



FILED

September 29, 2017

2017 SEP 29 P 4 16

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

PUBLIC UTILITIES
COMMISSION

Dear Commissioners:

Subject: Maui Electric Energy Cost Adjustment Factor for October 2017 (REVISED 9/29/2017)

Maui Electric Company, Limited ("Maui Electric" or "Company") hereby resubmits its October 2017 Energy Cost Adjustment filing to correct the calculations of the typical residential bills for September 2017 and October 2017. There are no changes to the energy cost adjustment factors for September 2017 and October 2017 as filed on August 29, 2017 and September 27, 2017, respectively.

The Company's Energy Cost Adjustment factor for our Maui Division for October 2017 is -7.391 cents per kilowatt-hour ("kWh"), an increase of 1.887 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$147.64, an increase of \$9.45 compared to rates effective September 1, 2017. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor (+\$9.44) and the increase in the Purchased Power Adjustment Clause rate (+\$0.01).

The Company's Maui Division fuel composite cost of generation, central station and other increased 158.10 cents per million BTU to 1,215.14 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.097 cents per kWh to 18.050 cents per kWh.

The Energy Cost Adjustment factor for our Lāna'i Division for October 2017 is -10.059 cents per kWh, an increase of 0.330 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$146.72, an increase of \$1.32 compared to rates effective September 1, 2017. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor.

The Company's Lāna'i Division fuel composite cost of generation, central station and other increased 30.87 cents per million BTU to 1,744.93 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 27.000 cents per kWh.

The Honorable Chair and Members
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September 29, 2017
Page 2

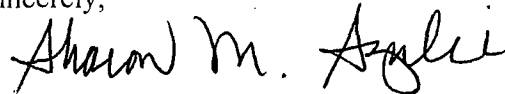
The Energy Cost Adjustment factor for our Moloka'i Division for October 2017 is -9.093 cents per kWh, an increase of 1.599 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$136.35, an increase of \$6.40 compared to rates effective September 1, 2017. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor.

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 130.79 cents per million BTU to 1,398.62 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 October 1, 2017.

For the Commission's convenience, Maui Electric is refiling all of the attachments included in the September 27, 2017 filing. The revised attachments are notated with "Revised 9/29/2017" 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>09-01-17</u>	<u>10-01-17</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,267.83	1,398.62	130.79
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	(10.692)	(9.093)	1.599
<u>Others - "G,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(10.692)	(9.093)	1.599
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	129.95 ¹	136.35 ¹	6.40
500 KWH Consumption, \$/Bill	161.66 ¹	169.65 ¹	7.99

¹ Reflects correction to the typical residential bill calculation.

Supersedes Sheet Effective:

September 1, 2017

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

ENERGY COST ADJUSTMENT (ECA) FILING - October 1, 2017 (page 1 of 2)

<u>Line</u>		
1	Effective Date	October 1, 2017
2	Supercedes Factors	September 1, 2017

GENERATION COMPONENT

<u>CENTRAL STATION</u>							
FUEL PRICES, ¢/mmbtu							
3	Industrial			0.00			
4	Diesel			1,398.62			
5	Other			0.00			
BTU MIX, %							
6	Industrial			0.00			
7	Diesel			100.00			
8	Other			<u>0.00</u>			
				<u>100.00</u>			
9	COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 6) + (4 x 7) + (5 x 8))			1,398.62			
10	% Input to System kWh Mix			99.78			
EFFICIENCY FACTOR, mmbtu/kWh							
	(A)	(B)	(C)	(D)			
		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	0.011194	100.00	0.011194			
13	Other	0.011194	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)]			0.011194			
15	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh (lines (9 x 10 x 14))			15.62141			
16	BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu			2,144.57			
17	Base % Input to Sys kWh Mix			99.91			
18	Efficiency Factor, mmbtu/kwh			0.011194			
19	WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (16 x 17 x 18))			23.98471			
20	COST LESS BASE (line(15 - 19))			(8.36330)			
21	Revenue Tax Req Multiplier			1.0975			
22	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))			(9.17872)			
					<u>DG ENERGY COMPONENT</u>		
					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	1.095
					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)	-9.17872
					34	DG (line 32)	0.00000
					35	TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)	-9.17872

