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2019 MAY 31 P 12:25

May 31, 2019

PUBLIC UTILITIES
COMMISSION

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

Dear Commissioners:

Subject: Maui Electric Energy Cost Adjustment Factor for June 2019
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 2019 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. 36336 issued on May 29, 2019.

On May 29, 2019, Maui Electric filed its energy cost adjustment factors for June 2019 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. 19-03 and incorporate the impact in the customer bill analysis. There is no change to the energy cost adjustment factors as filed May 29, 2019.

For our Maui Division, a residential customer consuming 500 kWh of electricity will be paying \$179.76, an increase of \$8.35 compared to rates effective May 1, 2019. The increase in the typical Maui Division residential bill is due to the increase in the energy cost adjustment factor (+\$39.71), the increase in the RBA rate adjustment (+\$2.77), and the increase in the Purchase Power Adjustment (+\$0.11), partially offset by the decrease in Base Charges (-\$18.20), cancellation of the Interim Rate Increase (TY2018) (-\$12.88), and credit for the Refund of 2018 Interim (-\$3.15).

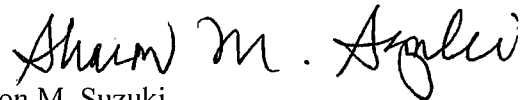
For our Lāna'i Division, a residential customer consuming 400 kWh of electricity will be paying \$172.73, an increase of \$10.58 compared to rates effective May 1, 2019. The increase in the typical Lāna'i Division residential bill is due to the increase in the energy cost adjustment factor (+\$48.24) and the increase in the RBA rate adjustment (+\$2.22), partially offset by the decrease in Base Charges (-\$25.48), cancellation of the Interim Rate Increase (TY2018) (-\$11.31), and credit for the Refund of the 2018 Interim (-3.09).

The Honorable Chair and Members
of the Hawai'i Public Utilities Commission
May 31, 2019
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For our Moloka'i Division, a residential customer consuming 400 kWh of electricity will be paying \$166.63, an increase of \$1.65 compared to rates effective May 1, 2019. The increase in the typical Moloka'i Division residential bill is due to the increase in the energy cost adjustment factor (+\$34.39) and the increase in the RBA rate adjustment (+\$2.22), partially offset by the decrease in Base Charges (-\$21.18), cancelation of the Interim Rate Increase (TY 2018) (-\$10.93), and credit for the Refund of 2018 Interim (-\$2.85).

For the Commission's convenience, Maui Electric is refileing all of the attachments included in the May 29, 2019 filing. The revised attachments are notated with "Revised 5/31/2019" in the headers; the other attachments are unchanged.

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>05-01-19</u>	<u>06-01-19</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,854.36	1,860.60	6.24
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	(3.503)	5.096	8.599
<u>Others - "G,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(3.503)	5.096	8.599
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	164.98	166.63	1.65
500 KWH Consumption, \$/Bill	205.37	206.77	1.41

Supersedes Sheet Effective: May 1, 2019

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

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

Line		
1	Effective Date	June 1, 2019
2	Supercedes Factors	May 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		
	Fuel Type	mmbtu/kwh	Other	Eff Factor		
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))					4.58591	
21	Revenue Tax Req Multiplier			1.0975		
22 CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))					5.03304	
					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)	5.03304
					34 DG (line 32)	0.00000
					35 TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)	5.03304

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

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

Line

1 Effective Date June 1, 2019
2 Supercedes Factors May 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))	0.00419
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))	(0.00017)
49	Loss Factor	1.098
50	Revenue Tax Req Multiplier	1.0975
51	PURCHASED ENERGY FACTOR, ¢/kWh (lines (48 x 49 x 50))	(0.00020)

Line SYSTEM COMPOSITE CALCULATIONS

52	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 51))	5.03284
53	Adjustment, ¢/kWh	0.000
54	ECA Reconciliation Adjustment	0.063
55	ECA FACTOR, ¢/kWh (lines (52 + 53 + 54))	5.096

