel composite cost of generation, central station and other decreased 157.35 cents per million BTU to 1,703.25 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 21.80 cents per kWh.

The attached sheets set forth the fuel adjustment in cents per kWh for each rate schedule that is applicable for pro rata use beginning July 1, 2019.

Sincerely,



Sharon M. Suzuki
President

Attachments

cc: Division of Consumer Advocacy

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

ENERGY COST ADJUSTMENT FACTOR

	EFFECTIVE DATES		<u>Change</u>
	<u>06-01-19</u>	<u>07-01-19</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,860.60	1,703.25	(157.35)
DG Energy, ¢/kWh	0.00	0.00	0.00
Purchased Energy, ¢/kWh	21.80	21.80	0.00
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	5.096	3.171	(1.925)
<u>Others - "G,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	5.096	3.171	(1.925)
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	166.63	161.65	(4.98)
500 KWH Consumption, \$/Bill	206.77	200.57	(6.20)

Supersedes Sheet Effective:

June 1, 2019

MAUI ELECTRIC COMPANY, LTD.
MOLOKAI DIVISION
ENERGY COST ADJUSTMENT (ECA) FILING

ENERGY COST ADJUSTMENT (ECA) FILING - July 1, 2019 (page 1 of 2)

<u>Line</u>		
1	Effective Date	July 1, 2019
2	Supercedes Factors	June 1, 2019

GENERATION COMPONENT

CENTRAL STATION						
FUEL PRICES, ¢/mmbtu						
3	Industrial					
4	Diesel					
5	Other					
BTU MIX, %						
6	Industrial					
7	Diesel					
8	Other					
9 COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 6) + (4 x 7) + (5 x 8))						
10	% Input to System kWh Mix					
EFFICIENCY FACTOR, mmbtu/kWh						
	(A)	(B)	(C)	(D)		
			Percent of			
		Eff Factor	Centrl Stn +	Weighted		
	<u>Fuel Type</u>	<u>mmbtu/kwh</u>	<u>Other</u>	<u>Eff Factor</u>		
11	Industrial	0.000000	0.00	0.000000		
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))						
16 BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu					1,448.39	
17	Base % Input to Sys kWh Mix			99.98		
18	Efficiency Factor, mmbtu/kwh			0.011127		
19 WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (16 x 17 x 18))					16.11301	
20	COST LESS BASE (line(15 - 19))			2.83568		
21	Revenue Tax Req Multiplier			1.0975		
22 CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))					3.11216	
					DG ENERGY COMPONENT	
					23 COMPOSITE COST OF DG ENERGY, ¢/kWh	0.000
					24 % Input to System kWh Mix	0.00
					25 WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 23 x 24)	0.00000
					26 BASE DG ENERGY COMP COST	0.000
					27 Base % Input to System kWh Mix	0.00
					28 WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 26 x 27)	0.00000
					29 Cost Less Base (Line 25 - 28)	0.00000
					30 Loss Factor	1.098
					31 Revenue Tax Req Multiplier	1.0975
					32 DG FACTOR, ¢/kWh (Line 29 x 30 x 31)	0.00000
					SUMMARY OF TOTAL GENERATION FACTOR, ¢/kWh	
					33 CNTRL STN + OTHER (line 22)	3.11216
					34 DG (line 32)	0.00000
					35 TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)	3.11216

MAUI ELECTRIC COMPANY, LTD.
MOLOKAI DIVISION
ENERGY COST ADJUSTMENT (ECA) FILING

ENERGY COST ADJUSTMENT (ECA) FILING - July 1, 2019 (page 2 of 2)

Line

1 Effective Date July 1, 2019
2 Supercedes Factors June 1, 2019

Line	PURCHASED ENERGY COMPONENT	
	PURCHASED ENERGY PRICE, ¢/kWh	
36	FIT	21.800
37		0.000
38	Sch Q	0.000
	PURCHASED ENERGY KWH MIX, %	
39	FIT	100.00
40		0.00
41	Sch Q	0.000
42	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (36 x 39) + (37 x 40) + (38 x 41))	21.800
43	% Input to System kWh Mix	0.02
44	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (42 x 43))	0.00388
45	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh	21.800
46	Base % Input to Sys kWh Mix	0.02
47	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (45 x 46))	0.00436
48	COST LESS BASE (lines (44 - 47))	(0.00048)
49	Loss Factor	1.098
50	Revenue Tax Req Multiplier	1.0975
51	PURCHASED ENERGY FACTOR, ¢/kWh (lines (48 x 49 x 50))	(0.00058)

Line SYSTEM COMPOSITE CALCULATIONS

52	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 51))	3.11158
53	Adjustment, ¢/kWh	0.000
54	ECA Reconciliation Adjustment	0.059
55	ECA FACTOR, ¢/kWh (lines (52 + 53 + 54))	3.171

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

MONTH END FUEL OIL ESTIMATE

	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
6/18/2019	5,823.90	33,370.97	590,251.31
Estimated Use	1,902.02	10,898.57	202,778.92
Estimated Received	4,300.00	24,639.00	414,951.90
Estimated Additional	-	-	-
Estimated End	<u>8,221.88</u>	<u>47,111.40</u>	<u>802,424.29</u>