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

ENERGY COST ADJUSTMENT (ECA) FILING - October 1, 2017 (page 2 of 2)

<u>Line</u>		
1	Effective Date	October 1, 2017
2	Supercedes Factors	September 1, 2017

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>	
	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	0.22
44	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (42 x 43))	0.04796
45	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh	21.800
46	Base % Input to Sys kWh Mix	0.09
47	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (45 x 46))	0.01962
48	COST LESS BASE (lines (44 - 47))	0.02834
49	Loss Factor	1.095
50	Revenue Tax Req Multiplier	1.0975
51	PURCHASED ENERGY FACTOR, ¢/kWh (lines (48 x 49 x 50))	0.03406

<u>Line</u>	<u>SYSTEM COMPOSITE CALCULATIONS</u>	
52	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 51))	(9.14466)
53	Adjustment, ¢/kWh	0.000
54	ECA Reconciliation Adjustment	0.052
55	ECA FACTOR, ¢/kWh (lines (52 + 53 + 54))	(9.093)

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

MONTH END FUEL OIL ESTIMATE

	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
9/20/2017	10,114.33	57,955.13	798,263.17
Estimated Use	1,642.52	9,411.64	119,323.33
Estimated Received	-	-	-
Estimated Additional	-	-	-
Estimated End	<u>8,471.81</u>	<u>48,543.49</u>	<u>678,939.84</u>

Next Months Expense = \$ 80.1411 /bbl

FUEL OIL INVENTORY PRICE USED FOR FILING

<u>Type of Oil Burned</u>	<u>Price</u>	<u>Prices ¢/MBTU</u>
Diesel	\$ 80.1411 5.73 BTU/BBL	1398.62

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

Contract Prices effective October 1, 2017

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
ULTRA LOW SULFUR DIESEL		
Tax *	2.0828	36.35
Ocean Transportation	1.6931	28.71
Storage	4.6440	81.05
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

October 2017

1. Amount to be Collected	\$3,300
2. Monthly amount (1/3 x Line 1)	\$1,100
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	\$1,207
5. Estimated Sales (October 2017)	2,310 mwh
6. Adjustment (Line 4 ÷ Line 5)	0.052 ¢/kwh

**MAUI ELECTRIC COMPANY, LTD.
MOLOKAI DIVISION
2017 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 '16					9,300	9,580	(8,349)
January '17					9,300	10,066	1,717
February	(14,400)	(4)	957	(15,357)	4,800	4,589	(9,051)
March					4,800	5,142	(3,909)
April					4,800	5,253	1,344
May	(3,600)	(1)	897	(4,497)	1,200	1,209	(1,944)
June					1,200	1,373	(571)
July					1,200	1,327	756
August	(3,300)	(2)	635	(3,935)	1,100	1,271	(1,908)
September					1,100		
October					1,100		

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		
	09-01-17	10-01-17	09-01-17	10-01-17	Difference
Base Rates					
effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	26.3468	26.3468	26.3468	0.00
Non-fuel Fuel Energy Charge					
First 250 kWhr per month	¢/kWh	11.4278	11.4278	11.4278	0.00
Next 500 kWhr per month	¢/kWh	14.0778	14.0778	14.0778	0.00
Customer Charge	\$	8.50	8.50	8.50	0.00
Total Base Charges			163.58	163.58	0.00
IRP Refund					
% on base		0.000	0.000	0.000	0.00
Revenue Balancing Rate Adjustment	¢/kWh	1.5654	1.5654	1.5654	0.00
PBF Surcharge	¢/kWh	0.4244	0.4244	0.4244	0.00
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	0.0000 ¹	0.0000 ¹	0.0000	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.0000	0.00
Energy Cost Adjustment	¢/kWh	-10.692	-9.093	-36.37	6.40
Green Infrastructure Fee	\$	1.18	1.18	1.18	0.00
Avg Residential Bill at 400 kwh			129.95	136.35	

