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April 26, 2017

PUBLIC UTILITIES  
COMMISSION

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

Dear Commissioners:

Subject: Maui Electric Energy Cost Adjustment Factor for May 2017

Maui Electric Company, Limited's ("Maui Electric" or "Company") May 2017 energy cost adjustment factor for our Maui Division is -7.998 cents per kilowatt-hour ("kWh"), a decrease of 2.228 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$144.79, a decrease of \$10.56 compared to rates effective April 1, 2017. The decrease in the typical residential bill is due to the decrease in the energy cost adjustment factor (-\$11.14) and the Purchased Power Adjustment Clause rate (-\$0.11), partly offset by the termination of the April 2017 credit for the SolarSaver Adjustment (+\$0.69).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 111.20 cents per million BTU to 1,066.64 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 0.884 cents per kWh to 20.127 cents per kWh.

The energy cost adjustment factor for our Lāna'i Division for May 2017 is -11.993 cents per kWh, a decrease of 1.118 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$139.14, a decrease of \$3.92 compared to rates effective April 1, 2017. The decrease in the typical residential bill is due to the decrease in the energy cost adjustment factor (-\$4.47), partly offset by the termination of the April 2017 credit for the SolarSaver Adjustment (+\$0.55).

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 93.20 cents per million BTU to 1,606.82 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 May 2017 is -8.851 cents per kWh, a decrease of 0.419 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$137.47, a decrease of \$1.12 compared to rates effective April 1, 2017. The decrease in the typical residential bill is due to

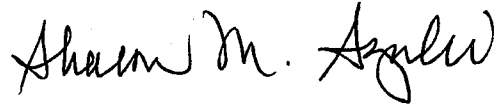
The Honorable Chair and Members  
of the Hawai'i Public Utilities Commission  
April 26, 2017  
Page 2

the decrease in the energy cost adjustment factor (-\$1.67), partly offset by the termination of the April 2017 credit for the SolarSaver Adjustment (+\$0.55).

The Company's Moloka'i Division fuel composite cost of generation, central station and other decreased 18.51 cents per million BTU to 1,417.57 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 May 1, 2017.

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>04-01-17</u>	<u>05-01-17</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,436.08	1,417.57	(18.51)
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	(8.432)	(8.851)	(0.419)
<u>Others - "G,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(8.432)	(8.851)	(0.419)
<u>Residential Customer with</u>			
400 KWH Consumption, \$/Bill	138.59	137.47	(1.12)
500 KWH Consumption, \$/Bill	172.43	171.02	(1.41)

Supersedes Sheet Effective:

April 1, 2017



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

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

Line

- 1 Effective Date May 1, 2017
- 2 Supercedes Factors April 1, 2017

<u>Line</u>	<b>PURCHASED ENERGY COMPONENT</b>	
	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	0.25
44	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (42 x 43))	0.05349
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))	0.03387
49	Loss Factor	1.095
50	Revenue Tax Req Multiplier	1.0975
51	PURCHASED ENERGY FACTOR, ¢/kWh (lines (48 x 49 x 50))	0.04070

Line

SYSTEM COMPOSITE CALCULATIONS

52	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 51))	(8.90982)
53	Adjustment, ¢/kWh	0.000
54	ECA Reconciliation Adjustment	0.059
55	ECA FACTOR, ¢/kWh (lines (52 + 53 + 54))	(8.851)

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

**MONTH END FUEL OIL ESTIMATE**

	<u>Barrels</u>	<u>MBTU</u>	<u>\$</u>
4/18/2017	8,368.33	47,950.55	691,673.79
Estimated Use	1,747.95	10,015.75	143,833.74
Estimated Received	3,400.00	19,482.00	266,085.35
Estimated Additional	-	-	-
Estimated End	<u>10,020.38</u>	<u>57,416.80</u>	<u>813,925.40</u>

Next Months Expense = \$ 81.2270 /bbl

**FUEL OIL INVENTORY PRICE USED FOR FILING**

<u>Type of Oil Burned</u>	<u>Price</u>		<u>Prices ¢/MBTU</u>
Diesel	\$ 81.2270	5.73 BTU/BBL	1417.57

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

**Contract Prices effective April 1, 2017**

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
<b>ULTRA LOW SULFUR DIESEL</b>		
Tax *	12.3116	214.86
Ocean Transportation	1.6964	29.61
Storage	4.7171	82.32
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**

**May 2017**

1. Amount to be Collected	\$3,600
2. Monthly amount (1/3 x Line 1)	\$1,200
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	\$1,317
5. Estimated Sales (May 2017)	2,237 mwh
6. Adjustment (Line 4 ÷ Line 5)	0.059 ¢/kwh



**MAUI ELECTRIC COMPANY, LTD.  
MOLOKAI DIVISION  
2017 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY  
(Thousand \$)**

