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SHARON M. SUZUKI  
President

September 28, 2016

2016 SEP 28 P 3:39

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 October 2016

Maui Electric Company, Limited's ("Maui Electric" or "Company") October 2016 energy cost adjustment factor for our Maui Division is -8.162 cents per kilowatt-hour ("kWh"), a decrease of 0.296 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$143.94, a decrease of \$1.48 compared to rates effective September 1, 2016.

The Company's Maui Division fuel composite cost of generation, central station and other decreased 73.30 cents per million BTU to 1,047.65 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 1.755 cents per kWh to 17.619 cents per kWh.

The energy cost adjustment factor for our Lāna'i Division for October 2016 is -12.723 cents per kWh, a decrease of 0.089 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$136.08, a decrease of \$0.35 compared to rates effective September 1, 2016.

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 4.83 cents per million BTU to 1,543.81 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.

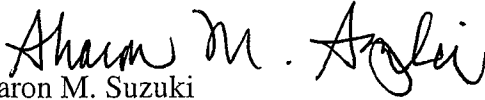
The energy cost adjustment factor for our Moloka'i Division for October 2016 is -11.131 cents per kWh, a decrease of 1.337 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$128.21, a decrease of \$5.34 compared to rates effective September 1, 2016.

The Company's Moloka'i Division fuel composite cost of generation, central station and other decreased 108.76 cents per million BTU to 1,222.18 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 Honorable Chair and Members  
of the Hawai'i Public Utilities Commission  
September 28, 2016  
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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, 2016.

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>09-01-16</u>	<u>10-01-16</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,330.94	1,222.18	(108.76)
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	(9.794)	(11.131)	(1.337)
<u>Others - "G,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(9.794)	(11.131)	(1.337)
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	133.55	128.21	(5.34)
500 KWH Consumption, \$/Bill	166.17	159.48	(6.69)

Supersedes Sheet Effective:

September 1, 2016

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

ENERGY COST ADJUSTMENT (ECA) FILING - October 1, 2016 (page 1 of 2)

Line

- 1 Effective Date                      October 1, 2016
- 2 Supercedes Factors                September 1, 2016

**GENERATION COMPONENT**

<b><u>CENTRAL STATION</u></b>						
FUEL PRICES, ¢/mmbtu						
3	Industrial			0.00		
4	Diesel			1,222.18		
5	Other			0.00		
BTU MIX, %						
6	Industrial			0.00		
7	Diesel			100.00		
8	Other			0.00		
				<u>100.00</u>		
9	COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 6) + (4 x 7) + (5 x 8))			1,222.18		
10	% Input to System kWh Mix			99.78		
EFFICIENCY FACTOR, mmbtu/kWh						
	(A)	(B)	(C)	(D)		
		Eff Factor	Percent of	Weighted		
	<u>Fuel Type</u>	<u>mmbtu/kwh</u>	<u>Centrl Stn + 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))			13.65137		
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))			(10.33334)		
21	Revenue Tax Req Multiplier			1.0975		
22	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))			(11.34084)		
<b><u>DG ENERGY COMPONENT</u></b>						
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)			-11.34084		
34	DG (line 32)			0.00000		
35	TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)			-11.34084		

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

ENERGY COST ADJUSTMENT (ECA) FILING - October 1, 2016 (page 2 of 2)

Line

1 Effective Date October 1, 2016  
2 Supercedes Factors September 1, 2016

<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))	0.04735
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))	0.02773
49	Loss Factor	1.095
50	Revenue Tax Req Multiplier	1.0975
51	PURCHASED ENERGY FACTOR, ¢/kWh (lines (48 x 49 x 50))	0.03332

Line

SYSTEM COMPOSITE CALCULATIONS

52 GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (11.30752)  
(lines (35 + 51))  
53 Adjustment, ¢/kWh 0.000  
54 ECA Reconciliation Adjustment 0.177  
55 ECA FACTOR, ¢/kWh (11.131)  
(lines (52 + 53 + 54))

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

**MONTH END FUEL OIL ESTIMATE**

	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
9/21/2016	6,902.83	39,553.24	492,246.63
Estimated Use	1,417.43	8,121.87	108,097.61
Estimated Received	-	-	-
Estimated Additional	-	-	-
Estimated End	<u>5,485.40</u>	<u>31,431.37</u>	<u>384,149.02</u>

