



SHARON M. SUZUKI  
President

June 1, 2018

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 2018  
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 2018 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. 35493. The enclosed revised Attachments 14 and 21 reflect corrections to first quarter 2018 reference.

On May 29, 2018, Maui Electric filed its energy cost adjustment factors for June 2018 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. 18-03 and incorporate the impact in the customer bill analysis. There is no change to the energy cost adjustment factors as filed May 29, 2018.

For our Maui Division, a residential customer consuming 500 kWh of electricity will be paying \$174.53, an increase of \$12.19 compared to rates effective May 1, 2018. The increase in the typical Maui Division residential bill is due to the increase in the energy cost adjustment factor (+\$10.54) and the increase in the RBA rate adjustment (+\$1.65).

For our Lāna'i Division, a residential customer consuming 400 kWh of electricity will be paying \$163.86, an increase of \$7.60 compared to rates effective May 1, 2018. The increase in the typical Lāna'i Division residential bill is due to the increase in the energy cost adjustment factor (+\$6.28) and the increase in the RBA rate adjustment (+\$1.32).

For our Moloka'i Division, a residential customer consuming 400 kWh of electricity will be paying \$160.24, an increase of \$7.48 compared to rates effective May 1, 2018. The increase in the typical Moloka'i Division residential bill is due to the increase in the energy cost adjustment factor (+\$6.16) and the increase in the RBA rate adjustment (+\$1.32).

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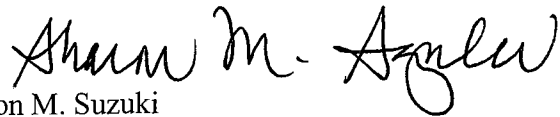
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PUBLIC UTILITIES  
COMMISSION

The Honorable Chair and Members  
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For the Commission's convenience, Maui Electric is refileing all of the attachments included in the May 29, 2018 filing. The revised attachments are notated with "Revised 6/1/18" in the headers; the other attachments are unchanged.

Sincerely,



Sharon M. Suzuki  
President

Attachments

cc: Division of Consumer Advocacy

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

**ENERGY COST ADJUSTMENT FACTOR**

	EFFECTIVE DATES		<u>Change</u>
	<u>05-01-18</u>	<u>06-01-18</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	2,012.66	2,140.84	128.18
DG Energy, ¢/kWh	0.00	0.00	0.00
Purchased Energy, ¢/kWh	30.00	30.00	0.00
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	(7.716)	(6.144)	1.572
<u>Others - "G,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(7.716)	(6.144)	1.572
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	156.26	163.86	7.60
500 KWH Consumption, \$/Bill	194.41	203.92	9.51

Supersedes Sheet Effective:

May 1, 2018

MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION

ENERGY COST ADJUSTMENT (ECA) FILING

ENERGY COST ADJUSTMENT (ECA) FILING - June 1, 2018 (page 1 of 2)

Line

1 Effective Date June 1, 2018  
2 Supercedes Factors of May 1, 2018

**GENERATION COMPONENT**

<b><u>CENTRAL STATION</u></b>							<b><u>DG ENERGY COMPONENT</u></b>	
FUEL PRICES, ¢/mmbtu								
3	Industrial			0.00				
4	Diesel - Miki Basin			2,140.84				
5	Diesel - Manele Bay			2,112.93				
6	Other			0.00				
BTU MIX, %								
7	Industrial			0.00%	25	COMPOSITE COST OF DG		
8	Diesel - Miki Basin			100.00%		ENERGY, ¢/kWh	0.000	
9	Diesel - Manele Bay			0.00%	26	% Input to System kWh Mix	0.00%	
10	Other			0.00%	27	WEIGHTED COMPOSITE DG ENERGY		
				100.00%		COST, ¢/kWh (Lines 25 x 26)	0.00000	
11	COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 7) + (4 x 8) + (5 x 9) + (6 x 10))			2,140.84	28	BASE DG ENERGY COMP COST	0.000	
12	% Input to System kWh Mix			91.86%	29	Base % Input to System kWh Mix	0.00%	
EFFICIENCY FACTOR, mmbtu/kWh					30	WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 28 x 29)	0.00000	
	(A)	(B)	(C)	(D)	31	Cost Less Base (Line 27 - 30)	0.00000	
			Percent of		32	Loss Factor	1.0510	
			Centrl Stn +	Weighted	33	Revenue Tax Req Multiplier	1.0975	
	Fuel Type	Eff Factor	Other	Eff Factor	34	DG FACTOR, ¢/kWh (Line 31 x 32 x 33)	0.00000	
13	Industrial	0.000000	0.00	0.000000				
14	Diesel	0.011151	100.00	0.011151				
15	Other	0.011151	0.00	0.000000				
(Lines 13, 14, 15): Col(B) x Col(C) = Col(D)								
16	Weighted Efficiency Factor, mmbtu/kWh [lines 13(D) + 14(D) + 15(D)]			0.011151				
17	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GEN COST, ¢/kWh (lines (11 x 12 x 16))			21.92928				
18	BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu			2,647.15				
19	Base % Input to Sys kWh Mix			89.65%				
20	Efficiency Factor, mmbtu/kwh			0.011151				
21	WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (18 x 19 x 20))			26.46322				
22	COST LESS BASE (line(17 - 21))			(4.53394)				
23	Revenue Tax Req Multiplier			1.0975				
24	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (22 x 23))			-4.97600				
					SUMMARY OF			
					TOTAL GENERATION FACTOR, ¢/kWh			
					35	CNTRL STN + OTHER (line 24)	(4.97600)	
					36	DG (line 34)	-	
					37	TOTAL GENERATION FACTOR, ¢/kWh (lines 35 + 36)	(4.97600)	

MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION

ENERGY COST ADJUSTMENT (ECA) FILING

ENERGY COST ADJUSTMENT (ECA) FILING - June 1, 2018 (page 2 of 2)

Line

1 Effective Date June 1, 2018  
2 Supercedes Factors of May 1, 2018

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>	
	PURCHASED ENERGY PRICE, ¢/kWh	
38	LANAI SOLAR RESEARCH - On Peak	30.000
39	- Off Peak	30.000
40	Sch Q	0.000
	PURCHASED ENERGY KWH MIX, %	
41	LANAI SOLAR RESEARCH - On Peak	100.00%
42	- Off Peak	0.00%
43	Sch Q	0.00%
44	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (38 x 41) + (39 x 42) + (40 x 43))	30.000
45	% Input to System kWh Mix	8.14%
46	WEIGHTED COMP. PURCH. ENERGY COST, ¢/kWh (lines (44 x 45))	2.44200
47	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh	27.000
48	Base % Input to Sys kWh Mix	10.35
49	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (47 x 48))	2.79450
50	COST LESS BASE(lines (46 - 49))	(0.35250)
51	Loss Factor	1.051
52	Revenue Tax Req Multiplier	1.0975
53	PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	(0.40660)

Line      SYSTEM COMPOSITE CALCULATIONS

54 GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (5.38260)  
(lines (37 + 53))  
55 Adjustment, ¢/kWh 0.000  
56 ECA Reconciliation Adjustment (0.761)  
57 ECA FACTOR, ¢/kWh (6.144)  
(lines (54 + 55 + 56))

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

**MONTH END FUEL OIL ESTIMATE**

<b><u>Miki Basin - ULSD</u></b>	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
5/22/2018	3,011.38	17,255.22	359,571.44
Estimated Use	1,264.26	7,244.21	141,341.78
Estimated Received	1,714.29	9,822.88	204,780.17
Estimated Additional	513.11	2,940.11	64,546.00
Estimated End	3,974.52	22,774.00	487,555.83

Next Month's Combined Miki Expense (\$/bbl) = \$ 122.6704 /bbl

<b><u>Manele CHP</u></b>	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
5/22/2018	193.81	1,110.53	23,464.78
Estimated Use	-	-	-
Estimated Received	-	-	-
Estimated Additional	-	-	-
Estimated End	193.81	1,110.53	23,464.78

Next Month's Manele Expense (\$/bbl) = \$ 121.0710 /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 - Miki Basin	\$ 122.6704	5.73 BTU/BBL	2,140.84
Diesel - Manele Bay	\$ 121.0710	5.73 BTU/BBL	2,112.93

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

**Contract Prices effective May 1, 2018**

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
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**MIKI BASIN - ULTRA LOW SULFUR DIESEL (DYED)**

Tax *	1.6020	27.96
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

**MIKI BASIN - ULTRA LOW SULFUR DIESEL**

Tax *	11.8080	206.07
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

**MANELE BAY - ULTRA LOW SULFUR DIESEL**

Tax *	16.8534	294.13
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**  
**ECA Reconciliation Adjustment**

**June 2018**

1. Amount to be refunded	(\$46,014)
2. Monthly amount (1 / 3 X Line 1)	(\$15,338)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$16,834)
5. Estimated Sales (June 2018)	2,212 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.761 ¢/kwh



**MAUI ELECTRIC COMPANY, LTD.  
LANAI DIVISION  
2018 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 '17					(14,700)	(15,711)	12,481
January '18					(14,700)	(16,163)	(3,682)
February	46,500	(4)	(2,214)	48,714	(15,500)	(16,173)	28,859
March					(15,500)	(17,469)	11,390
April					(15,500)	(15,859)	(4,469)
May	46,014	(1)	(4,105)	50,119	(15,338)		
June					(15,338)		

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): 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.**  
**Lanai Division**  
**Calculations of the Average Residential Customer Bill**