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

MONTH END FUEL OIL ESTIMATE

	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
5/21/2019	4,634.21	26,554.05	501,816.55
Estimated Use	1,589.93	9,110.30	168,937.38
Estimated Received	-	-	-
Estimated Additional	<u>1,474.56</u>	<u>8,449.25</u>	<u>148,885.08</u>
Estimated End	4,518.84	25,893.00	481,764.25

Next Months Expense = \$ 106.6124 /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	\$ 106.6124	5.73 BTU/BBL	1860.60

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

Contract Prices effective May 1, 2019

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
ULTRA LOW SULFUR DIESEL		
Tax *	2.1072	36.78
Ocean Transportation	1.7831	31.12
Storage	4.8063	83.88
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

June 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 (June 2019)	2,328 mwh
6. Adjustment (Line 4 ÷ Line 5)	0.063 ¢/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		
June					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			
	05-01-19	06-01-19	05-01-19	06-01-19	Difference	
Base Rates	effective date:	08/01/13	06/01/19			
Base Fuel/Energy Charge	¢/kWh	26.3468	17.6887	105.39	70.75	-34.64
Non-fuel Fuel Energy Charge						
First 250 kWh per month	¢/kWh	11.4278	14.0459	28.57	35.11	6.54
Next 500 kWh per month	¢/kWh	14.0778	16.6959	21.12	25.04	3.92
Customer Charge	\$	8.50	11.50	8.50	11.50	3.00
Total Base Charges			163.58	142.40	-21.18	
IRP Refund	% on base	0.000	0.000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment	¢/kWh	0.3183	0.8716	1.27	3.49	2.22
PBF Surcharge	¢/kWh	0.4658	0.4658	1.86	1.86	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
Interim Rate Increase (TY 2018)	% on base	6.68	0.00	10.93	0.00	-10.93
Refund of 2018 Interim	% on base	0.00	-2.00	0.00	-2.85	-2.85
Energy Cost Adjustment	¢/kWh	-3.503	5.096	-14.01	20.38	34.39
Green Infrastructure Fee	\$	1.35	1.35	1.35	1.35	0.00
Avg Residential Bill at 400 kwh			164.98	166.63		

Increase (Decrease -)	1.65
% Change	1.00%

	Rate		Charge (\$) at 500 Kwh			
	05-01-19	06-01-19	05-01-19	06-01-19	Difference	
Base Rates	effective date:	08/01/13	06/01/19			
Base Fuel/Energy Charge	¢/kWh	26.3468	17.6887	131.73	88.44	-43.29
Non-fuel Fuel Energy Charge						
First 250 kWh per month	¢/kWh	11.4278	14.0459	28.57	35.11	6.54
Next 500 kWh per month	¢/kWh	14.0778	16.6959	35.19	41.74	6.55
Customer Charge	\$	8.50	11.50	8.50	11.50	3.00
Total Base Charges			203.99	176.79	-27.20	
IRP Refund	% on base	0.000	0.000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment	¢/kWh	0.3183	0.8716	1.59	4.36	2.77
PBF Surcharge	¢/kWh	0.4658	0.4658	2.33	2.33	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
Interim Rate Increase (TY 2018)	% on base	6.68	0.00	13.63	0.00	-13.63
Refund of 2018 Interim	% on base	0.00	-2.00	0.00	-3.54	-3.54
Energy Cost Adjustment	¢/kWh	-3.503	5.096	-17.52	25.48	43.00
Green Infrastructure Fee	\$	1.35	1.35	1.35	1.35	0.00
Avg Residential Bill at 500 kwh			205.37	206.77		

Increase (Decrease -)	1.41
% Change	0.69%

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

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR CENTS / KWH RESIDENTIAL & COMMERCIAL</u>	<u>RESIDENTIAL BILL (\$)</u>	
		<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

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

<u>EFFECTIVE DATE</u>	<u>DESCRIPTION OF SURCHARGE</u>	<u>RATE</u>
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	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	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	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

~ Surcharges currently in effect are in bold.

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