Next Months Expense = \$ 70.0312 /bbl

**FUEL OIL INVENTORY PRICE USED FOR FILING**

<u>Type of Oil Burned</u>	<u>Price</u>		<u>Prices ¢/MBTU</u>
Diesel	\$ 70.0312	5.73 BTU/BBL	1222.18

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

**Contract Prices effective September 1, 2016**

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
<b>ULTRA LOW SULFUR DIESEL</b>		
Tax *	1.4700	25.65
Ocean Transportation	1.8232	31.82
Storage	4.7171	82.32
Wharfage	0.2500	4.36

\* Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST tax and Environmental Response 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 2016**

1. Amount to be Collected	\$11,400
2. Monthly amount (1/3 x Line 1)	\$3,800
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	\$4,171
5. Estimated Sales (October 2016)	2,363 mwh
6. Adjustment (Line 4 ÷ Line 5)	0.177 ¢/kwh



**MAUI ELECTRIC COMPANY, LTD.  
MOLOKAI DIVISION  
2016 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 '15					(1,433)	(1,450)	1,370
January '16					(1,433)	(1,417)	(47)
February	4,000	(4)	(55)	4,055	(1,333)	(1,321)	2,687
March					(1,333)	(1,326)	1,361
April					(1,333)	(1,381)	(20)
May	(5,900)	(1)	35	(5,935)	1,967	1,994	(3,961)
June					1,967	2,099	(1,862)
July					1,967	2,103	241
August	(11,400)	(2)	111	(11,511)	3,800	4,201	(7,069)
September					3,800		
October					3,800		

## 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			
	09-01-16	10-01-16	09-01-16	10-01-16	Difference	
<b>Base Rates</b>	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	26.3468	26.3468	105.39	105.39	0.00
Non-fuel Fuel Energy Charge	¢/kWh	11.4278	11.4278	28.57	28.57	0.00
First 250 kWh per month	¢/kWh	14.0778	14.0778	21.12	21.12	0.00
Next 500 kWh per month	\$	8.50	8.50	8.50	8.50	0.00
Customer Charge						
<b>Total Base Charges</b>				163.58	163.58	0.00
<b>IRP Refund</b>	% on base	0.000	0.000	0.00	0.00	0.00
<b>Revenue Balancing Rate Adjustment</b>	¢/kWh	1.4082	1.4082	5.63	5.63	0.00
<b>PBF Surcharge</b>	¢/kWh	0.5865	0.5865	2.35	2.35	0.00
<b>Renewable Energy Infrastructure Cost Recovery Provision</b>	¢/kWh	0.0099	0.0099	0.04	0.04	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Adjustment</b>	¢/kWh	-9.794	-11.131	-39.18	-44.52	-5.34
<b>Green Infrastructure Fee</b>	\$	1.13	1.13	1.13	1.13	0.00
<b>Avg Residential Bill at 400 kwh</b>				133.55	128.21	

Increase (Decrease -)	-5.34
% Change	-4.00%

	Rate		Charge (\$) at 500 Kwh			
	09-01-16	10-01-16	09-01-16	10-01-16	Difference	
<b>Base Rates</b>	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	26.3468	26.3468	131.73	131.73	0.00
Non-fuel Fuel Energy Charge	¢/kWh	11.4278	11.4278	28.57	28.57	0.00
First 250 kWh per month	¢/kWh	14.0778	14.0778	35.19	35.19	0.00
Next 500 kWh per month	\$	8.50	8.50	8.50	8.50	0.00
Customer Charge						
<b>Total Base Charges</b>				203.99	203.99	0.00
<b>IRP Refund</b>	% on base	0.000	0.000	0.00	0.00	0.00
<b>Revenue Balancing Rate Adjustment</b>	¢/kWh	1.4082	1.4082	7.04	7.04	0.00
<b>PBF Surcharge</b>	¢/kWh	0.5865	0.5865	2.93	2.93	0.00
<b>Renewable Energy Infrastructure Cost Recovery Provision</b>	¢/kWh	0.0099	0.0099	0.05	0.05	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Adjustment</b>	¢/kWh	-9.794	-11.131	-48.97	-55.66	-6.69
<b>Green Infrastructure Fee</b>	\$	1.13	1.13	1.13	1.13	0.00
<b>Avg Residential Bill at 500 kwh</b>				166.17	159.48	