<u>Line</u>	<u>Description</u>	<u>Without Deadband 1st Quarter YTD Total</u>	<u>collection by company*</u>	<u>Basis for Recon With Deadband 1st Quarter YTD Total</u>	<u>collection by company*</u>
Actual Costs					
1	Generation	\$1,046.3		\$1,046.3	
2	Distributed Generation	\$0.0		\$0.0	
3	Purch Power	\$0.3		\$0.3	
4	Total	\$1,046.6		\$1,046.6	
Fuel Filing Cost					
5	Generation	\$1,069.2		\$1,064.4	
6	Distributed Generation	\$0.0		\$0.0	
7	Purch Power	\$0.3		\$0.3	
8	Total	\$1,069.5		\$1,064.7	
Base Fuel Cost					
9	Generation	\$1,605.6		\$1,605.6	
10	Distributed Generation	\$0.0		\$0.0	
11	Purch Power	\$0.3		\$0.3	
12	Total	\$1,605.9		\$1,605.9	
13	FUEL - BASE COST (Line 8-12)	-\$536.4		-\$541.2	
14	ACTUAL FOA REVENUE LESS TAX	-\$525.9		-\$525.9	
15	FOA reconciliation adj for prior years	\$18.9		\$18.9	
16	ADJUSTED FOA LESS TAX	-\$544.8		-\$544.8	
17	FOA-(FUEL-BASE) (Line 16-13)	-\$8.4		-\$3.6	
ADJUSTMENTS					
18	Current year FOA accrual reversal	\$0.0		\$0.0	
19	Other prior year FOA	\$0.0		\$0.0	
20	Other	\$0.0		\$0.0	
21	1st QUARTER FOA RECONCILIATION (Lines 17+18+19+20)	-\$8.4	Under	-\$3.6	Under
22	2016 YTD FOA Reconciliation Recognized in FOA Rates			\$0.0	
23	FOA Reconciliation to be Refunded May 2017 to July 2017 (Line 22- 21)			\$3.6	To Be Collected

\* Over means an over-collection by the company.  
Under means an under-collection by the company.

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

Determination of Efficiency Factor to use for Cost-Recovery Purposes

Period: January 1, 2017 through March 31, 2017

	<u>Notes</u>	<u>Jan 1 - Mar 31</u>
<b><u>Palaau Diesel</u></b>		
Palaau Diesel Efficiency Factor (TY2009), BTU/kWh	f	11,194
Palaau Diesel Deadband Definition, +/- BTU/kWh	d	<b>50</b>
Palaau Diesel Portion of Recorded Sales, MWh	a	6,688
Palaau Diesel Consumption (Recorded), MMBTU	b	73,169
Palaau Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	10,940
Lower limit of Palaau Diesel Deadband, BTU/kWh	e = f-d	11,144
Higher limit of Palaau Diesel Deadband, BTU/kWh	g = f+d	11,244
Palaau Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	<b>11,144</b>

**MAUI ELECTRIC COMPANY, LTD.**  
**MOLOKAI DIVISION**  
**GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST, WITHOUT and WITH DEADBAND**  
**2017**

	<u>Without Deadband</u> <u>Jan 1 - Mar 31</u>	<u>With Deadband - AS FILED</u> <u>Jan 1 - Mar 31</u>
<b><u>DIESEL FUEL FILING COST</u></b>		
Diesel Portion of Recorded Sales, MWH	6,688	6,688
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.011194	0.011144
Mmbtu adjusted for Sales Efficiency Factor	74,869	74,535
\$/mmbtu	<u>\$14,2811</u>	<u>\$14,2811</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$1,069.2	\$1,064.4
TOTAL GENERATION FUEL FILING COST, \$000s	\$1,069.2	\$1,064.4
TOTAL GENERATION BASE FUEL COST , \$000s YTD	\$1,605.6	\$1,605.6
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$1,069.2	\$1,064.4
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$1,605.6	\$1,605.6

**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		
May	(3,600)	(1)	897	(4,497)	1,200		

## 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			
	04-01-17	05-01-17	04-01-17	05-01-17	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						
First 250 kWh per month	¢/kWh	11.4278	11.4278	28.57	28.57	0.00
Next 500 kWh per month	¢/kWh	14.0778	14.0778	21.12	21.12	0.00
Customer Charge	\$	8.50	8.50	8.50	8.50	0.00
<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	0.0098	0.0098	0.04	0.04	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	-0.1378	0.0000	-0.55	0.00	0.55
<b>Energy Cost Adjustment</b>	¢/kWh	-8.432	-8.851	-33.73	-35.40	-1.67
<b>Green Infrastructure Fee</b>	\$	1.27	1.27	1.27	1.27	0.00
<b>Avg Residential Bill at 400 kwh</b>				138.59	137.47	

Increase (Decrease -)	-1.12
% Change	-0.81%

	Rate		Charge (\$) at 500 Kwh			
	04-01-17	05-01-17	04-01-17	05-01-17	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						
First 250 kWh per month	¢/kWh	11.4278	11.4278	28.57	28.57	0.00
Next 500 kWh per month	¢/kWh	14.0778	14.0778	35.19	35.19	0.00
Customer Charge	\$	8.50	8.50	8.50	8.50	0.00
<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	0.0098	0.0098	0.05	0.05	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	-0.1378	0.0000	-0.69	0.00	0.69
<b>Energy Cost Adjustment</b>	¢/kWh	-8.432	-8.851	-42.16	-44.26	-2.10
<b>Green Infrastructure Fee</b>	\$	1.27	1.27	1.27	1.27	0.00
<b>Avg Residential Bill at 500 kwh</b>				172.43	171.02	

Increase (Decrease -)	-1.41
% Change	-0.82%

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

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR CENTS / KWH RESIDENTIAL &amp; COMMERCIAL</u>	<u>RESIDENTIAL BILL (\$)</u> <u>@ 400 KWH @ 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

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
<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>	
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
<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>
07/01/16 - 12/31/16	GREEN INFRASTRUCTURE FEE	1.13 DOLLARS/MONTH
<b>01/01/17</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.27 DOLLARS/MONTH</b>
<b>03/01/17</b>	<b>RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION</b>	<b>0.0098 CENTS/KWH</b>
04/01/17 - 04/30/17	SOLARSAVER ADJUSTMENT	-0.1378 CENTS/KWH
<b>05/01/17</b>	<b>SOLARSAVER ADJUSTMENT</b>	<b>0.0000 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.