Next Months Expense = \$ 97.5962 /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	\$ 97.5962	5.73 BTU/BBL	1703.25

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

Contract Prices effective June 1, 2019

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
ULTRA LOW SULFUR DIESEL		
Tax *	5.2066	90.87
Ocean Transportation	1.7216	30.05
Storage	5.0658	88.41
Wharfage	0.2900	5.06

* 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
ECA Reconciliation Adjustment

July 2019

1. Amount to be Collected	\$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 (July 2019)	2,477 mwh
6. Adjustment (Line 4 ÷ Line 5)	0.059 ¢/kwh

**MAUI ELECTRIC COMPANY, LTD.
MOLOKAI DIVISION
2019 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		
July					1,333		

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			
	06-01-19	07-01-19	06-01-19	07-01-19	Difference	
Base Rates	effective date:	06/01/19	06/01/19			
Base Fuel/Energy Charge	¢/kWh	17.6887	17.6887	70.75	70.75	0.00
Non-fuel Fuel Energy Charge						
First 250 kWh per month	¢/kWh	14.0459	14.0459	35.11	35.11	0.00
Next 500 kWh 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				142.40	142.40	0.00
IRP Refund	% on base	0.000	0.000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment	¢/kWh	0.8716	0.8716	3.49	3.49	0.00
PBF Surcharge	¢/kWh	0.4658	0.4775	1.86	1.91	0.05
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	-2.00	0.00	-2.85	0.00	2.85
Energy Cost Adjustment	¢/kWh	5.096	3.171	20.38	12.68	-7.70
Green Infrastructure Fee	\$	1.35	1.17	1.35	1.17	-0.18
Avg Residential Bill at 400 kwh				166.63	161.65	

Increase (Decrease -)	-4.98
% Change	-2.99%

	Rate		Charge (\$) at 500 Kwh			
	06-01-19	07-01-19	06-01-19	07-01-19	Difference	
Base Rates	effective date:	06/01/19	06/01/19			
Base Fuel/Energy Charge	¢/kWh	17.6887	17.6887	88.44	88.44	0.00
Non-fuel Fuel Energy Charge						
First 250 kWh per month	¢/kWh	14.0459	14.0459	35.11	35.11	0.00
Next 500 kWh 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				176.79	176.79	0.00
IRP Refund	% on base	0.000	0.000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment	¢/kWh	0.8716	0.8716	4.36	4.36	0.00
PBF Surcharge	¢/kWh	0.4658	0.4775	2.33	2.39	0.06
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	-2.00	0.00	-3.54	0.00	3.54
Energy Cost Adjustment	¢/kWh	5.096	3.171	25.48	15.86	-9.62
Green Infrastructure Fee	\$	1.35	1.17	1.35	1.17	-0.18
Avg Residential Bill at 500 kwh				206.77	200.57	

Increase (Decrease -)	-6.20
% Change	-3.00%

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

<u>EFFECTIVE DATE</u>	FUEL FACTOR CENTS / KWH <u>RESIDENTIAL & COMMERCIAL</u>	RESIDENTIAL BILL (\$)	
		<u>@ 400 KWH</u>	<u>@ 500 KWH</u>
January 1, 2017	-8.940	137.11	170.58
February 1, 2017	-8.792	137.70	171.32
March 1, 2017	-8.066	140.61	174.95
April 1, 2017	-8.432	138.59	172.43
May 1, 2017	-8.851	137.47	171.02
June 1, 2017	-8.516	139.44	173.49
July 1, 2017	-8.482	138.83	172.76
August 1, 2017	-9.670	134.08	166.82
September 1, 2017	-10.692	129.95	161.66
October 1, 2017	-9.093	136.35	169.65
November 1, 2017	-4.912	153.07	190.56
December 1, 2017	-5.591	150.36	187.16
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

**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
08/01/13 - 05/31/19	FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2012 TEST YEAR)	
01/01/16 - 06/30/16	GREEN INFRASTRUCTURE FEE	1.30 DOLLARS/MONTH
03/01/16 - 02/28/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0099 CENTS/KWH
04/01/16 - 04/30/16	SOLARSAVER ADJUSTMENT	-0.1835 CENTS/KWH
05/01/16 - 03/31/17	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/16 - 05/31/17	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.4082 CENTS/KWH
07/01/16 - 06/30/17	RESID. PBF SURCHARGE ADJUSTMENT	0.5865 CENTS/KWH
07/01/16 - 12/31/16	GREEN INFRASTRUCTURE FEE	1.13 DOLLARS/MONTH
01/01/17 - 06/30/17	GREEN INFRASTRUCTURE FEE	1.27 DOLLARS/MONTH
03/01/17 - 08/16/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0098 CENTS/KWH
04/01/17 - 04/30/17	SOLARSAVER ADJUSTMENT	-0.1378 CENTS/KWH
05/01/17 - 03/31/18	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
6/1/2017 - 05/31/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.5654 CENTS/KWH
07/01/17 - 12/31/17	GREEN INFRASTRUCTURE FEE	1.18 DOLLARS/MONTH
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
05/01/19	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	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.8716 CENTS/KWH
07/01/19	RESID. PBF SURCHARGE ADJUSTMENT	0.4775 CENTS/KWH
07/01/19	GREEN INFRASTRUCTURE FEE	1.17 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.