	Rate			Charge (\$) at 400 Kwh		
		05-01-18	06-01-18	05-01-18	06-01-18	Difference
<b>Base Rates</b>	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	32.2668	32.2668	129.07	129.07	0.00
Non-fuel Fuel Energy Charge						
First 250 kWhr per month	¢/kWh	9.1240	9.1240	22.81	22.81	0.00
Next 500 kWhr per month	¢/kWh	11.6240	11.6240	17.44	17.44	0.00
Customer Charge	\$	8.50	8.50	8.50	8.50	0.00
<b>Total Base Charges</b>				177.82	177.82	0.00
<b>IRP Refund</b>	% on base	0.0000	0.0000	0.00	0.00	0.00
<b>Revenue Balancing Rate Adjustment</b>	¢/kWh	1.5654	1.8954	6.26	7.58	1.32
<b>PBF Surcharge</b>	¢/kWh	0.4244	0.4244	1.70	1.70	0.00
<b>Renewable Energy Infrastructure Cost</b>						
<b>Recovery Provision</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Adjustment</b>	¢/kWh	-7.716	-6.144	-30.86	-24.58	6.28
<b>Green Infrastructure Fee</b>	\$	1.34	1.34	1.34	1.34	0.00
<b>Avg Residential Bill at 400 kwh</b>				156.26	163.86	

Increase (Decrease -)	7.60
% Change	4.86%

	Rate			Charge (\$) at 500 Kwh		
		05-01-18	06-01-18	05-01-18	06-01-18	Difference
<b>Base Rates</b>	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	32.2668	32.2668	161.33	161.33	0.00
Non-fuel Fuel Energy Charge						
First 250 kWhr per month	¢/kWh	9.1240	9.1240	22.81	22.81	0.00
Next 500 kWhr per month	¢/kWh	11.6240	11.6240	29.06	29.06	0.00
Customer Charge	\$	8.50	8.50	8.50	8.50	0.00
<b>Total Base Charges</b>				221.70	221.70	0.00
<b>IRP Refund</b>	% on base	0.0000	0.0000	0.00	0.00	0.00
<b>Revenue Balancing Rate Adjustment</b>	¢/kWh	1.5654	1.8954	7.83	9.48	1.65
<b>PBF Surcharge</b>	¢/kWh	0.4244	0.4244	2.12	2.12	0.00
<b>Renewable Energy Infrastructure Cost</b>						
<b>Recovery Provision</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Adjustment</b>	¢/kWh	-7.716	-6.144	-38.58	-30.72	7.86
<b>Green Infrastructure Fee</b>	\$	1.34	1.34	1.34	1.34	0.00
<b>Avg Residential Bill at 500 kwh</b>				194.41	203.92	

Increase (Decrease -)	9.51
% Change	4.89%

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

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR</u> <u>CENTS / KWH</u>		<u>RESIDENTIAL BILL (\$)</u>
	<u>RESIDENTIAL &amp; COMMERCIAL</u>	<u>@ 400 KWH @ 500 KWH</u>	
January 1, 2016	-12.957	135.62	168.62
February 1, 2016	-14.236	130.51	162.23
March 1, 2016	-15.833	124.12	154.24
April 1, 2016	-15.204	125.90	156.47
May 1, 2016	-13.856	132.03	164.13
June 1, 2016	-12.617	136.22	169.37
July 1, 2016	-11.833	139.64	173.68
August 1, 2016	-12.201	138.17	171.84
September 1, 2016	-12.634	136.43	169.68
October 1, 2016	-12.723	136.08	169.23
November 1, 2016	-12.595	136.59	169.87
December 1, 2016	-11.160	142.33	177.05
January 1, 2017	-11.861	139.67	173.68
February 1, 2017	-11.218	142.24	176.90
March 1, 2017	-10.975	143.21	178.11
April 1, 2017	-10.875	143.06	177.92
May 1, 2017	-11.993	139.14	173.02
June 1, 2017	-11.149	143.14	178.03
July 1, 2017	-11.181	142.28	176.97
August 1, 2017	-11.659	140.36	174.58
September 1, 2017	-10.389	145.40	180.88
October 1, 2017	-10.059	156.26	194.41
November 1, 2017	-8.264	153.90	191.51
December 1, 2017	-9.353	149.55	186.06
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

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
01/01/11 - 12/31/11	RESID. PBF SURCHARGE ADJUSTMENT	0.5944 CENTS/KWH
<b>06/01/11</b>	<b>IRP RECOVERY REFUND</b>	<b>0.000 PERCENT ON BASE</b>
<b>08/01/13</b>	<b>FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2012 TEST YEAR)</b>	
01/01/16 - 06/30/16	GREEN INFRASTRUCTURE FEE	1.3000 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
06/01/17 - 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
<b>07/01/17</b>	<b>RESID. PBF SURCHARGE ADJUSTMENT</b>	<b>0.4244 CENTS/KWH</b>
<b>08/17/17</b>	<b>RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION</b>	<b>0.0000 CENTS/KWH</b>
<b>01/01/18</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.34 DOLLARS/MONTH</b>
04/01/18 - 04/30/18	SOLARSAVER ADJUSTMENT	1.3400 CENTS/KWH
<b>05/01/18</b>	<b>SOLARSAVER ADJUSTMENT</b>	<b>0.0000 CENTS/KWH</b>
<b>06/01/18</b>	<b>REVENUE BALANCING ACCOUNT RATE ADJUSTMENT</b>	<b>1.8954 CENTS/KWH</b>

~ Surcharges currently in effect are in bold.

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