Increase (Decrease -)	-6.69
% Change	-4.03%

**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 &amp; COMMERCIAL</u>		<u>@ 400 KWH</u>	<u>@ 500 KWH</u>
January 1, 2014	3.885		185.67	231.62
February 1, 2014	4.590		188.49	235.14
March 1, 2014	4.652		188.74	235.45
April 1, 2014	4.585		187.49	233.89
May 1, 2014	4.690		188.89	235.64
June 1, 2014	4.779		192.52	240.17
July 1, 2014	5.145		194.72	242.92
August 1, 2014	4.697		192.93	240.68
September 1, 2014	-2.835		162.80	203.01
October 1, 2014	1.864		181.60	226.51
November 1, 2014	2.683		184.87	230.61
December 1, 2014	1.266		179.46	223.52
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

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
01/01/11 - 12/31/11	RESID. PBF SURCHARGE ADJUSTMENT	0.5944 CENTS/KWH
01/12/11 - 05/03/12	FINAL RATE INCREASE (3.66%), DOCKET NO. 2006-0387 (2007 TEST YEAR)	
01/12/11 - 05/03/12	INTERIM RATE INCREASE 2010 TEST YEAR	2.38 PERCENT ON BASE
02/01/11 - 02/28/11	IRP RECOVERY REFUND	-3.472 PERCENT ON BASE
03/01/11 - 04/30/11	IRP RECOVERY REFUND	0.000 PERCENT ON BASE
04/01/11 - 04/30/11	SOLARSAVER ADJUSTMENT	-0.0888 CENTS/KWH
05/01/11 - 03/31/12	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/11 - 05/31/11	IRP RECOVERY REFUND	-0.204 PERCENT ON BASE
<b>06/01/11</b>	<b>IRP RECOVERY REFUND</b>	<b>0.000 PERCENT ON BASE</b>
01/01/12 - 12/31/12	RESID. PBF SURCHARGE ADJUSTMENT	0.6766 CENTS/KWH
04/01/12 - 04/30/12	SOLARSAVER ADJUSTMENT	-0.2392 CENTS/KWH
05/01/12 - 03/31/13	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
5/4/2012 - 7/31/13	FINAL RATE INCREASE (1.51%), DOCKET NO. 2009-0163 (2010 TEST YEAR)	
6/1/2012- 7/31/13	INTERIM RATE INCREASE 2012 TEST YEAR	4.11 PERCENT ON BASE
01/01/13 - 06/30/13	RESID. PBF SURCHARGE ADJUSTMENT	0.7850 CENTS/KWH
04/01/13 - 04/30/13	SOLARSAVER ADJUSTMENT	-0.205 CENTS/KWH
05/01/13 - 03/31/14	SOLARSAVER ADJUSTMENT	0.000 CENTS/KWH
06/01/13 - 05/31/14	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.8071 CENTS/KWH
07/01/13 - 06/30/14	RESID. PBF SURCHARGE ADJUSTMENT	0.8312 CENTS/KWH
<b>08/01/13</b>	<b>FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2012 TEST YEAR)</b>	
04/01/14 - 04/30/14	SOLARSAVER ADJUSTMENT	-0.2453 CENTS/KWH
05/01/14 - 03/31/15	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/14 - 05/31/15	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.6239 CENTS/KWH
07/01/14 - 11/30/14	RESID. PBF SURCHARGE ADJUSTMENT	1.0157 CENTS/KWH
12/01/14 - 06/30/15	RESID. PBF SURCHARGE ADJUSTMENT	0.7583 CENTS/KWH
12/01/14 - 06/30/15	GREEN INFRASTRUCTURE FEE	1.29 DOLLARS/MONTH
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
<b>03/01/16</b>	<b>RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION</b>	<b>0.0099 CENTS/KWH</b>
04/01/16 - 04/30/16	SOLARSAVER ADJUSTMENT	-0.1835 CENTS/KWH
<b>05/01/16</b>	<b>SOLARSAVER ADJUSTMENT</b>	<b>0.0000 CENTS/KWH</b>
<b>06/01/16</b>	<b>REVENUE BALANCING ACCOUNT RATE ADJUSTMENT</b>	<b>1.4082 CENTS/KWH</b>
<b>07/01/16</b>	<b>RESID. PBF SURCHARGE ADJUSTMENT</b>	<b>0.5865 CENTS/KWH</b>
<b>07/01/16</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.13 DOLLARS/MONTH</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.