Increase (Decrease -)	6.40
% Change	4.92%

	Rate		Charge (\$) at 500 Kwh		
	09-01-17	10-01-17	09-01-17	10-01-17	Difference
Base Rates					
effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	26.3468	26.3468	26.3468	0.00
Non-fuel Fuel Energy Charge					
First 250 kWhr per month	¢/kWh	11.4278	11.4278	11.4278	0.00
Next 500 kWhr per month	¢/kWh	14.0778	14.0778	14.0778	0.00
Customer Charge	\$	8.50	8.50	8.50	0.00
Total Base Charges			203.99	203.99	0.00
IRP Refund					
% on base		0.000	0.000	0.000	0.00
Revenue Balancing Rate Adjustment	¢/kWh	1.5654	1.5654	1.5654	0.00
PBF Surcharge	¢/kWh	0.4244	0.4244	0.4244	0.00
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	0.0000 ¹	0.0000 ¹	0.0000	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.0000	0.00
Energy Cost Adjustment	¢/kWh	-10.692	-9.093	-45.47	7.99
Green Infrastructure Fee	\$	1.18	1.18	1.18	0.00
Avg Residential Bill at 500 kwh			161.66	169.65	

¹ Reflects updated REIP rate.

Increase (Decrease -)	7.99
% Change	4.94%

**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, 2015	-0.141	173.84	216.48
February 1, 2015	-3.412	160.75	200.13
March 1, 2015	-6.056	150.18	186.91
April 1, 2015	-6.122	148.81	185.21
May 1, 2015	-6.727	147.49	183.55
June 8, 2015	-7.453	144.48	179.79
July 1, 2015	-6.185	148.55	184.84
August 1, 2015	-5.864	149.83	186.45
September 1, 2015	-5.935	149.59	186.14
October 1, 2015	-9.896	133.75	166.34
November 1, 2015	-10.149	132.73	165.07
December 1, 2015	-9.676	134.63	167.44
January 1, 2016	-9.942	133.44	165.99
February 1, 2016	-11.270	128.13	159.35
March 1, 2016	-12.649	122.61	152.45
April 1, 2016	-13.391	118.92	147.82
May 1, 2016	-13.226	120.31	149.57
June 1, 2016	-13.376	118.95	147.87
July 1, 2016	-12.675	122.03	151.76
August 1, 2016	-9.906	133.11	165.61
September 1, 2016	-9.794	133.55	166.17
October 1, 2016	-11.131	128.21	159.48
November 1, 2016	-9.970	132.85	165.29
December 1, 2016	-9.244	135.75	168.92
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 ¹	161.66 ¹
October 1, 2017	-9.093	136.35 ¹	169.65 ¹

¹ Reflects correction to the typical residential bill calculation.

**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	FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2012 TEST YEAR)	
04/01/15 - 04/30/15	SOLARSAVER ADJUSTMENT	-0.2744 CENTS/KWH
05/01/15 - 03/31/16	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/15 - 06/07/15	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.0000 CENTS/KWH
06/08/15 - 05/31/16	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.5987 CENTS/KWH
07/01/15 - 06/30/16	RESID. PBF SURCHARGE ADJUSTMENT	0.4749 CENTS/KWH
07/01/15 - 12/31/15	GREEN INFRASTRUCTURE FEE	1.42 DOLLARS/MONTH
08/17/15 - 02/29/16	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0103 CENTS/KWH
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	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/17	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.5654 CENTS/KWH
07/01/17	GREEN INFRASTRUCTURE FEE	1.18 DOLLARS/MONTH
07/01/17	RESID. PBF SURCHARGE ADJUSTMENT	0.4244 CENTS/KWH
08/17/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0000 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.